

# Oracle® Insurance Rules Palette

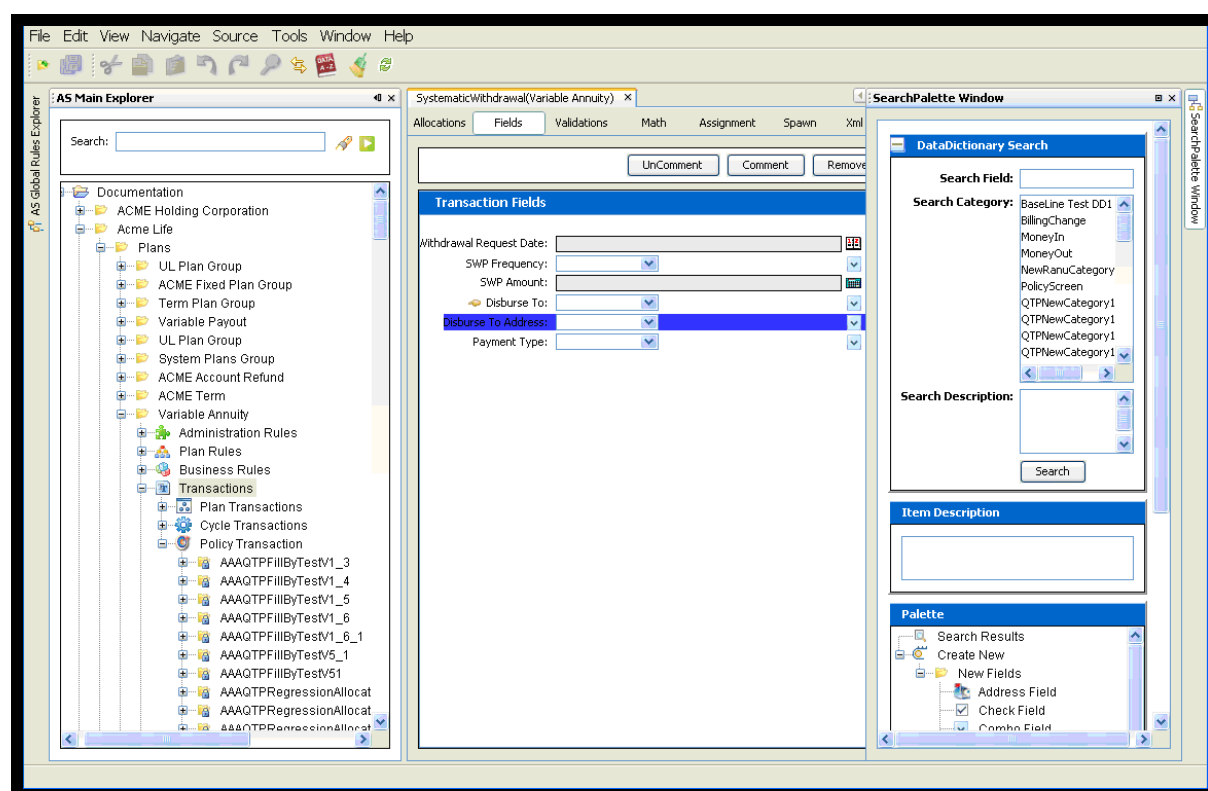


User Guide

Rules Palette Release 8.1

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# Oracle® Insurance Rules Palette Release V8.1

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# Welcome to the Rules Palette

## Introduction

The Rules Palette is Oracle's new configuration solution. It is a standalone application that can be used in conjunction with the Oracle Insurance Policy Administration (OIPA) application. The Rules Palette provides straightforward functionality that assists with configuration tasks. Until now all configuration had to be done in XML and required knowledge of OIPA elements, attributes and values. The Rules Palette mitigates the need to know XML and features user-friendly visual configuration tools. In short, the Rules Palette will significantly lessen the learning curve for teams configuring in the OIPA application.

## The Rules Palette offers the following easy to use configuration tools:

- Explorer windows and panes for quick navigation
- Organized folder structure for Plans, Business Rules, Transactions and Segments
- Windows with intuitive visual editing tools
- Properties window with available options for configuration
- Tabbing system that enables multiple tabs for Business Rules, Transactions and other rules to be open at once
- Wizards that step through all required tasks and provide applicable options
- Drag and Drop features on Fields/Math for Business Rule and Transaction configuration
- Visual Math configuration tools that make Math simple to read and develop
- Nested MathIFs and MathLoops in folder structures that enhance readability
- Inline integration of Data Dictionary for standardization
- Debugging tools that make errors easy to find and correct
- XML editing tools for those die-hard XMLers who want to configure 100% in XML

**Note:** The Rules Palette is only compatible with OIPA applications that are Version 8 and higher.

This User Guide is designed for readers of every OIPA skill level. If you're familiar with previous methods of configuration, this guide will help you make the transition from the old, familiar way of doing things to the new, improved way.



**Important:** When using this guide the following terminology is important to understand:

Term	Definition
rules	Any OIPA rule that includes Business Rules, Transactions and/or Segments.
terms	OIPA Fields or MathVariables found in the Data Dictionary.
variables	OIPA Fields or MathVariables.

## Environments

You will need to create an environment connection in order for the Rules Palette to communicate with the database that stores your application configuration. There are two different types of environment connections that can be created; an Internal Version System (IVS) or a non-IVS. The environment you create depends upon whether your company is using an IVS database.

IVS is OIPA's versioning system. It can revert a configuration to a previous version if necessary; therefore, it is critical to identify the IVS database. An IVS database can have a one-to-many relationship with configuration databases. If you do not know if your project uses IVS, contact your OIPA Project's Technical Lead.

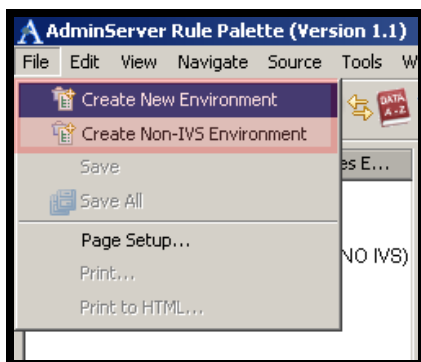
**Note:** Once you launch the Rules Palette, make sure to delete any old/existing environments before creating new ones.



**Important:** Make sure that you download the necessary proprietary and open source executable jar files prior to creating a new environment connection. See the ***Rules Palette Installation Instructions*** for information on downloading these jar files.

### Steps to Create either Environment Connection

1. Select **File** from the menu bar.
2. Select either **Create New Environment** or **Create Non-IVS Environment**.



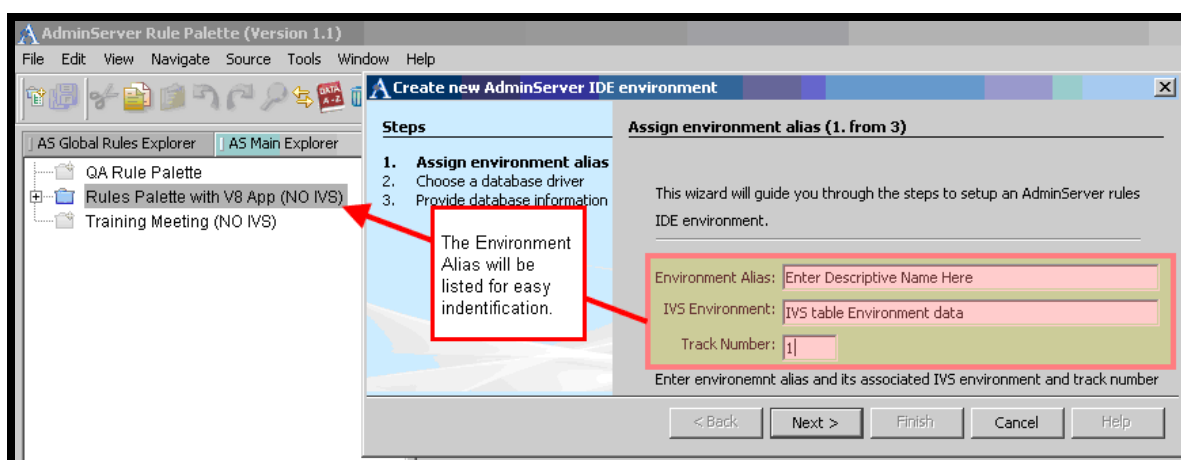
Rules Palette File Menu

## Creating a New Environment Connection

When you select **Create New Environment** you are creating a connection to an environment that uses IVS. A user-friendly setup wizard walks you through three steps to create the new environment.

### Step 1 – Assign Environment Alias

The first step is to create a descriptive environment alias name that will enable you to distinguish between the various environment connections that you establish. In the screenshot below, you can see that all Environment Alias names are listed in the **AS Main Explorer** window. It is important that you name the environment properly to ensure you are not configuring the wrong application.



Step 1 Wizard Menu

### Required Fields

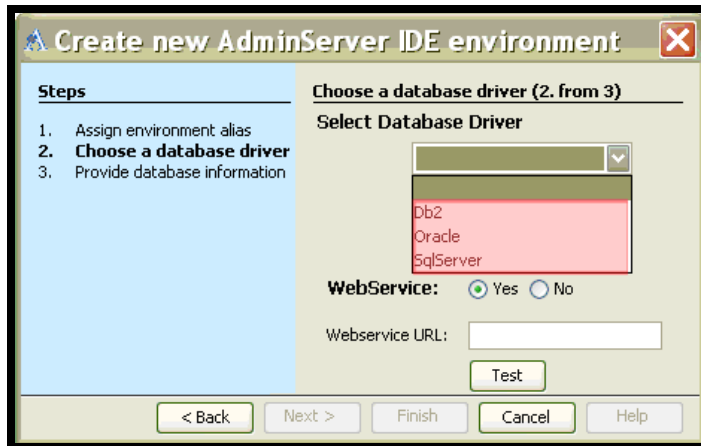
Field	Description
Environment Alias	Name used to identify the database. This is the name that will display in the <b>AS Main Explorer</b> window.
IVS Environment	This must be the IVS Environment information found in the Environment column in the IVS table. This information can be obtained from the Build Manager on the project.
Track Number	Track number is used to identify the project. If your project does not use track numbers, enter 1.

**Note:** Once all the information is entered, the **Next** button becomes available. If any required field is left blank, the **Next** button is not enabled.



## Step 2 – Choose a Database Driver

In this step, you are going to select the type of database used. The available options are DB2, Oracle or SQL Server. If you do not know your database, contact your OIPA Project's Technical Lead.



Step 2 of the wizard

If you select a SQL Server or DB2 Database Driver from the drop-down list, an additional **Browse** field and button will appear beneath it. This allows you to enter the location of the JDBC jar file/s manually or you can click the Browse button to search your machine for the location of the necessary jar files. Select the jar file/s that correspond to the database you are using. There are three jar files for the DB2 database (**db2jcc**, **db2jcc\_license\_cisuz**, and **db2jcc\_license\_cu**) and there is one jar file for the SQL Server database (**jtids**).

Refer to the *Rules Palette Installation Instructions* for more information on downloading the necessary jar files required to run the Rules Palette.

**Note:** The **Browse** field and button will only appear the first time you are setting up your environment connection for a DB2 or SQL Server database. Once it has been set up it will not appear again.

If you are using a Web Service for remote debugging, you can enter the URL for that Web Service. Select the **Yes** radio button for Web Service and enter the URL in the **WebService URL** field. If you do not wish to use a Web Service, select the **No** radio button for Web Service and the **WebService URL** field will disappear. The **Next** button will become enabled to allow you to proceed to the next step.

**Create new AdminServer IDE environment**

**Steps**

1. Assign environment alias
2. **Choose a database driver**
3. Provide database information

**Choose a database driver (2. from 3)**

**Select Database Driver**

Db2

Select the appropriate database driver from the list above

Enter the location of the JDBC .jar file above

**WebService:** ☒ Yes ☐ No

Webservice URL:

Test

< Back Next > Finish Cancel Help

Step 2 Web service

**Note:** You must select either the **Yes** or **No** radio button for Web Service in order to proceed to the next step in the environment connection setup.

At any time you can select **Cancel** and void all the information that was entered. Canceling returns you to the **AS Main Explorer** window.

### Step 3 – Provide Database Information

The final step is to enter the database information. You will need the following information for the application and IVS database:

Host	The IP address of the server that houses the database.
Port	Each database type has its own port. Ports for the database types are: <ul style="list-style-type: none"> <li>▪ SQL Server – 1433</li> <li>▪ Oracle – 1521</li> <li>▪ DB2- 50000</li> </ul> In some instances the port might change but the previously mentioned port numbers are commonly used.
Database	Name of the database.
DB Schema	Database Schema (for DB2 only)
UserID	User ID. The User ID must be typed in ALL CAPS.
Password	Password. The password must be typed in all lowercase characters.

There is a **Test Connection** button that you can use to test connectivity before saving the settings. Because the wizard does not validate data before it is saved, it is recommended that you test your connections to ensure all the information entered is correct. You will receive an error if you test a database connection and the connection fails.

**Create new AdminServer IDE environment**

**Steps**

1. Assign environment alias
2. **Choose a database driver**
3. Provide database information

**Provide database information (3. from 3)**

**Development 2 (Db2)**

Host:

Port:

Database:

Schema:

Userid:

Password:

**Development 2 (IVS)**

IVS Host:

IVS Port:

IVS Database:

Schema:

Userid:

Password:

Click the finish button to create the environment  
The finish button will be enabled when both databases are tested successfully.

Enter db information and test connections

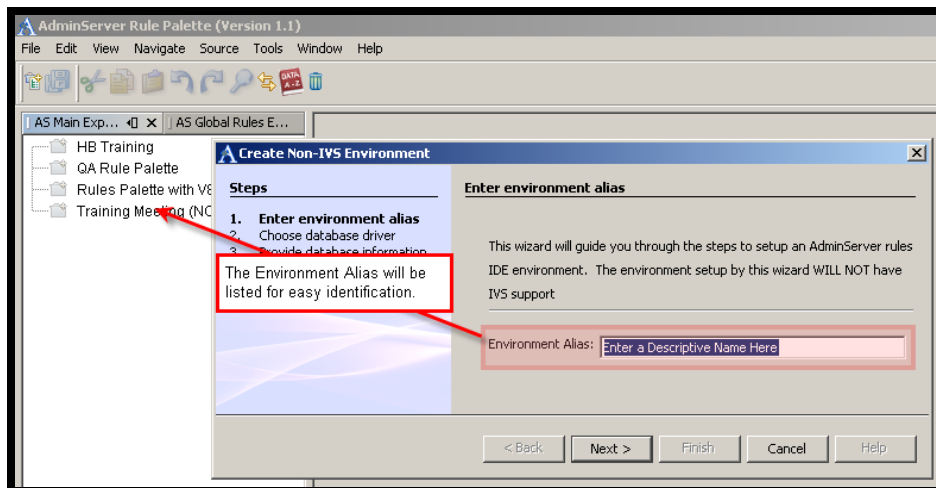
After you have entered the information and tested each database connection, select the **Finish** button. The **Finish** button will be enabled when both the main environment and the IVS environment are tested successfully.

## Creating a New Non-IVS Environment Connection

If you are not using an IVS environment and do not require IVS support, you should use the **Create a New Non-IVS Environment** option. It is important to note that all development environments should have an IVS database.

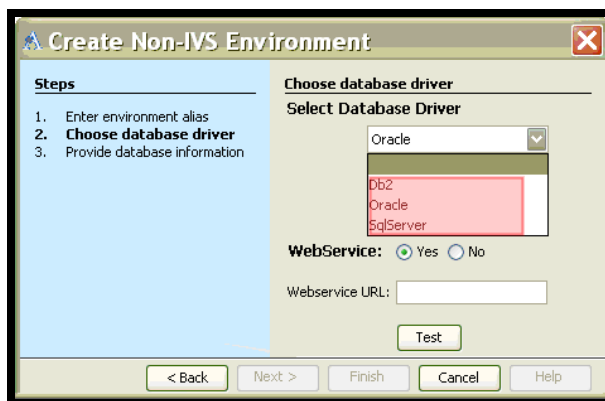
### Step 1 – Assigning Environment Alias

The first step is to create a descriptive environment alias name that will enable you to distinguish between the various environment connections that you setup. In the screenshot below, you can see that all Environment Alias names are listed in the **AS Main Explorer** window. It is important that you name the environment properly to ensure you are not configuring the wrong application.



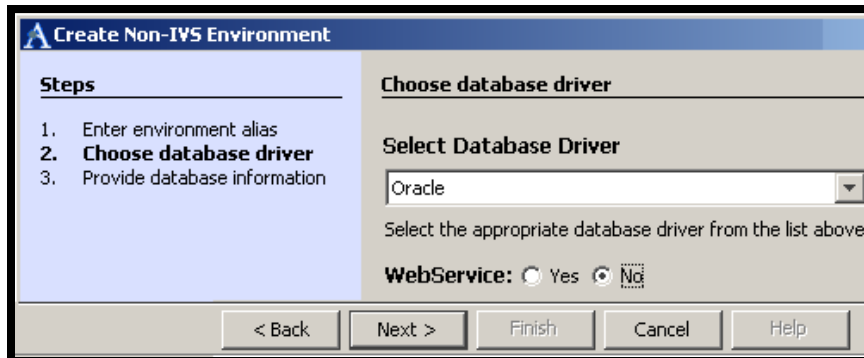
### Step 2 – Choose a Database Driver

In this step, you are going to select the database type. The available options are DB2, Oracle or SQL Server. If you do not know the type of database used, contact your OIPA Project's Technical Lead.



If you select SQL Server or DB2 Database Driver from the drop-down list, an additional Browse field and button will appear beneath it. This allows you to enter the location of the JDBC jar file/s manually or you can click the Browse button to search your machine for the location of the necessary jar files. Select the jar file/s that correspond to the database you are using. There are three jar files for the DB2 database (**db2jcc**, **db2jcc\_license\_cisuz**, and **db2jcc\_license\_cu**) and there is one jar file for the SQL Server database (**jtids**).

Refer to the *Rules Palette Installation Instructions* for more information on downloading the necessary jar files required to run Rules Palette.



**Note:** The Browse field and button will only appear the first time you are setting up your environment connection for the DB2 or SqlServer database. Once it has been set up it will not appear again.

If you are using a Web Service for remote debugging, you can enter the URL for that particular Web Service. Select the **Yes** radio button for Web Service and enter the URL in the **WebService URL** field below. If you do not wish to use a Web Service, select the **No** radio button for Web Service and the **WebService URL** field will disappear. The **Next** button will become enabled to allow you to proceed to the next step.

**Note:** You must select either the **Yes** or **No** radio buttons for Webservice in order to proceed to the next step in the environment connection setup.

You can select **Cancel** to void all the information that was entered. Canceling returns you to the **AS Main Explorer** window. Selecting the **Back** button will return you to Step 1-Assign Environment Alias.

### Step 3 – Provide Database Information

The final step is to enter the database information. You will need the following information:

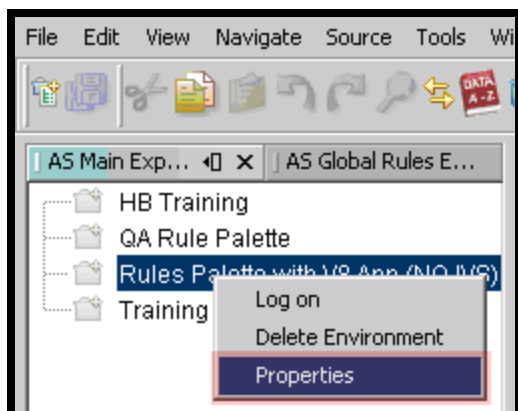
Host	The IP address of the server that houses the database.
Port	Each database type has its own port. Ports for the database types are: <ul style="list-style-type: none"> <li>▪ SQL Server – 1433</li> <li>▪ Oracle – 1521</li> <li>▪ DB2- 50000</li> </ul> In some instances the port might change but the previously mentioned port numbers are commonly used.
Database	Name of the database.
Schema	Schema name (for DB2 only)
UserID	User ID. The User ID must be typed in ALL CAPS.
Password	Password. The password must be typed in all lowercase characters.

The **Test Connection** button allows you to test connectivity before saving the settings. Because the wizard does not validate data before you save it, be sure to test your connection to ensure all the information entered is correct. You will receive an error if you test a database connection and the connection fails.

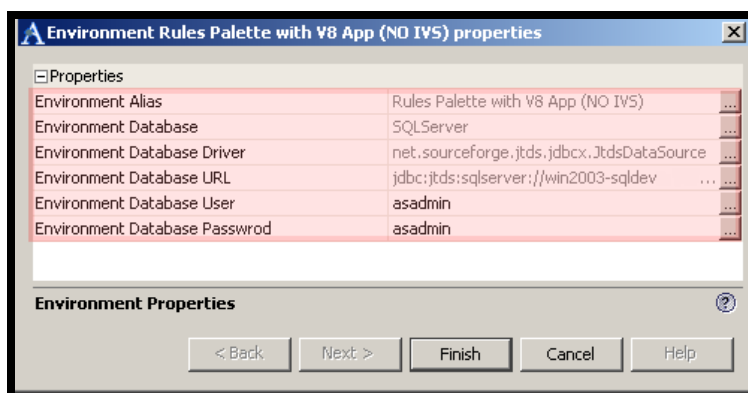
After you have entered the information and tested the database connection, select the **Finish** button. The **Finish** button will be enabled only if the connection is tested successfully.

## Environment Properties

The Environment Properties selection lets you update or view an environment. All properties are listed with their corresponding information. From the **AS Main Explorer** window, right-click on the appropriate environment and select **Properties**.






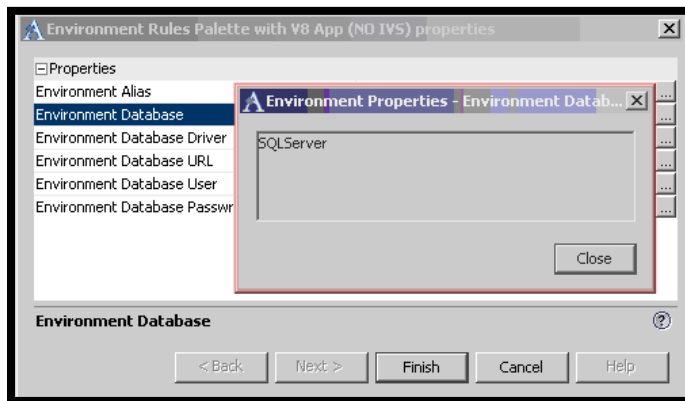
When **Properties** is selected from the right-click menu, the following screen appears.



**Note:** When you add your actual environment, your username and password will be encrypted.

## View or Update Properties

If you want to view a property's information, simply select its associated  button. In the screenshot below, the  button was selected for Environment Database. The properties window opened displaying the database type. You can only update the User ID, Password, IVS Environment and Track Number for an environment. You can update directly in the Environment Properties window or via the  button for the username.



If you want to change any other properties, you will need to delete the Environment Alias and create a new one. You must log off and re-login for the changes to take effect.

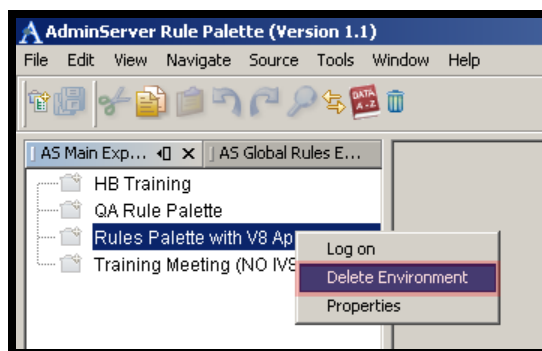


## Delete an Environment Connection

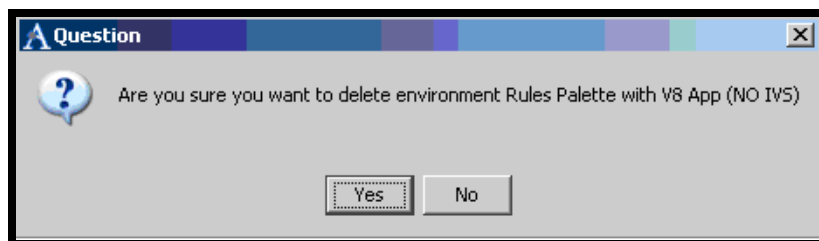
Due to various circumstances you may need to delete an environment connection. Perhaps it was setup incorrectly, has been moved, or you no longer configure for that project.

### Steps to Delete an Environment

1. Select the appropriate environment.
2. Right-click on the environment.
3. Select the **Delete Environment** option.
4. Select the **Yes** button.



Delete Environment Option Menu



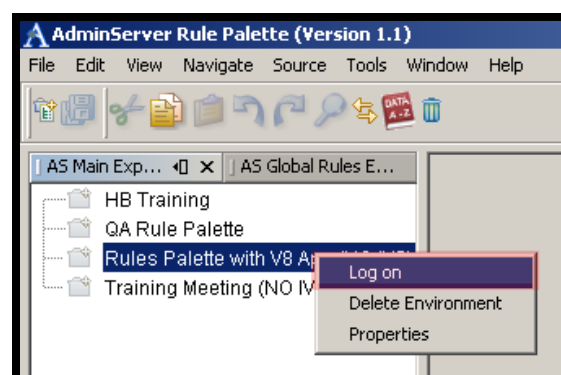
Delete Environment Confirmation Screen

By selecting **Yes**, the environment connection is deleted from your **AS Main Explorer** window. If **No** is selected, the environment connection is not deleted and you will be returned to the **AS Main Explorer** window.

## Getting Started


### Logging On

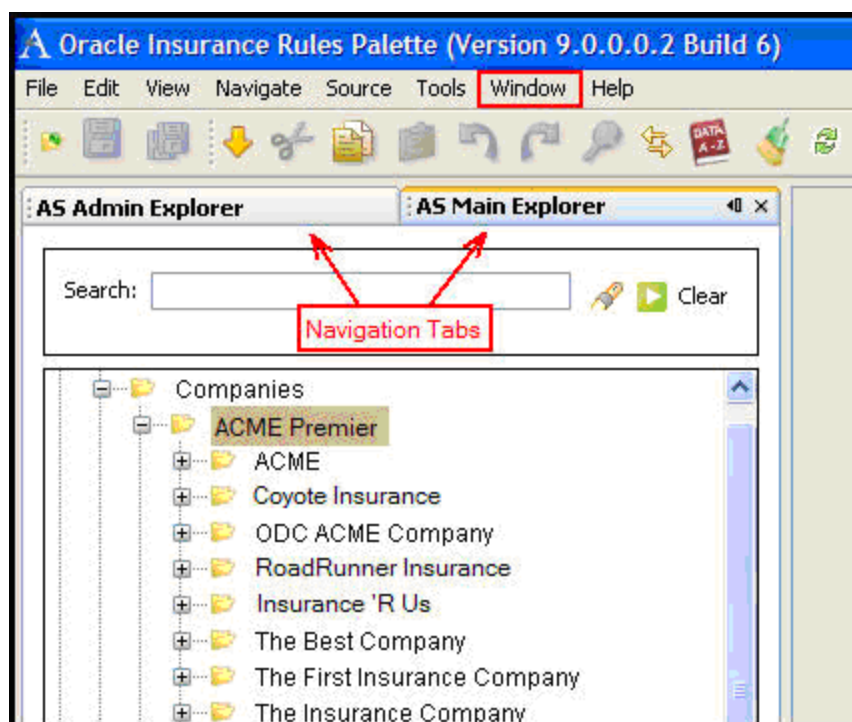
To log on to an environment, right-click the appropriate Environment Alias name in the **AS Main Explorer** window and select **Log on**. You will need to enter your user ID and password, which will match those in the application for this environment. The password is encrypted in the Rules Palette application.



Rules Palette Log On Menu

After you log on you will see three navigation tabs; Main Explorer, Global Explorer and the XML Navigator. The AS Main Explorer is your default tab. You can switch between tabs by clicking the tab you want. The tab you are working in will be highlighted in blue. If the tabs are not visible, select Window on the menu bar and select the name of the tab/window to open it.

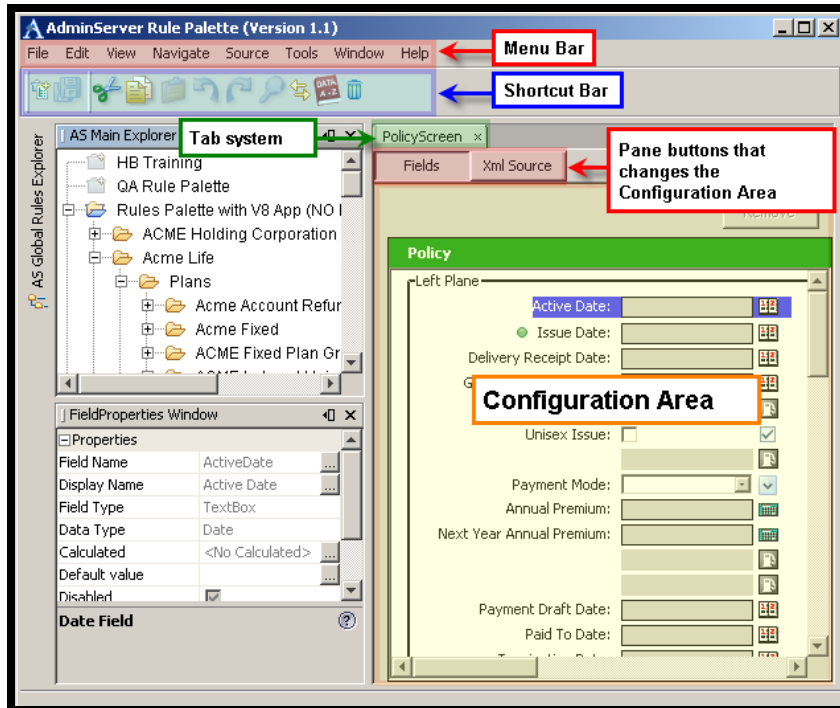
Once all the rules have loaded into the Rules Palette, you will be able to expand  the Environment's folder. The Palette will load rules on an as-needed basis. As you select folders, additional information is loaded. This is done to reduce the load-time.



Rules Palette

## Navigating














With the Rules Palette, navigation has never been easier. You can quickly navigate through the hierarchy of Clients, Plans and Business Rules. Movable Explorer windows make it easy to access configuration functionality. This section introduces the most useful navigational features.



Interface

## Tool Bar

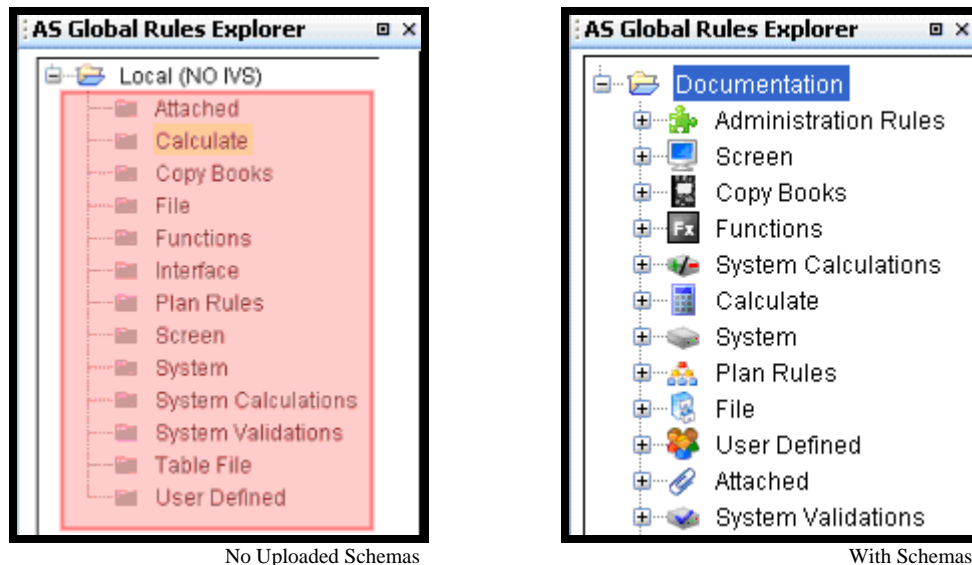
The Tool Bar is available directly under the menu bar and provides quick access to commonly used functionality. Shortcut buttons are only available when they are applicable to what you are currently configuring.

	Create New Environment	Create a database and IVS database connection.
	Save All	Save all configuration changes and compile the information. You must select <b>Check In</b> to write the changes to the database. <b>Note:</b> Save All will save and compile any configuration that is open.
	Upload Schemas	Allows for the upload of business rule XML schemas into the database directly through the Rules Palette interface.
	Cut	Cut configuration
	Copy	Copy configuration
	Paste	Paste configuration
	Undo	Undo configuration changes
	Redo	Redo configuration changes
	Find	Find term in configuration
	Select in Explorer	Locates the rule's XML file in either the <b>AS Main Explorer</b> window or <b>AS Global Rule Explorer</b> window.
	Data Dictionary	Open Data Dictionary management
	Clear Cache	Clicking the broom clears the cache, restores the settings to default, deletes all settings and closes the application.
	Refresh	Clicking this button refreshes Plan Types and sub-folders.

## Upload Schemas


XML Schemas are used by the Rules Palette to perform several functions. They determine the various categories and the rules that are placed into those categories. The XML Schema also controls the dynamic editor, which is used in the configuration of certain rules.

Once a Schema has been uploaded, the various categories become enabled and the appropriate icons appear for each of them. If a Schema has not been loaded, the categories will be disabled.



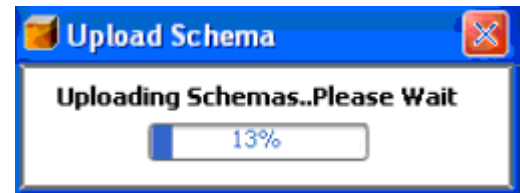
Once the Rules Palette is installed, the environment connection is setup, and you have logged in for the first time, the default Schemas should be uploaded and applied to the system. If there are currently no Schemas in the system, the categories visible in the Explorer window are disabled and no icons are present for any of them.

New Schemas are uploaded by clicking the **Upload**


**Schemas** toolbar button  located in the Rules Palette Tool Bar. If there are currently no Schemas in the system, the Upload Schema popup window appears.

This popup will only appear the first time a user logs in if there are no existing Schemas currently in the system.

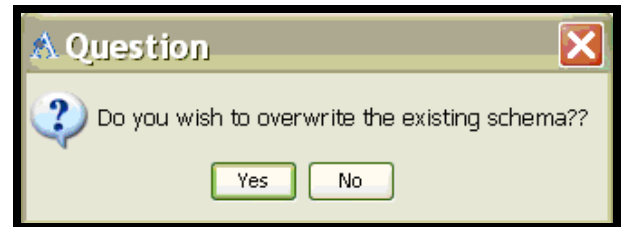
Once the default Schemas have been uploaded they will remain in the database.



Uploading Schemas Popup Window

The **Upload Schemas** button  allows you to upload Business Rule XML Schemas into the database directly through the Rules Palette interface. You can overwrite the default Schema or other existing Schemas in the database by clicking this button. The Question popup window will appear if the environment you are in already contains Schemas and you click the **Upload Schemas** toolbar button.

The system will ask you whether or not you wish to overwrite the existing Schema. Select the **Yes** button to overwrite the Schema. Select the **No** button to cancel your request. You may wish to overwrite existing Schemas if you have added new rules to the database, or you are cleaning up existing Schemas that may have invalid XML.



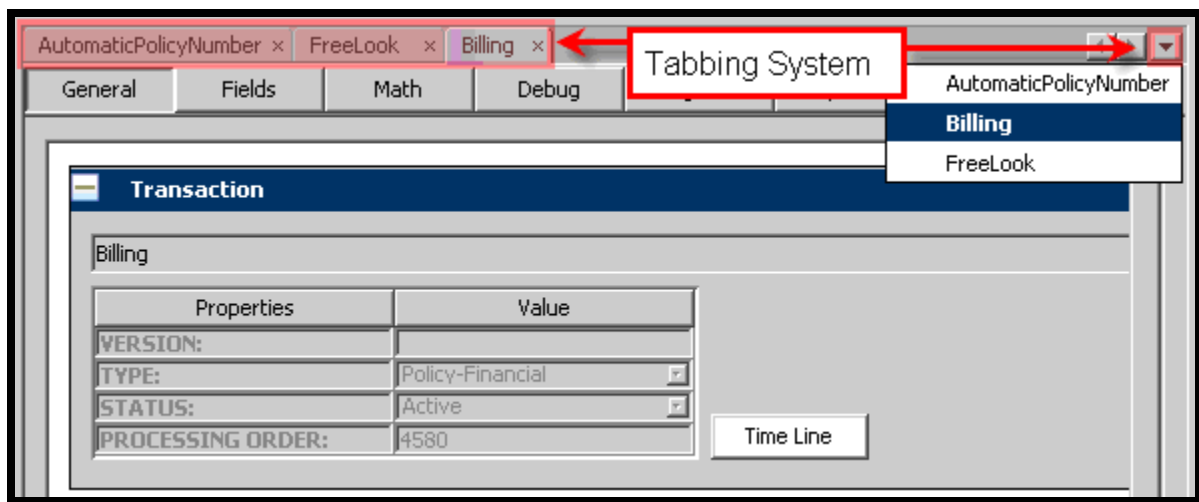
Uploading Schemas Popup Window

**Note:** When you upload new Schemas you must log out of the environment and re-login in order for the changes to take effect and the Schemas to be correctly uploaded to the database. If you attempt to upload Schemas when you are not logged into an environment, you will be prompted with a message instructing you to login to the environment.

## Navigating Between Tabs

When you select a new rule to be displayed in the Configuration Area, the previous rule is made available via a tab above the Configuration Area. You can also use the down arrow button on the top right side of the screen to toggle between rules. Rules Palette eliminates the need to open multiple instances of PAS when configuring by providing this tabbing system.

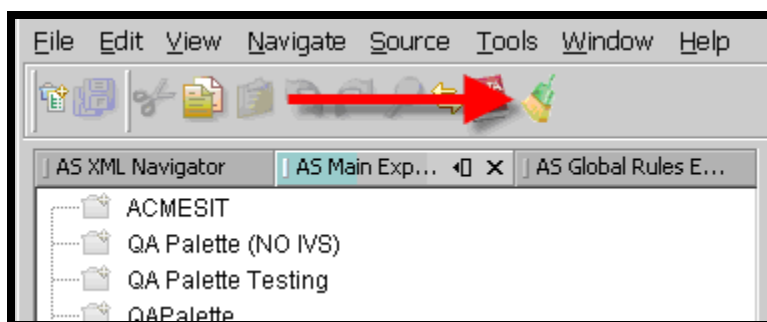
You can also use the double arrow button located in the upper right corner of the screen to open tabs if they are not visible on the pane. You can move back and forth between tabs in either direction by clicking on the respective left/right arrows.



Tabbing System

## Clearing the Cache

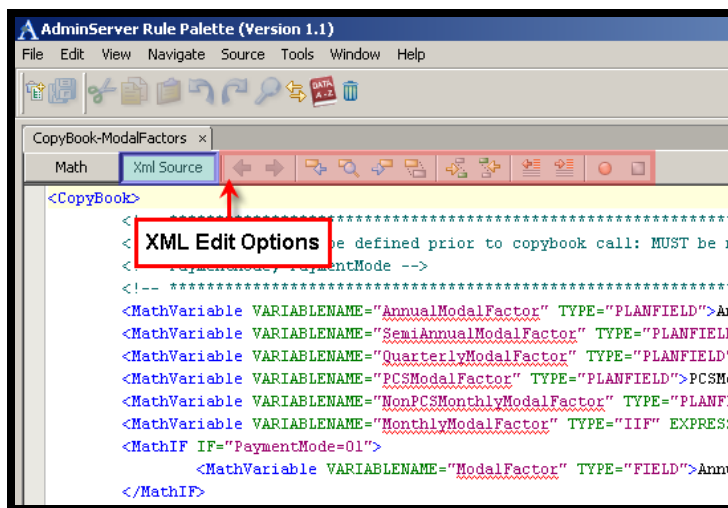
If you have an earlier version of the Rules Palette on your machine, it is strongly advised that you clear the cache after installing a new version. To clear cached data, select the broom icon from the shortcut bar.



Clear Cache Shortcut Button

## XML Source Editing

Once you begin working in Rules Palette, you'll see how easy the system is to use. But if you prefer to code in XML, you can always select the **XML Source** button. When you open a rule and select **XML Source**, you'll have functionality available similar to a standard XML editor.



XML edit options

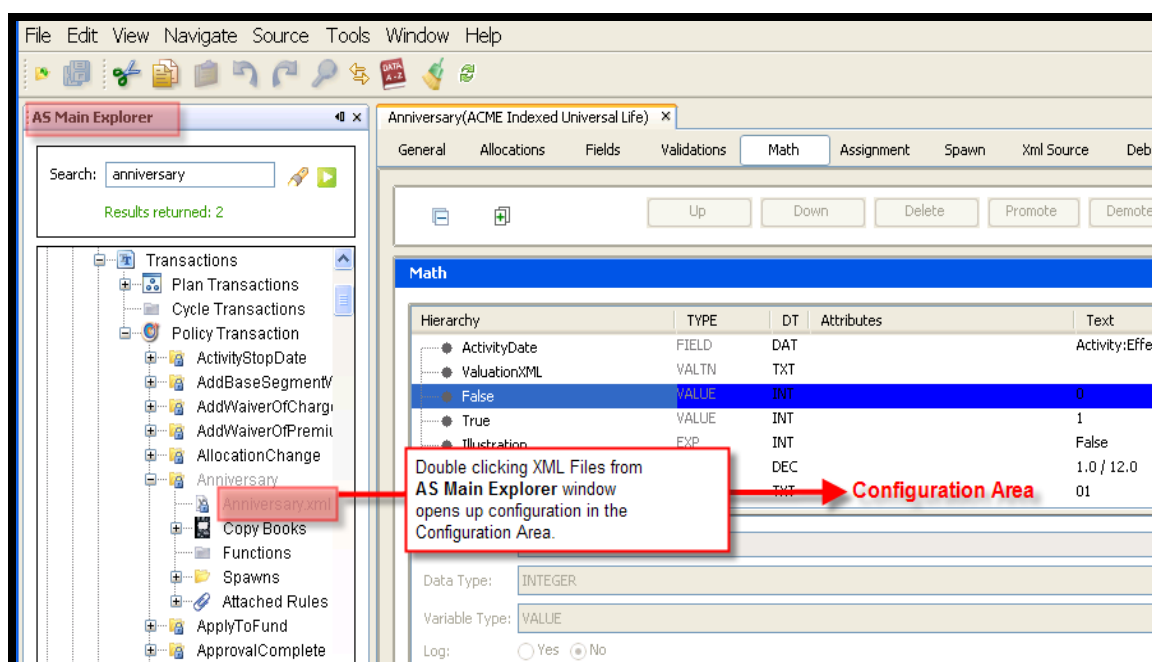


**Important:** You can turn line numbering and Editor toolbar on or off by selecting or deselecting **Show Line Numbers** and **Show Editor Toolbar** from **View** on the menu bar.



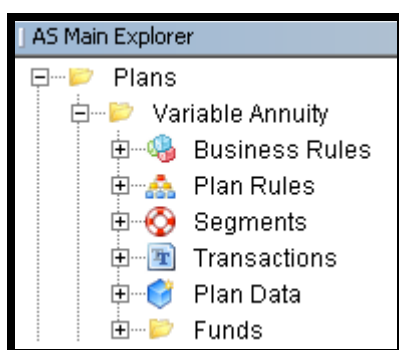
## AS Main Explorer Window

The **AS Main Explorer** window allows you to log on to environments and navigate through rules associated with Companies, Plans, Business Rules, Transactions and Segments. Right-clicking on the files and folders in this window will give you access to options like add, edit, refresh, compile, etc. By double-clicking a rule's XML file in this window, you can open up its configuration in the Configuration Area.



Opening Configuration from AS Main Explorer Window

**AS Main Explorer** uses a folder structure to organize rules and improve navigation. Each company has its own folder, which has a sub-folder for each plan. The plan folder further organizes the rules into six main categories.



Folder Structure


1. Business Rules - Any rules that are attached to the Plan, Interface, Screen, or System, rules that are user defined, and rules that apply to Calculate and CopyBooks.
2. Plan Rules - Any rules that are overridden at the Plan level and are required for a Plan to run in the application.
3. Segments – All the Segments attached to the Plan.
4. Transactions – All the Transactions attached to the Plan.
5. Plan Data – Constant values for a Plan that can be used for configuration calculations.
6. Funds – Only for Plans that use funds. This will store fund information.

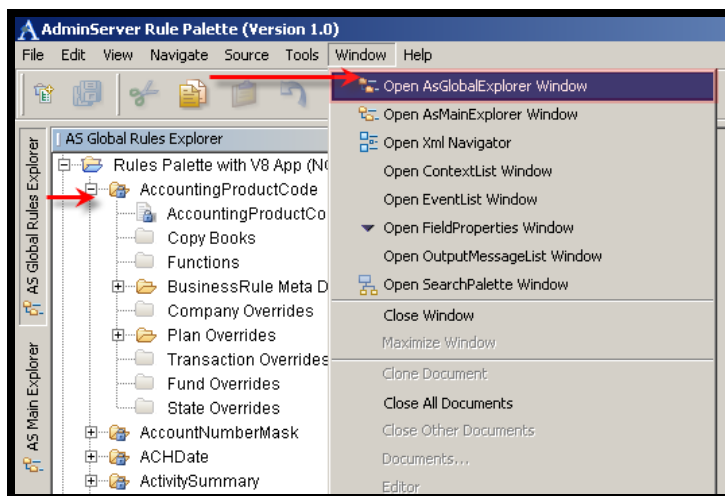
**Note:** If the Plan Rules folder is empty, there is a possibility that the XML Schemas are null in the Business Rules table. In this case, you will need to upload Schemas using the Upload Schema function on the toolbar. Please refer to the previous section on [Upload Schemas](#) for more information.

The Rules Palette assigns each rule a rule category according to the rule type. The type code is stored in a column called XML Schema in the Business Rule database. It is updated by scripts and is used by the Rules Palette for organization and performance. If you create a rule outside of the Rules Palette and do not assign the rule a rule category, it will not be viewable through the Rules Palette.

**Note:** Rules Palette type codes are different from the type codes in Code Names. Code Names can be accessed from the **As Admin Explorer** window.

## AS Global Rule Explorer Window

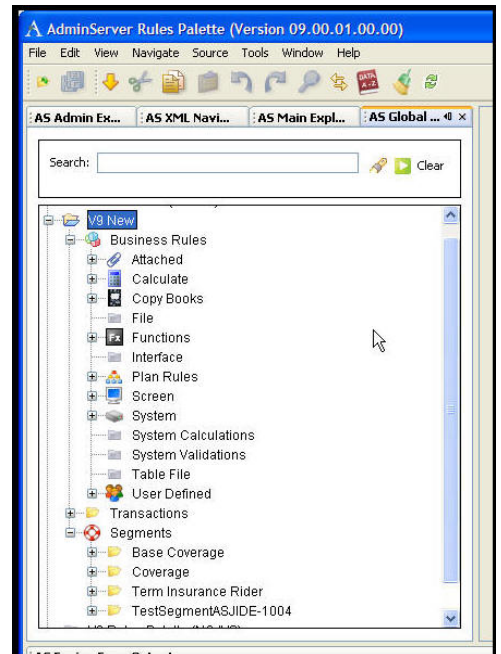
The **AS Global Rule Explorer** window lets you view the Global Business Rules and their associated files. You will be able to view Global Rules, overrides of rules, CopyBooks and Functions contained for the various rules. Overrides for rules include Company, Plan, Transaction, Fund and State Level overrides. To view a rule, expand  the rules folder and double-click on its XML file. The Configuration Area will display the configuration. Right-clicking on the files and folders in this window will provide all available options.



**AS Global Rules Explorer Opens from the Window Menu Bar**

The **AS Global Rule Explorer** window organizes the global rules into folders according to the rule type. The folder structure organization lets you move easily through the rule categories and provides a visual example of how the rules should be configured.

1. **Attached** - stores all the rules that you may need to attach to a transaction. The rules in the attached folder allow you to configure additional processing options.
2. **Calculate** - stores all the rules that perform system calculations.
3. **Copy Books** - stores all CopyBook rules (can be global or plan-specific).
4. **File** - stores all rules that identify report files.
5. **Functions** - stores all function rules that can be reused for calculations.
6. **Interface** - stores all rules that are used to interface XML data to different systems.
7. **Plan Rules** - stores all rules that are required in order to have any new plan.
8. **Screen** - stores rules that are associated with a screen in the application.
9. **System** - stores rules that must be present in order for the system to process correctly.
10. **System Calculations** - stores rules with pre-defined names that are used to perform set calculations. The syntax required is defined by the rule name. These rules should only be used for backward compatibility.
11. **System Validations** – stores rules with pre-defined names that are used to perform set validations. They syntax required is defined by the rule name. These rules should only be used for backward compatibility.
12. **Table File** - stores all rules that direct the system to a table that stores required data.
13. **User Defined** - stores optional rules.

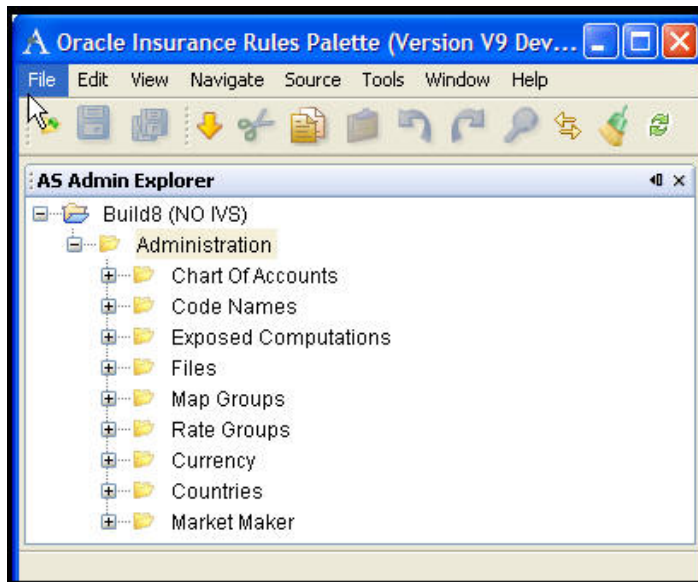


AS Global Rules Explorer

**Note:** If all the rule folders are empty there is a possibility that the XML Schemas are null in the Business Rules table. In this case, you will need to upload Schemas using the Upload Schema function on the toolbar. Please refer to the previous section on [Upload Schemas](#) for more information.


## AS Admin Explorer Window

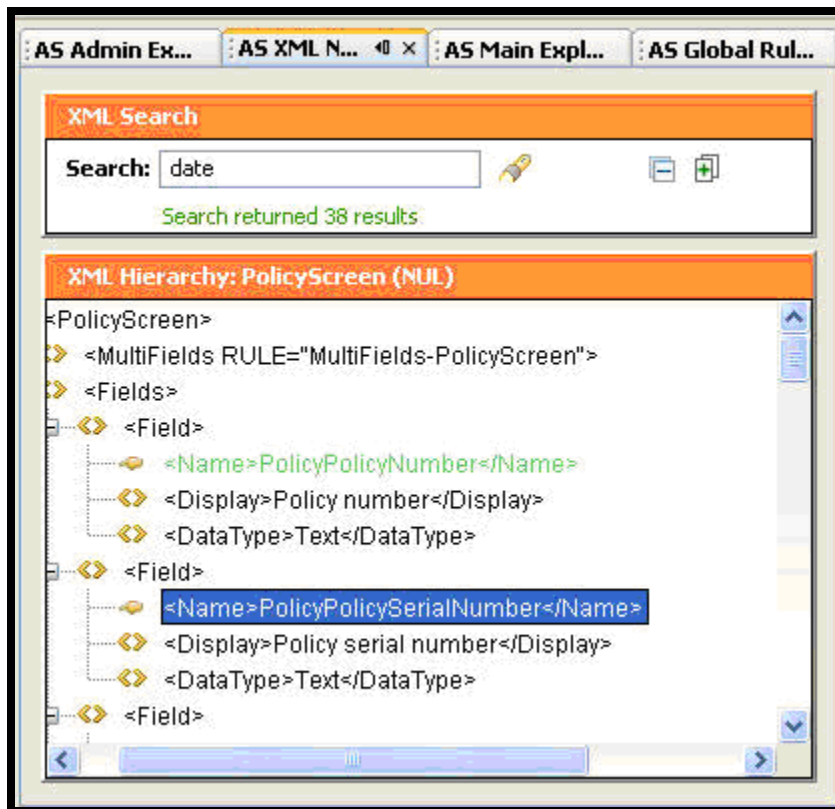
The **AS Admin Explorer** window consists of sub-folders for each administrative task that may be performed in the Rules Palette. Inside each sub-folder is a specific visual configuration editing mechanism for each administrative task. For more detailed information on the options available in the **AS Admin Explorer** window, refer to the [Administration](#) section in this document.



AS Admin Explorer Window



## AS XML Navigator Window

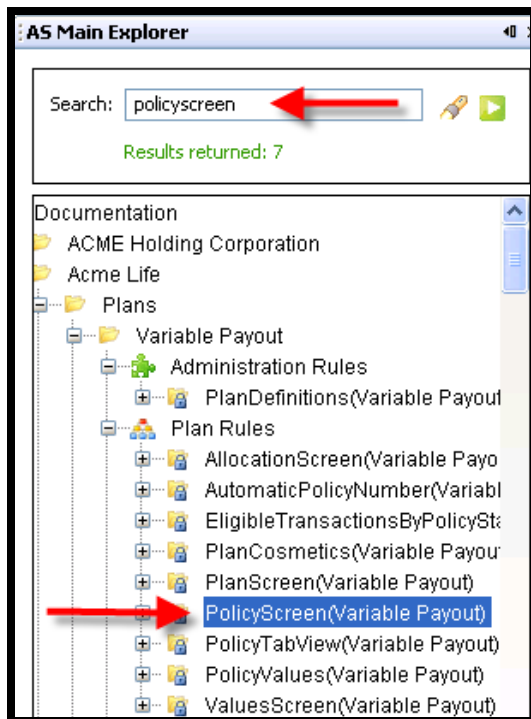
The **AS XML Navigator** window displays the XML configuration in an expandable tree structure. First, open a rule in the **AS Global Rule Explorer**. Then, switch over to the **AS XML Navigator**. For improved readability you can expand and close XML according to element tags. You can also search from this window. All result matches are highlighted in the **XML Hierarchy** box. You can double-click the  finger icon and the visual editor will open to the pane where that search criteria appears. The search criteria will be highlighted on the screen.



AS XML Navigator





## Expanded Search Functionality


You can use the search functionality to locate a specific component of the Rules Palette instead of having to hunt through the tree directory structure. You will see a search bar at the top of the AS Main Explorer, AS Global Rules Explorer and AS XML Navigator windows. Simply enter your search term in the search field and click the search button . If your search term is found, the search results will be highlighted in the expanded tree directory structure below and a message will appear beneath the Search field displaying the number of results found. By clicking the  button to the right of the search button, you can automatically go to the next result in the list.

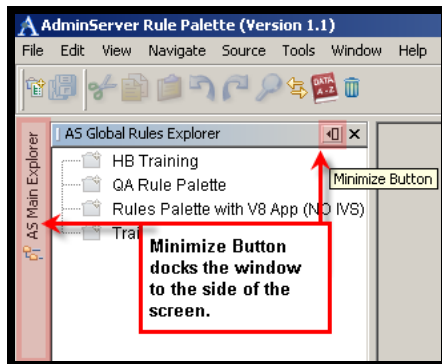


Search Functionality

## Movable Windows and Pane System

One of the many benefits of Rules Palette is that you can customize the window layout to fit your needs. Depending on how you arrange the windows, you can increase the viewing and editing space. You can grab, drag and drop windows to highlighted docking areas on the interface. You will arrange windows by using tab-docking buttons   to temporarily hide the window off to the side, or by dragging and positioning windows to docking areas to keep the window in view. To position any window along the side of the screen, simply click a window's minimize button . To re-dock a window, bring the screen into view then click the re-dock button . Double-clicking items in an Explorer window will open up information in the Configuration Area.

 **Important:** Use the **Window** menu bar option to open a window after it has been closed.

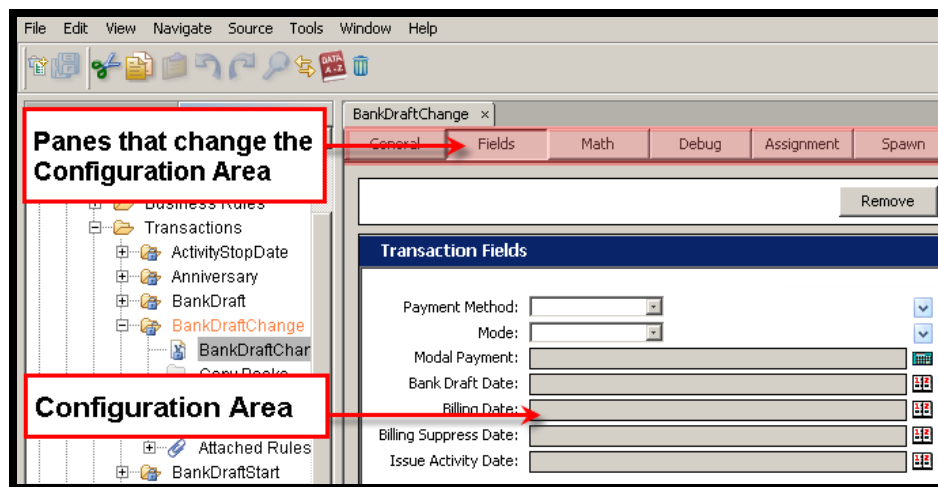


Docking windows

## Configuration Area

The Configuration Area is where you perform configuration. The contents of the area will change depending on the type of configuration you are performing. Each section of the configuration has an associated tab, which is referred to as a pane. These panes are displayed along the top of the configuration area. By selecting a pane, the Configuration area displays configuration tools for that particular section. You can visually configure using drag and drop features and selection options, or you can configure in XML. You are only provided with configuration tools that are relevant for the type of business rule that you are editing. Simply put, the Configuration Area provides panes where you do all of your configuration whether using the visual editing tools available in the Rules Palette or using straight XML.

In order to edit in this pane, the rule must be checked out. If the rule is not checked out, the information is available for viewing but not for editing.



Configuration Area



**Important:** Please note that if you wish to use the Rules Palette with the Policy Administration System (PAS), you must configure in only one area - either in the Palette OR PAS but not both. If both are used to update configuration, then there will be technical issues.



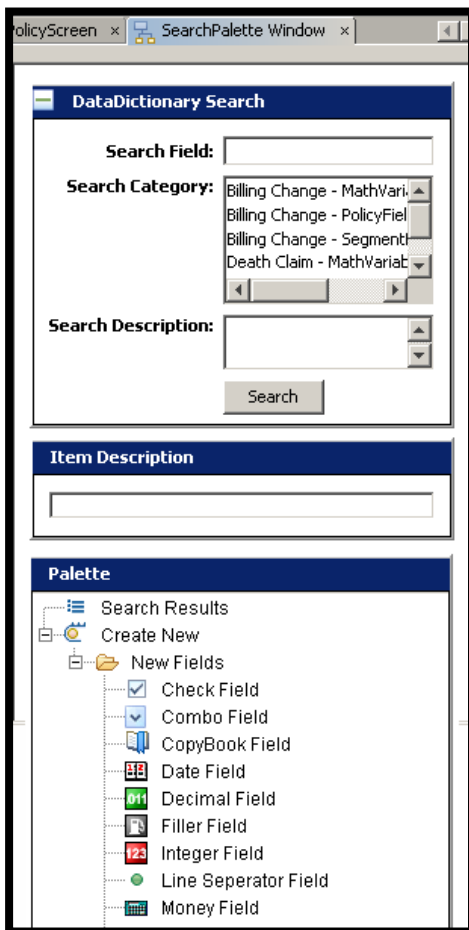
## SearchPalette Window

The **SearchPalette** window is used to drag and drop Fields and MathVariables onto the Configuration Area. You can search Fields and MathVariables that have been added to the Data Dictionary by using the **DataDictionary Search** section.

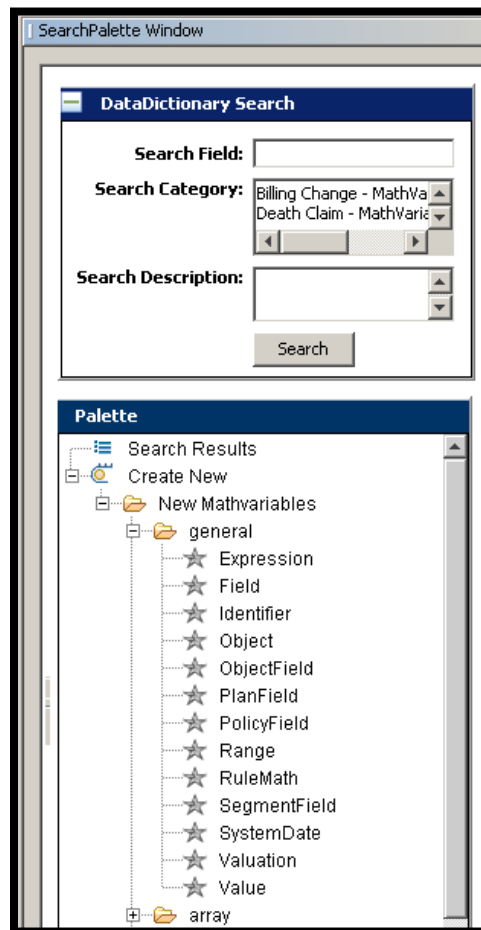
Results from a **DataDictionary Search** will be viewable in the Palette section under **Search Results**. The user can use drag and drop functionality to move variables found from the DataDictionary search results onto either the Field or Math panes of the Configuration Area.

You can also create new Fields and MathVariables from the **Palette**. All available Fields are listed in the Palette when configuring the Field pane. When configuring Math the MathVariable types are divided up into folders by type in the Palette. The folders can be expanded to expose the types available and collapsed to help in locating the appropriate folder. Once the appropriate variable is selected, the user can drag and drop from the **Create New** folder onto the Configuration Area.

### Search Palette Window for Fields



### Search Palette Window for Math



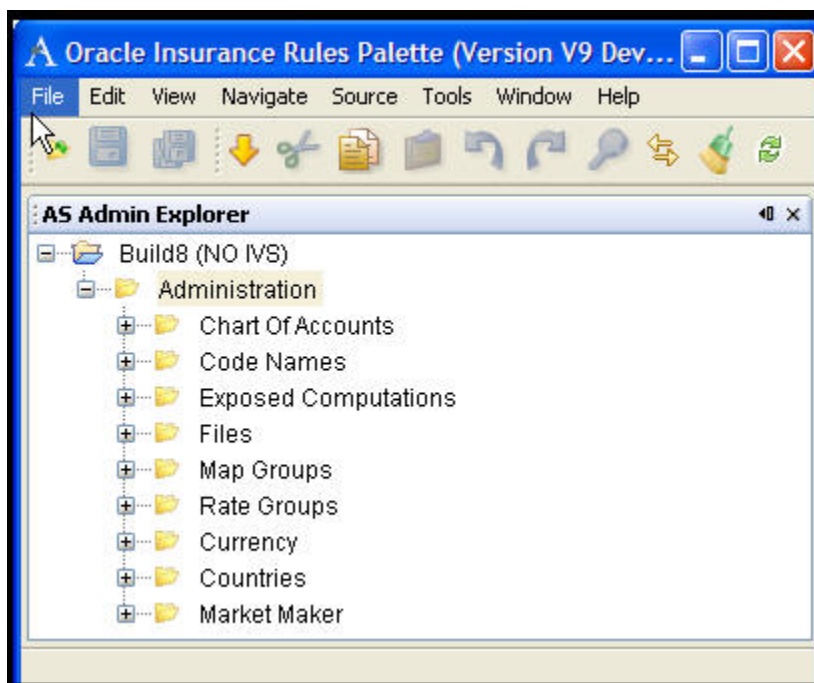
## Administration

The Rules Palette has been created to make many of the administrative functions for the Oracle Insurance Policy Administration (OIPA) system easier than ever to perform. Much of the functionality that originally needed to be configured in the OIPA system is now transferred to the user-friendly Rules Palette. Now you have a single location for configuring both system rules and administrative requirements.

**Note:** Processing and Customer Service Representative (CSR) functionality will remain in OIPA.

The Rules Palette administration window, **As Admin Explorer** consists of sub-folders for each administration task that may be performed. These tasks include functions such as defining security roles and privileges, managing available type codes, uploading rates, configuring builds, migrating rules as well as managing various other metadata required for the system to function in accordance with an individual client's requirements.

Once administrative functionality has been enabled in the Rules Palette, it will no longer be available in the OIPA application. An administration user security role will be defined, separate from a rules configuration role. This administration security role will be the only user that can update or view security options.



As Admin Explorer

**Note:** Security resides under the Administration folder, but it is only visible to the user who has been assigned the administration security role.

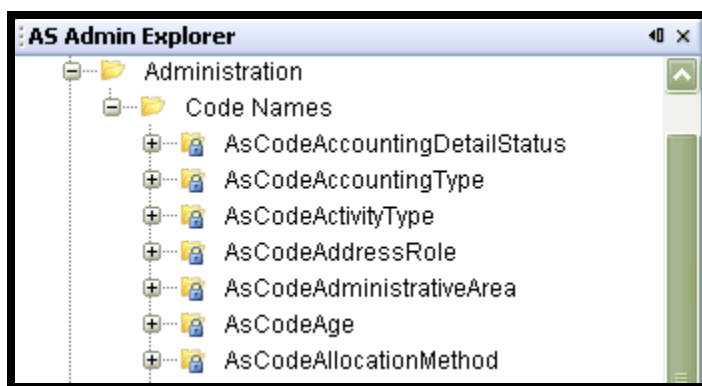
## Code Names

Codes are used to maintain consistency, performance and flexibility in the database. Codes are two digit numeric values associated with various types of data, categorized by purpose, and stored in the Code Names folder. The Code Names folder, has sub-folders that store the various types of codes, which are grouped together according to their purpose. For example, all the codes that are associated with roles on a policy are stored in the folder called AsRole.

Certain rules have elements that specifically use codes found in the Code Name folder. By using numeric codes instead of names when configuring, you can easily make changes to the database. When you change the code using this administration tool, every instance where that code appears in the system will automatically be changed as well. The two character codes also save performance time and space in the database.

When configuring rules in the Rules Palette, you will notice drop-down boxes labeled TYPE with look up links that display the codes associated with the task you are configuring. For example, roles on a policy such as insured, beneficiary, etc. each have a code in the Code Names folder under AsRoles. When configuring for a beneficiary you will use the associated code of 01. If the company decides to rename the beneficiary role to primary beneficiary, this will only need to be done in the Codes Name folder instead of everywhere it was used in the configuration.

The Rules Palette provides dynamic code editing capabilities and the ability to make updates to the AsCode table values with visual editing tools. This allows you to dynamically add, edit or delete values in the AsCode table. Information including the Code Name, Code Value, Long Description, Short Description and a System Indicator can be added or updated in the AsCode table using the code-editing functionality. This functionality is accessible via the AS Admin Explorer window in the Administration folder. The Code Names sub-folder contains all code categories. When changes, additions or deletions are made to codes within the Code Names folder, and then checked in, those updates are automatically made to the AsCode table.



Code Names Folder

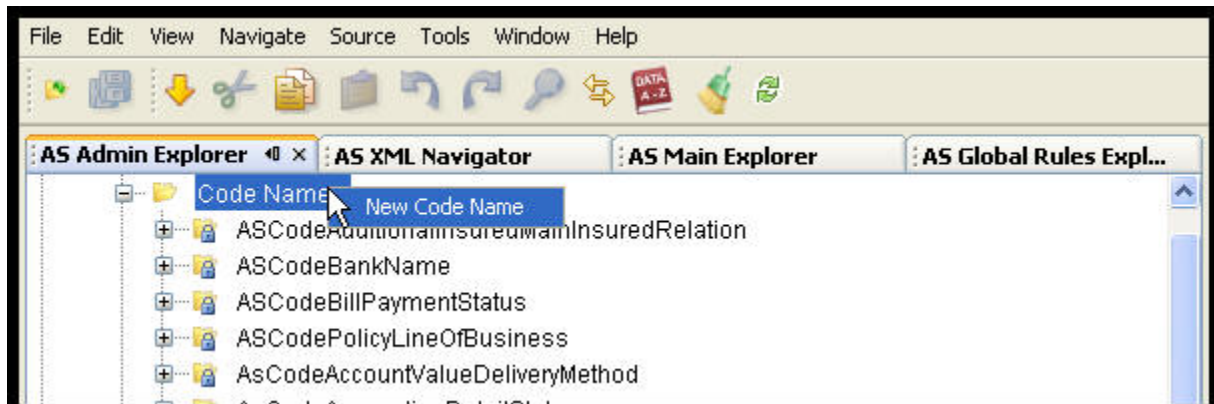
**Note:** Security Roles that can update the codes and make modifications using the code-editing functionality will be determined by the Security Manager – see the section on [Security](#) for more information on assigning Security Roles.

## Adding a New Code Name

There will be times when you need to create a new code. This administration task can be performed from the Code folder. Use the following instructions to create a new code name and add it to the system.

### Steps to Add a New Code Name

1. Right-click on the Code Names sub-folder in **AS Admin Explorer**.
2. Select **New Code Name**.



Create a New Code Name

3. Type the code name in the Code Name box. The prefix AsCode is already provided for you and must be part of your code name. When you have entered your new code name correctly, the **Finish** button becomes enabled.



Add New Code Name Wizard

**Note:** The system will not let you save a code without the AsCode prefix in the Code Name.

4. Select the **Finish** button. You will now see your new code name added to the list in the AS Admin Explorer.

**Note:** By default, your new code name will be checked in. You must check it out (right click on the code name in the AS Admin Explorer and select Check Out) in order to edit it.

## Basic Editing Functionality

The following options are available when editing Codes in the Codes pane of the AS Admin Explorer. The functionality will become enabled as soon as you check out the desired Code Name from the AS Admin Explorer Code Names folder.

Option	Description
Code Value	The numeric value assigned to the code. Saving this in the database instead of the entire code name saves space and improves performance.
Short Description	A short description of the code.
Long Description	A more detailed description of the code.
System Indicator	This denotes a special type of system code. Default for this option is unchecked.
Edit	Selecting this checkbox allows you to edit a code within a particular code name. When you add a new code, the edit checkbox defaults to checked and the code will appear highlighted in <b>blue</b> . If you select the Edit checkbox on an existing (not new) code, it will become highlighted in <b>green</b> .
Delete	Selecting this checkbox allows you to delete a code from the particular code name you have checked out. This code will become highlighted in <b>red</b> when the checkbox is selected.
Add	The Add button allows you to add a new code to the particular code name you have checked out. When you add a new code, a new code line will appear in the codes pane and it will be highlighted in <b>blue</b> . The Edit Checkbox is checked by default.

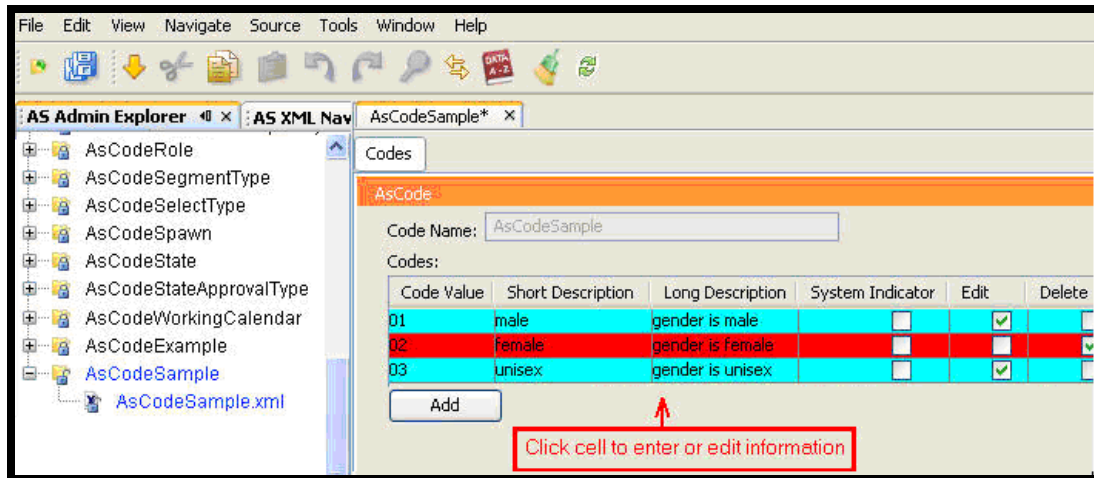
## Color Coding

The code-editing functionality uses the following color coding (highlighting) to identify the status of a particular code.

- Green: When editing an existing code (not a new one) it will be highlighted in Green.
- Blue: When you first add a new code it will appear highlighted in blue with the Edit checkbox defaulting to Checked In.
- Red: When deleting a code it will be highlighted in Red

## Adding, Editing and Deleting Codes in a Code Name

Once you check out a Code Name and the Codes Editor functionality becomes enabled, you can begin your updates to the codes. The following image displays the edit screen that appears when you check out a Code and edit it.



Codes Marked for Edit and Delete

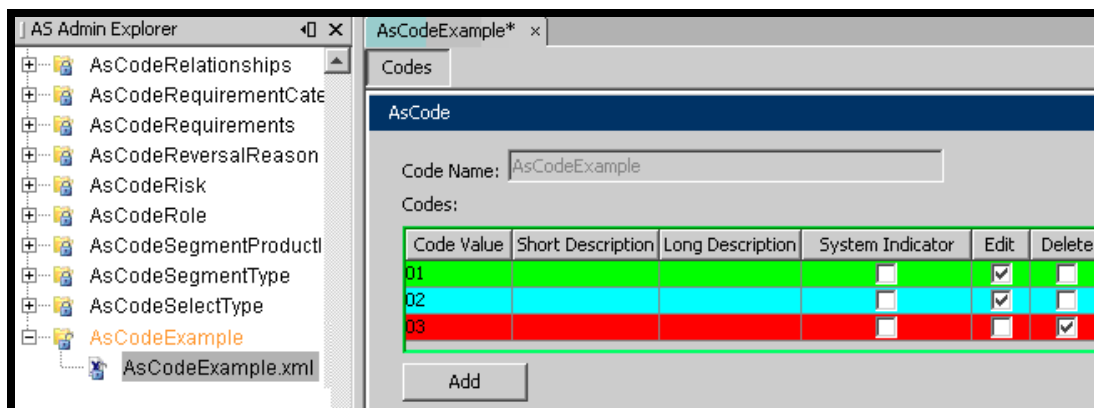
Select the **Add** button on the Codes pane to add a new blank row (code) to the Code Name. This new code appears highlighted in blue.

Enter the **Code Value**, **Short Description** and **Long Description** information for the code. You can then select the **System Indicator**, **Edit**, and/or **Delete** checkboxes for that Code as desired.

If you select the **Delete** checkbox, the row (code) will automatically become highlighted in red.

**Note:** Be aware that editing or deleting existing code could adversely affect the system so use caution when making changes to the codes.

If you have a Code Name checked out which already exists, it will appear with no highlighting. If you select the Edit box on this existing code, the row (code) will automatically become highlighted in green.



Codes Marked Edit Existing, Edit New and Delete

Once you have made all the desired edits, adds and/or deletions in a particular Code Name, you will have to check it in to commit the changes to the AsCode table in the system.

## Exposed Computation

Exposed Computation is a feature that is used in situations where an external application needs to pull information from the OIPA system. An incoming Web Service message provides the required calculation variables. OIPA then returns the results of the computation in an outgoing Web Service message.

Exposed Computation allows for calculations to be performed on values that do not execute Math Configuration. The required calculation variables and computed results are generally not kept within the OIPA database and are managed only in memory as required for the specified calculation.

Before you configure the Exposed Computation, you need to create a new global business rule.

### Steps to Create New Exposed Computation Global Business Rule

1. Navigate to the **AS Global Rules Explorer**.
2. Open the Business Rules folder.
3. Right click on the Attached category.
4. Select **New Global Business Rule for “Attached” category**.
5. Enter the name for your new rule. It is a good practice to begin your name with “ExposedComputation – “ and the name of the activity it is associated with. That way all of the business rules will be grouped together. (Ex: ExposedComputation – AutoAssessment.)
6. Select the Company, Plan and Transaction associated with the Exposed Computation.
7. Select Exposed Computation from the Typecode drop down box.
8. Select PAS from the VBOTypeCode drop down box and click **Next**.
9. Select **Finish**.

**New Global Rule**

**Steps**

1. Step #1: Name
2. **Step #2: Overrides & Settings**
3. Step #3: Template

**Step #2: Overrides & Settings**

Company: ACME

Plan: ACME **Term Plan**

Transaction: TransactionForTest

State:

Fund:

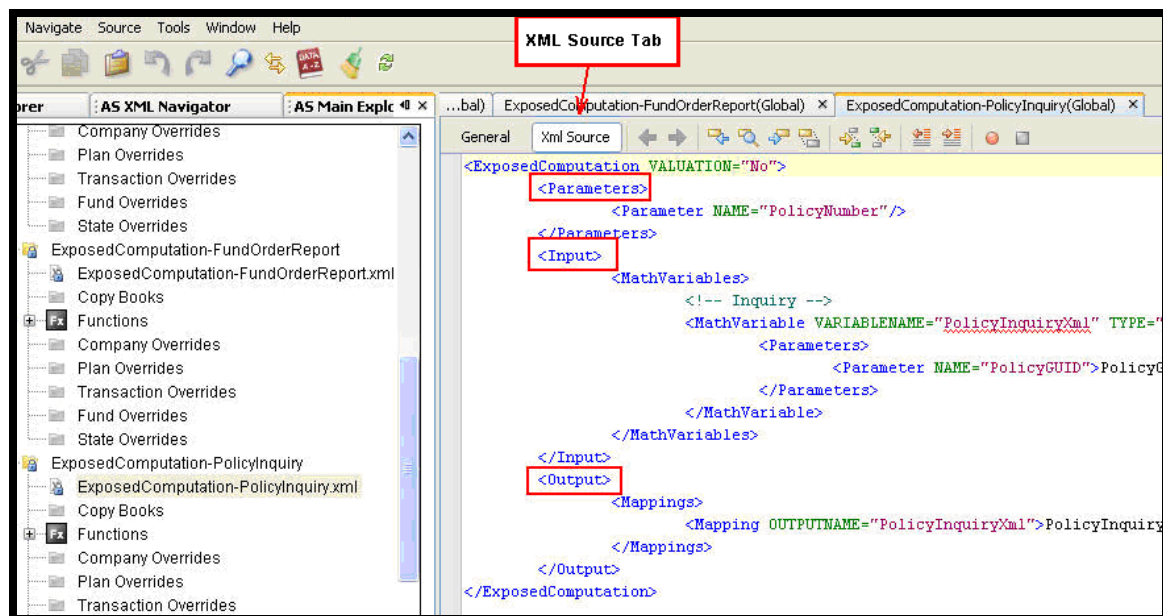
TypeCode: Exposed Computation

VBOTypeCode: PAS Base

< Back   Next >   Finish   Cancel   Help



10. Select the XML Source tab at the top of the Configuration window.
11. Enter the XML code for your exposed computation. Your code can have the following sections.
  - a. Parameter – this tells the web service where to look for the information. This is an optional element.
  - b. Input – this section contains the math variables that will calculate the specific information you are requesting. This is a required element.
  - c. Output – this section contains the mapping information. This is a required element.
  - d. Validations: this section contains validations. This is an optional element.
12. Right click on the XML file and select **Check- in** to save your exposed computation.

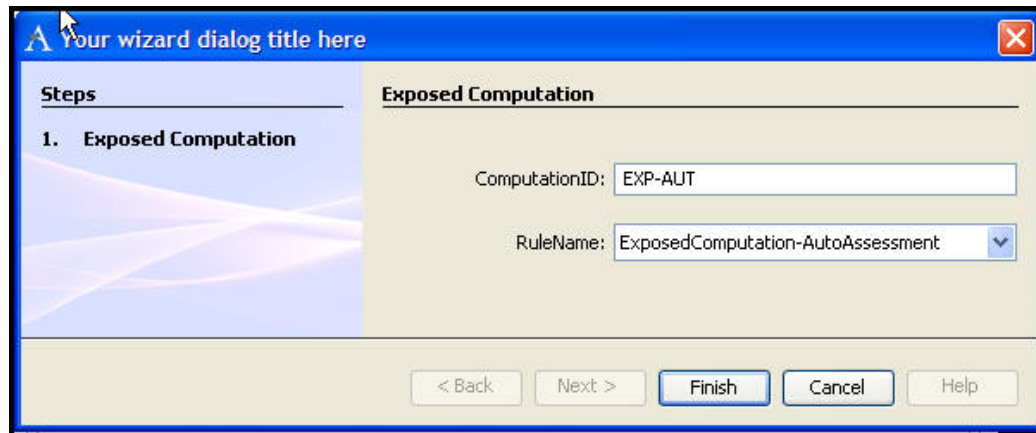


Configure Exposed Computation



### Steps to Create a New Exposed Computation

1. Select the **AS Admin Explorer** tab.
2. Open the Administration folder.
3. Right click on Exposed Computation and select **New Exposed Computation**.



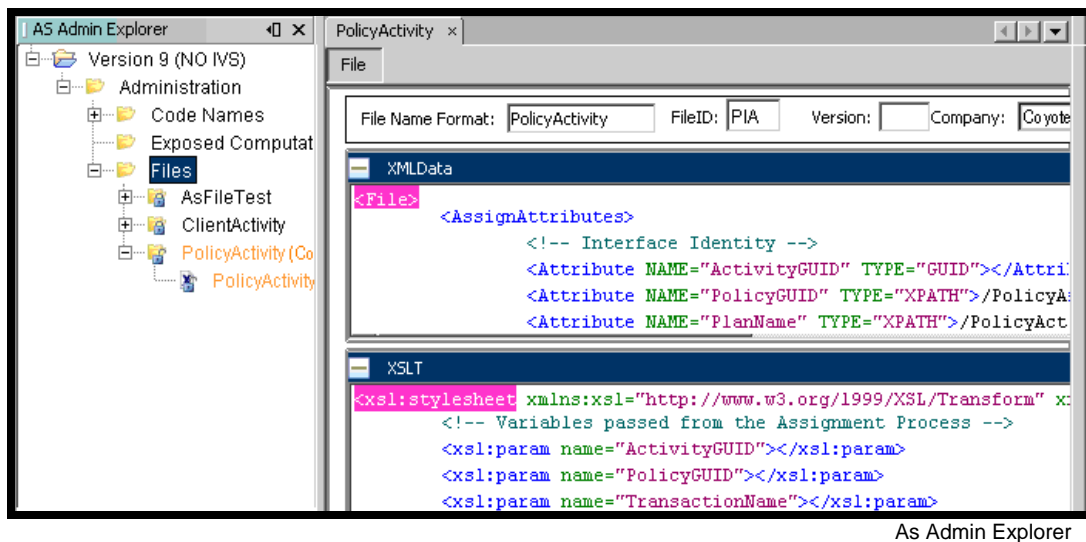
New Exposed Computation

4. Enter a Computation ID. It is a good practice to begin your Computation IDs with "EXP – "...and the abbreviation of the activity it is associated with. For example, EXP – AUT is the Computation ID for the exposed computation that returns the errors generated by the AutoAssessment activity on a given policy.
5. Select the name of the new global business rule you just created from the drop down box for RuleName.
6. Select **Finish**.
7. Check-in your new Exposed Computation.

## Files

The Files administration functionality allows you to select, transform and upload incoming data and insert it directly into the OIPA database. You can also leverage this functionality to filter imported data and activities based on the state of a particular entity or request.

Each file is configured with two separate sections: XMLData and XSLT. The XMLData processes the incoming request by assigning values to the variables. The XSLT directs how the information will be transformed so that it can be processed. The Rules Palette provides easy to use auto-entry functionality to make configuring either section quite simple.



### Steps to Create a File

1. Open the **As Admin Explorer** window.
2. Select the Files folder and right-click.
3. Select **New File**.
4. Enter a name in the File Name Format box. The name can be similar to the name you would give a business rule or transaction.
5. Select the Company from the drop down box.
6. Enter a File ID, which allows the caller to specify the file to use to process the request. A File ID is limited to three characters and should be an acronym or abbreviation for the calling or desired process.
7. Select the **Finish** button.

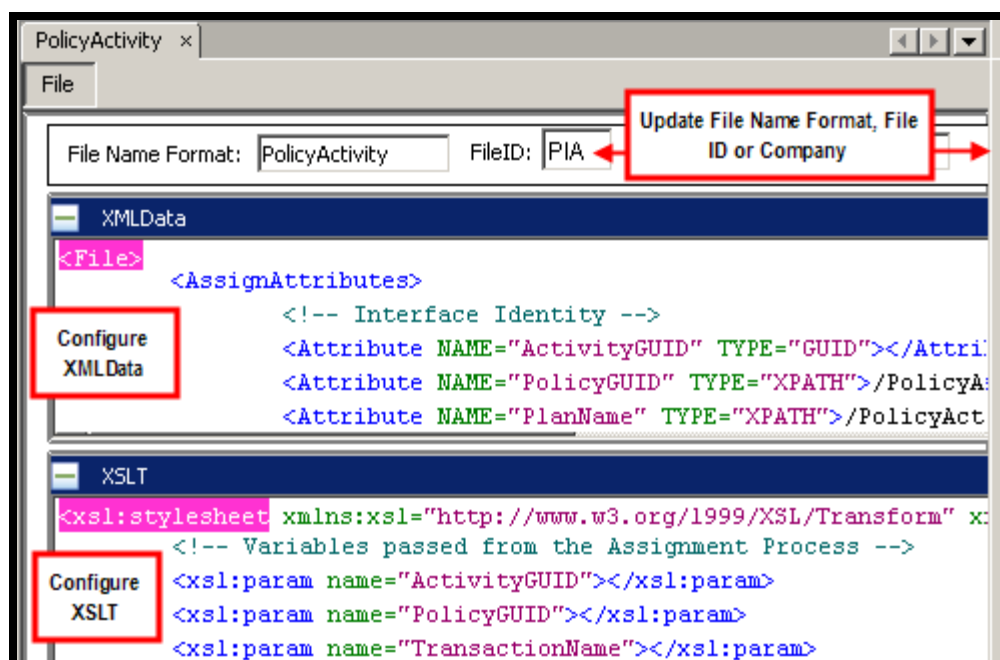
New File Wizard

A folder with the file's XML is created. Use the XML file to configure the file accordingly. You must check in and check out the file, similar to the checking in and checking out of rules. Checking in the file updates the record in the AsFile table in the database. When the file is checked out, you may edit the File Name Format and File ID using the fields at the top of the configuration area. Refer to the [Check Out and Check in Rules](#) section for further details.

### Steps to Configure a File

1. Open the **As Admin Explorer** window.
2. Expand the Files folder.
3. Locate and open the folder of the file you want to configure.
4. Right click the file's XML file.
5. Select **Check Out**.
6. Configure in the **XMLData** section
  - a. The <File> element must be the first tag in the XML section and its end tag last.
  - b. Configure all necessary <Attributes> tags in-between the <AssignAttributes> tag.
  - c. Configure the two required <Attributes> elements, using its NAME and TYPE attributes. The value of <Attributes> is only populated if it is a requirement of the associated TYPE attribute.
    - i. ImportMapName is a required NAME attribute. The import map name is the text of the root XML node of the AsXML.
    - ii. ClassName is a required NAME attribute. The ClassName attribute should be defined as one of the objects that AsXML mapping is going to create.

- d. After the closing `</AssignAttributes>` element, you may configure pre and post insert operations if there is a need to call other functionality in the application. Use the `<PreInsert>` and `<PostInsert>` elements to do so.



File configuration

7. Configure in the **XSLT** section
  - a. Configure the XLS stylesheet.
  - b. Perform the validations. You can perform validations prior to business processing. You also have the flexibility to perform validations on requests that will not insert an activity record. In addition, XSLT syntax gives you the ability to validate records before any of them are inserted into the database.
8. Check in the file by right clicking the XML file and selecting **Check-In**.

**Note:** See Appendix 4 of the Technical Manual for further details on configuring files.

## Rate Groups

When a new plan is configured for OIPA, a rate group must be created via the Rules Palette. A rate group arranges rates together by their designated purpose and provides a means for retrieving those rates.

Once a rate group is created, a unique GUID is established and used to link the rate group to the individual rates. The rate group stores a description for the rates, the rate indexing method and the rate criteria(s). These key pieces of information are required for the rate group and drive how the system will use the associated rates for configuration and policy events.

After a rate group is created, the next step is to upload the actuarial rates, which should have been provided in an Excel spreadsheet by the business, client or party responsible for supplying the rate information. Rates can also be entered manually using the Rate Editor in the Rules Palette.

## Types of Rates

There are three types of rates that can be used in OIPA. The type of rate you intend to upload will impact the values required in the wizard. Here is a brief explanation of the three types of rates.

- Aggregate Tables - Aggregate tables always use age as the IntegerCriteria to index the rates. An Aggregate table must be in the correct OIPA format to upload. The specified IntegerCriteria must be placed in the left-most column of your table. All other criteria must be placed in the columns directly to the right of the Integer Criteria column.

E	F	G	H	I	J	K
	ACME_Base_COI					
	Male		Female		Unisex	Criteria1
AGE	Smoker	Nonsmoker	Smoker	Nonsmoker	Smoker	Nonsmoker
0	11.53	11.53	13.99	13.99	11.95	11.95
1	11.59	11.59	13.97	13.97	11.99	11.99
2	11.27	11.27	13.58	13.58	11.66	11.66
3	10.94	10.94	13.19	13.19	11.33	11.33
4	10.63	10.63	12.81	12.81	10.99	10.99
5	10.31	10.31	12.42	12.42	10.67	10.67
6	10	10	12.05	12.05	10.34	10.34
7	9.68	9.68	11.68	11.68	10.02	10.02

Aggregate Rate Table

- **Select Tables** - Select tables are used when two criteria are needed to index the rate group. For example, a rate table can use both duration and age as methods for indexing rates. In this scenario, the IntegerCriteria for a Select table would be Duration and it is always specified in the left-most column of your table. Issue Age is then specified as the row header for each additional column. All Issue Age criteria must be placed in the columns directly to the right of the Integer Criteria column.

B	C	D	E	F	G	H	I	J	K
					ACME Base Current COI without AGE 100 Rider Male Nonsmoker				
									Issue Age
		00	01	02	03	04	05	06	07
Duration	1	0.0001117	0.0000892	0.0000825	0.0000817	0.0000792	0.000075	0.0000717	0.0000667
	2	0.0000833	0.000077	0.0000763	0.0000739	0.00007	0.0000669	0.0000623	0.0000591
	3	0.000077	0.0000763	0.0000739	0.00007	0.0000669	0.0000623	0.0000591	0.0000576
	4	0.0000763	0.0000739	0.00007	0.0000669	0.0000623	0.0000591	0.0000576	0.0000567
	5	0.0000739	0.00007	0.0000669	0.0000623	0.0000591	0.0000576	0.0000567	0.0000601
	6	0.00007	0.0000669	0.0000623	0.0000591	0.0000576	0.0000567	0.0000601	0.0000666
	7	0.0000669	0.0000623	0.0000591	0.0000576	0.0000567	0.0000601	0.0000666	0.0000778
	8	0.0000623	0.0000591	0.0000576	0.0000567	0.0000601	0.0000666	0.0000778	0.0000907
	9	0.0000591	0.0000576	0.0000567	0.0000601	0.0000666	0.0000778	0.0000907	0.0001003
	10	0.0000576	0.0000567	0.0000601	0.0000666	0.0000778	0.0000907	0.0001053	0.0001055
	11	0.0000567	0.0000599	0.0000661	0.000077	0.0000894	0.0001034	0.0001074	0.0001078

Select Table

- **Select with Ultimate** - Select with Ultimate is a hybrid strategy that uses two indexes for the rating. The final row of rates is called the ultimate row and once attained will end the incrementing of that index. Once the ultimate rate is reached that row will always be used for retrieving rates and only the second index method will increment to retrieve a rate.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2			AGE -->									
3		duration	18	19	20	21	22	23	24	25	26	27
4		1	0.0001270	0.0001191	0.0001098	0.0001006	0.0000901	0.0000807	0.0000701	0.0000621	0.0000581	0.0000581
5		2	0.0001261	0.0001195	0.0001103	0.0001024	0.0000931	0.0000852	0.0000786	0.0000759	0.0000746	0.0000746
6		3	0.0001251	0.0001198	0.0001120	0.0001041	0.0000975	0.0000923	0.0000884	0.0000871	0.0000883	0.0000896
7		4	0.0001255	0.0001202	0.0001124	0.0001059	0.0001019	0.0000980	0.0000980	0.0000992	0.0001017	0.0001043
8		5	0.0001257	0.0001205	0.0001141	0.0001102	0.0001075	0.0001061	0.0001061	0.0001060	0.0001111	0.0001136
9		6	0.0001260	0.0001221	0.0001182	0.0001142	0.0001116	0.0001115	0.0001127	0.0001151	0.0001177	0.0001214
10		7	0.0001251	0.0001237	0.0001210	0.0001172	0.0001158	0.0001169	0.0001180	0.0001217	0.0001255	0.0001317
11		8	0.0001277	0.0001264	0.0001226	0.0001199	0.0001198	0.0001209	0.0001233	0.0001269	0.0001330	0.0001403
12		9	0.0001303	0.0001277	0.0001251	0.0001237	0.0001236	0.0001259	0.0001318	0.0001366	0.0001426	0.0001487
13		10	0.0001314	0.0001289	0.0001287	0.0001286	0.0001308	0.0001319	0.0001377	0.0001448	0.0001519	0.0001590
14		11	0.0001348	0.0001323	0.0001322	0.0001332	0.0001354	0.0001399	0.0001457	0.0001538	0.0001619	0.0001713
15		12	0.0001358	0.0001367	0.0001377	0.0001398	0.0001420	0.0001465	0.0001544	0.0001613	0.0001716	0.0001842
16		13	0.0001389	0.0001398	0.0001419	0.0001452	0.0001506	0.0001562	0.0001640	0.0001741	0.0001853	0.0002000
17		14	0.0001429	0.0001450	0.0001481	0.0001546	0.0001612	0.0001677	0.0001765	0.0001876	0.0002019	0.0002185
18		15	0.0001457	0.0001510	0.0001584	0.0001648	0.0001724	0.0001821	0.0001918	0.0002037	0.0002189	0.0002373
19		16	0.0001507	0.0001602	0.0001699	0.0001774	0.0001881	0.0001989	0.0002108	0.0002249	0.0002443	0.0002669
20		17	0.0001609	0.0001694	0.0001780	0.0001887	0.0002006	0.0002124	0.0002275	0.0002458	0.0002685	0.0002933
21		18	0.0001691	0.0001787	0.0001894	0.0002012	0.0002140	0.0002281	0.0002463	0.0002689	0.0002957	0.0003269
22		19	0.0001783	0.0001889	0.0002007	0.0002135	0.0002296	0.0002478	0.0002703	0.0002971	0.0003272	0.0003624
23		20	0.0001884	0.0002013	0.0002141	0.0002290	0.0002472	0.0002707	0.0002964	0.0003285	0.0003626	0.0003956
24		Ultimate Row	0.0002008	0.0002135	0.0002285	0.0002466	0.0002701	0.0002957	0.0003277	0.0003617	0.0003968	0.0004317
25												
26		ultimate age	38	39	40	41	42	43	44	45	46	47
27												

Ultimate Table

### Steps to Create an Aggregate Rate Group

1. Open the **AS Admin Explorer** window.
2. Select and right click on the Rate Groups folder.
3. Select **New Rate Group**.

**New Rate Group Wizard**

**Steps**

1. **Rate Group Info**
2. Add Rates?
3. Upload Rates (optional)

**Rate Group Info (1 of 3)**

**1. Rate Group Info**

Please enter information for the new Rate Group

Rate Description: ABC Rate Group

Integer Criteria: Age

Rate Activation Date: Thu 11/06/2008

Transaction From Date: Thu 11/06/2008

Transaction To Date:

Criteria 1: Gender

Criteria 2: Tobacco

Criteria 3:

Criteria 4:

Criteria 5:

Criteria 6:

Criteria 7:

Criteria 8:

Criteria 9:

Criteria 10:

< Back   **Next >**   Finish   Cancel   Help

Rate Group Wizard

4. Enter the Rate Description. This is a descriptive name that is used to identify the rates. It should be the name provided with the rate table. This name will be stored as the RateDescription in AsRateGroup and AsRate.
5. Enter the Integer Criteria. This is the main index in the database table. Age is always the Integer Criteria for Aggregate tables.
6. Enter the Rate Activation Date. This date is used in conjunction with a policy's effective date to identify when a set of rates is active for a policy. The policy must be effective **on or after** the date listed here. Rate Activation Date is stored as EffectiveDate in the AsRateGroup table.
7. Enter the Transaction From Date. Transactions that occur **on or after** this date will use the associated rates. TransactionFromDate is stored as the ActiveFromDate in AsRateGroup.
8. Enter the Transaction To Date. When loading new rates, this field should be left blank. The TransactionToDate is stored as the ActiveToDate in AsRateGroup.



9. Enter the descriptions for Criteria 1 through Criteria 10 and select Next. The descriptions should be entered as they appear in the Excel spreadsheet. Criteria names must remain constant for all rate groups in the system. These criteria names will correlate to columns in your rate table. Criteria names are case sensitive so make sure the names match exactly.
10. Determine how you want to add your rates.
  - a. Select **Yes** to upload an Excel spreadsheet of rate information. Refer to the steps for uploading an Excel spreadsheet.
  - b. Select **No** and then select **Finish** if you want to add your rates manually using the Rate Group Editor. Refer to the steps for Editing Rate Groups.

If you selected Yes to upload an excel spreadsheet, the following steps will pick up at Step 3, where the previous steps left off.

### Upload Rates From Aggregate Table in an Excel Spreadsheet

1. Select the Excel spreadsheet containing the rates you want to upload.
2. Specify Aggregate as the table type (rate type) to be uploaded.

**Note:** Make sure the IntegerCriteria is listed as Age.

**New Rate Group Wizard**

**Steps**

1. Rate Group Info
2. Add Rates?
3. **Upload Rates (optional)**

**3. Upload Rates**

Please enter Rate Upload information.

Workbook: C:\Documents and Settings\tiffanyb\Desktop\RatesAggregate.xls

Table Name: ACME Rate Group

Table Type: Aggregate

Worksheet: aggregate

Integer Criteria: Age

Int. Criteria Column: A

Start Row: 23

End Row: 99

Add Row Remove Row

Column	Criteria1	Criteria2	Criteria3	Criteria4	Criteria5	Criteria6	Criteria7	Criteria8	Criteria9	Criteria10
B	01	00								
C	02	00								
D	03	00								

< Back Next > Finish Cancel Help

Upload Aggregate Rates

3. Enter the literal worksheet name (exactly as appears on the spreadsheet) in the Worksheet field.
4. Enter the spreadsheet column identifier that contains the Integer Criteria for the intended indexing strategy.
5. Enter the starting and ending row numbers that contain the rates to be uploaded.
6. Select the **Add Row** button.
7. Enter the Column letter of the criteria you want to add.



8. Enter the Criteria type. The criteria type will be a code value not actual text. If you are not sure of the correct code value, you can look it up from the appropriate AsCode table.
9. Complete steps 12 and 13 until you have entered all columns and criteria.
10. Select the **Finish** button.

Once you have finished uploading the rates, the Configuration Panel will open and display your new rate table. You can check-out the XML file if you need to make changes to the rate table information.

### Steps to Create a Select/Select Ultimate Rate Group

1. Open the **AS Admin Explorer** window.
2. Select and right click on the Rate Groups folder.
3. Select **New Rate Group**.

**New Rate Group Wizard**

**Steps**

1. **Rate Group Info**
2. Add Rates?
3. Upload Rates (optional)

**Rate Group Info (1 of 3)**

**1. Rate Group Info**

Please enter information for the new Rate Group

Rate Description:	<input type="text" value="ABCTerm"/>	Criteria 4:	<input type="text"/>
Integer Criteria:	<input type="text" value="Duration"/>	Criteria 5:	<input type="text"/>
Rate Activation Date:	<input type="text" value="Wed 11/12/2008"/>	Criteria 6:	<input type="text"/>
Transaction From Date:	<input type="text" value="Wed 11/12/2008"/>	Criteria 7:	<input type="text"/>
Transaction To Date:	<input type="text"/>	Criteria 8:	<input type="text"/>
Criteria 1:	<input type="text" value="Age"/>	Criteria 9:	<input type="text"/>
Criteria 2:	<input type="text"/>	Criteria 10:	<input type="text"/>
Criteria 3:	<input type="text"/>		

< Back   **Next >**   Finish   Cancel   Help

Create Select/Ultimate Rate Group

4. Enter the Rate Description. This is a descriptive name that is used to identify the rates. It should be the name provided with the rate table. This name will be stored as the RateDescription in AsRateGroup and AsRate.
5. Enter the Integer Criteria. This is the main index in the database table. Duration is always the Integer Criteria for Select/Select Ultimate tables.
6. Enter the Rate Activation Date. This date is used in conjunction with a policy's effective date to identify when a set of rates is active for a policy. The policy must be effective **on or after** the date listed here. Rate Activation Date is stored as EffectiveDate in the AsRateGroup table.
7. Enter the Transaction From Date. Transactions that occur **on or after** this date will use the associated rates.. Transaction From Date is stored as the ActiveFromDate in AsRateGroup.
8. Enter the Transaction To Date. When loading new rates, this field should be left blank. The Transaction to Date is stored as the ActiveToDate in AsRateGroup.
9. Enter the descriptions for Criteria 1 through Criteria 10 and select **Next**. The descriptions should be entered as they appear in the Excel spreadsheet. Criteria names must remain constant for all rate groups in the system. These criteria names will correlate to columns in your rate table. Criteria names are case sensitive so make sure the names match exactly.
10. Determine how you want to add your rates.
  - a. Select **Yes** to upload an Excel spreadsheet of Select rate information. Refer to the steps for uploading an Excel spreadsheet below.
  - b. Select **No** and then select **Finish** if you want to add your rates manually using the Rate Group Editor. Refer to the steps for Editing Rate Groups.

If you selected Yes to upload an excel spreadsheet, the following steps will pick up at Step 3, where the previous steps left off.

#### **Upload Rates From Select/Select Ultimate Table in an Excel Spreadsheet**

1. Select the Excel spreadsheet containing the rates you want to upload.
2. Specify Select/Select Ultimate as the table type (rate type) to be uploaded.

**Note:** Make sure the IntegerCriteria is listed as Duration.

3. Enter the literal worksheet name (exactly as appears on the spreadsheet) in the Worksheet field.
4. Enter the spreadsheet column identifier that contains the Initial Integer Criteria for the intended indexing strategy.



## Editing Rates

Once the wizard is finished, the Rate Group will be created and Rates will be uploaded, as specified, into the system. To edit the data or enter rates manually right click on the appropriate rates.xml file from the Rate Groups folder in **AS Admin Explorer**. Check out the XML file you want to edit. Use the Add Rate and Delete Rate buttons to manually enter rates. When you have completed editing and or entering the rates, right click on the Rates.xml file and check your changes into the database.

**Rate Group**

Name: TiffTestRateGroup Criteria 1: Gender Criteria 2: Tobacco

Integer Criteria: Age Criteria 3: Criteria 4:

Rate Activation Date: Thu 11/06/2008 Criteria 5: Criteria 6:

Transaction From Date: Thu 11/06/2008 Criteria 7: Criteria 8:

Transaction To Date: Criteria 9: Criteria 10:

**Rates**

Filter Criteria

Name	Date	Int Criteria	Rate	Criteria1	Criteria2	Criteria3	Criteria4	Criteria5
TiffTestRateGroup	15	0.00204	01	00				
TiffTestRateGroup	16	0.00218	01	00				
TiffTestRateGroup	17	0.00229	01	00				
TiffTestRateGroup	18	0.00235	01	00				
TiffTestRateGroup	19	0.00241	01	00				
TiffTestRateGroup	20	0.00243	01	00				
TiffTestRateGroup	21	0.00242	01	00				
TiffTestRateGroup	22	0.00239	01	00				
TiffTestRateGroup	23	0.00236	01	00				
TiffTestRateGroup	24	0.00232	01	00				
TiffTestRateGroup	25	0.00227	01	00				
TiffTestRateGroup	26	0.00223	01	00				

Filtered Results - 77 Rates found

Integer Criteria = Age

Gender (m=01, f=02, u=03)

Smoker/Non-Smoker

Select Rate Open for Editing

## Retrieving Specific Rates with Rate Array

The RATEARRAY function of OIPA is used to return a collection (array) of rates from the rate related tables based on the parameters it is passed. The two primary tables used in such a query are:

AsRateGroup – A table that stores the criteria group information, rating method, date and other descriptive rate information.

AsRate – A table that stores the criteria group values from AsCodes, rating and rate.

The AsRate and AsRateGroup tables can be joined, for query purposes, via the RateGroupGUID or RateDescription fields.

The Integer Criteria column of the AsRate table is used as the main method for rate indexing. Rate indexing is a mechanism used by insurance companies to track the amount of time or change affecting an insurance rate. This form of indexing should not be confused with array indexes. For example, a company can use Integer Criteria as the method of rating because they use “duration in years a policy is in effect” as a rate index.

All criteria needed for any call to the RATEARRAY function must be included in the query parameters. The <Parameter> tag values must be defined in the MathVariables section of configuration prior to use in the RATEARRAY function. Examples of commonly used parameters are RateDescription, ActiveFromDate and EffectiveDate.

**Note:** If you list a parameter, the value must be of the correct datatype or will process in error. You will also receive an error if the value is null.

The RATEARRAY function has a start and end index attribute that determines the records that are retrieved based on either the integer or date criteria start and end index. Your start and end index can be configured to best meet the needs of the business.

The StartIndex variable indicates what IntegerCriteria in AsRate you are going to begin with when retrieving values for your RateArray. The array index for identification begins with 0, the StartIndex has no effect on the actual array index.

The EndIndex indicates the last value in IntegerCriteria that will be used in the function. The end index does not include the last value to be retrieved; so you need to set the end index value to be one greater than the length of the array.

**Note:** For further information on retrieving rates, review the Technical Manual or attend the Oracle Insurance Policy Administration Configuration IV class offered by Oracle University.

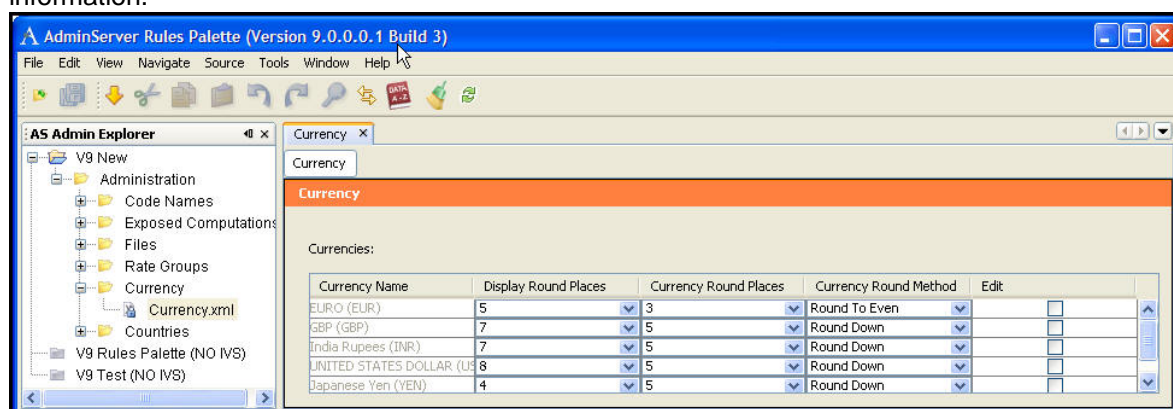
## Currency Editor

The Rules Palette allows you to manage multiple currencies within the OIPA system. The currency information is displayed according to the international standards outlined in the ISO 4217 Currency Names and Codes Element Table. The Currency Editor allows you to define and update the currency rounding methods. Currency names can not be edited.

There may be times when you need to add additional currency codes to the Palette. You can not do this through the Currency Editor. You need to expand the Code Names folder from As Admin Explorer and check-out the AsCodeCurrency file. You can add new currency codes to this file. Refer to the Code Names section of the User's Guide for more information on adding new codes.

### Steps to Change Currency Rounding Attributes

1. Open the **AS Admin Explorer** window.
2. Double click the Currency folder.
3. Right click the currency XML file and select **Check-Out**. Each currency row contains four pieces of information.



Currency File

- **Currency Name:** Displays the currency name along with the corresponding code. You can not make changes to these names or codes.
- **Display Round Places:** Determines the number of decimal places the currency will be rounded to for display purposes.
- **Currency Round Places:** Indicates the number of digits to the right of the decimal place to keep after a currency calculation is performed.
- **Currency Round Method:** Determines the type of rounding method to employ once a calculation is performed. There are three options:
  - Automatic Round: increases the last digit by one if the next digit is five or greater.
  - Round to Down: leaves the last digit the same, regardless of the next digit.
  - Round to Even: increases the last digit by one if the next digit is six or more, or a five followed by one or more non-zero digits. Also will increase the last digit by one if the next digit is five followed by zeros when the last digit is odd.

4. Find the name of the Currency you want to change in the Currency Name column. The currency

- attributes that you can change are in the columns to the right and are accompanied by a drop down list.
- Click the down arrow next to the attribute you want to change. The currency's row will appear highlighted in green.
  - Make the necessary currency rounding adjustments.

The screenshot shows a 'Currency\*' dialog box with a 'Currency' tab. Below the tab is a table titled 'Currencies:'. The table has five columns: 'Currency Name', 'Display Round Places', 'Currency Round Places', 'Currency Round Method', and 'Edit'. The 'EURO (EUR)' row is highlighted in green. Other rows include 'GBP (GBP)', 'Indian Rupee (INR)', 'New Taiwan Dollar (TWD)', 'UNITED STATES DOLLAR (USD)', and 'Japanese Yen (YEN)'. Each row has dropdown arrows for the rounding places and method columns.

Currency Name	Display Round Places	Currency Round Places	Currency Round Method	Edit
EURO (EUR)	4	3	Round To Even	<input checked="" type="checkbox"/>
GBP (GBP)	7	5	Round Down	<input type="checkbox"/>
Indian Rupee (INR)	7	5	Round Down	<input type="checkbox"/>
New Taiwan Dollar (TWD)	2	2	Automatic Round	<input type="checkbox"/>
UNITED STATES DOLLAR (USD)	8	5	Round Down	<input type="checkbox"/>
Japanese Yen (YEN)	6	4	Automatic Round	<input type="checkbox"/>

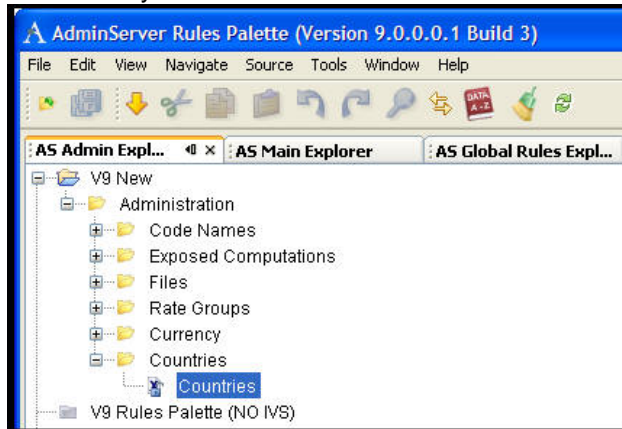
Edit Currency Information

- Right click the name of the currency XML file to check the file back in and save your changes. If you want to cancel the changes, select Revert Modifications **BEFORE** you check the file back in. This will return the values to the last saved version from the database.

## Country Editor

The Country Editor is an Administration feature used to edit the country information stored in the database. It interacts with the AsCountry table allowing you to add and edit the relationship between a supported country and its applicable taxable currency code.

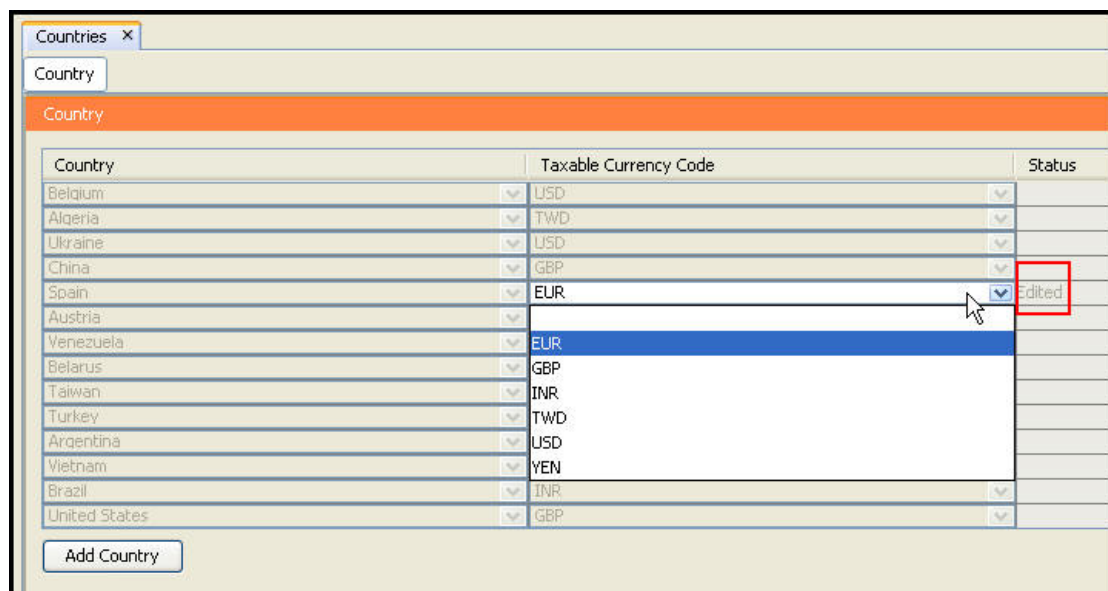
The Country Editor can be accessed from AS Admin Explorer in the Administration folder.



As Admin Explorer

### Steps to Edit Country Information

1. From **AS Admin Explorer**, open the Administration folder.
2. Open the Countries folder.
3. Double click the Countries file. It will open in the Configuration pane of the Rules Palette.



Edit Country Information

4. Select the country you want to edit.
5. Select the corresponding taxable currency code. A list will display with all eligible currency codes when you click the down arrow next to the code you want to change. You will see the status field



automatically display a message that the information has been edited.

6. Right click on the Country folder from the **As Admin Menu** and select **Check In**. This will save your changes to the database.

**Note:** If you don't want to save your changes, you can select Revert Modifications from the drop down list when you right click on the Countries folder. This will delete your changes and keep the last saved copy of the Country file.

### Steps to Add a Country to the Countries List

1. From **AS Admin Explorer**, open the Administration folder.
2. Open the Countries folder.
3. Double click the Countries file. It will open in the Configuration pane of the Rules Palette.
4. Select the **Add Country** button. A new line will be added at the bottom of the Countries list.
5. Click the down arrow next to the Country field and select the Country you want to add. The status column will be automatically updated with an insert message.
6. Click the down arrow next to the Taxable Country Code field and select the code you want to add.

Country	Taxable Currency Code	Status
Turkey	GBP	
Argentina	USD	
Vietnam	GBP	
Brazil	INR	
United States	GBP	
Syria	GBP	
Switzerland	GBP	
United Kingdom	GBP	
Canada	USD	
Albania	INR	
Thailand	INR	
Bahrain	USD	
India	USD	
		Insert

Add a Country and Taxable Country Code

7. Right click on the Country folder from the **As Admin Menu** and select **Check In**. This will save your changes to the database.

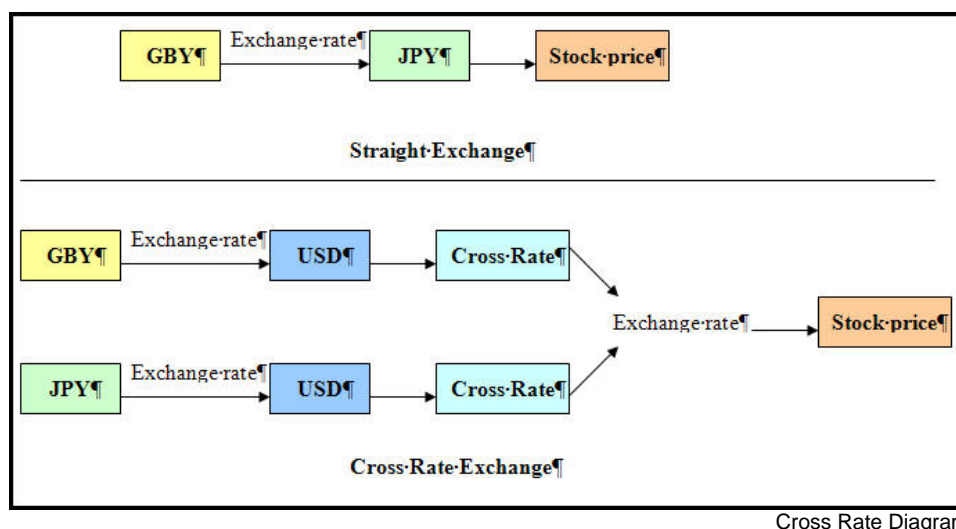
**Note:** If you don't want to save your changes, you can select Revert Modifications from the drop down list when you right click on the Countries folder. This will delete your changes and keep the last saved copy of the Country file.

## Market Maker

The Rules Palette uses Market Maker to store information about specific currency conversions that are associated with a plan. Market Maker is an administrative feature that can be found on the **AS Admin Explorer**. Two tables are used to store the currency conversion data. The first table is the AsMarketMaker table and the second is the AsMarketMakerCurrency table.

Before reviewing the table information it is important to understand how a Market Maker works. Market Makers provide liquidity to the market by facilitating the trading of stocks. They are usually broker-dealer firms that quote both buy and sell prices for stocks. While they make money on the spread, or the difference between the buy and sell price, they provide a valuable service for their clients. The extra liquidity they bring to the market reduces transactions costs and facilitates trades for their clients.

When stocks are exchanged using different currencies the Market Maker provides the means of currency conversion. In some instances, it is not as simple as going from one currency to another. In such situations, you need an intermediary currency, or cross rate, to facilitate the exchange. For example, suppose your currency pair (GBP/JPY) did not have an exchange rate. However, GBP/USD has an exchange rate and so does USD/JPY. The cross rate currency would be USD. Instead of one conversion, the Market Maker would perform three.



Cross Rate Diagram

Once you have identified the cross rate currency there is one final step to consider. You have to determine whether the currency rate will be quoted in direct or indirect terms. This is a critical step that will greatly impact the accuracy of the currency calculation.

Selecting direct verses indirect terms simply determines which currency will be used as the denominator in the conversion equation. For example, if the conversion of USD/JPY was quoted in direct terms, then the domestic currency is the denominator and the foreign currency is the numerator. If the conversion was quoted in indirect terms, then it would be JPY/USD and the foreign currency would be the denominator and the domestic currency would be the numerator.

## ASMarketMaker Table

The ASMarketMaker table holds six characteristics of the currency conversion.

1. **Name:** This is the common name for the Market Maker. Market Makers are broker-dealer firms that sell and buy stocks, making money on the spread and providing market liquidity.
2. **CrossRateRoundPlaces:** Number of places to round to the right of the decimal point. This rounding is applied to the denominator used in the cross rate calculation.
3. **CrossRateRoundMethod:** One of three possible rounding methods: 01-Arithmetic, 02-Round Down or 03-Round to Even. One of these methods will be applied to the denominator used in the cross rate calculation.
4. **CrossRateCurrencyCode:** This is the intermediate currency that must be used when there is no common exchange rate between two currencies.
5. **CalendarCode:** Identifies the working calendar for the Market Maker and determines if a Market Maker can trade a currency on a given date.

## ASMarketMakerCurrency Table

The ASMarketMakerCurrency table holds additional information about the CrossRateCurrencyCode defined in the ASMarketMaker table. It determines whether each cross rate should be calculated in direct or indirect terms.

1. **CurrencyCode:** Identifies the currency code that will be associated with the value in the DirectTermIndicator field.
2. **DirectTermIndicator:** Indicates whether the currency code is quoted using direct or indirect terms. T, or true, indicates direct and F, or false, indicates indirect.

### Steps to Add a New Market Maker

1. Navigate to **As Admin Explorer**.
2. Expand the Administration folder.
3. Expand the Market Maker folder.
4. Right click the MarketMaker.xml file and select **Check-out**. The Market Maker file will open in the Configuration Pane. It is divided into two sections. The top table contains the ASMarketMaker table information. The bottom table contains the ASMarketMakerCurrency table information.

MarketMaker

**Market Maker**

Name	Cross Round Places	Cross Rate Round ...	Cross Rate Curren...	Base Currency Code	Calendar Code	Edit	Delete
New MarketMaker	2	Round Down	INR	GBP	NYSE	<input type="checkbox"/>	<input type="checkbox"/>
New MarketMaker	3	Round Down	GBP	EUR	NYSE	<input type="checkbox"/>	<input type="checkbox"/>
New MarketMaker	2	Round Down	INR	USD	NYSE	<input type="checkbox"/>	<input type="checkbox"/>

AsMarketMaker Table

Add Market Remove Market

Currency Table:

Currency Code	Direct Term In...	Edit	Delete
		<input checked="" type="checkbox"/>	<input type="checkbox"/>

AsMarketMakerCurrency Table

Add Currency Remove Currency

Market Maker Editor

5. Select the **Add Market** button at the bottom of the top table. A new row will appear highlighted in green.
6. Double click in the Name column and enter the name of your new Market Maker.
7. Double click in the Cross Round Places column and select the number of places to the right of the decimal point that you want to round.
8. Double click in the Cross Rate Round column and select the rounding method you want to use.
9. Double click in the Cross Rate Currency column and select the currency that you want to use for the intermediate currency conversion. This cross rate currency is used when a currency pair does not have a direct exchange rate.

**Note:** If the currency you want to select is not listed, you need to add the Currency code to the AsCodeCurrency table. The steps necessary to complete this action are listed in the Currency section.

10. Double click in the Base Currency Code column and select the default currency the Market Maker uses. If the currency code isn't listed, refer to the Note above.
11. Double click in the Calendar Code column and select the calendar code the Market Maker uses. The calendar code will determine if a trade can occur on a given date. If the calendar code is not listed, you will need to add it to the AsCodeCalendar table.
12. Right click on the XML file and select **Check-in** to save the new Market Maker.

Once you have established a new Market Maker, you need to update the Currency table. In this table you are associating cross rate currency codes with either direct or indirect terms. A cross rate currency that is marked as direct will calculate the cross rate using the domestic currency as the denominator and the foreign currency as the numerator. A cross rate currency that is marked as indirect will calculate the cross rate using the foreign currency as the denominator and the domestic currency as the numerator.

### Steps to Define Cross Rate Terms in the Currency Table

1. Navigate to **As Admin Explorer**.
2. Expand the Administration folder.
3. Expand the Market Maker folder.
4. Right click the MarketMaker.xml file and select **Check-out**. The Market Maker file will open in the Configuration Pane. It is divided into two sections. The top table contains the AsMarketMaker table information. The bottom table contains the AsMarketMakerCurrency table information.
5. Select the **Add Currency** button. A new row will appear highlighted in green.
6. Double click in the Currency Code column and select the appropriate currency.
7. Double click in the Direct Term Indicator column and select T for True or F for False. If T is selected, the currency will be quoted using direct terms. If F is selected, the currency will be quoted using indirect terms.
8. Right click on the XML file and select **Check-in** to save the currency information.

### Steps to Delete a Market Maker or Currency

1. Navigate to **As Admin Explorer**.
2. Expand the Administration folder.
3. Expand the Market Maker folder.
4. Right click the MarketMaker.xml file and select **Check-out**.
5. Highlight the row you want to delete.
6. Select the **Remove Market** button or the **Remove Currency** button. The row that you want to delete will be highlighted in red.
7. Right click on the XML file and select **Check-in** to save the deletion.

Market Maker							
Name	Cross Round Places	Cross Rate Round ...	Cross Rate Curren...	Base Currency Code	Calendar Code	Edit	Delete
New MarketMaker	2	Round Down	INR	GBP	NYSE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New MarketMaker	3	Round Down	GBP	EUR	NYSE	<input type="checkbox"/>	<input type="checkbox"/>
New MarketMaker	2	Round Down	INR	USD	NYSE	<input type="checkbox"/>	<input type="checkbox"/>
New MarketMaker						<input type="checkbox"/>	<input type="checkbox"/>

Delete Market Maker

## Security

Security functionality is available in both the Rules Palette and the OIPA system. In the Rules Palette, the Security Manager is the only user who will be able to view the Security folder and assign security roles.

Security in the Rules Palette is configured at the user level, where the Security Manager can add users to the database and create roles with specific privileges. When assigned to users, these privileges allow them to view and/or modify different sections of the Palette based on the role they have been assigned. Please see the *Rules Palette Security* section below for information on setting up and using the security functionality in the Rules Palette.

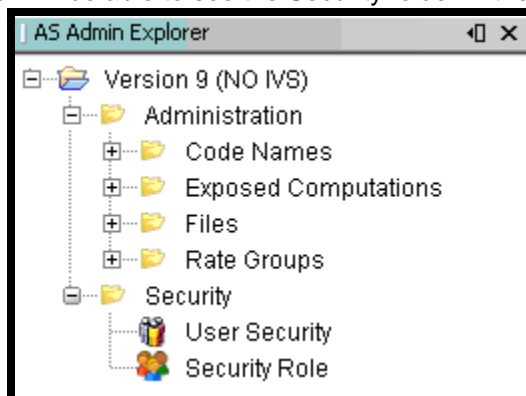
Security in PAS is accessed through the Administration menu in the main menu. Configuration of PAS security can limit access to Fields, Buttons, Menu Items and their associated Screens and Activities. Access to the screen can be denied, while access to individual buttons on the screen can be granted. Access to perform certain tasks at the activity level can be granted or denied. Security in PAS allows for multiple levels of restriction to be placed on different users of the system, from agents to service representatives and department managers.

More detailed information on security in PAS can be found in *Section 8* of the *PAS Technical Manual*.

### Rules Palette Security

Palette security allows a Security Manager to determine which users have authority to view and/or modify specific sections of the Rules Palette. By default, a Security Manager is given the ability to grant access to the configuration and administration panes in the Rules Palette as well as apply security around the data dictionary. The Security Manager is responsible for setting up the security roles and determining what the proper security role is for each user. This role and user setup is done in the **Security Role** and **User Security** windows. These windows are accessible via the **AS Admin Explorer** window, which can be opened via the **Window** menu on the Menu bar.

The **AS Admin Explorer** provides access to all of the administrative functions of the system. Only the Security Manager will be able to see the Security folder in the Administration folder.



As Admin Explorer  
Window

## Security Role

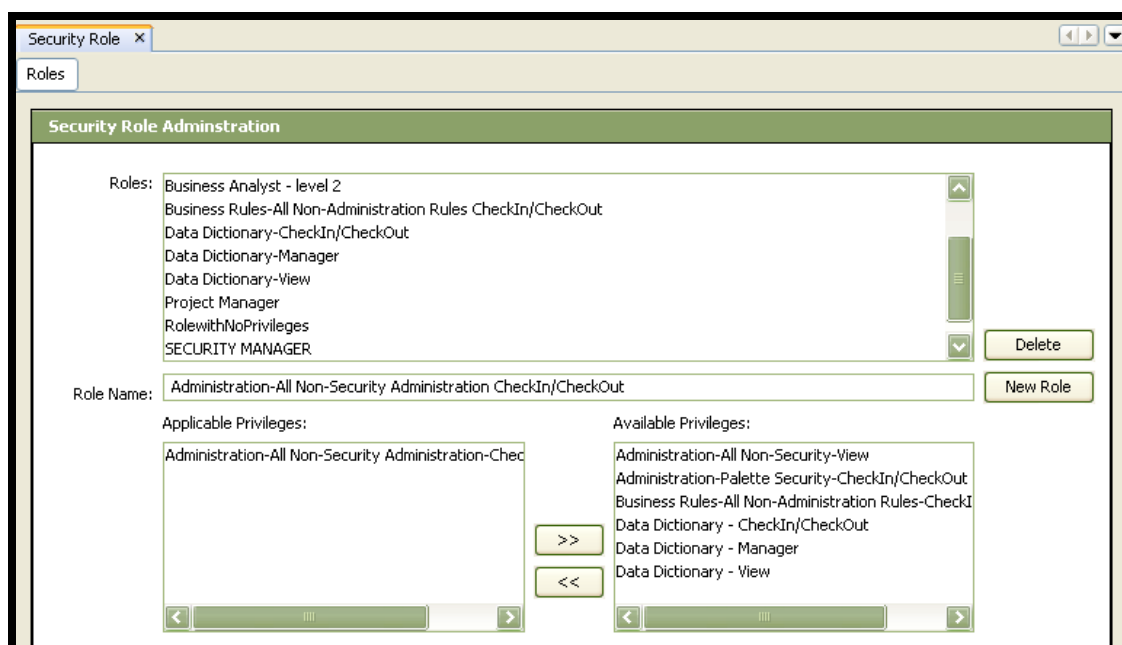
You can access the **Security Role** option in the **AS Admin Explorer** window by expanding the Administration folder and double-clicking the Securing Role option.

Only the user with SecurityManager rights is able to create roles and then assign those roles to specified users.

Available privileges within Rules Palette security are:

Available Privileges	Definition
<b>Administration - All Non-Security Administration – CheckIn/CheckOut</b>	Allows creation and check in/check out of the administration items.
<b>Administration – Palette Security – CheckIn/CheckOut</b>	Allows access to Palette security.
<b>Administration - All Non-Security View</b>	Allows access to the Administration explorer.
<b>Business Rules – All Non-Administration Rules – CheckIn/CheckOut</b>	Allows creation of company, plan, transaction, business rule, segments, check in, check out.
<b>Data Dictionary - View</b>	Gives the role access to view, but not to write to, the Data Dictionary.
<b>Data Dictionary - Manager</b>	Allows Accept, Deprecate and decline actions. Allows write access to hierarchy view.
<b>Data Dictionary - CheckIn/CheckOut</b>	Gives the role access to view and to write to the Data Dictionary.

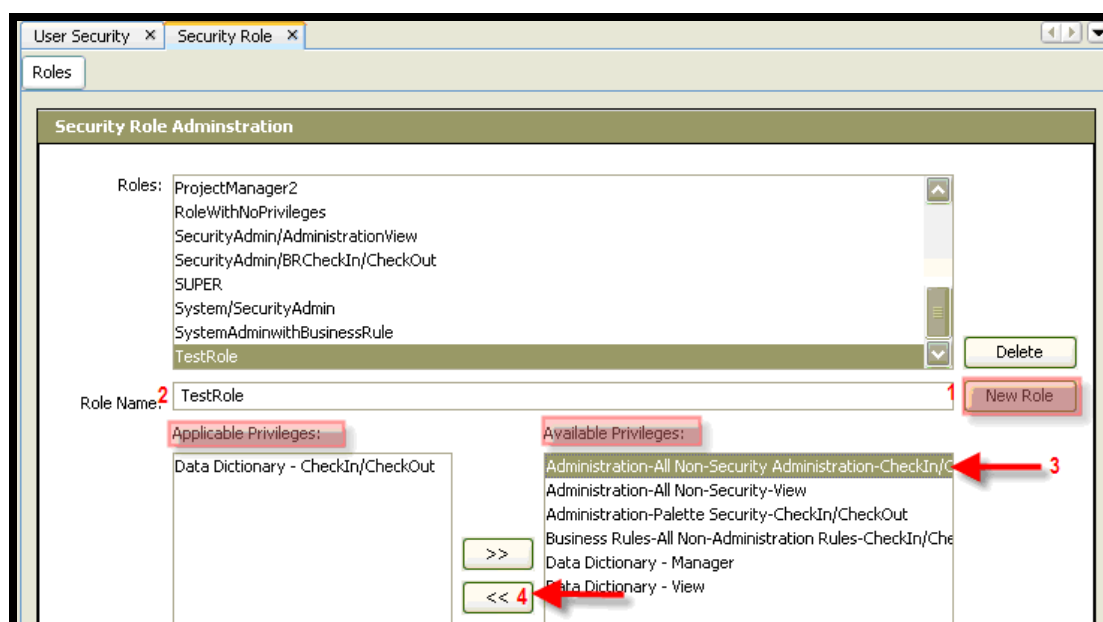
**Note:** All users will have view access to all rules as a default.



Security Role Window

## Create a New Security Role




A Security Manager will be required to create new security roles to support the business.

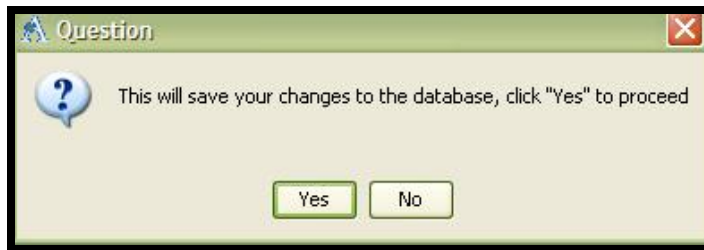


Adding a Role in Security Role Window



### Steps to Create a New Role

1. From **AS Admin Explorer**, double click the Security Role option to open the Security Role window.
2. Click the **New Role** button.
3. Enter the name for the new role in the **Role Name** field.
4. Select the desired privileges to be granted to the new role from the list of Available Privileges. CTRL-click to select multiple options at a time. Selected items will become highlighted.
5. Use the left arrow  button to move selected privileges from the **Available Privileges** list to the **Applicable Privileges** list. The privileges you place in the **Applicable Privileges** list will be the ones that are applied to your selected role upon clicking **Save All**. You can also click the right arrow  button to remove items from the **Applicable Privileges** list.
6. An Insert action next to the role name indicates a new role is about to be added. This will disappear when the changes are saved.
7. Click the **Save All**  button in the Palette Toolbar to save your changes. The following window will appear to confirm that your changes should be saved to the database.




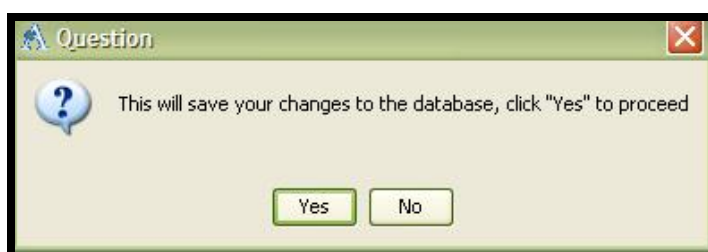
**Note:** When using the Save All button, changes to Security will be saved to the database. In addition, any panes open for configuration that contain changes will be saved to your local drive.

## Delete a Security Role

There are instances where it may be necessary to delete security roles. The following steps explain the process for removing security roles.

### Steps to Delete a Security Role

1. From **AS Admin Explorer**, double click the Security Role option to open the Security Role window.
2. Select the role that you want to delete from the **Roles** list.
3. Click the **Delete** button.
4. A delete action is indicated when the user deletes a role. This will disappear when the changes are saved.
5. Click the **Save All**  button in the Palette Toolbar to save your changes. The following window will appear to confirm that your changes should be saved to the database.

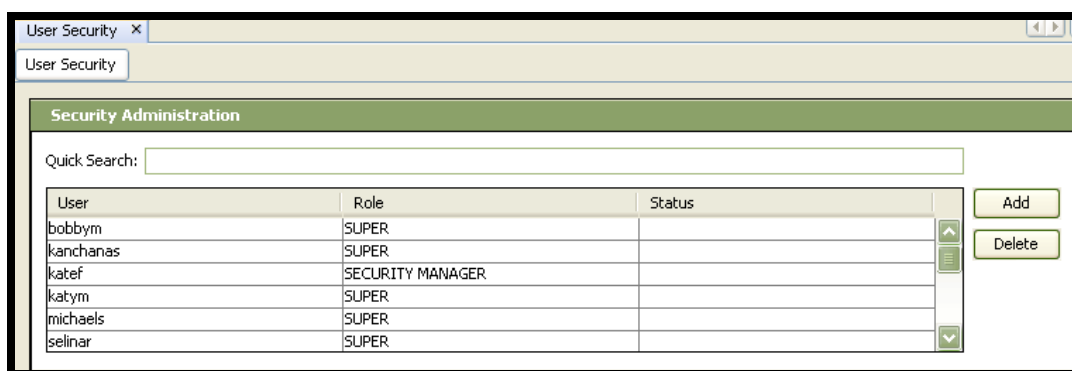


**Note:** When using the Save All button, changes to Security will be saved to the database. In addition, any panes open for configuration that contain changes will also be saved to your local drive.

### User Security Window

The **User Security** window is the gateway for managing users and their respective Security Roles. New users can be added and existing users can be deleted using the **Add** or **Delete** buttons.. Each user can only be assigned one Security Role.

The **Quick Search** option at the top of the **User Security** window allows you to enter the first letter or letters to search for a particular user in the system. You can also click on the column heading (**User**, **Role** or **Status**) to sort the selected column alphabetically.



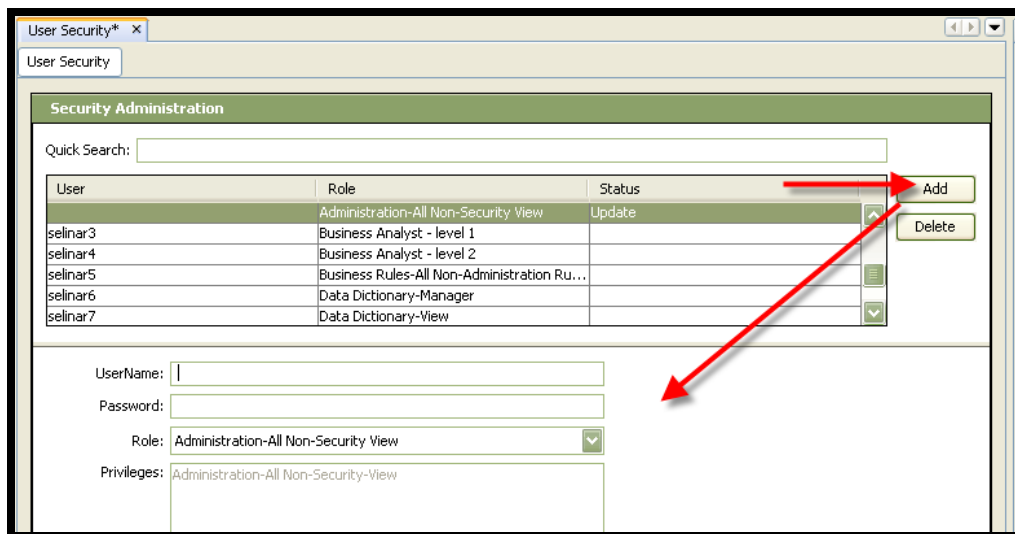
User Security Window

## Create a New User

In order for a user to be able to login to the Rules Palette, a username, password and role must be first be created and assigned by the Security Manager.

### Steps to Create a New User

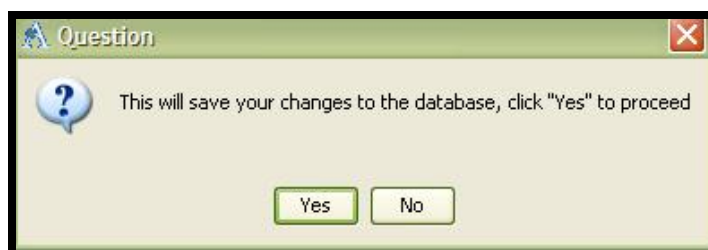
1. Click the **Add** button in the **User Security** window. Additional fields will appear at the bottom of the window.
2. Enter the new user's name in the **UserName** field and assign a password in the **Password** field.
3. Assign a role to the new user in the **Role** drop-down field. More information on Roles is available in the following **Security Role Window** section.



User Security Window

**Note:** Depending on the Role selected, the **Privileges** field will be auto-populated by the system with the respective Privileges. The **Privileges** field is not editable.

4. After adding the new user, click the **Save All**  button on the shortcut toolbar.



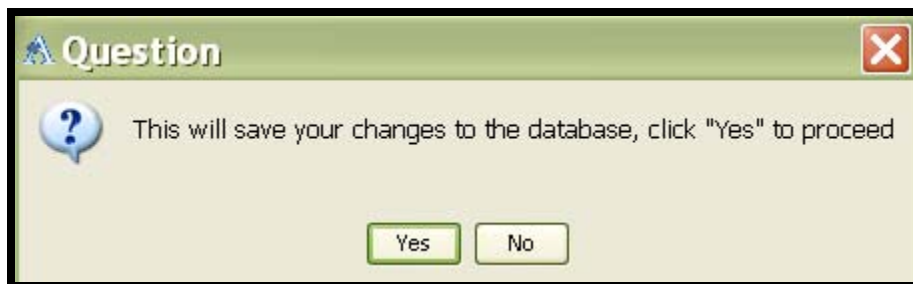
**Note:** When using the Save All button, changes to Security will be saved to the database. In addition, any panes open for configuration that contain changes will be saved to your local drive.

## Delete an Existing User

There may be occasions where a Security Manager will need to delete an existing user.

### Steps to Delete an Existing User


1. Select the user from the list of available users in the **User Security** window.
2. Click the **Delete** button. A popup window appears, prompting: "This will save your changes to the database."
3. Click **Yes** to proceed and delete the user or click **No** to cancel the deletion and return to the **User Security** window.



User Security Popup Window

## Initial Setup

When the designated Security Manager first logs into the Rules Palette and opens Palette Security via the **AS Admin Explorer**, SecurityManager is listed as the default role. This role cannot be deleted and has security rights to add other users with specific roles and privileges. The Security Manager will also be able to apply those roles to new users in the User Security window. There can only be one Security Manager role defined in the Rule Palette and only one user may be assigned to the role of Security Manager at a time. Adding new role types with all available privileges gives complete access to Rules Palette functionality with the exception of security.

Once the Security Manager has created the necessary additional roles and users, and assigned those roles to the users, users will receive their login information. New users can then log in to the Palette using the username and passwords provided to them by the Security Manager and they will have access to specific areas of the Palette granted to them depending on the role they have been assigned. The Security Manager can also modify the roles and privileges previously assigned to users at any time by logging into the Palette and selecting the user or role in the **User Security** and **Security Role** windows respectively. After making any needed modifications, click the **Save All**  button to save the modifications to the database.

## Assigning a new Security Manager

Only one Security Manager role can be assigned to the Palette. If a different user needs to be assigned this role then the current Security Manager must first downgrade his user ID to a different role and then assign a new user as the Security Manager. It is important to click **Save All** after completion. The **Save All** will not take effect unless there is one Security Manager saved in the database.

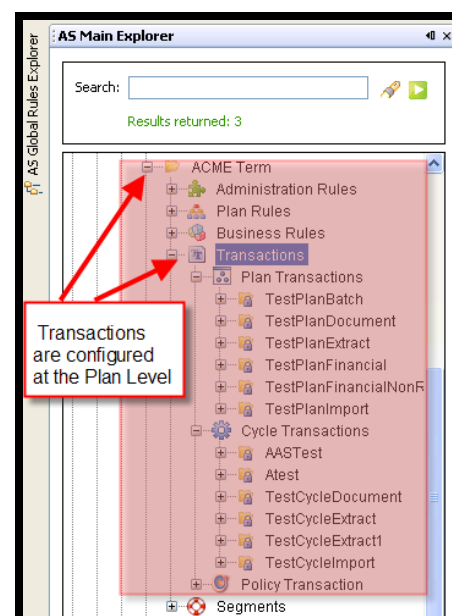
## Transactions

Businesses have processes they need supported for their policies and throughout the policy lifecycle. Transactions are configured to be business events that end users (most likely Customer Services Representatives) need to process when an event occurs that affects a policy. Some Transactions are configured to automatically occur without end user initiation. No matter how the Transaction processes, it must be configured to support the business event processes that need to occur.

Below you will find some examples of Transactions that can be configured.

- Applying Premium to a Policy
- Issue a Policy
- Send a Grace Letter
- Change Beneficiary
- Pay a Death Benefit
- Add or Delete Riders

After a Transaction has been configured and is in production, it is located on the Activities Tab in the Activity drop-down box. An Activity is an instance of a Transaction or the actual use of a Transaction onto a policy. Every time an Activity is processed, the Transaction configuration is executed.



Transactions are always configured on the Plan Level meaning that each Plan must have its own set of Transactions. Transactions are broken down by the type of Transaction, for example: Policy, Cycle or Plan type of Transaction. If multiple plans use the same Transaction, a CopyBook can be created that contains the shared information. This will eliminate configuring the same Transaction for each plan. It also means that the shared configuration is maintained in one place making updates to information easier.

## CopyBooks in Transactions

There are several different ways to use a CopyBook when configuring a new transaction. You can use an entire CopyBook or just a portion of it. Here's a brief explanation of the three different options.

1. You can configure a transaction to use an entire CopyBook. In this case your transaction is just a shell that points to a specific CopyBook.
2. You can use a specific section of a CopyBook within your transaction. In this case you must use a complete section such as the entire validation section or the entire allocations section, etc.
3. You can use the CopyBook Field feature in the Palette to insert a CopyBook into a manually configured transaction. You drag and drop the elements onto the screen and then insert the CopyBook using the CopyBookField option. This is an advanced feature that requires a solid understanding of configuration.

## Transaction Types, Status and Processing Order

Transaction Type indicates the type of Transaction processing that is needed. Most Transaction Rule Types overridden at the Plan level are configured at the **Policy-Financial**. Transaction Types are named by the Level they apply to and the type of processing they perform. Also, 'Financial' Transaction does not necessarily imply that there is a movement of funds. It's simply a designation within OIPA to identify Activities that impact data or initiate processing at the Policy or Plan level.

### Transaction Types and Definitions

Transaction Type	Definition
Client-Batch	Client level batch transactions
Client-Document	Client level documents
Client-Document-Nonreversible	Client level documents nonreversible
Client-Extract	Client level extracts
Client-Financial	Client level financial transactions
Client-Financial-Nonreversible	Client level financial transactions nonreversible
Client-Import	Client level imports
Cycle-Document	Plan level documents during nightly cycle
Cycle-Extract	Plan level extracts during nightly cycle
Cycle-Import	Plan level imports during nightly cycle
Plan-Batch	Batch entry of activities
Plan-Document	Plan level documents
Plan-Extract	Plan level extracts
Plan-Financial	Plan level financial transactions
Plan-Import	Plan level imports
Policy-Document	Policy level documents
Policy-Extract	Policy level extracts
Policy-Financial	Policy level financial transactions
Policy-Illustration	Illustration transactions
Policy-Financial-Nonreversible	Policy level financial transactions nonreversible
Plan-Financial-Nonreversible	Plan level financial transactions nonreversible
Policy-Document-Nonreversible	Policy level documents nonreversible
Plan-Document-Nonreversible	Plan level documents nonreversible

**Status** is the policy status in which the Transaction should be made available to the end user. This option should be kept as Active. The **EligibleTransactionsbyPolicyStatus** Business Rule actually controls the Transaction's availability based on policy status. See [EligibleTransactionsByPolicyStatus](#) section of this guide for further information on the **EligibleTransactionsbyPolicyStatus** Business Rule.

**Processing Order** is the order in which the Transaction should run. You can view the order in which all Transactions are processed by clicking the **Time Line**  button. The Time Line button is available when the Transaction is first created and also on the Transaction's General pane.



## Configure a Transaction

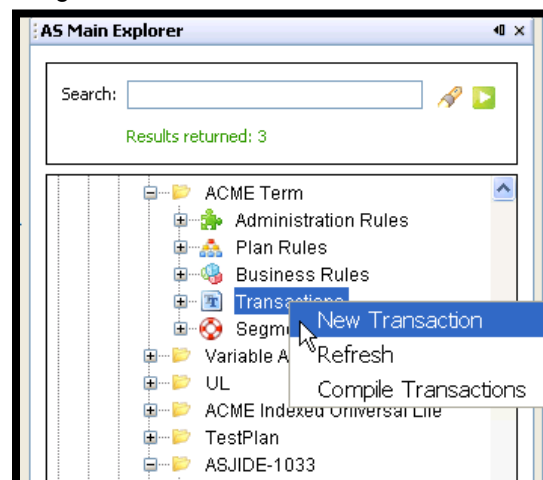
### Configure a Transaction

1. Open the Transaction Folder.
2. Right-click on the Transaction's XML file.
3. Select **Check Out**.
4. Use the General, Allocations, Fields, Validations, Math, Assignment, Spawn, XML Source or Debug sections of this User Guide for information on how to configure.
5. **Check In** when finished.
6. Open the application and test your configuration.

## Create a New Transaction

### Create a New Transaction

1. Log on to the applicable environment.
2. Expand  the appropriate Company folder in **AS Main Explorer** window.
3. Expand  the appropriate Plan folder.
4. Select the Transaction Folder and right-click.
5. Select **New Transaction** and the wizard will guide you through the process of creating a Transaction.
6. Type the name of the Transaction **without** including spaces between the words. Select **Next**.

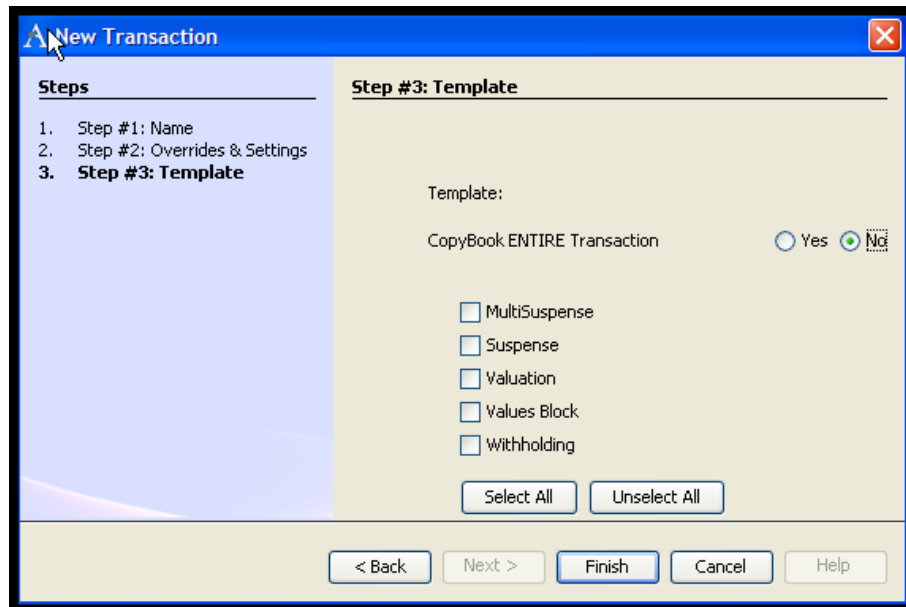


New Transaction Wizard

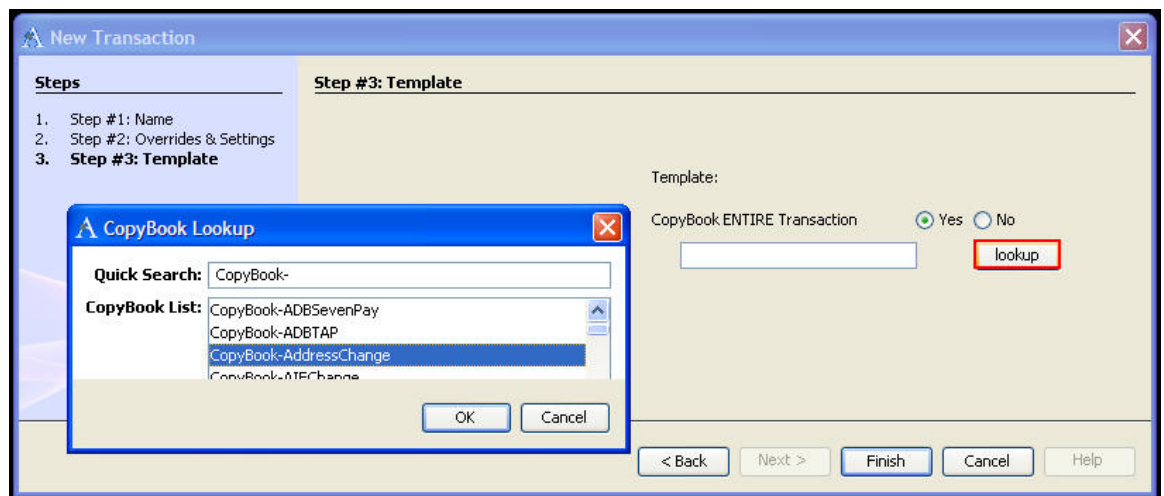
7. Select the Transaction Type, Status and Processing Order and then click the **Next** button. The status must be set to Active. If you have questions about Transaction Type, Status or Processing order, refer to the [Transaction Type, Status and Processing Order](#) section of this User Guide.



8. Create the template for your new transaction. You can use an entire CopyBook or you can select the configuration sections you need to create the Transaction. A sample configuration of the sections you select will be given as a starting point when you open the transaction's XML file. All panes are available for configuration regardless of whether the pane is checked or not. Not checking a pane simply means that the pane will be a blank slate.



New Transaction without CopyBook



New Transaction Using CopyBook

9. Click the **Finish** button. Your new transaction will be displayed in blue text. It has not been added to the database yet.
10. Right-click on your new transaction and select **Check-In**. It has now been added to the database.

Every new Transaction automatically overrides and attaches the **TransactionCosmetics** and **TransactionBusinessRulePacket** Business Rule, you **do not** need to manually override and attach these Business Rules. These two rules will have been copied from the existing Global Rules. These two business rules are **mandatory** for the Transaction to process and cannot be deleted from the Transaction; however, the information may be edited.

- **TransactionCosmetics** business rule controls the icon, button and reverse icon for the Transaction that it is associated with. Also amount values from the Transaction may be displayed on the Activity Screen using this Rule as well. You can locate a list of available graphics in Appendix 7 of the Technical Manual.
- **TransactionBusinessRulePacket** business rule controls the order in which the rules attached to the Transaction are processed. All rules attached to a Transaction must be listed in the **TransactionBusinessRulePacket** in order to be processed. Exceptions to this are rules that do not require processing for the rule to be invoked are listed in [Appendix 2](#) of this guide. The Rules Palette automatically updates the **TransactionBusinessRulePacket** with rules you attach. Please see the [Attached Rules](#) section for steps on attaching rules. You may need to re-arrange the order in which the rules are listed because it directly correlates with the way they are processed.

In the **TransactionBusinessRulePacket** business rule attached rules must be listed with the exact name of the rule as the value of the <Rule> tag. The <Rule> tag is a sub-element of the <TransactionBusinessRulePacket> tag.

```
<TransactionBusinessRulePacket>
  <Rule>CopyToPolicyFields</Rule>
  <Rule>CopyToSegmentFields</Rule>
  <Rule>DeleteActivity</Rule>
</TransactionBusinessRulePacket>
```

Example XML for **TransactionBusinessRulePacket**

### Steps to Edit the Attached Business Rules

1. Edit the attached **TransactionCosmetics** XML file to change the graphics and display Amount Values. You can locate a list of available graphics in Appendix 7 of the Technical Manual. In the **TransactionCosmetics** Business Rule graphic files must be listed with their exact file name as the value of the <Icon>, <Button> and <Reverse> sub-element tags. These tags must be in-between a start and end <TransactionCosmetics> tag.

```
<TransactionCosmetics>
  <Icon>AsIconDeathPending.GIF</Icon>
  <Button>AsButtonDeathPending.GIF</Button>
  <Reverse>AsReverseDeathPending.GIF</Reverse>
</TransactionCosmetics>
```

Example XML for **TransactionCosmetics**

2. Use the General, Fields, Math, Debug, Assignment, Spawn, Validation, Allocations and/or XML Source sections of this User Guide for information on how to configure.
3. Override and attach needed business rules to the Transaction. See the [Attached Rules](#) section for steps on attaching rules. Review the **TransactionBusinessRulePacket** Business Rule's XML file to make sure the attached rules are listed in the proper processing order.

## General Pane

This is where you can select the required and optional Transaction processing features. The required sections; Transaction and Effective Date are automatically added. You can add optional sections; Value Block, Withholding, Valuation, Suspense or MultiSuspense if applicable. These options are selected via the wizard when a new Transaction is created or via **Edit Transaction General** from the right-click menu.

### Edit Sections in General Transaction Pane

1. Check out the Transaction's XML file.
2. Right-click on the Transactions' XML file.
3. Select **Edit Transaction General**.
4. Check or uncheck XML section checkboxes.
5. Save and Check-In the Transaction.

The screenshot shows the 'Billing' window with the 'General' tab selected. A red arrow points to the 'General' tab. The 'Transaction' section contains a table with the following data:

Properties	Value
VERSION:	
TYPE:	Policy-Financial
STATUS:	Active
PROCESSING ORDER:	4580

The 'Effective Date' section contains a table with the following data:

Attribute	Value
STATUS:	Enabled
TYPE:	Enabled
TITLE:	Enabled
VALUE:	Disabled

Below these tables are checkboxes for 'Values Block' and 'Withholding'.

You can update any values in the General pane by using the Value fields. You can view further information regarding the options by reading *Appendix 2: Transaction Configuration* from the Technical Manual.

## Allocations Pane

This pane is used to allow for configuration of Allocation functionality. Configuration of allocations displays an allocation structure on the Activity Detail Screen and controls what is defaulted and allowed for entries. If an allocation is present a record will be written to AsAllocation when the activity is saved.

The screenshot shows the 'FundTransfer(Variable Annuity)\*' window with the 'Allocations' tab selected. The 'Include' section has a checkbox for 'CopyBook ENTIRE Allocation Section'. The 'Create Allocation' table is as follows:

Create Allocation	Include
Fund Allocation	<input checked="" type="checkbox"/>
Allocation From	<input checked="" type="checkbox"/>
Allocation	<input checked="" type="checkbox"/>
Default Allocation	<input type="checkbox"/>

The 'Fund Allocation' section contains the following fields:

- ShowValuation: Yes
- FundLimit: 20
- PolicyField:
- Class:
- Model:
- AllocationTypes: Percent, Amount, Units
- Assignment:

Allocations Pane

## About Allocations

Allocations are the amount or percent of money that is applied to selected investment options for a policy. An example of an investment option could be mutual funds or money market accounts, which are called ‘funds’ in OIPA. Policyholders or other requirements can elect how money is allocated in various available funds.

Money being applied to allocation(s) can be done by either assigning a percentage of the total amount or an exact value amount. Allocations can be individually selected funds or part of a model. A model is a group of funds called “subaccounts” that are grouped together according to risk tolerance categories, such as aggressive or conservative. Allocation amounts applied to a model allocation are distributed among the subaccounts.

Allocations can be at the Plan level, the Policy level, the Segment level or the Transaction level. Transaction Level allocations are configured to specify how allocations will be assigned for an Activity and how they are applied to the policy. Allocation configuration enables the Allocation Section to appear on the Activity Detail Screen and also can control defaults and allowable entries.

**Note:** Allocation configuration can apply to rebalancing, auto-invest, systematic purchase or dollar cost averaging programs.

AdminServer.com - Microsoft Internet Explorer provided by AdminServer

http://172.16.1.203:9080/AsController/AsActivityDetail?operation=\$\$\$NewActivity\$\$\$transactionGuid=8D7483A5-41

AdditionalPayment - AVA30016214

Effective Date: 09/19/2030

Gross Amount: \$250.00

Funding Method: Premium

OK Cancel

Allocation(s):

Number of Funds: 2

Allocation Method: Percent

☒ Equal %

Fund	Percent
ACME - Equity Income	50.00
ACME - Money Market	50.00
	0.00

Example Activity Detail Screen of a Transaction that uses Allocations

### Configure Allocations

1. Navigate to the Transaction or create a new Transaction.
2. **Check out** the Transaction's XML file.
3. Open the **Allocation** Pane.
4. Check the **Fund Allocation** checkbox. This is **required** and displays the **Allocation** section on the Activity Detail Screen.
  - a. Select only the **Fund Allocation** options you need. It is not required to select something for each

option. Definitions for the **Fund Allocation** options are in *Appendix 2 – Transaction Configuration* of the Technical Manual.

5. **AllocationFrom** is optional. This option should be used when configuring for allocations that move money out of funds.
6. **Allocation** is optional. This option should be used when configuring for allocations that move money into funds.
7. **DefaultAllocation** is optional. Defines a default allocation that will be displayed on the allocation section on the Activity Details Screen and whether or not it can be modified. You can only use this option if **FundAllocation** has been configured.
8. **Check In** when finished.



**Important:** All options and their associated definitions are listed in *Appendix 2 – Transaction Configuration* of the Technical Manual.

SystematicWithdrawal(Variable Annuity)\*

General Allocations Fields Validations Math Assignment Spawn Xml Source Debug

Create Allocation Include

Create Allocation	Include
Fund Allocation	<input checked="" type="checkbox"/>
Allocation From	<input checked="" type="checkbox"/>
Allocation	<input checked="" type="checkbox"/>
Default Allocation	<input type="checkbox"/>

Fund Allocation

ShowValuation:

FundLimit:

PolicyField:

Class:

Model:

AllocationTypes: Percent  
Amount  
Units

Assignment:

AllowMixedMethods:

Repeat Fund: Yes

Exclude Fund Status: Active  
Closed to New Policies  
Closed to New Money

ExcludeType: Fixed  
Variable  
Fixed-ABL

Allocation Pane

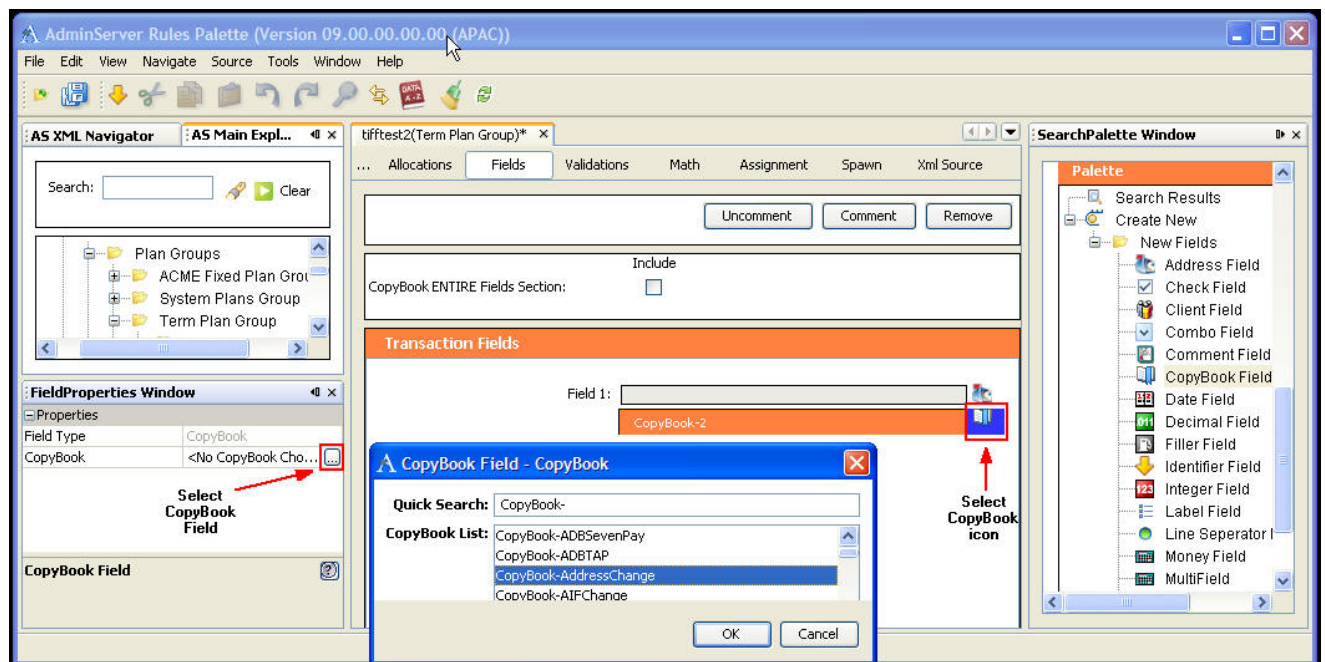
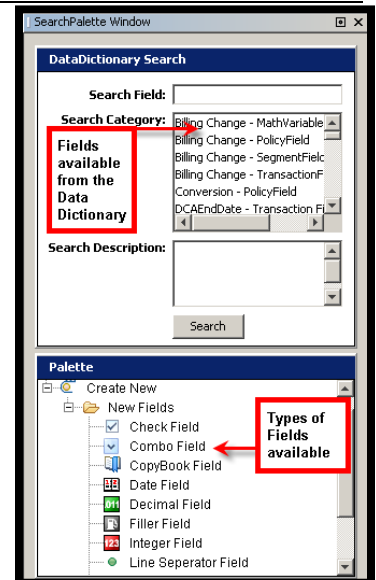
**Note:** You can hold down the **Ctrl** key to select multiple items in a combo box.

## Fields Pane

The Fields pane is used to create Fields that will display on the application. You can drag and drop Fields from the Data Dictionary or add new Fields using the **SearchPalette** window and visual configuration tools.

## Insert a CopyBook Field

Some transactions may require a combination of manually configured elements as well as a specific CopyBook field. This is an advanced feature, which requires a solid understanding of configuration principles. Before inserting the CopyBook field, look at your transaction and determine the correct placement of the CopyBook. You need to ensure that your tags are properly placed so the transaction will run correctly.



Insert a CopyBook Field

## Steps to Insert a CopyBook Field

**Note:** Before beginning the following steps, look at your transaction and determine the correct placement of the CopyBook. You need to ensure that your tags are properly placed so the transaction will run correctly.

1. Drag CopyBookField into the pane from the Palette window.
2. Click the CopyBook icon to the right of the field you just added. The FieldProperties window will display on the left side of your screen.
3. Click the button to the right of the tag that says, **No CopyBook Chosen**.

4. Scroll through the list of available CopyBooks and select the one you want to use for this transaction.
5. After you drag and drop a Field onto the Screen in the Configuration Area you will configure the Fields properties via the **FieldProperties** window. In this window, you can edit the Field's properties using text boxes, drop-down boxes and check-boxes, which have all available options that can be populated with the appropriate information.

**Note:** You can also use the hot keys CTRL-C (Copy), CTRL-V (Paste), CTRL-Z (Undo), and CTRL-X (Cut) in place of dragging and dropping fields in the Fields pane.

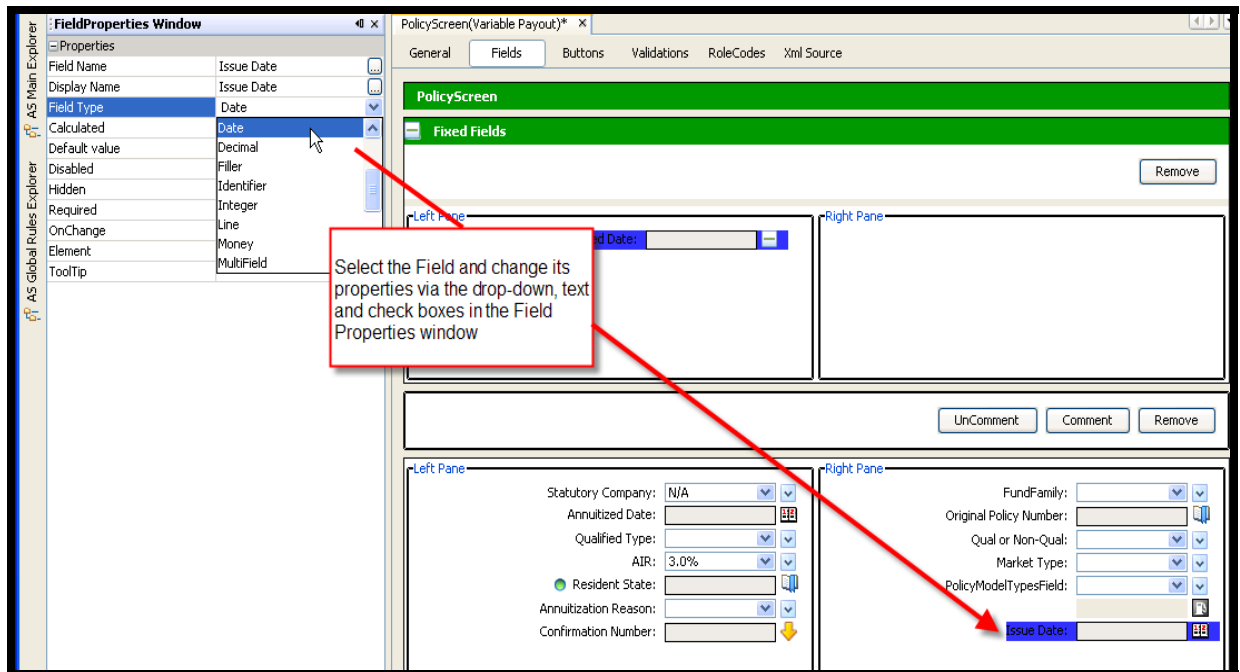
## Explanation of Field Properties

The screenshot shows the 'FieldProperties Window' with the following properties:

FieldProperties Window	
[-] Properties	
Field Name	field14
Display Name	Field 14
Field Type	Combo
Query	<No Query>
Calculated	<No Calculated>
Default value	
Disabled	<input type="checkbox"/>
Hidden	<input type="checkbox"/>
Required	<input type="checkbox"/>
OnChange	<No onChange>
ToolTip	

### Most Commonly Used Field Properties


Field	Definition
Field Name	The name of the field.
Display Name	The name that displays on the screen. This is the label and it can have spaces.
Field Type	The type of field displayed on the screen. With Version 8 configuration Field Type is now required. Field Type replaces DataType in pre-version 8 configuration. See the Technical Manual. Field Type also defines a set of values and the allowable operations on those values. DECIMAL, TEXT, DATE, INTEGER.
Calculated	Can be used to default the field to a value derived through an SQL statement.
Default Value	The initial value displayed when the user brings up the Screen or Transaction.
Disabled	Displays the field and the fields information, but the user cannot enter the data.
Hidden	Whether or not the field is displayed on the screen.
Required	The field must be filled in by the user when Screen or Transaction information is submitted.
OnChange	Triggers the data in specific fields to change because the user changed a specified field.
Element	Allows you to put a mask on a field.
Length	Determines how many characters permitted for a field value.
Tool Tip	Allows you to enter a tool tip which will be visible upon mouse-over of field.
Parts	Provides information to create a next identifier. Used commonly with Identifier Field Types.



Field Properties

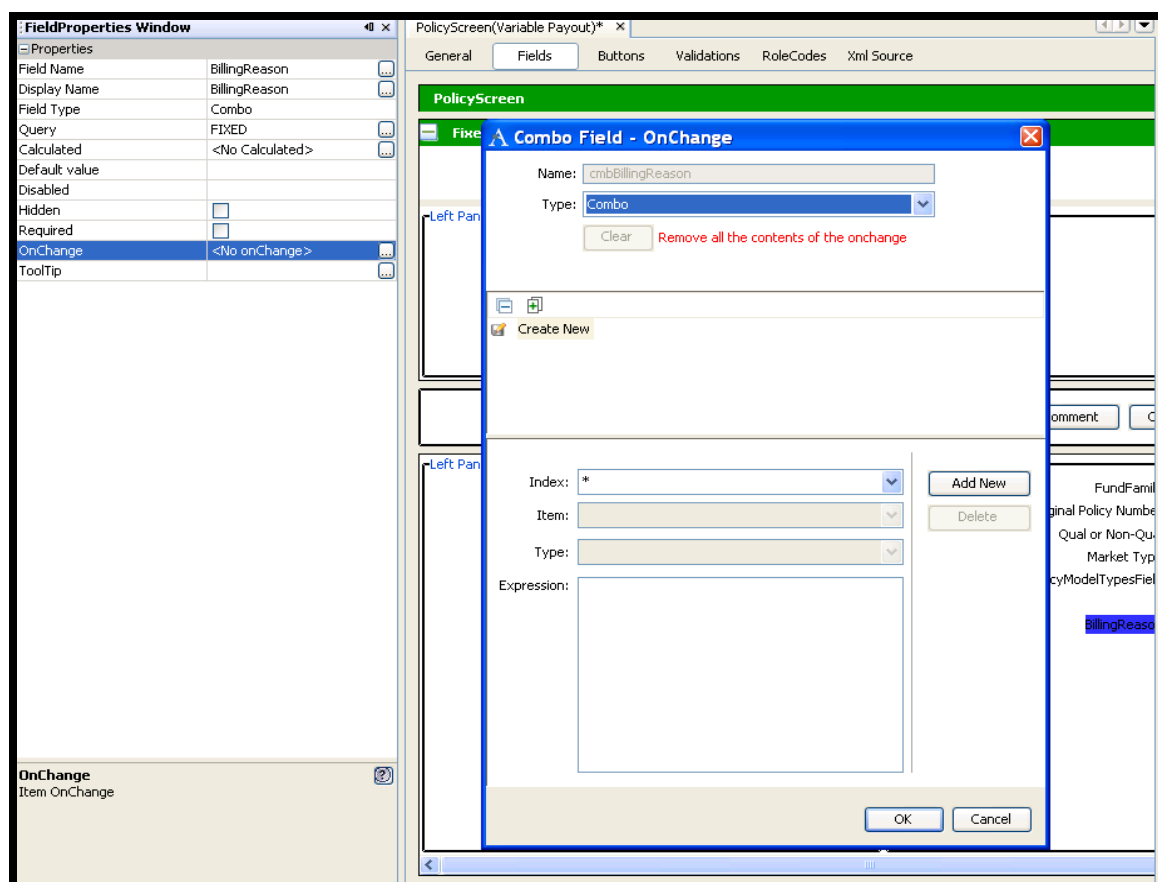
## OnChange Property

The OnChange property selection is used to setup Fields with content that can change if the current Field you are configuring is changed by the user. The current Field you are configuring is called the **trigger field**. Changing the **trigger field** changes the values of another Field(s). OnChange configuration can be used in business rules that contain entry Fields such as Screens, Segments or Transactions.

In Rules Palette, the OnChange property is available via the **FieldProperties** window. The OnChange  button opens the OnChange configuration window. The OnChange configuration window populates with the pre-fixed Field Name, which must be used when writing OnChange statements. When writing a statement, also known as an Expression, or pulling the value of the trigger field, you **must** prefix the beginning of the Field name with the DataType. OnChange supports the Combo Box, Compare or Radio data type. The fields in the OnChange configuration box will vary accordingly.

**Note:** The OnLoad checkbox is available via the **FieldProperties** window only after an OnChange has been setup up. The OnLoad lets the system know that this Field affects other Fields on the page and will execute an OnChange command. When the Screen or Transaction is initially displayed, the OnChange will be triggered by the OnLoad functionality. If the OnLoad box is not checked, the OnChange command will not be performed when the Screen/Transaction initially loads. The OnLoad checkbox is normally used in conjunction with the creation of a Field that performs an OnChange; however, there are situations where the OnLoad checkbox is not needed because the user needs to make a selection before loading data into another field.





OnChange window

## Create a Combo or Radio Field using OnChange

First you will add, index and name Items that store what will occur when the various options listed for the trigger field are selected. When you create an Item, you are selecting from the Index box the index number of the trigger field option you want to associate your Item to. Index numbers are associated with the positioning in a combo box or radio button, starting with 0, not the associated code value. Naming the Item can be done to help associate an Item with the options in the trigger field, but the Index number is what makes the connection. The asterisk \* is used as a default for when the user selects an option that does not have specified Item associated with it. Remember indexing starts at 0 for the trigger field.

### Steps to Create Items

1. Select **Create New** (make sure **Create New** is Highlighted) from the OnChange Window.
2. Using the **Index** drop-down box select either \* or 0 to begin.
3. Select the **ADD** button and your item is added under **Create New**.

**Note:** After you create your **Items**, you will need to write the Expressions that execute what will happen when the user selects an option in the trigger field. Please see [Appendix 1](#) of this user guide for further detail on how to write an Expression.

4. Highlight an **Item** under Create New.
5. Select whether the **Item** will be **Calculated** or a **TypeCode**.

- a. If you select **Calculated**, you will perform a calculation to fill the Field with. You can use a SQL statement to populate the Field using the **Calculated**. You can select **Type** of either:
  - **EVAL** – Should be used when the desired affect is to enable, disable, or change the formatting of a field
  - **RELOAD** – Should be used for a SQL statement.

## Compare OnChange

OnChange Compares are used to perform operations depending on whether the Field condition is true, false or left blank.

### Steps to Create a Compare

1. Select **Compare** from the **Type** drop-down box.
2. Type in your conditional Expression. Expressions use the Form name, the prefixed Field name and JavaScript operators for condition writing. Please see [Appendix 1](#) of this User Guide.
3. Type in the Expression that performs a function. Please see [Appendix 1](#) of this User Guide when filling out the IfTrue, IfFalse or IfBlank Expression box.

Combo Field

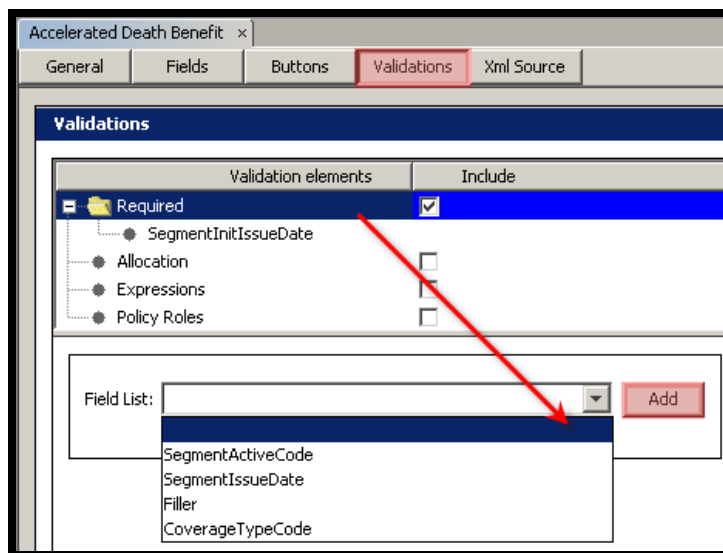
## Validations Pane

In this pane, you can validate the data a user inputs in a Field to ensure it is the type of data required. You can configure field validation in Screen and Transaction rules. The validation occurs when the user attempts to add the Transaction to the policy by hitting the **OK** button. There are three types of validations that can be configured.

- **Required Validations** are used if the Fields are required and it is **not** necessary to display a specific error message to the end user. If the required field is not entered, the user is brought to a window stating that the Field(s) is missing. The user is then required to go back and enter the missing data.
- **Allocation Validations** ensure proper allocations are entered. This is only available on Screens and Transactions with Allocations. Allocation From is similar to Allocation.
- **Expression Validations** are used to verify that data input into OIPA is the type of data required and it meets a specific condition. Expressions are the only way to display a specific error message to the end user.

### Steps to Create a Required Validation

1. Select the **Required Folder** under Validation Elements by checking the box.
2. Select the required Field from the **Fields List** drop-down box.
3. Click the **Add** button.

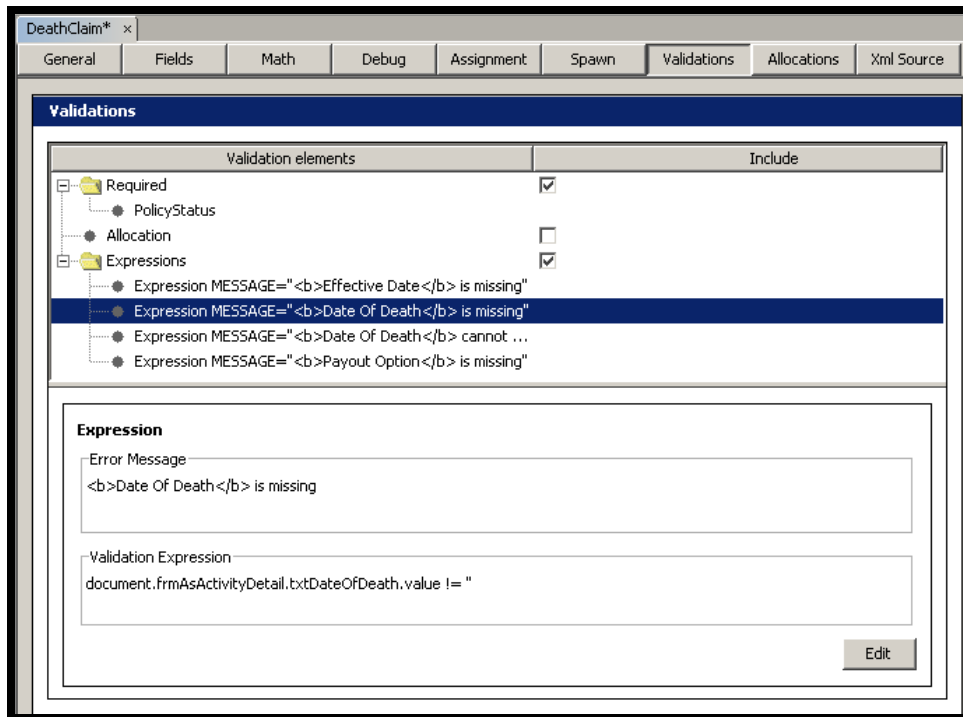


Required Validation

**Note:** To remove a required Field, right-click on the Field name and select **Remove**.

### Steps to Create an Expressions Validation

1. Select the **Expressions** Folder.
2. Enter the error message. You can use basic HTML formatting tags in the Error Message.
3. Enter the Validation Expression. You may also use JavaScript functions and logical operators to validate conditions and check criteria. Please see the [Appendix 1](#) of this manual for more information.



Validations Pane

## Math Pane

The Math pane is used to perform the bulk of the business processes. Calculations can be performed using MathVariables and the values calculated can be used by supporting business rules.

Here are a few examples of times you would use Math.

- Need to add, subtract, multiply or divide values
- Pull in policy data to be used within Functions
- Picking the next business day for an Activity
- Determining whether or not to Spawn a Transaction

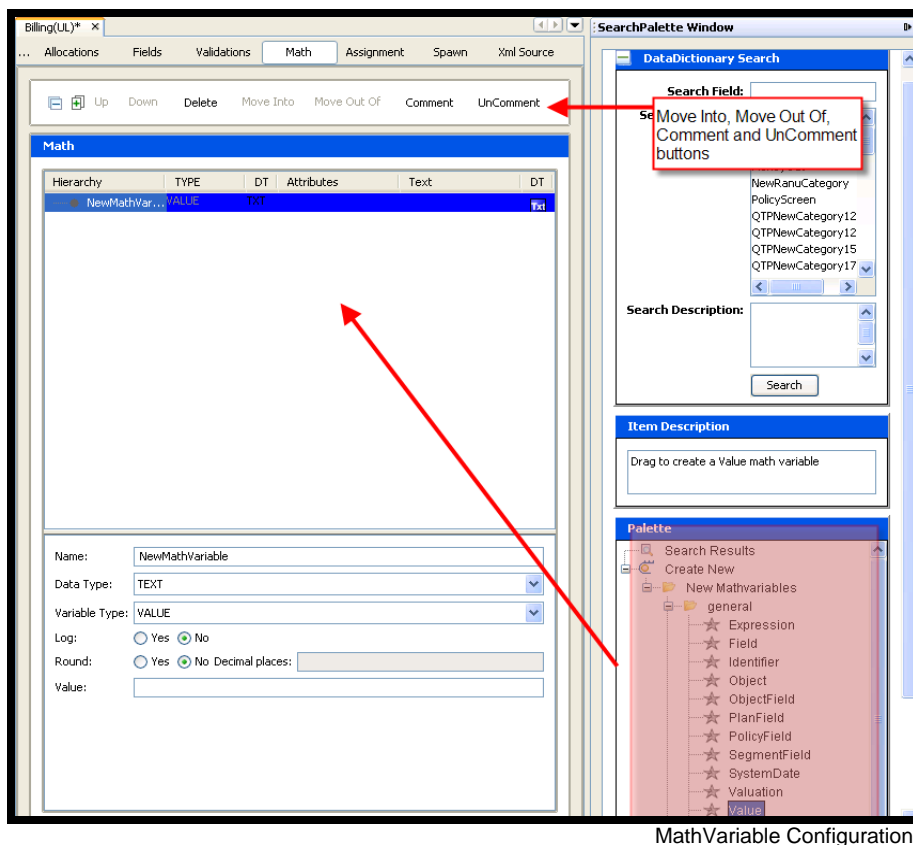
The Math pane contains the definitions and calculations that process MathVariables and Functions. Literal values may also be applied to MathVariables, as well as setting up conditions for evaluating if something is true or false, and creating an array of values. Fields can also be referenced in the Math pane of a Transaction to perform calculations.

**Note:** MathVariables are populated in the order in which they are configured. If a MathVariable name is repeated in configuration, the final value is what displays in the Math tab of the Activity Details screen.

### Steps to Create a New MathVariable: (*\*Please see Appendix 2 of the Technical Manual of further detail*)

1. Drag the type of MathVariable you need to the Configuration Area.
  - **General** – Create commonly used MathVariables, such as EXPRESSION, VALUE, and POLICYFIELD.
  - **Array** – Create MathVariable types for creating and performing operations on an array.
  - **Commutation** – Contains MathVariables used to perform commutation functions.

- **Conditional** – Perform IF or MathIF operations.
  - **Loop** – Perform math loop operations, including FOR, SEGMENT, and OBJECT.
  - **Rate Lookup** – Get a RateArray or Rate.
  - **Rule** – Call a CopyBook, FunCall or Function.
  - **Solve** – Create and IRR, SolveFor or Target MathVariable.
  - **SQL** – Get results from a SQL statement.
  - **WebService** – Create a Webservice call MathVariable.
  - **XML** - Uses XPATH to obtain a value from an XML blob.
2. Depending on the type of MathVariable you select, there will be various operations, behaviors and characteristics you can select. The following are required:
    - Name your MathVariable.
    - Select the DataType.
    - MathVariable Type automatically is selected based on what drag and drop variable was selected.
    - Only those attributes associated with the TYPE will be displayed and available for entry.
  3. Determine your MathVariable hierarchy. You can move your MathVariables hierarchy using the **Up** or **Down** buttons at the top of the Configuration Area.
  4. Arrange your Math folder structure. You can create or delete a Math folder by using the **Move Into** and **Move Out Of** buttons at the top of the Configuration Area. Promote means that a MathVariable will be moved inside a MathLoop or MathIF. Demote means that a MathVariable will be moved outside and above the MathLoop or MathIF that it is currently inside.



5. You can use the Comment and Uncomment buttons to comment out a Math Variable or uncomment Math Variables.

## Use an Existing MathVariable

From the **SearchPalette** window, you can use the Data Dictionary to search for pre-existing MathVariables. If you are unsure of the exact MathVariable name, use the % sign as a wildcard. This wildcard can be used at the beginning or/and the end of your partial search term. You can also search the Category section if you don't know the MathVariable term name or if one even exists.

### Steps to Use an Existing MathVariable

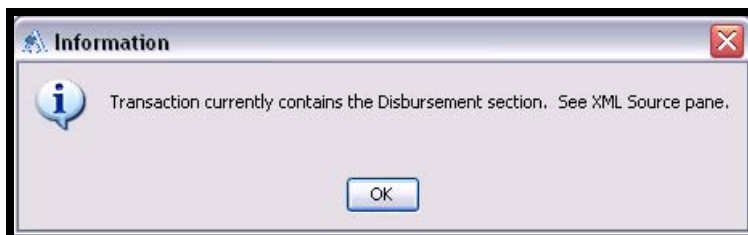
1. Search for the MathVariable using the **Search Field** text box or Search Category list.
2. Select the **Search** button.
3. Select the MathVariable from the **Search Results** section in the **Palette** window.
4. Drag and drop the MathVariable from the **Palette** window to the Configuration Area.
5. Use the **Up** or **Down** button to place the MathVariable in the correct spot in the hierarchy.
6. Edit the MathVariable properties as necessary.



When configuring a General MathVariable that is type PlanField or PolicyField, all applicable MathVariables from either the Plan or Policy Screen are populated in a drop-down box for you to select.



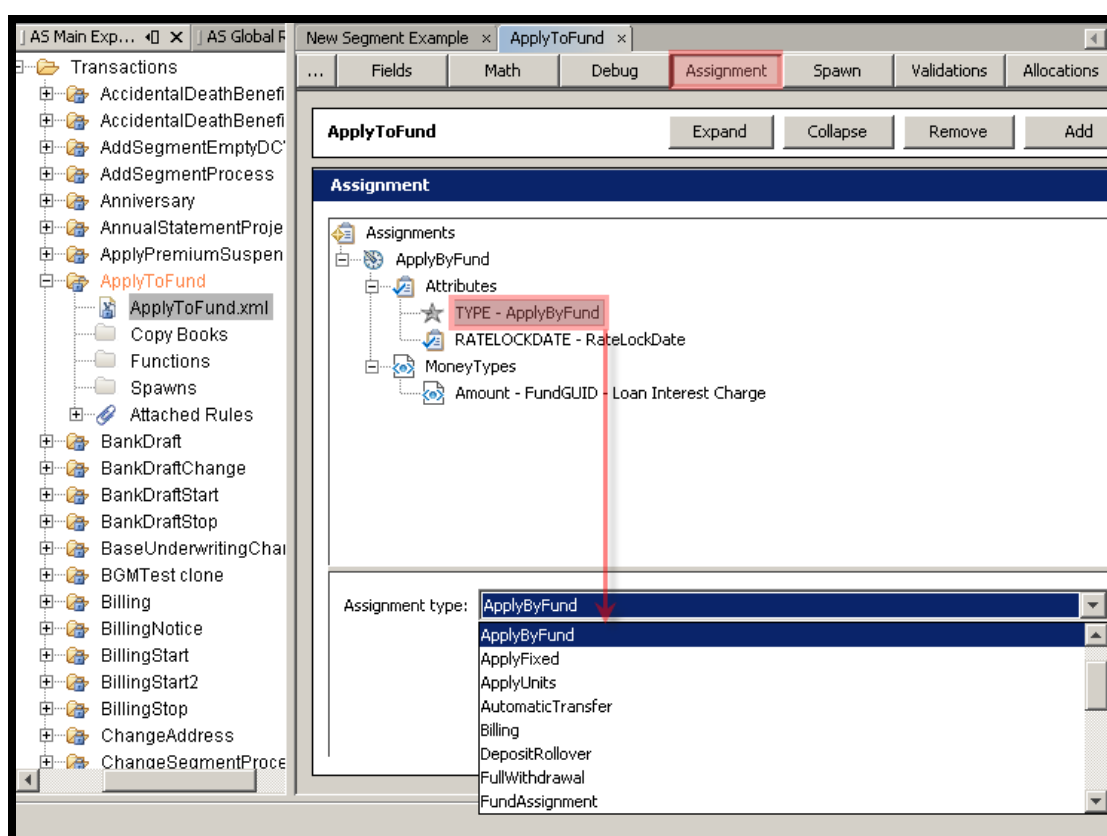
If you are checking out a transaction that contains a Disbursement section, you will receive a pop-up notification that informs you that there is a Disbursement section in the transaction and that you need to refer to the XML Source Pane for that transaction in order to edit it.



## Assignment Pane

The Assignment pane allows you to visually configure assignments to be made to a policy due to Transaction processing. Money can be assigned into a policy or deducted from a policy's value, by allocating or withdrawing. Some assignments require allocations, while others require that the money value be a positive or negative. For example, a Full Withdraw Transaction applied to a policy needs an assignment that requires a negative value to process correctly.


Assignments must have a money type associated with it, as money can be applied to a policy from different sources and it must be tracked for auditing and tax purposes. Money types are stored, edited and updated via the **AsCodeMoneyType** table in the Tables>Codes menu bar selection in OIPA. Each Money Type is assigned a code value that is included in the assignment. This also allows for it to process and display the money values correctly.








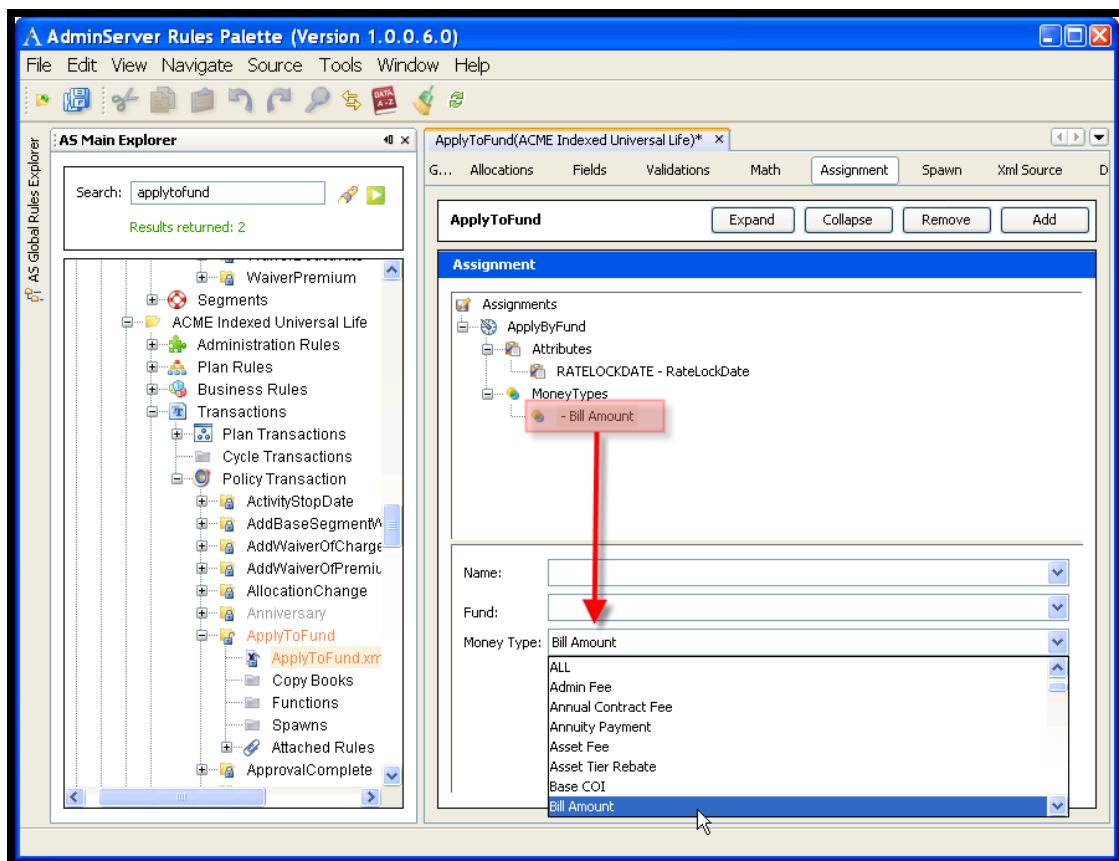
Assignment Screen

**Note:** When an assignment is processed on a policy it is stored in the AsValuation table because an assignment affects the value of a policy.

### Steps to Configure an Assignment

1. Navigate to the Transaction or create a new Transaction.
2. Check out the Transaction's XML file.
3. Open the Assignment Pane.
4. Select  **Assignments**.

5. Right-click and select **Add** or select the **Add**  button.
6. Select  TYPE.
7. Select an assignment from the **Assignment type** drop-down box.
  - a. You can add **Attributes** to the **Assignment type** by selecting the Add  button.  
Refer to *Appendix 2 – Transaction Configuration* of the Technical Manual for available attributes and definitions.
8. Select  **NewMoneyType**.
9. Select the appropriate value from the **Money Type** drop-down box.
  - a. You can add multiple **MoneyTypes** by selecting the Add  button.



Assignment Screen



## Spawn Pane

Spawn is an OIPA word used to describe an Activity that the system generated as a result of another Activity being processed. If you delete or recycle an Activity that Spawned other Activities, the Spawned Activities will be deleted or recycled as well. In the Activity Details Screen in OIPA, you can view the Activities that Spawned.

In the Rules Palette, Spawn configuration is divided up into 4 sections:

1. At the top is a listing of Spawns the Transaction will trigger. Under **Transaction to spawn** are all the Transactions that will be Spawned. Highlighting a Transaction in the listing will display all related information regarding the Spawn. The SPAWNCODE indicates when the Transaction should be Spawned. A list of SpawnCodes is obtained from AsCodeSpawn in AsCode Table and also listed in the table below. If the Spawn is based off of a date field, then select Field Value for SPAWNCODE and the FIELD combo box will be enabled and the user can choose the correct variable from a combo box.

Code Value	Description
01	Immediate – Spawn on the Effective Date
02	One Year – Spawn a year from the Effective Date
03	Field Value – Spawn on a date defined from a field in the Activity
04	1 Business Day – Spawn on the Next Business Day
05	One Month – Spawn a month from the Effective Date
06	Segment – Spawn one for each Segment
07	1 Quarter – Spawn one quarter from the Effective Date
08	Spawn multiple – Spawn an activity for each Pattern Field (Field0, Field 1, etc.)
09	Policy – Spawn an activity for each Policy in the Plan
10	SpawnMultiFields. This spawncode is used with transactions that have MultiFields in it. On selecting this spawncode, the MultiFields column on the screen is enabled with 2 options, Yes and No. Yes- Spawns the current activity's MultiFields to the spawned activity No-no MutiFields values will be spawned. If Attribute is not present, No will be assumed.

2. This section gives the user the option to configure a condition in which the Transaction should be spawned. If no condition is given then the Transaction will always be spawned.

3. Spawn Fields is where you indicate what variables from the processed Activity should be passed to the Spawned Transaction. The **TO** fields will be automatically filled in. Then you select from a combo box for each **TO** field that is filled with all the Fields and MathVariables available in the spawning Transaction. If no selection is made in the **FROM** field, the field will not be spawned. In a majority of the cases all **FROM** fields will be filled in. **FROM** fields allow date entry and are sorted by datatype of the **TO** fields.
4. The **Quick Search** section is used to add a new Spawn to the Transaction. To add a Spawn, type in the Transaction name in the **Quick Search** box. You will filter through all available Transactions and they will be listed in the Transaction box. Highlight the desired Transaction and click the **Add** button. The Transaction will be added to the Spawn listing.

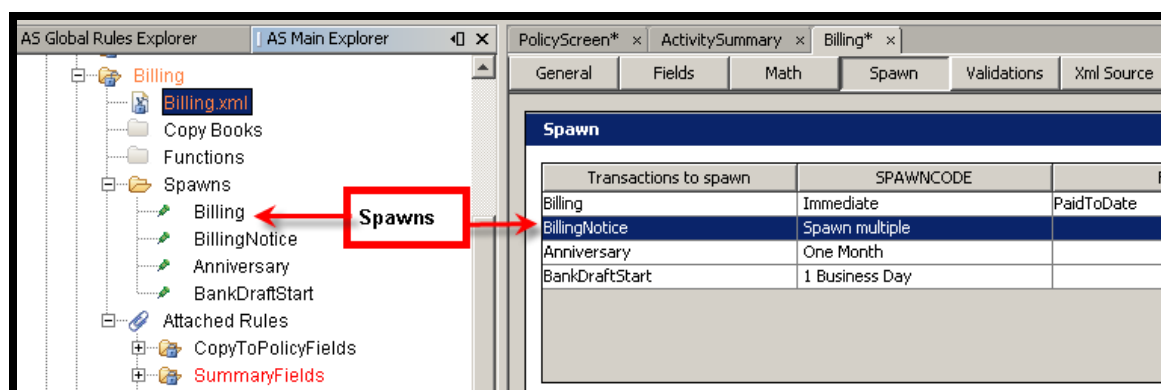
The screenshot shows a user interface for searching transactions. At the top, there is a 'Quick Search:' label followed by a text input field containing the text 'pre'. To the right of this input field is a red button labeled 'Add'. Below the search input is a section labeled 'Transactions:' followed by a list box containing three items: 'Premium', 'PremiumRefund', and 'PremiumReversal'. The 'Premium' item is highlighted with a blue background. A red rectangular box labeled 'Filtered list' is positioned to the right of the list box, with a red arrow pointing from it to the 'Premium' item in the list.

**Note:** An Activity is an instance of a Transaction. When the end user selects an Activity, the Transaction configuration is executed.

#### Steps to Create a Spawn

1. Select the Spawn pane.
2. Search for the Transaction you want to Spawn from the **Quick Search** box.
3. Select the Transaction name from the **Transactions** list.
4. Select the **Add** button, which adds the Transaction to be spawned.
5. Use the **Up** or **Down** button to move the Spawn to the order in which you want it Spawned. This may be important if one Activity relies on the output of another Activity.
6. Select the **Spawn Code** from the drop-down box. The Spawn Code is how or when you want to the Transaction to be spawned.
7. Set the **Spawn Condition** - if the Spawn should only occur when some condition result is true. If left blank, the Spawn will always occur.
8. Select the **Spawn Fields** needed to complete the Spawn. The **To** section automatically populates with the applicable MathVariables or Fields for where the **From** values are going to. The **From** section has drop-down boxes where you will select a Field or MathVariable that stores the values that need to be passed to the Activity you are spawning. The **From** value will be passed to the specified **To** Field or MathVariable of the Spawned Transaction.

After you create a Spawned Activity, it is listed in the rule's folder. You will notice a green push pin icon next to each of the Spawns. By double-clicking on the green pushpin icon you are directly taken to the Spawned Transaction's folder.



Spawn Configuration

## Xml Source Pane

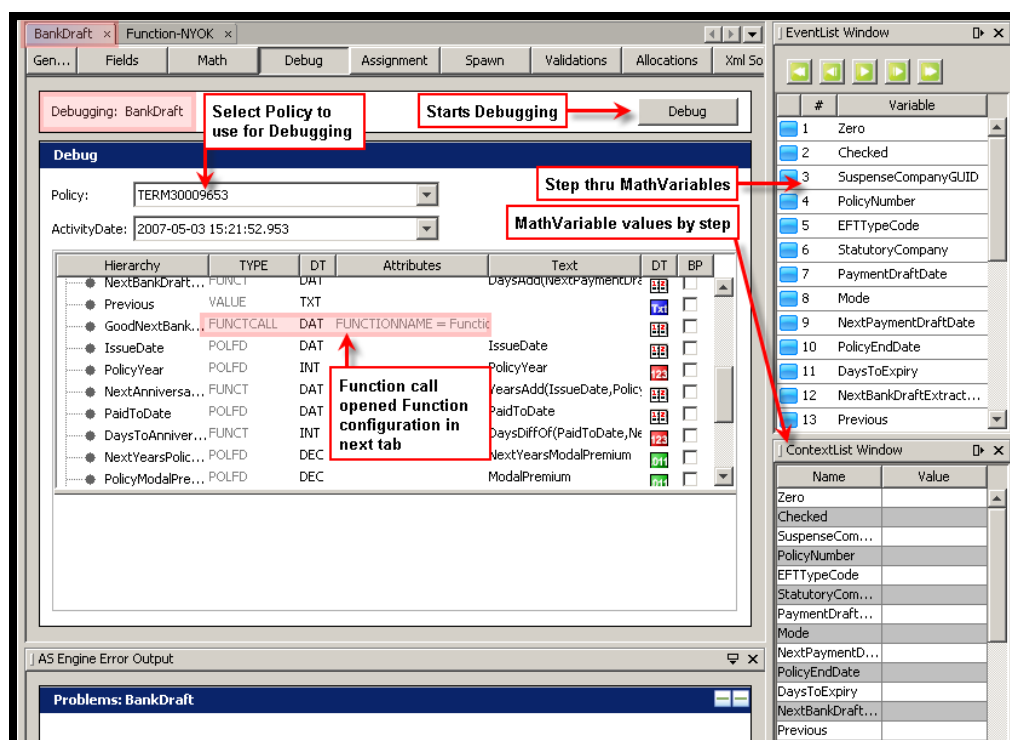
This pane allows individuals who prefer to configure in XML to do so. Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.

The XML Source pane includes XML Editor functionality that enhances the configuration experience. Please see the [XML Source Editing](#) section of this guide for further information on the features of the Xml Source pane.

## Debug Pane

This pane is a tool that can be used to debug errors in the Math section of a Transaction. This tool allows you to walk through execution steps in sequence and view all MathVariables and their associated values at each step. Debugging not only walks through the Transaction's configuration but automatically opens any called Functions and steps through all of those MathVariables. Values are displayed according to what was passed in from the Transaction configuration. Debugging is done by first viewing the Transaction you want to debug. The Transaction may be checked in or out; however, it is the data currently in the database (the checked in version) that will be used for debugger processing. Debugging is performed on all policies and their pending Activities that match the Transaction selected.

**Note:** All Translation, Compilation and Runtime errors must first be fixed in order to use the Debug pane. You can debug when the Transaction is checked in or checked out. You must check out the Transaction in order to fix any configuration issues.








Debugging pane

### Steps to Debug a Transaction

1. Double-click on the Transaction's XML file.
2. Open the **Debug** pane.
3. Select a policy from the **Policy** drop-down box.

**Note:** If you try to debug a Transaction without selecting a policy, you will get a sad server.


4. Select the **Debug** button. Any called Functions will open up in their own tab.
5. All the MathVariable Names and Values in the **ContextList** window will be highlighted in yellow indicating all MathVariables were initialized.
6. Use the **EventList** window buttons  to walk through execution steps. You will automatically step through any called Function MathVariables using the **EventList** window buttons.
7. As you step through the configuration, the Rules Palette will highlight in yellow any changed values in the **ContextWindow** to draw attention to the change.

In the **EventWindow** you will notice blue  and green  next to the MathVariable execution steps. The blue  indicates the MathVariable is part of the Transaction. The green  indicates the MathVariable is part of a called Function. You can double-click on either buttons to be brought to the MathVariable in the Transaction or Function configuration.




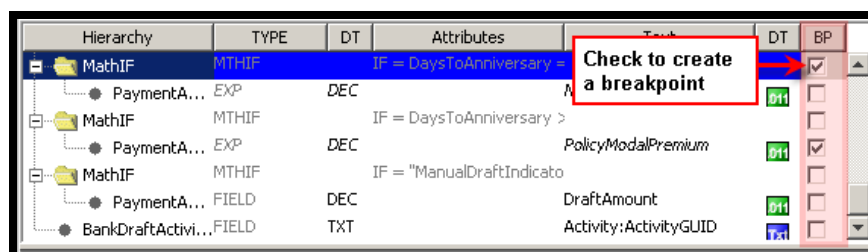
**Important:** In order to debug a particular policy, the Transaction being debugged needs to exist in a pending state on the policy in OIPA.

## Breakpoints

Another debugging feature is the ability to set-up breakpoint(s) in the configuration. Breakpoints are places in the code where execution is stopped for debugging purposes. In the Rules Palette, you can select as many breakpoints as you like by checking the **BP** check box. After you select your breakpoints, use the play button  in **EventList** window to step through configuration.



**Important:** Breakpoints can be set for a loop, which then displays MathVariables and associated values for each iteration of the loop. Use the play button  to step through each iteration of a loop.





Breakpoint checkboxes

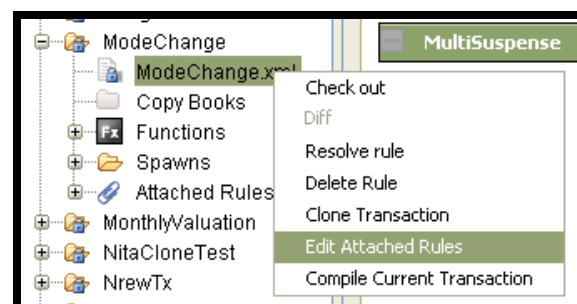
To clear all the breakpoints, select the Clear All  button.

## Attached Rules for a Transaction

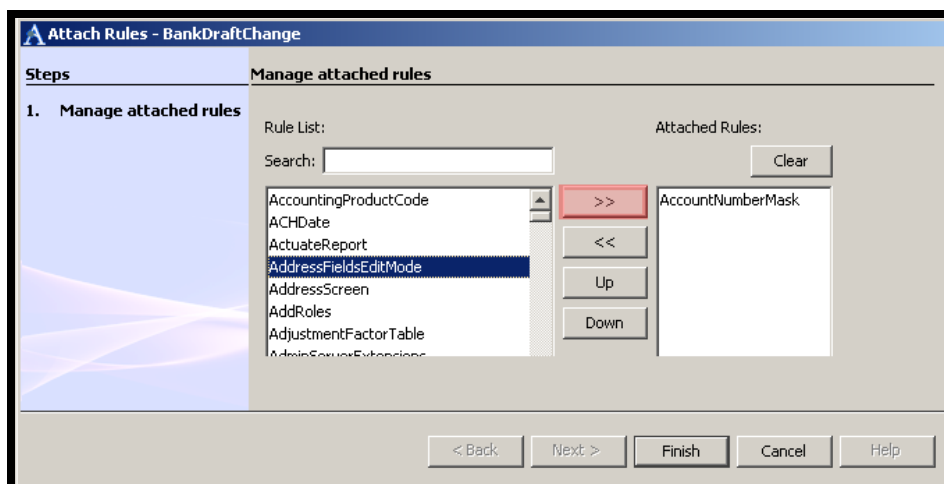
You can attach rules to your Transaction to enhance and support processing. Global Processing Business Rules can be used by overriding and attaching them to your Transaction. The attached rule is an override at the Transaction level of the Global Business Rule and the configuration is a copy of what is in the Global Rule. The attached overridden rule can be edited in order to make the functionality specific to the Transaction's requirements. See *Appendix 1 – Business Rule Configuration* in the Technical Manual for a complete listing of Business Rules.

### Steps to Attach a Rule


1. Expand  the associated Transaction Folder.
2. Right-click on the Transaction's XML file.
3. Select **Edit Attached Rules**. The rule must be checked in to see this option.
4. Select the rule to Attach from the Rule List.
5. Use the  button to attach the rule.
6. Repeat as necessary.
7. Select the **Finish** button.

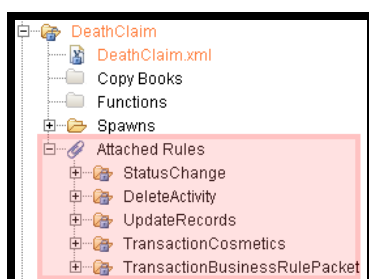


Edit Attached Rules



Attaching rules

Attaching rules adds them to the Transaction's **Attached Rules** folder as well as automatically adding the rules to the **TransactionBusinessRulePacket**. The order of the attached business rules in the **TransactionBusinessRulesPacket** should be ordered by the user according to configuration standards. You expand  each attached Rule's folder and **Check Out** its XML file to configure the override appropriately.



Attached Rules




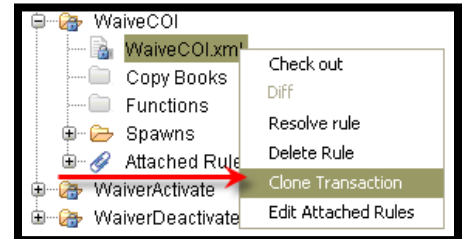
**Important:** The Rules Palette always attaches the **TransactionCosmetics** and **TransactionBusinessRulePacket** Business Rules for each Transaction; you **do not** need to attach them. Please see the [Creating a New Transaction](#) section for further details on how to configure these rules correctly.

## Cloning a Transaction

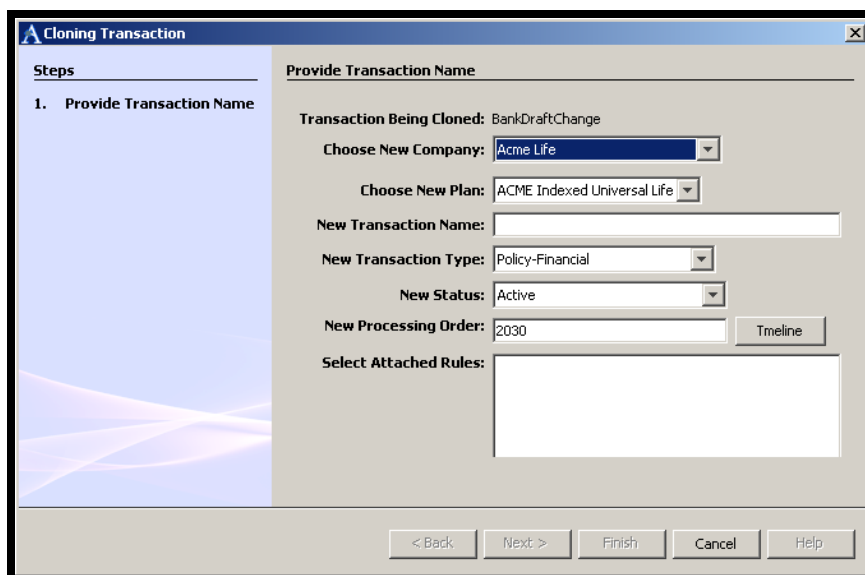
In Rules Palette, you have the ability to quickly and easily clone a Transaction. You no longer have to cut, paste and re-attach Business Rules to clone a Transaction to each Plan that uses it. You can clone Transactions across Companies and Plans, as well as into the current Plan in which the Transaction exists, eliminating errors and saving time. All business rules, including the **TransactionBusinessRulePacket** and **TransactionCosmetics**, will also be attached to the Transaction you clone.

### Steps to Clone a Transaction

1. Expand  the Transaction Folder.
2. Right-click on the Transaction.
3. Select **Clone Transaction**. This option is only available when the Transaction is **not** checked out.
4. In the Cloning Transaction Wizard select:
  - a. The Company you want to use the cloned Transaction.
  - b. The Plan you want to use the cloned Transaction.
  - c. Name of the cloned Transaction.
  - d. Transaction Type
  - e. Keep the **Status** as Active.
  - f. Change the **Processing Order** for the Transaction if applicable.
  - g. Deselect any Attached rules that you don't want to clone with the Transaction.
5. Select the **Finish** button.





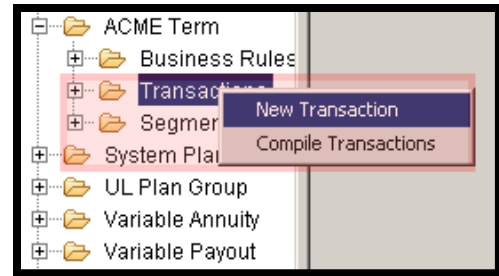
After you have successfully cloned the Transaction you can navigate to its location. You can configure the Transaction as needed.



Cloning a Transaction


## Compile Transaction

The **Compile Transaction** feature compiles Transaction Math configuration and identifies configuration errors. You can easily identify where there are errors because the Rules Palette marks folders and files with a red  icon. You can run the **Compile Transaction** feature on an individual Transaction or on all of the Transactions in a Plan. After running **Compile Transaction**, you will see the red  icon on folders that include a Transaction with an error. You must check out the Transaction's XML file with the error and open the **AS Engine Error Output** window to view the explanation of the compilation error. If this window is not visible, go to the window or menu tab and select it.

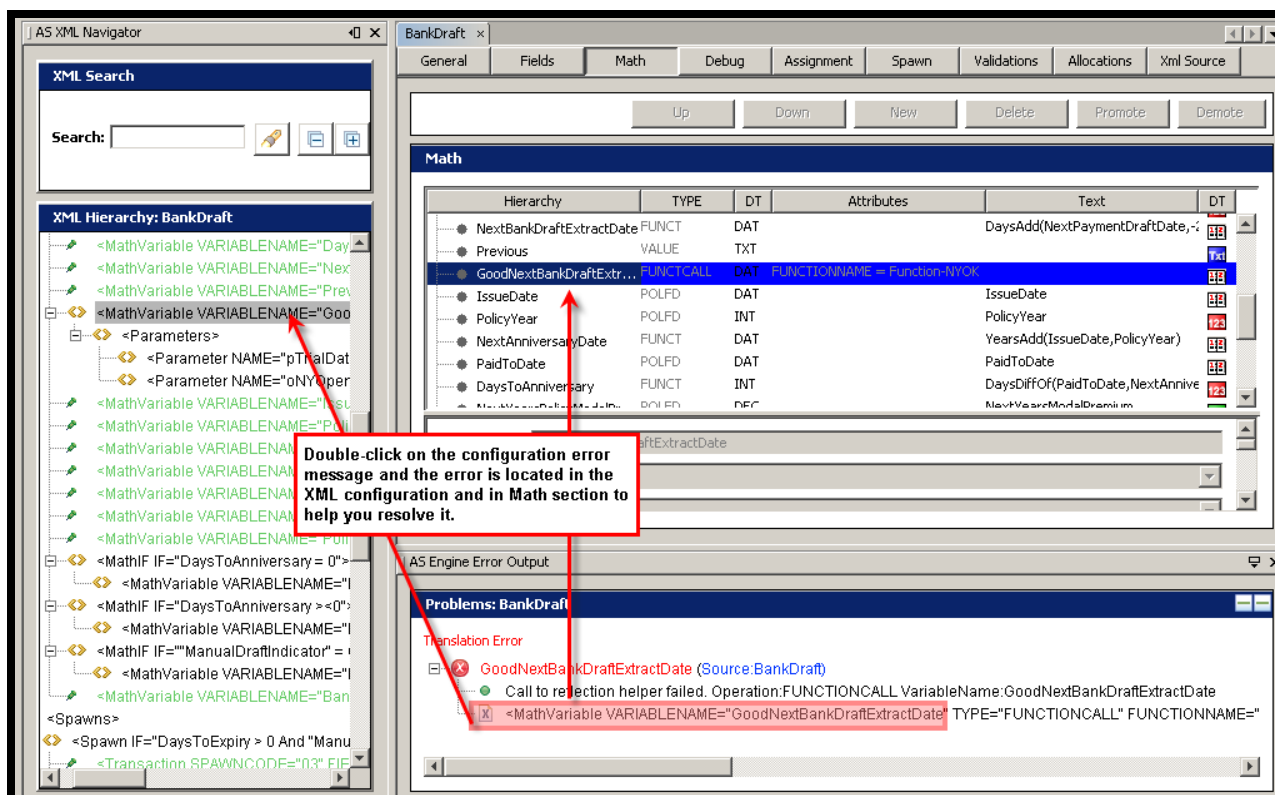


The **AS XML Navigator** window will automatically open when you check out a Transaction with errors. It is **necessary** that this window remain open, as it connects the error output to its location in the configuration.

There are three types of errors that are listed in the **AS Engine Error Output** window:




- **Translation Error** is an error that was caused by a syntax error in the Math Section. All Translation Errors will be listed at one time.
- **Compilation Error** is an error with the configuration in the Math Section. In this situation, the compile feature stops compiling the configuration of a Transaction after it locates this type of error; so only one compilation error at a time is handled. After resolving the compilation error and selecting the **Save** button , the compiler runs again through the configuration and locates the next compilation error. This process repeats until all errors have been resolved.
- **Runtime Error** is a system code error that was caused by configuration.

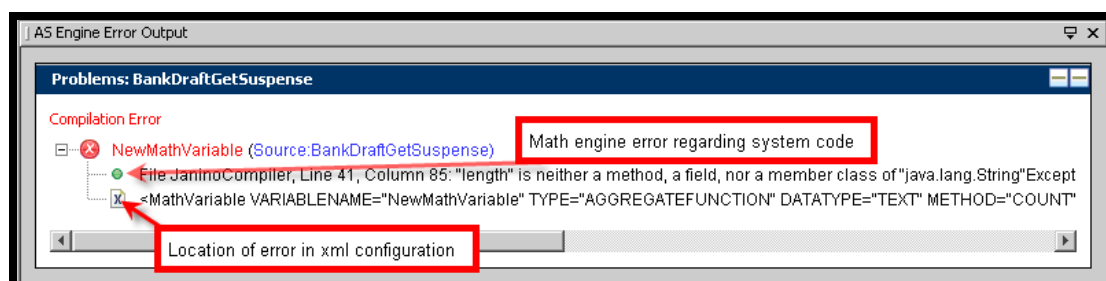




Compile Transaction



### Steps to Compile all Transactions at Once


1. Right-click on the Transaction folder.
2. Select **Compile Transactions**.
3. Navigate in folders with the  icon until you locate the Transaction's XML file.
4. **Check out** the Transaction's XML file.
5. Review the error in the **AS Engine Error Output** window.
6. Double-click on the configuration error message  to be brought to the error in the configuration.
7. Resolve error.
8. Select the **Save** button .
9. Repeat steps 5 and 6 until no errors are reported.



Example Transaction Compilation Error

**Steps to Compile an Individual Transaction**

1. **Check out** the Transaction's XML file.
2. Review the error in the **AS Engine Error Output** window.
3. Double-click on the configuration error message  to be brought to the error in the configuration.
4. Resolve error.
5. Select the **Save** button .
6. Repeat steps 5 and 6 until no errors are reported.

**Note:** If the **AS Engine Error Output window** is closed, you can open it up from the **Window** menu bar option by selecting .



**Important:** Please see the [Debug Pane](#) for correcting errors that do not pertain to compiling.

## Rules

The core processing within the OIPA system is controlled by a set of rules. Rules are configurable according to the needs of the business. Business needs can be Company policies, plan specifications and/or Activity processing requirements to name a few. PAS rules are stored to the database in XML, but the Rules Palette has mitigated the need to know XML by providing visual editors that create the XML for you. Some Business Rules still must be configured in XML and the Rules Palette has a built in XML Editor that can be used in conjunction with the Technical Manual in this instance.

The three types of rules that can be configured through the Rules Palette are:

- Business Rules
- Transactions
- Segments



**Important:** For any configuration in the Palette, if you do not find the element or attribute that is necessary for your configuration, you can manually configure it in the appropriate Xml Source Pane.

## Business Rules

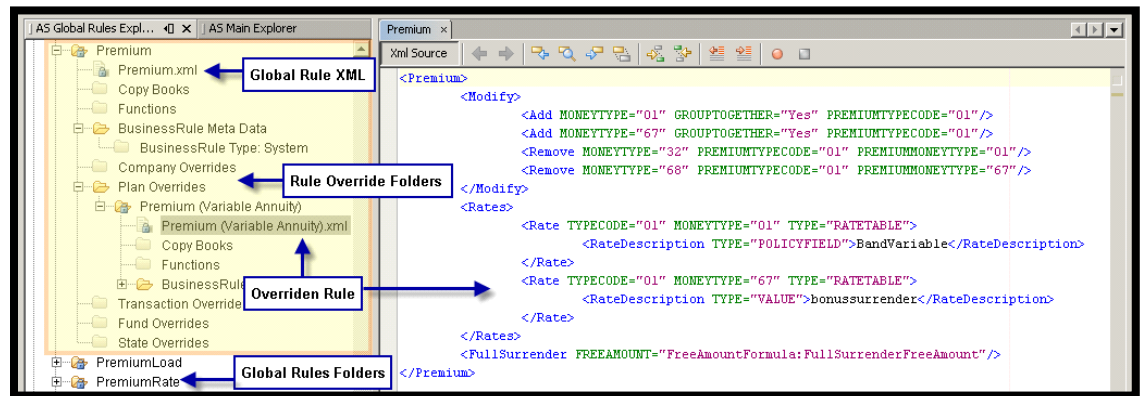
Business Rules are used for the configuration of business processing. They control the creation, display and validation of Screens and provide the means for displaying, entering, and processing Transactions. With Rules Palette you can view, edit and configure Business Rules. Business Rules are configured at the Global Level until overridden and configured for a specific Level such as Plan, Transaction, Fund, State etc. Business Rules do not include Transactions and Segments, which are different rules and whose configuration must be overridden at the Plan level.



**Important:** When you see the word **rule** with a small 'r', it means any rule in the systems which consist of Business Rules, Transactions or Segments.

## Global Business Rules

The Global Business Rules can be viewed via the **AS Global Rules Explorer** window. Each Global Rule has its own folder that includes the XML for the Rule, Business Rule Meta Data, and associated CopyBooks and Functions. Business Rule overrides are displayed in the Global Rule's folder with the same set of folder breakdown as the Global Rule. If the rule is overridden at the Plan level then the rule is also viewable in the **AS Main Explorer** window under the Plan's folder.

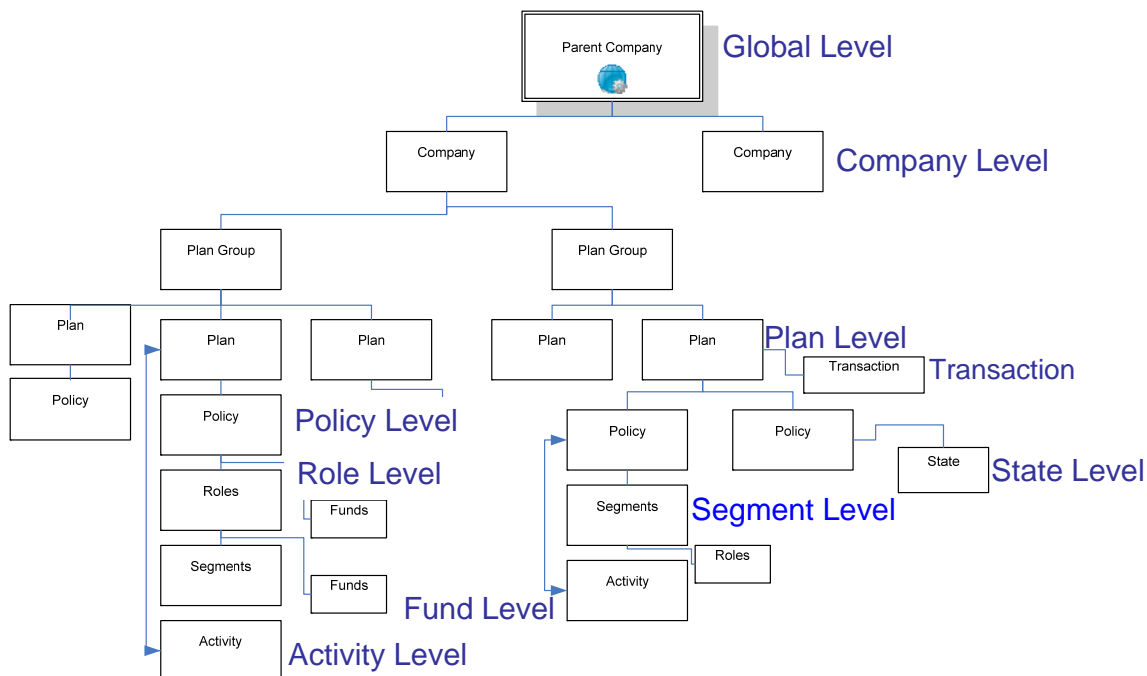


Global Rules Screen

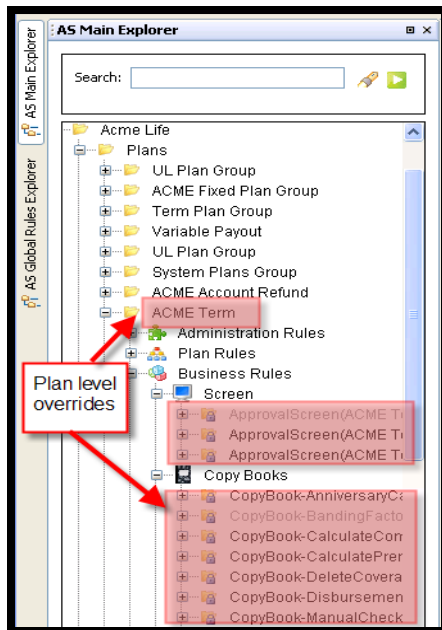
## Global Business Rules Overrides

You must have a Global Rule in order to create an override of the rule. If there is an exception to a Global Rule, an override can be used to support this.

### Override Levels for the Policy Administration System (PAS)



Business Rules that are overridden at the Plan Level are located in the Plan Folder in their respective Rule Folder via the **AS Main Explorer** window.

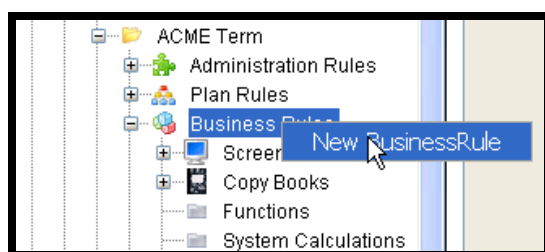


## Create a New Rule Override

You can create overrides for the various types of rules. Right-clicking on a rule's folder and selecting the **New Business Rule** option will open a wizard window that steps you through creating an override. Depending on the type of rule you are overriding the wizard will have different options and selections pre-populated.

### Steps to Create a New Override

1. Right-click on the rule's folder.
2. Select **New BusinessRule**.
3. Select the Name of the rule you want to override and select **Next**.
4. Select the appropriate **Override Level** if it hasn't been selected for you and select **Next**.
5. Select a template for your override if applicable.
6. Your override will save in its applicable folder.



Creating a Business Rule Override

**Step #2: Overrides & Settings**

Company:

Plan:

Transaction:

State:

Fund:

TypeCode:

VBOTypeCode:

< Back   Next >   Finish   Cancel   Help

Identify the Override Level

## Configure Business Rule

Configuring rule overrides will differ depending on the type of rule. Rules that are associated with Screens have visual editing tools in the Rules Palette for configuration. There are also rules that enhance processing that are configured using XML tags that are detailed in the Technical Manual. The Rules Palette only provides configuration tools for visual editing when applicable. Rules requiring XML coding only will have XML Source editing options available.

### Steps to Configure a Rule Override

1. Locate the rule's folder.
2. Expand  the rule's folder.
3. Right-click on the rule's XML file.
4. Select **Check-out**. Refer to the following section of this user guide for further detail.

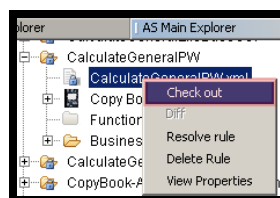
5. Configure the rule accordingly.
6. Select **Check-in** to save your changes.

## Check out and Check in Rules

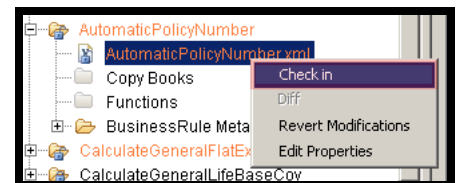
It's now even easier to manage rules that are checked in or out. This is for all rule types, including Business Rules, Transactions, and Segments. Rules will be displayed in various colors depending on who has them checked out. The following table describes the color scheme.

Rule Status	Color
Checked out by user	Orange
Checked in and available for check out	Black
Checked out by someone other than user	Gray
New rule created by the user and not saved to database	Blue

By right-clicking on a rule's XML file you can select **Check out** or **Check in** accordingly.




Check Out Rules Menu



Check In Rule

**Note:** If you need to cancel your configuration changes, select **Revert Modifications** from the right-click menu.

## Saving Configuration Changes

You can save your configuration changes without actually checking in the rule. Using the **Save All**  button from the shortcut bar saves configuration changes locally to your machine. If your configuration is complex and takes several days to complete this is a useful option, as you can save and log off the system without checking in the rule. Remember you must come back to the same machine you were configuring from as the Save button only saves changes locally.

Remember that others can view the rule that you have checked out, but they will only see the configuration that is stored in the database. They will not see any configuration changes that you saved.

**Note:** The "Save" action saves all of the rules currently opened and validation errors will be presented for each of the currently opened rules.

## Plan Rules

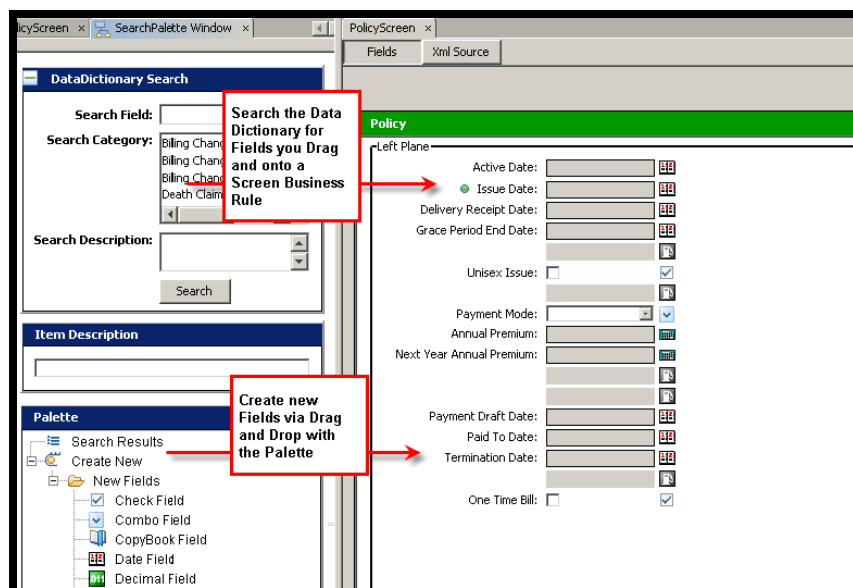
Plan Rules are used to organize and capture data needed to administer policies. We configure Fields Plans to capture the data a company needs to administer a specific type of plan.

Some of the major Plan Rules that are configured are:

1. **Policy Screen** – Defines the foundation of the contract, such as the issue date, premium mode, and free look end date.
2. **Plan Screen** – Defines the plan structure, such as maximum face amount, maximum age or grace to lapse days.
3. **Role Screen** – Defines responsibilities and duties of the participants related to the contract such as beneficiaries, insured, owner, and payer.
4. **Segment Screen** – Defines the display of the columns in the segment summary. The segment summary displays above the segment detail information. This is also where you configure when you need to disable the ability to add new segments, except through a transaction.
5. **Value Screen** – Defines the formatting of non-fixed fields on the Values Screen.

When configuring a Business Rule that is associated with a Screen, a comprehensive visual editor for Field entry is available in the Rules Palette. The visual editor allows you to drag and drop field elements and see the Screen as you are editing. However, if XML is preferred, configuration can still be done in XML via the XML Source pane. Configuration for the additional screen tags must still be done through the XML Source pane.

You drag and drop on to the Configuration Area using the available options in the **SearchPalette** window. In the **SearchPalette** window you can use the Data Dictionary or the Palette to drag from and the Configuration Area to drop on.



Screen Configuration Using the Palette



## PolicyScreen Business Rule

The PolicyScreen Business Rule has six panes available for configuration. The General, Fields, Buttons, Validations and RoleCodes panes offer visual configuration editing tools. The XML Source pane can be used to configure the Policy Screen using XML.

### PolicyScreen General Pane

The General Pane displays specific properties that are configurable for the Policy Screen. The PolicyScreen General Pane Segments section lists the property and an editable value field to use for configuration.

PolicyScreen General Pane

A listing of definitions for the Policy Screen General Pane:

Property	Definition
Use State Approval	Select whether state approval should be enforced or not.
Segments Allowed	Specifies the number of segments that are allowed on the policy.
Minimum Segments	Specifies the minimum number of segments that are required for the policy.
Show Segment Roles	Allows roles to be associated with a segment.
Automatic Policy Number	System will generate an automatic policy number.
Disabled Status	Indicates which applicable status(es) will disable otherwise editable fields.
Segment Count	Total number of segments that are assigned to a policy.

## PolicyScreen Fields Pane

The Fields pane is used to create Fields that will display on the Policy Screen. The functionality is exactly the same as the Fields pane described later in the Rules section of this guide. Please see the [Fields Pane](#) for more information.

The screenshot shows the 'PolicyScreen' window with the 'Fields' tab selected. The window is divided into two main sections: 'Fixed Fields' and 'Fields'. The 'Fixed Fields' section is further divided into 'Left Plane' and 'Right Plane'. The 'Fields' section is also divided into 'Left Plane' and 'Right Plane'. Each plane contains a list of fields with their respective data types and formats. The 'Fixed Fields' section includes fields like 'Policy Status', 'Issue State', 'Plan Date', and 'Company'. The 'Fields' section includes fields like 'Active Date', 'App. Signed Date', 'Free Look End Date', 'Grace Amount', 'Policy Fee', 'Payment Method', 'Modal Premium', 'Next Year Modal Premium', 'Premium Available', 'Policy Year', 'Maturity Date', 'Issue Date', 'Delivery Receipt Date', 'Grace Period End Date', 'Unisex Issue', 'Payment Mode', 'Annual Premium', 'Next Year Annual Premium', 'Payment Draft Date', 'Paid To Date', and 'Termination Date'. A 'SearchPalette Window' is open on the right side of the screen, showing a 'DataDictionary Search' section with a 'Search Field' and 'Search Category' dropdown, a 'Search Description' text box, and a 'Search' button. Below the search section is an 'Item Description' section with a 'Drag this to create a filler' instruction. At the bottom is a 'Palette' section with a tree view showing 'Search Results', 'Create New', 'New Fields', 'Address Field', 'Check Field', and 'Combo Field'.

Policy Screen Fields Pane

## PolicyScreen Buttons Pane

The Buttons pane allows the selection of the type of button you want to be displayed on the Policy Screen. The functionality in this pane is the same as the Button pane detailed in the Segments section of this document. Refer to the [Buttons Pane](#) for more information.

The screenshot shows the 'PolicyScreen' window with the 'Buttons' tab selected. The window is divided into two main sections: 'Select Buttons' and 'Order'. The 'Select Buttons' section contains a list of buttons with checkboxes: 'Activity', 'Add', 'Allocate', 'Calculate', 'Close', 'Find', 'New', 'Process', 'Save', 'Values', and 'Withholding'. The 'Order' section contains a list of buttons: 'New', 'Save', and 'Close'. There are 'Up' and 'Down' buttons to the right of the 'Order' list. At the bottom of the window is a 'Preview' section with three buttons: 'New', 'Save', and 'Close'.

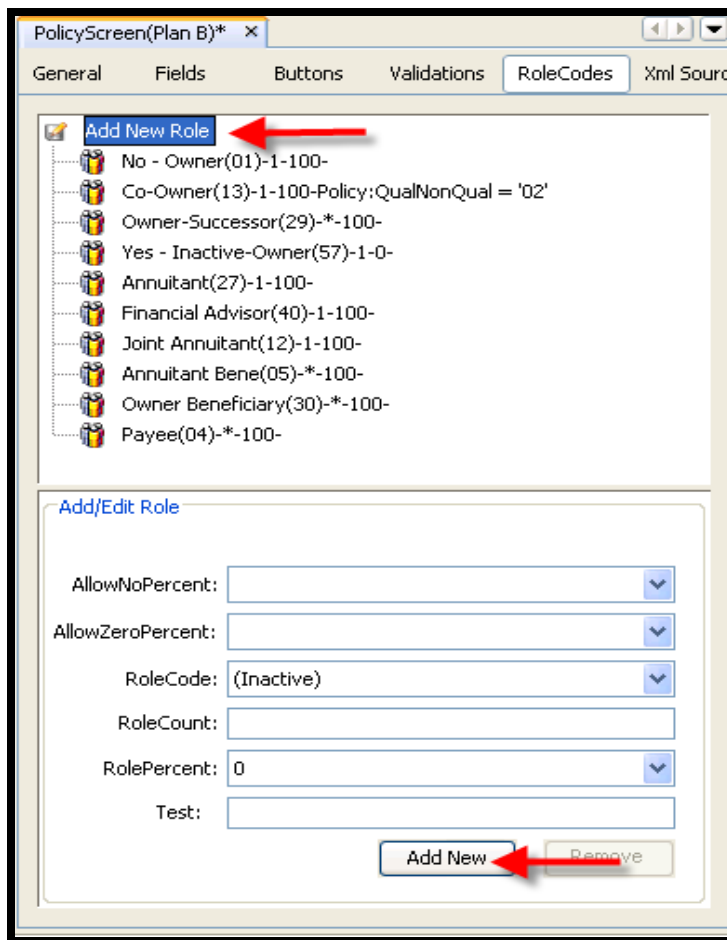
Policy Screen Buttons Pane

## PolicyScreen RoleCodes Pane

The **RoleCodes** Pane allows you to add, edit, or remove roles that can be associated with a policy.

### Steps to Add a New Role

1. Select the RoleCodes Pane.
2. Select **Add New Role** and click the **Add New** button at the bottom of the **RoleCodes** Pane.

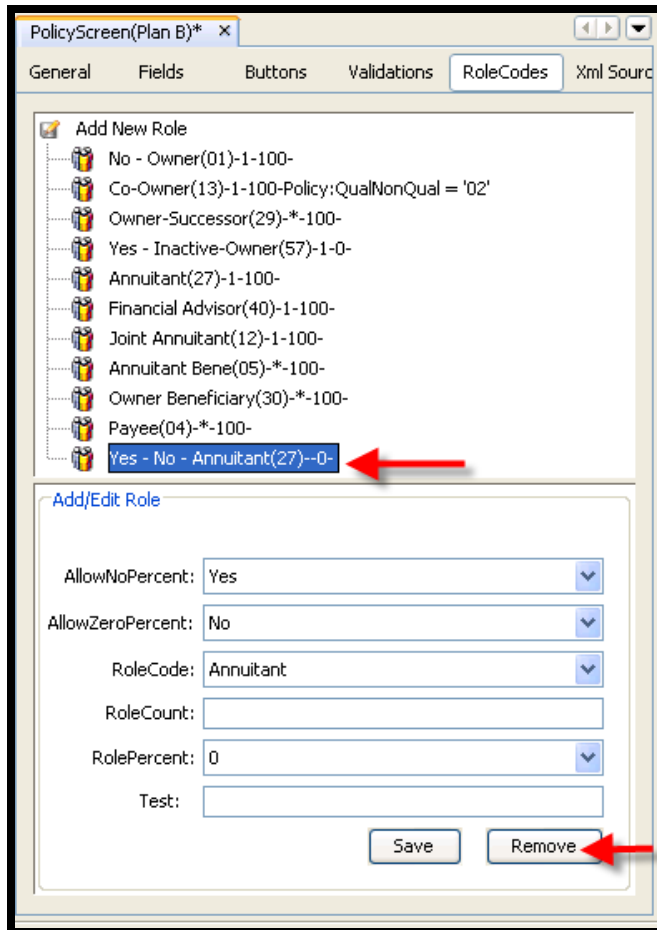


Adding a new role in PolicyScreen RoleCodes Pane

3. Select the desired RoleCode name from the available list in the **RoleCode** drop-down box. RoleCode options are populated by the AsCodeRole table.
4. Enter a Role Count in the **RoleCount** field if desired. RoleCount is the number of times you can assign a client to a particular role on a policy.
5. Select a Role Percent from the available list in the **RolePercent** drop-down box. Percentages are available from 0 to 100. The percent must always equal 100%.
6. Select an option in the **AllowNoPercent** field.
7. Select an option in the **AllowZeroPercent** field.

### Steps to Remove a Role

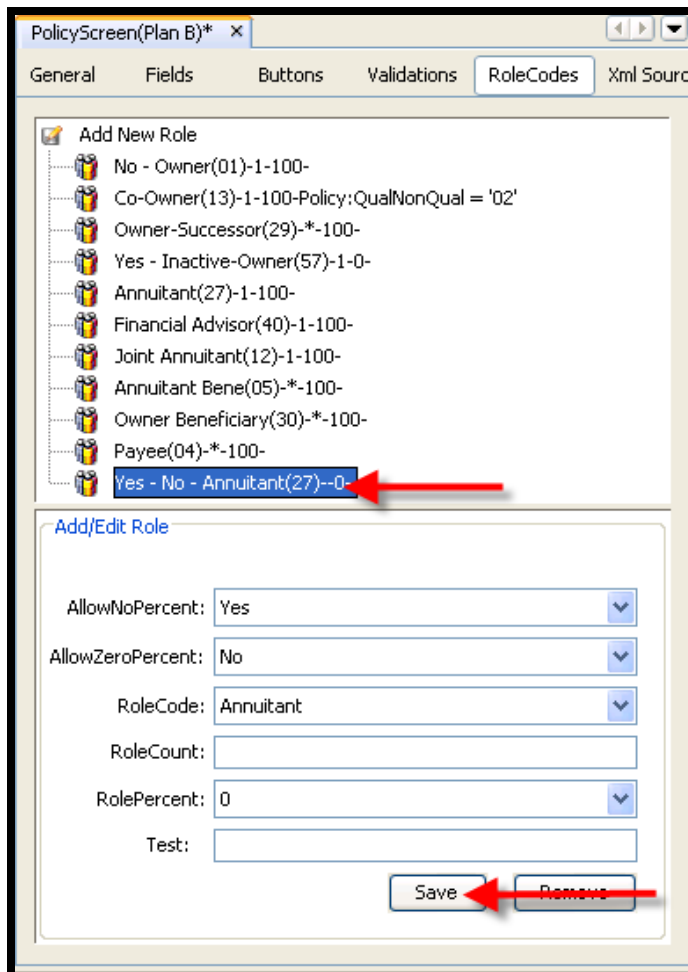
1. Select the **RoleCodes** Pane.
2. Select the role to be removed.
3. Click the **Remove** button at the bottom of the **RoleCodes** Pane.



Removing a role in PolicyScreen RoleCodes Pane

### Steps to Edit a Role

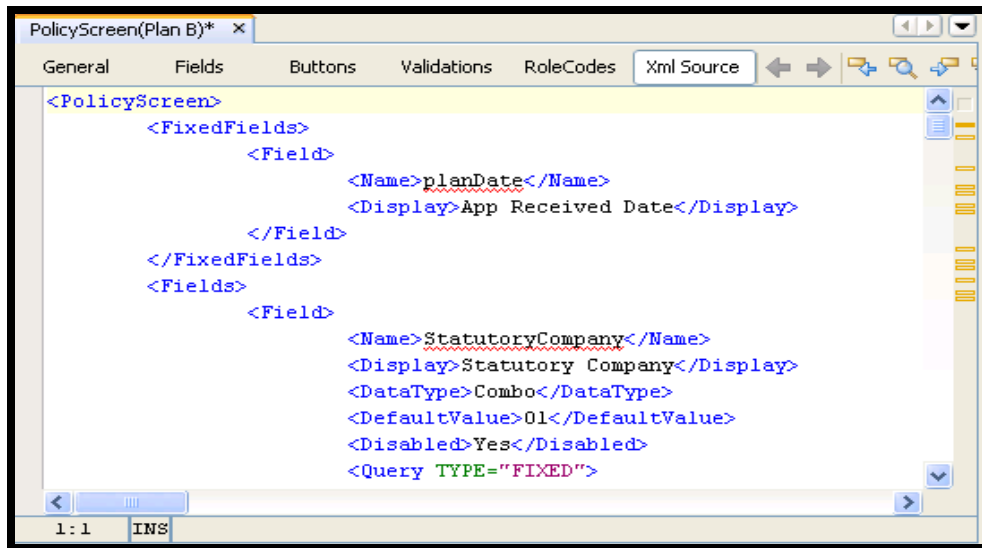
1. Select the **RoleCodes** Pane.
2. Select the role you wish to edit and make your necessary changes.
3. Click the **Save** button at the bottom of the **RoleCodes** Pane.



Editing a Role in PolicyScreen RoleCodes Pane

## PolicyScreen XML Source Pane

If you prefer to do your configuration directly in XML, it can be done via the **Xml Source** pane.



PolicyScreen Xml Source Pane

The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.

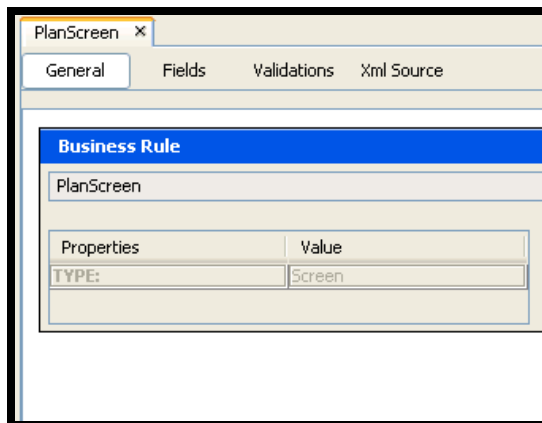
Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.

## PlanScreen Business Rule

The PlanScreen Business Rule has four panes available for configuration. The General, Fields, and Validations panes offer visual configuration editing tools. The Xml Source pane can be used to configure the Plan Screen using XML. This rule defines plan values that can be accessed by other business rules.

### PlanScreen General Pane

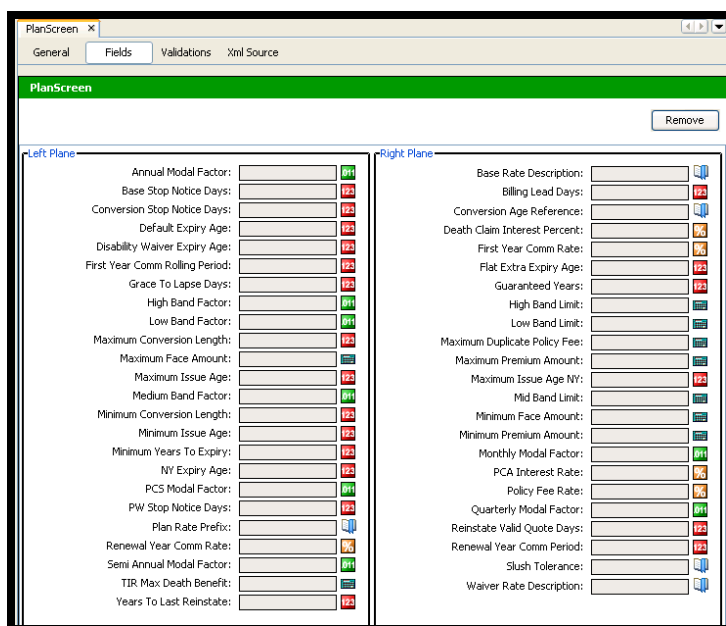
The General Pane displays the name and properties of the PlanScreen Business Rule.



PlanScreen General Pane

### PlanScreen Fields Pane

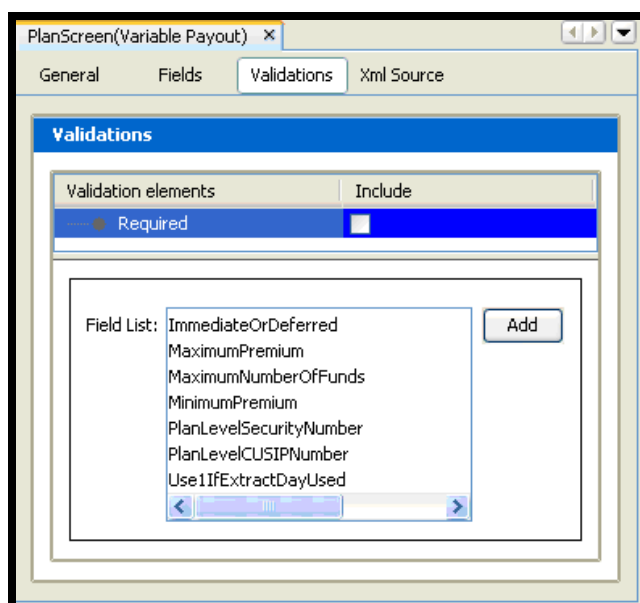
This pane is used to create Fields that will display on the Plan Screen. The functionality is exactly the same as the Fields pane described later in the Rules section of this guide. Please see the [Fields Pane](#) for more information.



PlanScreen

## PlanScreen Validations Pane

This pane is used to create Validations that will display on the Segment's Screen. The functionality is exactly the same as described in the Rules section of this guide. Please see the Rule [Validation Pane](#) for more information.

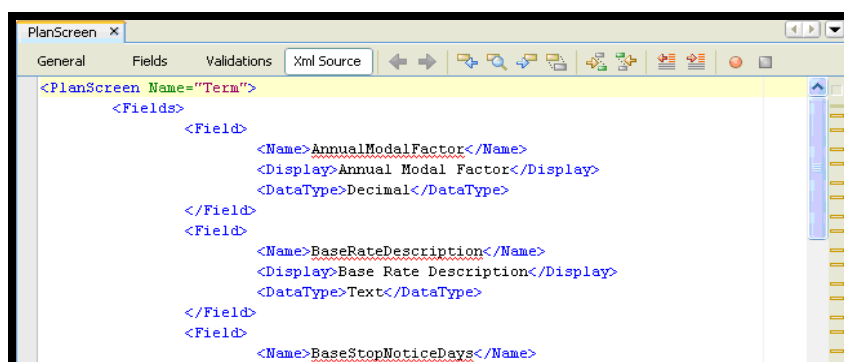


PlanScreen Validations Pane

## PlanScreen XML Source Pane

Configuration can also be done in XML via the Xml Source pane. The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document. Configuration for the additional screen tags must still be done through the Xml Source pane.

Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.



PlanScreen Xml Source Pane



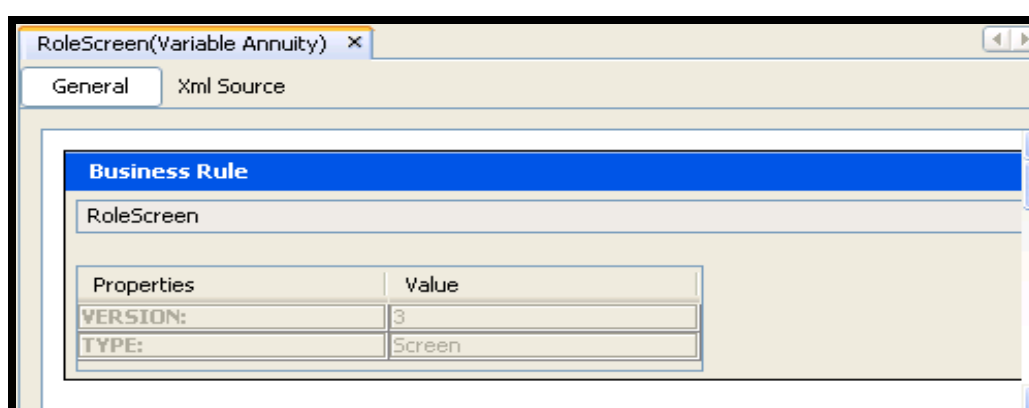
## RoleScreen Business Rule

The RoleScreen Business Rule allows configuration of fields specified on the Role Details Screen in PAS. Each role, such as beneficiaries, insured, owner and payer can have configured fields for capturing relevant data.

The RoleScreen Business Rule has two panes available for configuration. The General Pane and the Xml Source pane, which can be used to configure the Role Screen using XML.

### RoleScreen General Pane

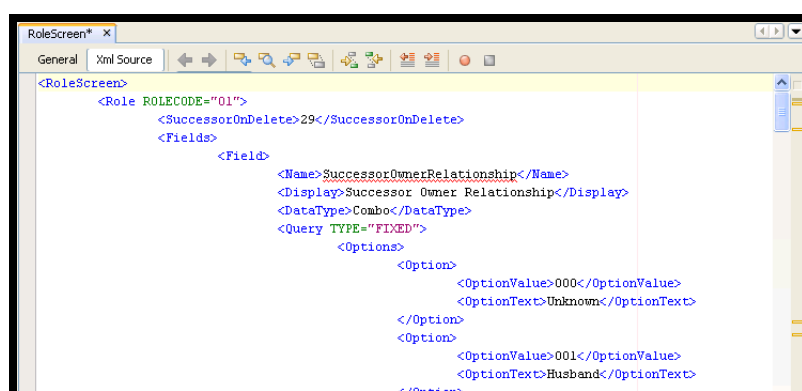
The General Pane displays the name and properties of the RoleScreen Business Rule.



RoleScreen General Pane

### Role Screen Xml Source Pane

Configuration can also be done in XML via the Xml Source pane. Configuration for the additional screen tags must still be done through the Xml Source pane.



RoleScreen Xml Source Pane

The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.

Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.

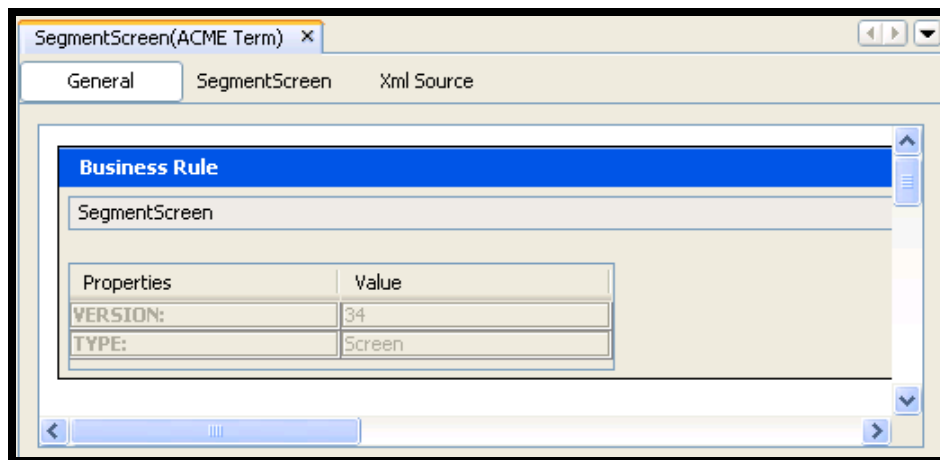
## SegmentScreen Business Rule

The SegmentScreen Business Rule defines the display of the columns in the segment summary, which displays above the segment detail information. The SegmentScreen Business Rule has three panes available: General, SegmentScreen and Xml Source, which can be used to configure the Segment Screen layout.

**Note:** Actual segments on a policy are configured in the Segment folder. For more information on creating and configuring segments, refer to the [Segments](#) section later on in this document.

### SegmentScreen General Pane

The General Pane displays the name and properties of the SegmentScreen Business Rule.

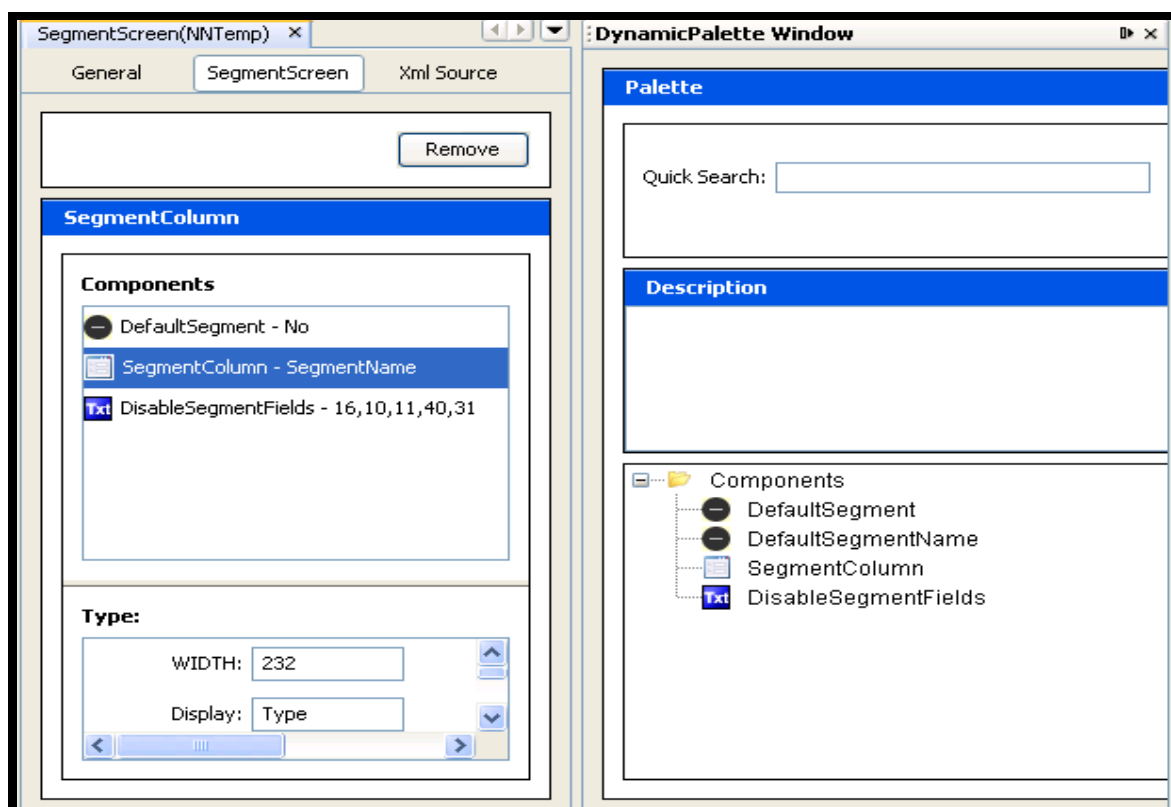


SegmentScreen General Pane

### SegmentScreen Pane

The SegmentScreen Pane allows you to visually configure the display of the columns in segments. Notice the options in the Palette are now specific to SegmentScreen configuration. You can drag and drop Components from the Palette onto the Components windows under SegmentColumn.

- **DefaultSegment** allows you to set a segment that will be the default when the end user navigates to the Segment Screen.
- **DefaultSegmentName** is the segment name that you want to be displayed when the end user selects the segment tab. This name must exactly match the name of the segment XML file.
- **Segment Column** allows you to set the width of the column in pixel size and justify its position. You will also define the display name of the column heading and enter the name of the field whose value will display under the column heading. It is important the exact name of the field exists for each segment you have configured. To display the name of the segment the value for display must be **\$\$\$SegmentName\$\$\$**.
- **DisableSegmentFields** allows you to disable segment fields from being edited when the policy is in a specific status. Enter the Code Value from AsCodeStatus for the policy statuses you want the segment fields to be disabled in.

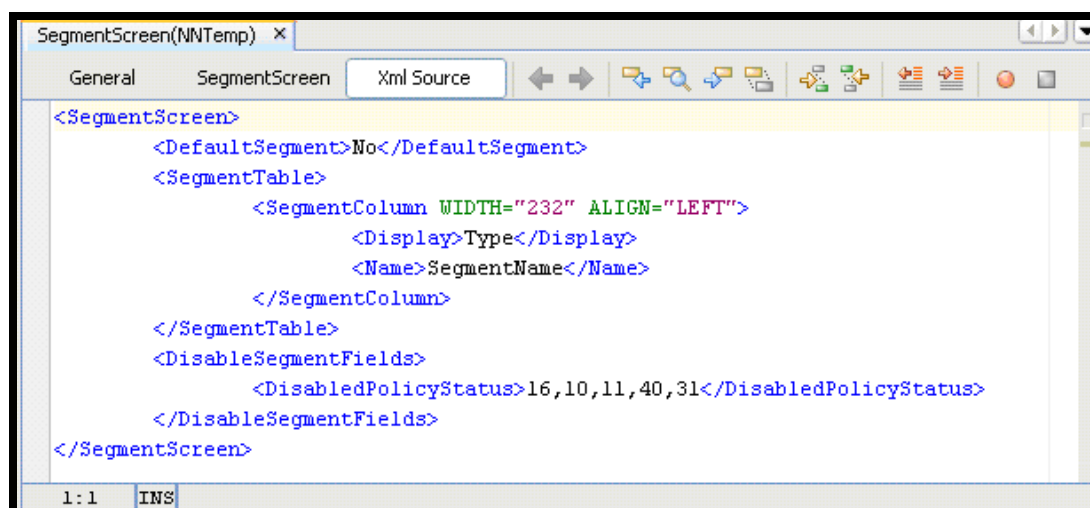


SegmentScreen SegmentScreen Pane

### SegmentScreen Xml Source Pane

Configuration can also be done in XML via the Xml Source pane. The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.

Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.



SegmentScreen Business Rule configuration

### ValuesScreen Business Rule

The ValuesScreen Business Rule allows for the formatting of non-fixed fields on the Values Screen. This

business rule defines how information is going to be displayed on the Values Screen. This rule can pull values from the PolicyValues Business Rule using the MathVariable name. The layout of the PolicyValues MathVariables values can be configured and is viewed at the policy level's Values Screen. This rule also controls what appears in the funds section at the bottom of the screen. When displaying fund detail, the fund name and cash value always appear and the rule can specify other columns. When using funds, you may also display a pie chart graph.

**Note:** The PolicyValues Business Rule must be configured prior to configuring the ValuesScreen Business Rule.

**Policy Values**

Company: Acme Life  
 Plan Group: Variable Plan Group  
 Plan: Variable Annuity  
 Entry Date: 02/21/2000 Issue State: PA  
 Search Name: Policy Number: AVA3101012821  
 Policy Status: Active

**Values Screen**

Valuation: AVA3101012821

**Fixed Fields**

Valuation Date: 02/21/2000 Valuation Date: 02/21/2031

**Policy Values**

Policy Account Value: \$2  
 Policy Issue Date:

Fund Name	Cash Value	Units
ACME - Balanced		5183.3429
ACME - Equity Income		3225.9548
ACME - Mid Cap	\$60,402.46	3335.31

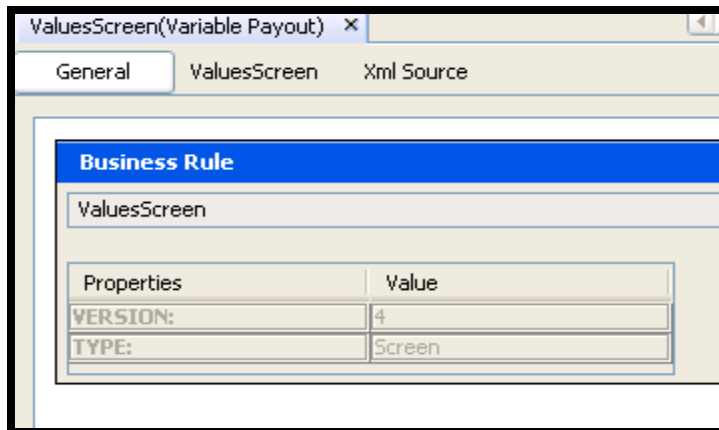
**Fund Details**

Update Close Calculate +/-

Policy Value tab with Values Screen on PAS

## ValuesScreen General Pane

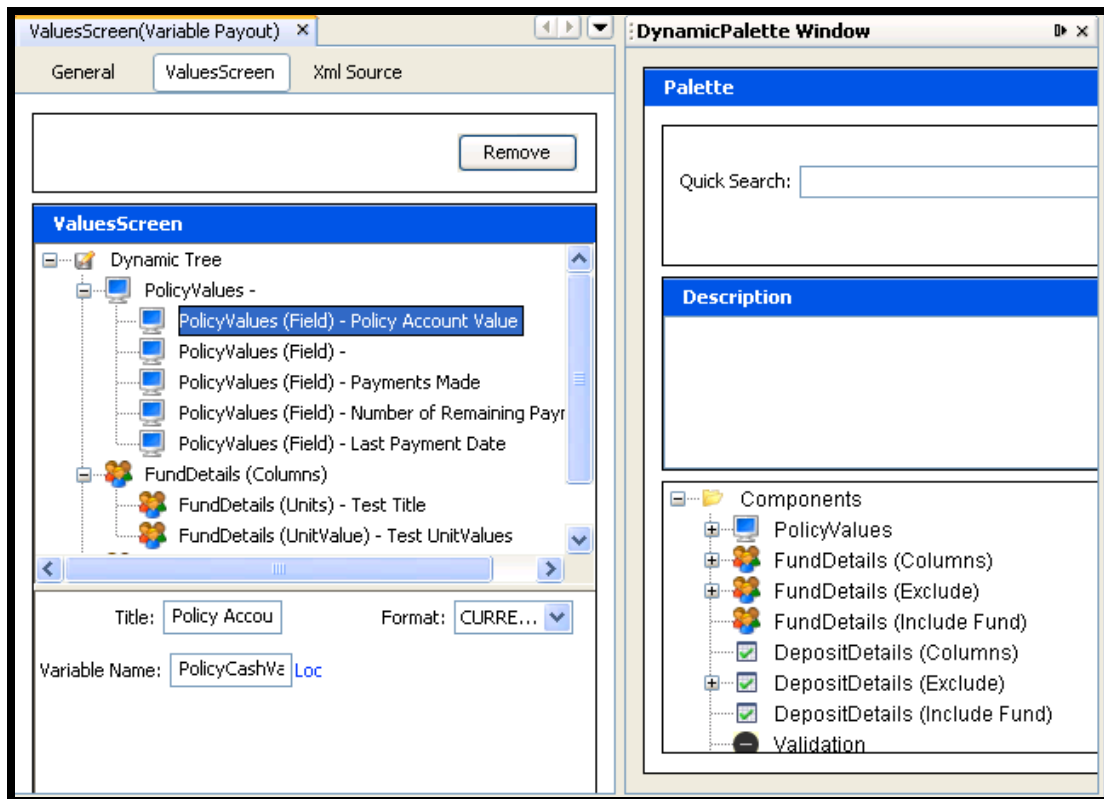
The General Pane displays the name of the rule and its Version and Type.



ValuesScreen General Pane

## ValuesScreen ValuesScreen Pane

The ValuesScreen Pane in conjunction with the Palette allows for the visual configuration of the Values Screen. Policy Values and Fund Details can be configured from this screen.



ValuesScreen ValuesScreen Pane

### ValuesScreen XML Source Pane

Configuration can also be done in XML via the Xml Source pane. The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the XML Source pane can be found in the [XML Source Editing](#) section of this document.

## AllocationScreen Business Rule

The AllocationScreen business rule allows you to configure the screen where allocations are assigned for Plan, Policy and Segments. The AllocationScreen business rule has visual editing capabilities in the Palette, which can be configured on the Allocation pane. It has the tree structure and drag and drop functionality like the other dynamic editor rules. You can configure this screen according to business and allocation needs.

Plan Level Allocations are typically allocations that are established as part of business processing rules. For example; during the FreeLook period all deposits are invested in Fund A, or all deposits are moved into Fund B at notification of Death. The plan level allocation is not unique to a specific policy or determined by the policy owner. There can be multiple Plan Level allocations, however, each allocation type must be assigned its own Allocation TypeCode. Any unused code can be designated as a Plan TypeCode.

Policy Level allocations determine the types of allocations that can be set up for a policy. For example, in Future Payment, Dollar Cost Averaging or a Systematic Withdrawal Transaction.

### AllocationScreen General Pane

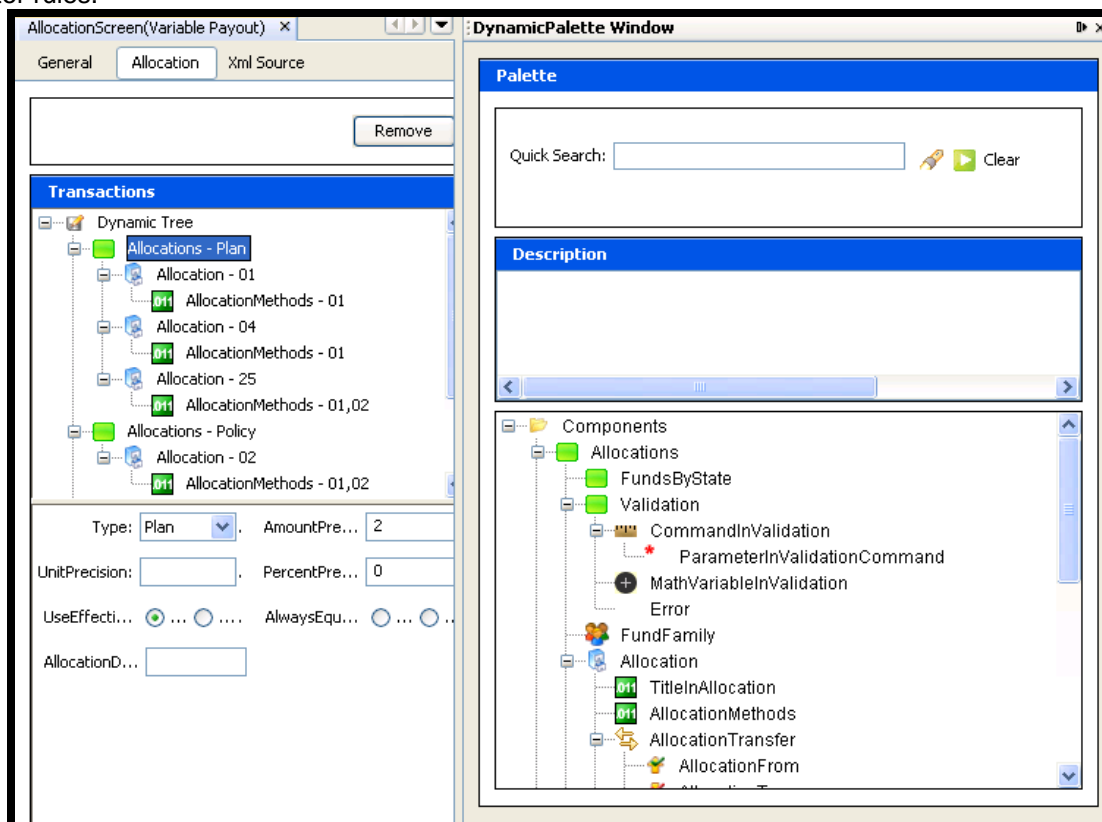
The AllocationScreen General Pane displays the name of the rule, the properties of the AllocationScreen and their associated values.

Properties	Value
VERSION:	2
TYPE:	Screen

AllocationScreen General Pane

## AllocationScreen Allocation Pane

The AllocationScreen Allocation Pane allows you to configure how allocations are assigned for Plan, Policy and Segments. The pane appears in a tree-structure with the same drag and drop functionality as in other dynamic editor rules.



AllocationScreen Allocation Pane – Level 1

Depending on what you select in the Dynamic Tree, a different list of default fields will appear on the screen below the tree. You can also drag and drop fields into the screen to configure the screen as you require. The following is a list of potential fields that can appear and be configured on the screen.

Field Name	Field Description
Type	Can be Plan, Policy or Segment. Corresponds with the level the allocation is on.
AmountPrecision	One of three attributes (AmountPrecision, UnitPrecision, and PercentPrecision) that can be used to set the number of decimal places for the AllocationMethod(s) used. Used when allocating money.
UnitPrecision	One of three attributes (AmountPrecision, UnitPrecision, and PercentPrecision) that can be used to set the number of decimal places for the AllocationMethod(s) used. Used when allocations are unit values.
PercentPrecision	One of three attributes (AmountPrecision, UnitPrecision, and PercentPrecision) that can be used to set the number of decimal places for the AllocationMethod(s) used. Used when allocations are in percentages.
UseEffectiveDate	Used to display different effective dates for a model and allows you to select a group of allocations by model and effective date. The value Yes allows for effective dates and No indicates effective dates aren't used.

Field Name	Field Description
AlwaysEqualPercent	Attribute that is used if you want the system to calculate equal allocation percentages according to the number of fund allocations selected. Selecting Yes calculates allocation percents when Equal Percent box is checked and it doesn't matter if the percentage results are not even. For example: selecting 3 funds will result in 33, 33, and 34 % allocation percentages. Selecting No calculates allocation percentages only if the number of funds selected will result in equal percentages and the Equal Percent box is checked. For example: selecting 2 funds results in 50, 50%, selecting 3 – 0,0,0% will be displayed and you must enter percents.
AllocationDate	Used to specify the effective date of the fund (value pulled from a PolicyField)
AllocationMethods	The method in which to allocate - element value is the Code value from AsCodeAllocationMethod - 01(Percent), 02(Amount), 03(Units), 04(Pro Rata), 05(Mixed)
TypeCode	The allocation code number that is defined in AsCodeAllocationType. TYPECODE 01 is a system code reserved for Plans. Any code defined in AsCodeAllocation can be designated as a Plan TypeCode except the TypeCodes reserved by OIPA. If you do designate a different TypeCode you should only use it with an Allocations Type that equals Plan.
ExcludeType	Allows you to exclude funds from the Allocation Fund drop-down box. Use the fund type codes listed in AsCodeFundType
Model	Models are a group of funds with specific allocations that share in an investment goal. An investor can select a model for their allocations that includes all of fund and the specified amount. In OIPA a model creates a template of allocations and allocation amounts. Models are set-up via the Plan's Allocation Screen. In order to set-up the model on the Allocation Screen, you must configure a typecode and AllocationScreen Business rule. Model data is stored in the Allocations table and can be located using the TypeCode, which is stored in this table. <b>Note:</b> AsAllocation table is used to define a Fund Model. There is no specific Fund Model table that creates the required relationships needed to build Fund Models. FundGUID,RelatedGUID and (Allocation) TypeCode columns in AsAllocation table are used in defining the Fund Model. 1) FUNDGUID: Individual Funds used in a model 2) RELATEDGUID: Is the POLICYGUID with allocations 3) TYPECODE: The model allocation typecode
IncludeFundField	Field Value defines the Fund name and if it should be included
ExcludeFundField	Field Value defines the Fund name and if it should be excluded
AllowMixedMethods	Yes / No - Allows different method codes to be specified for each of the allocations moving money out. If set to Yes, allows user to specify different method codes for each of the allocations for which the money is being transferred. For example: Fund A can have the MethodCode, Amount. Fund B can have the MethodCode , Percent
MixedMethods	Different method codes specified for each of the allocations moving money out.
UnitMinimum	Minimum unit allocated
ExcludeFundName	Name of fund to be excluded.
FundLimit	Can be used to limit the number of allocations that are allowed to be selected (Plan)/attached to a policy, use integer number (policy)
IF	Defines the condition. Only when satisfied, Allocation From funds will be displayed in the Allocation Screen
ExcludeFundStatus	Allows you to exclude funds from the Allocation Fund drop-down box based on their status. Use the fund type codes listed in AsCode FundStatus.
IncludeFundFieldValue	A comma-separated list of fund names which are allowed to be included.
ExcludeFundFieldValue	A comma-separated list of fund names which are allowed to be excluded.



Field Name	Field Description
MethodCodes	Code (as defined in AsCode/AsCodeAllocationMethod) Comma delimited list of Allocation Method codes (Amount, Percent, etc.)
AmountMinimum	Minimum amount allocated
PercentMinimum	Minimum percent allocated
AllocationMethods	Lists the Allocation Methods that are applicable for this allocation type. See also: MethodCodes
PlanField	Name of Plan field that identifies which FundFamily to use
SegmentField	Name of Segment field that identifies which FundFamily to use
PolicyField	Name of Policy field that identifies which FundFamily to use
DisablePolicyStatus	Sub-element of DisableAllocation Fields. If used the policy allocation screen fields will be disabled if policy is currently in one of the listed status codes. Status Codes are stored in AsCodeStatus

### Steps to Create an Allocation

1. Drag the Allocations component from the Palette.
2. Select whether the Allocation Screen Type will be at the Plan, Policy, or Segment level.
3. Enter any restrictions, formatting, or other guidelines for the allocation structure.
4. Drag Fund Family if previously defined or Allocation from the Allocation components in the Palette.
5. For Fund Family, enter the name of the Fund Family.
6. For Allocation, enter the type code of the Allocation from AsCode table and the number of this fund that may be selected.

**Note:** Each allocation must have a distinct TypeCode.

### AllocationScreen Xml Source Pane

Configuration can also be done in XML via the Xml Source pane. The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the XML Source pane can be found in the [XML Source Editing](#) section of this document.



**Important:** Math associated with the AllocationScreen needs to be done using the XML Source Pane.

## PolicyTabView Business Rule

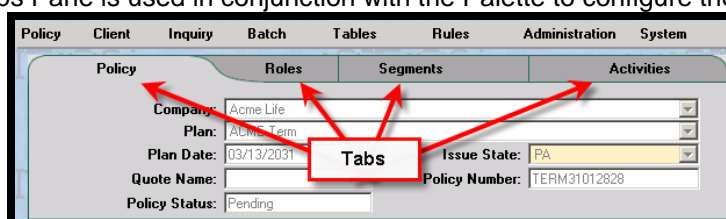
The **PolicyTabView** Business Rule is a plan rule that can be configured to establish the use of screen tabs in PAS and the display names on the tabs. You can visually configure the tabs associated with the Screens and enter the necessary display name.

### PolicyTabView General Pane

The General Pane displays the name of the rule, along with its Version and Type.

### PolicyTabView Tabs Pane

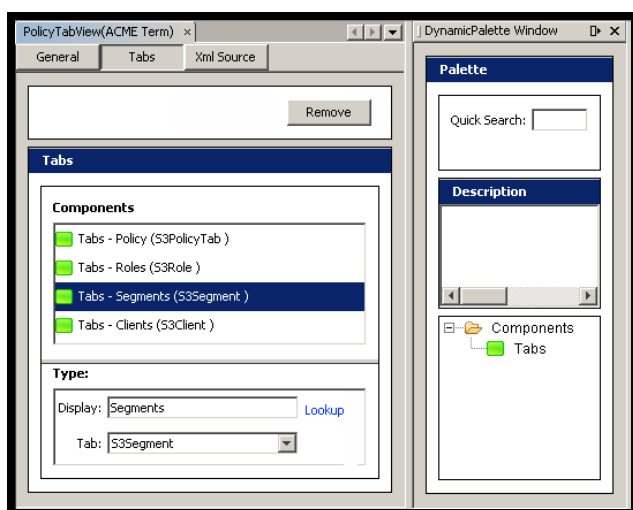
The Tabs Pane is used in conjunction with the Palette to configure the tabs that will display in PAS.



PAS Tabbing System

### Steps to Configure a New Tab

1. In the Palette window, drag the Tabs component onto the Tabs window.
2. Enter the Display name that will be on the tab.
3. Select the screen that you want the tab to open when a user selects on it from the tab drop-down box.



PolicyTabView Tabs Pane

Screen form name necessary for configuration	Actual PAS end user screen name
AsActivity	Activity Screen
S3PolicyTab	Policy Screen
S3PolicyOverview	Policy Overview Screen (aka Splash Screen)
S3Segment	Segment Screen
S3Role	Role Screen
S3Client	Client Screen
S3Values	Value Screen

### **PolicyTabView Xml Source Pane**

The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.

### **PolicyValues Business Rule**

The PolicyValues business rule is used to display valuation on a policy and allows you to configure other fields that you want to run at the time valuation is executed in a transaction. Fields are also displayed on PolicyValues Screen.

**Note:** If fields are only needed for display purposes, it is advisable to use the Inquiry Screen instead.

Other rules may reference the policy value MathVariables in this rule in order to obtain the policy value for displaying or processing. This rule may be configured to perform the actual policy value calculation or may pull the policy value from the valuation results. If this rule is not configured at the plan level, the system will try to use global rules using the same best-match lookup that is used for other rules.

Rules that are used in conjunction with the PolicyValues Business Rule are:

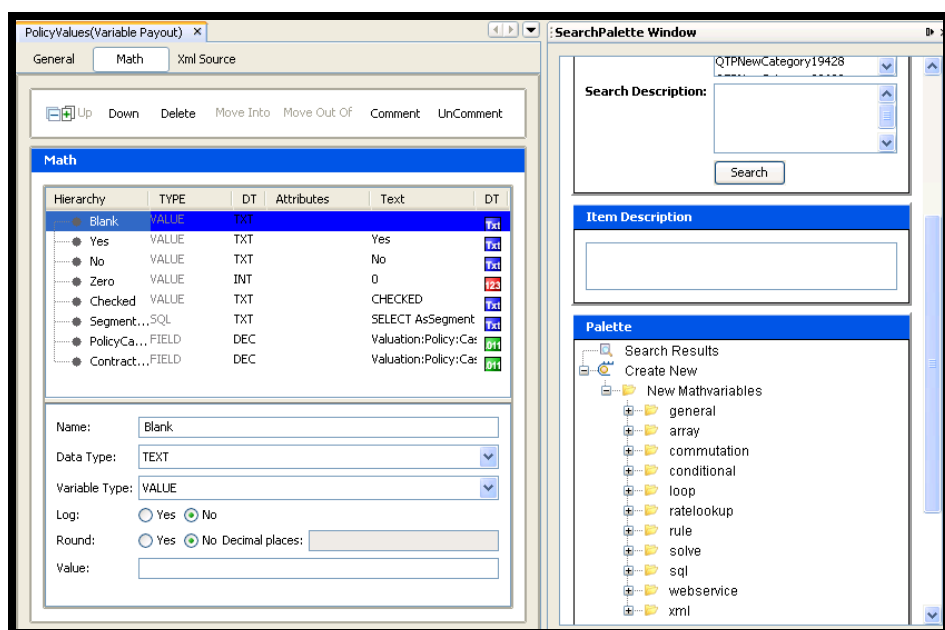
- **ValueScreen** business rule, which is used to format the Value Screen, can display the policy value using the value stored in the PolicyValues Business Rule. See the Value Screen Business Rule for more detail.
- **Transaction Rules** can execute the PolicyValues business rule if the valuation tag is attached and the attribute policy value is set to Yes.

### **PolicyValues General Pane**

The General Pane displays the name of the rule and that it is a System type rule with the version number.

### **PolicyValues Math Pane**

The Math Pane is used to calculate the policy value(s). For further information on how to use the Math pane, see the [Math Pane](#) section of this document.



PolicyValues Math pane

## PolicyValues Xml Source pane

The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.

## EligibleTransactionsByPolicyStatus

The EligibleTransactionsByPolicyStatus business rule is a plan rule that enhances and supports processing of events in the system. This type of rule can be configured using XML. Using XML elements, attributes and values you can configure these processing rules according to the business needs. You can configure the rule using the Xml Source pane, which displays color coded XML for optimal reading and buttons for finding and formatting code. For a listing of XML editing features, please see the [XML Source Editing](#) section of this guide.

The EligibleTransactionsByPolicyStatus business rule controls what Transactions are available to the end user. This business rule checks the status of the policy, and depending on the current status, determines whether the transaction will be initiated by the user or the system. For example, the Transaction that issues a policy is available only when the policy is in pending status. If the policy was already in active status, there would be no reason to have the issue Activity available, as the policy has already been issued.

The **General Pane** displays the name of the rule and that it is a System type rule and version number.

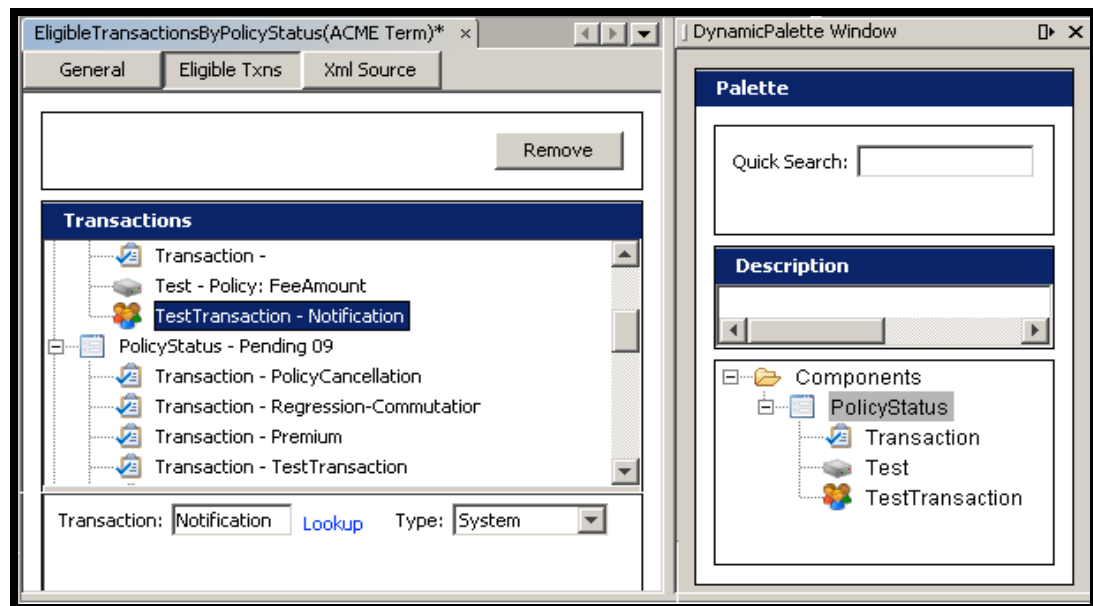
The **Eligible Txns** pane allows for the visual editing of this rule. You can drag and drop from the Components listed in the Palette window to the Transaction configuration window.

- **PolicyStatus** can be dragged onto the Transaction window to create a new Policy Status. You can either enter the code value and name of the policy status manually or you can use the Lookup link to select from records in AsCodeStatus. If you enter a new policy status code it is important to make sure it exists in the AsCodeStatus table.

- **Transaction** can be dragged onto any PolicyStatus in the Transaction window. You must identify the Transaction that should be available in the associated policy status either by entering the name manually or using the Lookup link to select the Transaction from the AsTransaction table.

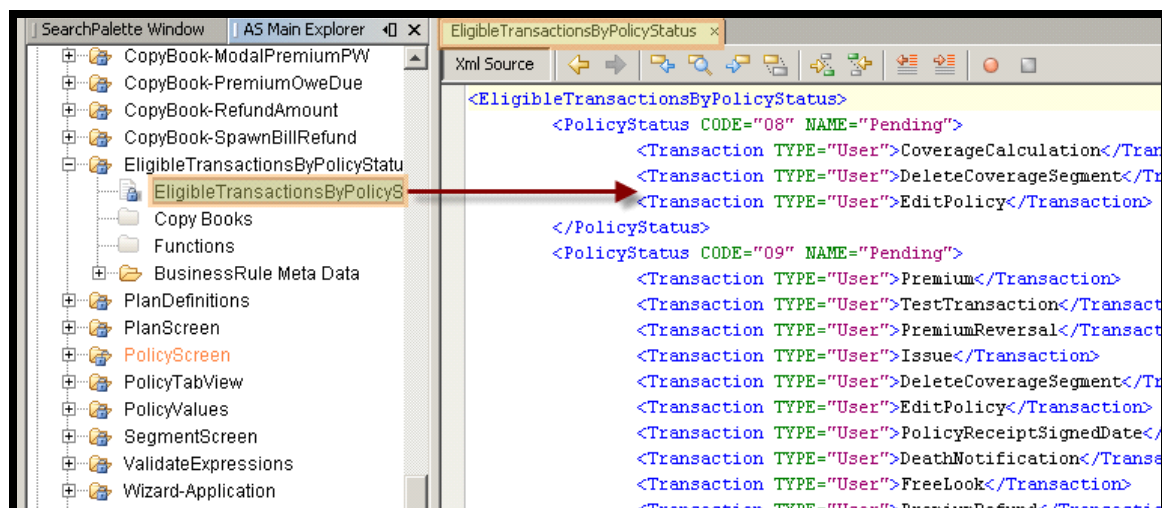
**Note:** System transactions are created only by spawns and will not be available from a drop-down list. User transactions can be created manually (through drop-down list selection) or through spawns.

- **Test** should be used in conjunction with the TestTransaction component. Test is available if you want to validate a screen field against a value in a transaction. Write the validation in the Test field. There may be multiple Test validations per TestTransaction.
- **TestTransaction** is used in conjunction with Test and identifies which Transaction will be available if the Test condition result is true.



Eligible Txns Pane

In the **EligibleTransactionsByPolicyStatus** example below, you can see how to add, edit or delete a Transaction's availability by status. The Transaction's name must be the value between the <Transaction> start and end tags. All <Transaction> tags must be sub-elements of the <PolicyStatus> tag. You can also choose whether the Transaction is System generated or User generated using the TYPE attribute. The <PolicyStatus> element has an attribute called NAME that lists the name of the Policy Status that the policy must be in for the Transaction to be available. The NAME attribute is only used for readability, the CODE attribute controls the policy status that will make this Transaction available. CODE values are available in the **AsStatusCode** table, which you can view in PAS via Table>Codes from the menu bar.



EligibleTransactionsbyPolicyStatus Business Rule



**Important:** A complete listing of all rules, elements, attributes and values that are available please see the Technical Manual.

## Calculate Rules

Calculate Rules are business rules that calculate various Segment and/or Policy values necessary for a policy. Calculate Rules consist of an input math and calculation section, MathVariable validation and a mapping output section. The math section pulls in any necessary input values and performs required calculations. Expression validations can be configured to validate any MathVariables that just processed. The output section of a Calculate General rule includes a mapping section that can write calculated values to AsPolicyField, AsSegmentField, AsClientField, and AsRoleField.

**Note:** When calculating a segment the segment fields should be mapped to the segment being calculated.

**Note:** Any field included in the output mapping must be defined in the destination screen rule such as the PolicyScreen or Segment Business Rule.

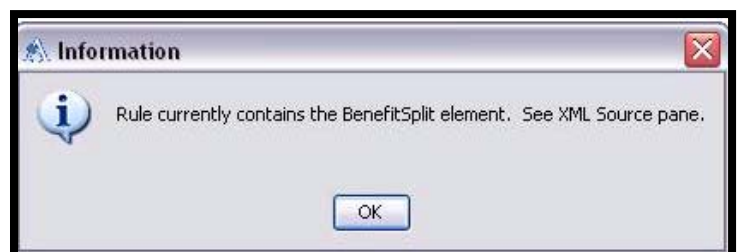
## Calculate Rules General Pane

The General Pane displays the name of the rule and that it is a User Defined rule. You can define whether this rule should generate pending requirements or not.

Calculate Rules General Pane



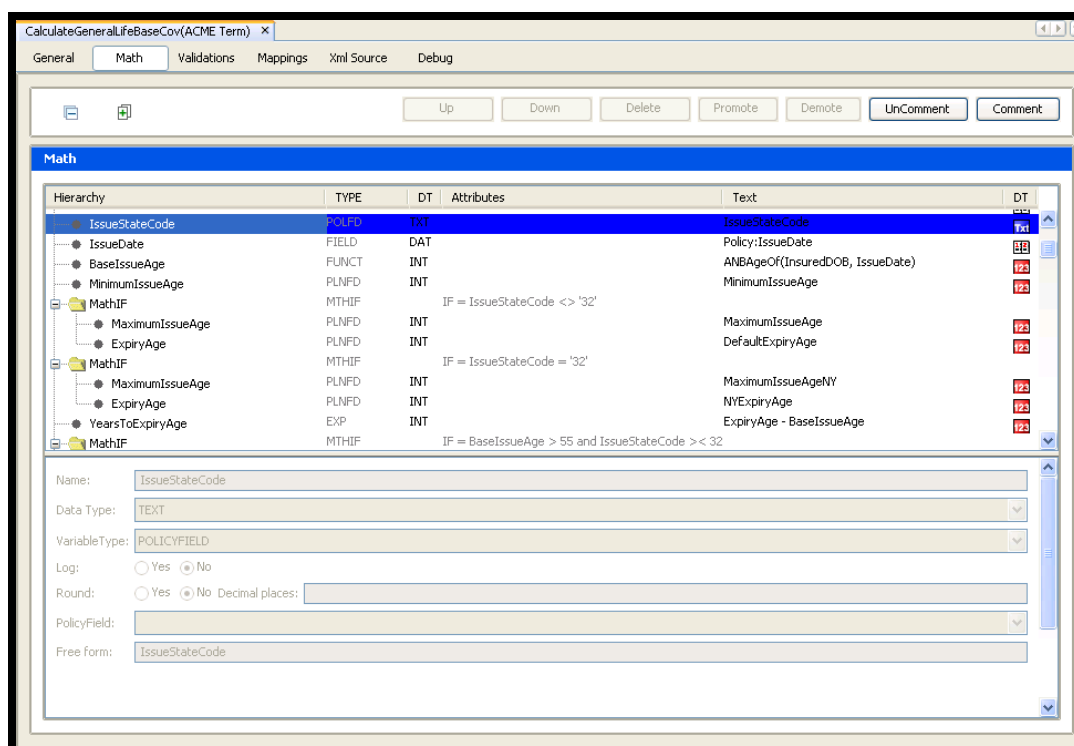
If you are checking out a rule that contains a Benefit Split element, you will receive a pop-up notification that informs you that there is Benefit Split element in the rule and that you need to refer to the XML Source Pane for that rule in order to edit it.



Benefit Split Pop-Up Notification Window

## Calculate Rules Math Pane

The Math pane in Calculate Rules is used to perform calculations and can use information from segment screens and any stored values. The Math pane allows for the visual configuration of math. More detailed information on configuration using the Math pane can be found in the [Math Pane](#) section of this document.

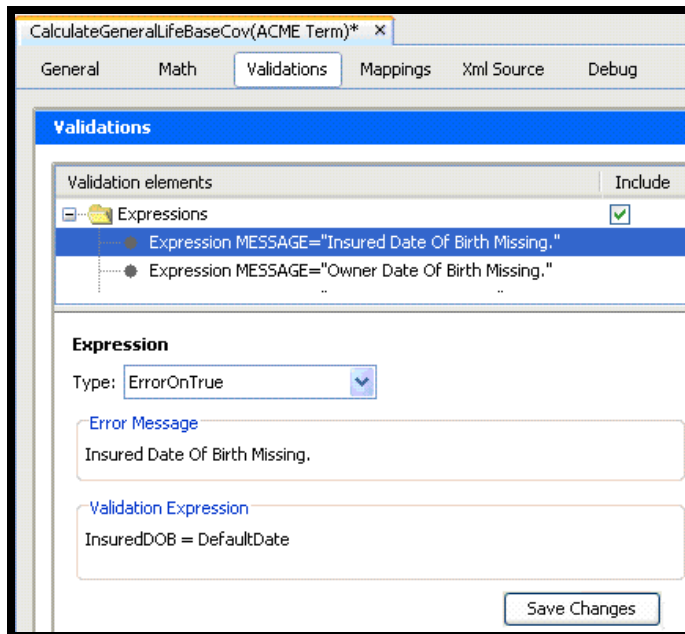


Calculate Rules Math Pane



## Calculate Rules Validation Pane

The Validation pane in Calculate Rules only uses Expression validations. More detailed information on configuring Expression Validations can be found in the [Validations Pane](#) section of this document.

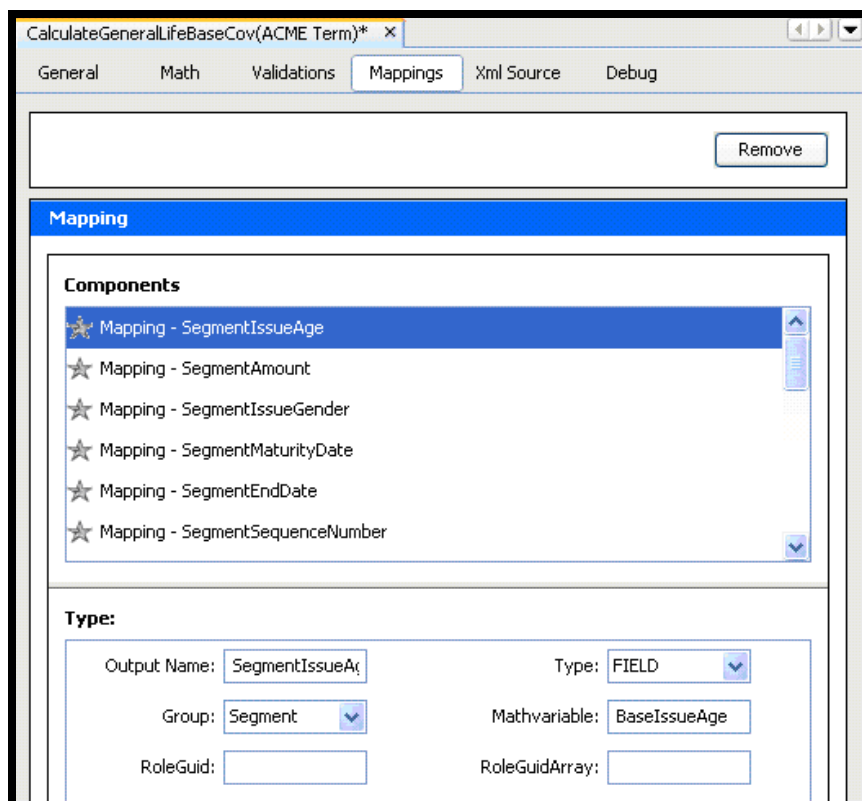


Calculate Rules Validations Pane

## Calculate Rules Mapping Pane

The Mapping pane allows for the configuration of the output section of this Business Rule. Mapping updates a field on a screen with the value of a MathVariable that was calculated in this rule. The value of the MathVariable is written to a specified table which will display on the screen if the field is not hidden. To create a new mapping, drag the Mapping component to the Mapping configuration window.

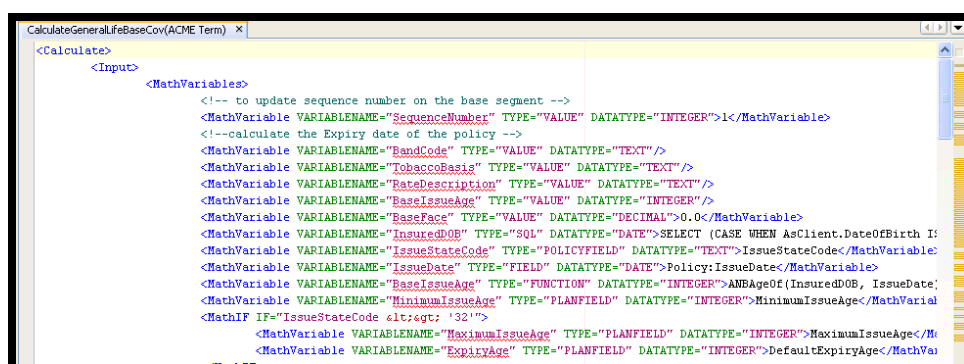
- **Output name** is the name of the field that will be updated. The name of the field must exactly match the name configured on the screen you want to update.
- **Type** should equal FIELD because that is what is being updated.
- **Group** is used to indicate the screen you are mapping to. For instance, this value could be Policy, Segment or Role.
- **MathVariable** is the name of the MathVariable in the Calculate Rule that will be output.



Calculate Rules Mappings Pane

## Calculate Rules Xml Source Pane

The Xml Source pane includes XML Editor functionality that enhances the configuration experience. More detailed information on configuration using the Xml Source pane can be found in the [XML Source Editing](#) section of this document.



Calculate Rules XML Source Pane

**Note:** A Calculate button or a Save button must be configured on the desired screen with the RULE attribute equaling the name of the Calculate Rule to be invoked.

## Calculate Rules Debug Pane

The Debug Pane is a tool that can be used to debug errors in the Math section of a Segment. This tool allows you to walk through execution steps in sequence and view all MathVariables and their associated values at each step. Debugging not only walks through the Segment's configuration but automatically opens any called Functions and steps through all of its MathVariables, displaying values according to what was passed in from the Segment configuration. Debugging is done by first viewing the Segment that you want to debug. The Segment may be checked in or out; however, it is the data currently in the database (the checked in version) that will be used for debugger processing. Debugging is then performed on all policies and their pending Activities that match the Segment selected.

**Note:** All Translation, Compilation and Runtime errors must first be fixed in order to use the Debug pane. You can debug when the Segment is checked in or checked out. You must check out the Segment in order to fix any configuration issues.

CalculateGeneralLifeBaseCov(ACME Term) x

General Math Validations Mappings Xml Source **Debug**

Debugging: CalculateGeneralLifeBaseCov Debug

**Debug**

Segments:  Search

System Date:

Hierarchy	TYPE	DT	Attributes	Text	DT	BP
SequenceNumber	VALUE	INT		1	123	
BandCode	VALUE	TXT			Txt	
TobaccoBasis	VALUE	TXT			Txt	
RateDescription	VALUE	TXT			Txt	
BaseIssueAge	VALUE	INT			123	
BaseFace	VALUE	DEC		0.0	011	
InsuredDOB	SQL	DAT		SELECT (CASE WHEN AsClient.C	111	
IssueStateCode	POLFD	TXT		IssueStateCode	Txt	
IssueDate	FIELD	DAT		Policy:IssueDate	111	
BaseIssueAge	FUNCT	INT		ANBAgeOf(InsuredDOB, IssueD	123	
MinimumIssueAge	PLNED	INT		MinimumIssueAge	123	

Name:

Data Type:

Variable Type:

Log: ☐ Yes ☒ No

Round: ☐ Yes ☒ No Decimal places:

Value:

Calculate Rules Debug Pane

## Functions

There are two different types of Functions that you will use.

- **Functions defined as rules** that are created to support Business Events.
- **Pre-defined Functions** that can be used to help with creating calculations.

### Functions defined as rules

A **Function defined as a rule** contains common calculations that can be broken out into logical pieces. Functions improve readability as the inputs and outputs are clearly defined. In addition, the majority of MathVariables used in a Function do not need to be stored or used outside of the Function. The MathVariables in a Function are not stored in Math Results, which improves performance. Instead, the Function is cached temporarily.

#### Tips for Functions defined as rules

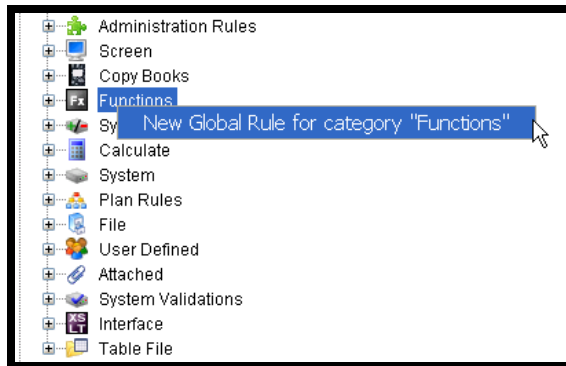
- All Math functionality available in Transactions and Business Rule configuration is available within Functions, except LOG. You can LOG the Function's return value, but you cannot LOG MathVariables in the Function itself.
- Functions **must** be Global and cannot call a Non-Global Function or [CopyBook](#).
- Functions are often chosen over CopyBooks for specific calculations since they offer increased readability.
- If a Function is used multiple times in a Transaction/Business Rule it will be resolved and compiled once, no matter how many times it is used in that Transaction/Rule.



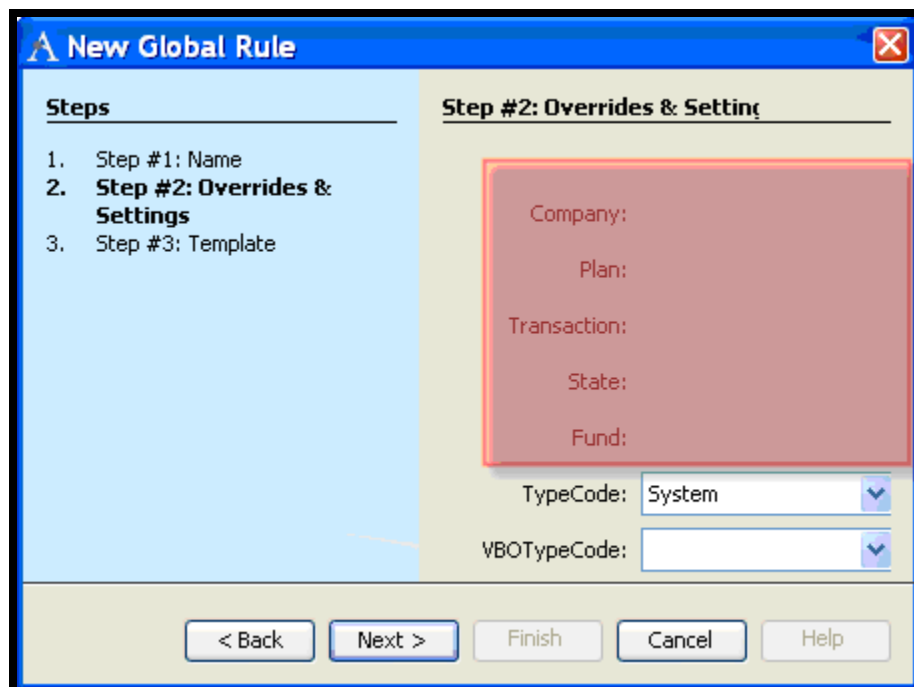
**Important:** Existing Functions are stored in **AsGlobalRules Explorer** window under the Function Folder Type. You can view a Functions inputs and return value by double-clicking the Functions XML file. In the XML source, you will see the return value as an attribute of the Function tag and pre-fixed with 'r' for return. The inputs of the function are in the parameter tag and pre-fixed with "p" for parameter.

### Steps to Create a New Function

1. Go to **AS Global Rules Explorer** window.
2. Right-click on the Functions folder.
3. Select **New Global Rule for Category "Functions"**.



4. Enter a name for your Function and select **Next**. Function names should always begin with 'Function-' then whatever name you want to name the Function. No spaces are allowed in the Function name and you must use camel case.
5. Select **Function** from the TypeCode drop down box and **PAS Base** from the **VBO TypeCode** drop down box and then select **Next**.
6. Functions are always at a Global level.
7. Select **Finish**.

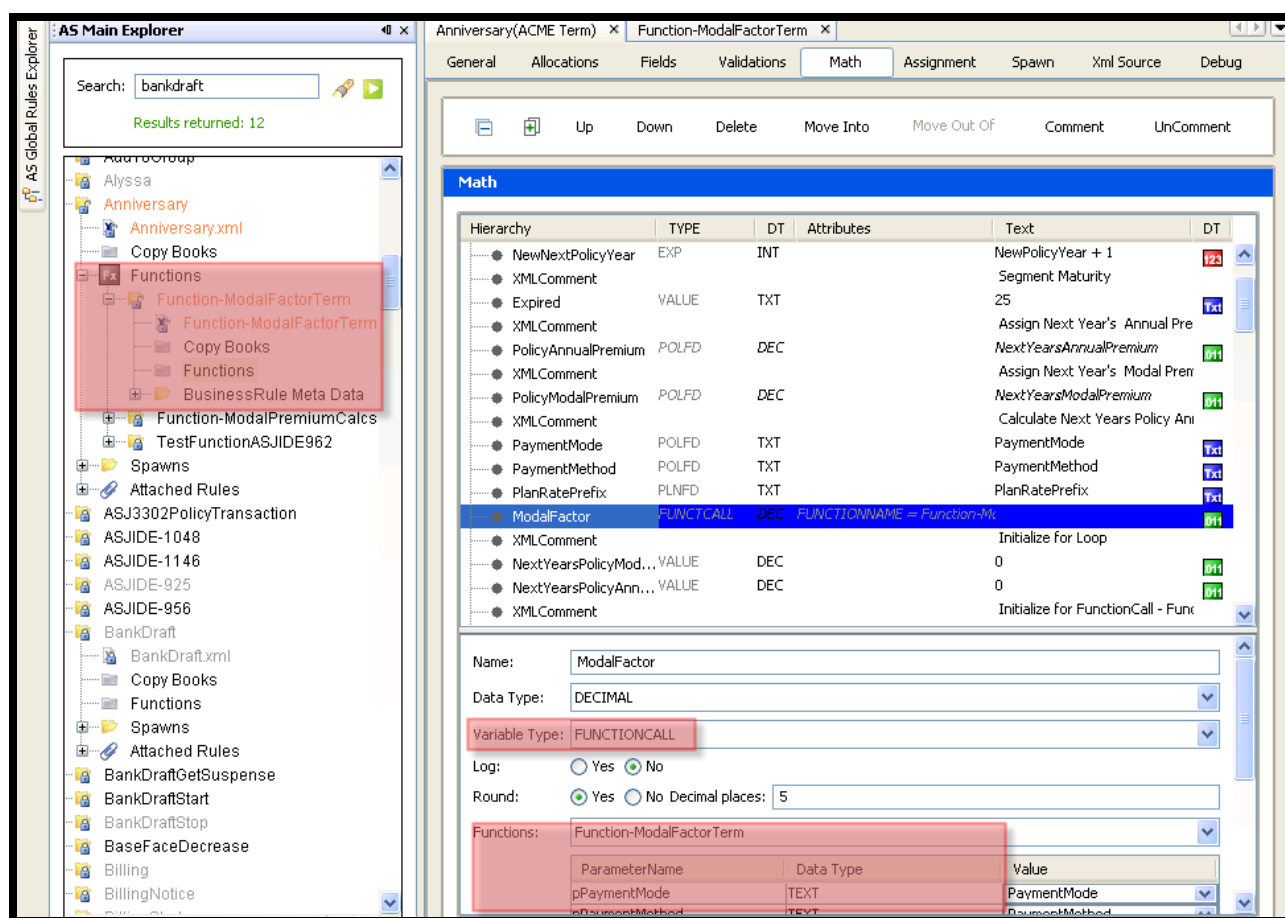


Selecting the Level to Override the Function

### Steps to Call a Function Defined as a Rule

1. Right-click on the XML file where you want to call the Function.

2. Select **Check out**.
3. Open the **Math** pane.
4. Create a new MathVariable by dragging from the Palette in the **SearchPalette** window.
5. Name the MathVariable.
6. Select the **Data Type** that will be returned. Not selecting the correct Data Type will cause an error.
7. Select Variable Type – **FUNCTIONCALL**
8. Select whether to **LOG** or **Round** the function's output result.
9. Select the Function you would like to call from the **Functions** drop-down box.
10. The **Parameter Name(s)** and **Data Type(s)** needed by the Function are listed. In the **Value** drop-down box select the Transaction's Field(s) or MathVariable(s) that you are going to pass into the Function.
11. Select the **Save** button when finished.



Function Call via the Math Pane

**Note:** If the Function's parameters are setup incorrectly in the Function, you will see a red error in the bottom MathVariable text box.

## Pre-defined Java Functions

Pre-defined Java Functions are available to assist with calculation creation. You can use these Java Functions in the Math section of Rule configuration.

### Steps to Use a Pre-defined Java Function

1. Checkout the Rule you want to use a Java Function in.
2. Open the Math pane.
3. Create a new MathVariable.
4. Select the **Data Type** of the variable that should be returned.
5. Select **FUNCTION** from the **Variable Type** drop-down box.
6. In the **Call** text box type the Function and its parameters.

The screenshot shows the Oracle Insurance Rules Palette interface. The 'Math' tab is selected, displaying a list of pre-defined Java functions. The 'DaysToMaturity' function is highlighted. Below the list, the configuration for 'DaysToMaturity' is shown:

Hierarchy	TYPE	DT	Attributes	Text	DT
SegmentAnnPre...	FIELD	DEC	INDEX = SegmentIndex	CurrYearAnnPremiumAmt	011
SegmentModalP...	FIELD	DEC	INDEX = SegmentIndex	CurrYearModalPremiumAmt	011
SegmentNextYe...	FIELD	DEC	INDEX = SegmentIndex	NextYearsAnnualPremium	011
SegmentNextYe...	FIELD	DEC	INDEX = SegmentIndex	NextYearsModalPremium	011
EachSegmentAc...	FIELD	TXT	INDEX = SegmentIndex	ActiveCode	011
NextYearsPolicy...	EXP	DEC		NextYearsPolicyAnnualPremium	011
NextYearsPolicy...	EXP	DEC		NextYearsPolicyModalPremium	011
NextYearsPolicyAnn...	EXP	DEC		NextYearsPolicyAnnualPremium	011
NextYearsPolicyMod...	EXP	DEC		NextYearsPolicyModalPremium	011
XMLComment				Calculate Days to Maturity for	
PolicyMaturityDate	POLFD	DAT		MaturityDate	011
DaysToMaturity	FUNCTION	INT		DaysDiffOf(ActivityDate, PolicyMaturityDate)	123
TestFunction	FUNCTIONCALL	DEC	FUNCTIONNAME = TestFunction		011

Below the table, the configuration for the 'DaysToMaturity' function is shown:

Name: DaysToMaturity

Data Type: INTEGER

Variable Type: FUNCTION

Log: ☐ Yes ☒ No

Round: ☐ Yes ☒ No Decimal places:

Call: DaysDiffOf(ActivityDate, PolicyMaturityDate)

Pre-defined Java Function



**Important:** You can locate a list of available Java Functions in the JavaScriptingCode Business Rule via the **AS Global Rules Explorer** window.

## CopyBooks

A CopyBook is a type of Business Rule that allows Plans, Transactions and other rules to share common functionality. Maintenance for configuration is easier because the CopyBook configuration is held in one place. This configuration can contain data for the creation of Fields for screens or actions for Math and Spawns.

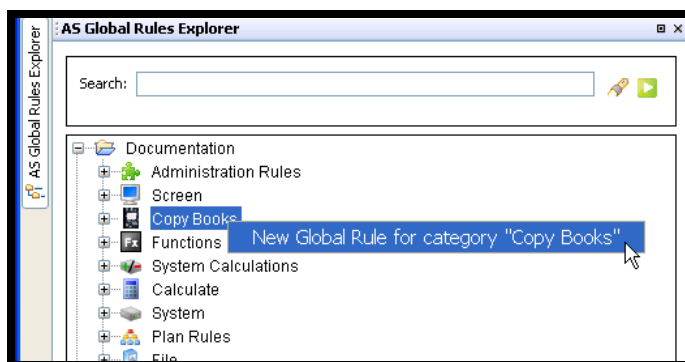
CopyBooks are used to hold common code and are embedded at the point in the configuration where associated MathVariables are being used. When a Transaction or Rule references a CopyBook, the contents of that CopyBook are inserted inside that Rule or Transaction at the specific place where the CopyBook was referenced.

## CopyBook Tips

- The CopyBook must exist as a Global Business Rule prior to an override being added.
- CopyBooks can be overridden at specific levels to support calculation variations. Overriding a CopyBook allows you to keep the name of the CopyBook the same, but when called in the configuration, the system will go the CopyBooks Folder and look for overrides from the lowest level and up. A CopyBook call starts looking for overrides at the Policy level then Fund, State, Transaction, Plan, Company levels and so forth until it gets to the Global level.
- Confirm that the Fields and/or MathVariables referenced but not defined within the CopyBook exist within the Transaction that calls that CopyBook.
- Currently, Copybooks can only be edited in the Math or Fields pane. If needed in another pane, you can add it manually through the Xml Source Pane.

### Steps to Create a new CopyBook

1. Go to **AS Global Rules Explorer** window.
2. Right-click on the CopyBooks folder.
3. Select **New Global Rule for Category "Copy Books"**.



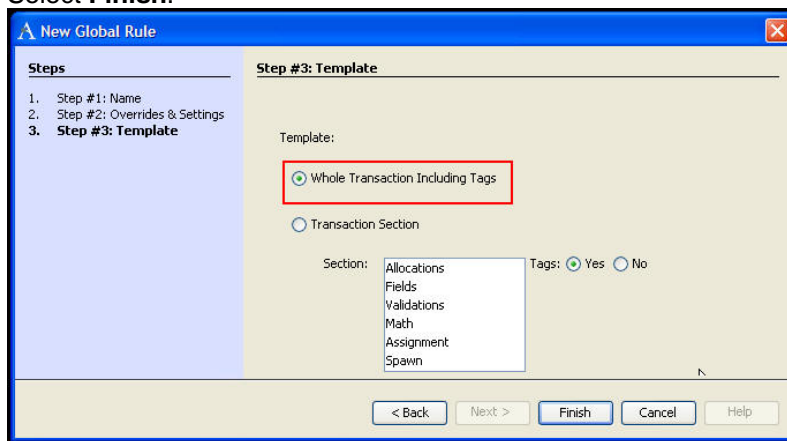


4. Enter a name for your CopyBook. CopyBook names should always begin with 'CopyBook-' followed by the name you want use for the CopyBook. No spaces are allowed in the CopyBook name and it should appear in camel case.
5. Select CopyBook from TypeCode drop down box.
6. Select PAS Base from the VBOTypeCode drop down box and select **Next**.

At this point you can choose to include an entire transaction with the accompanying tags or you can choose to add a specific section of a transaction.

#### Use a Whole Transaction

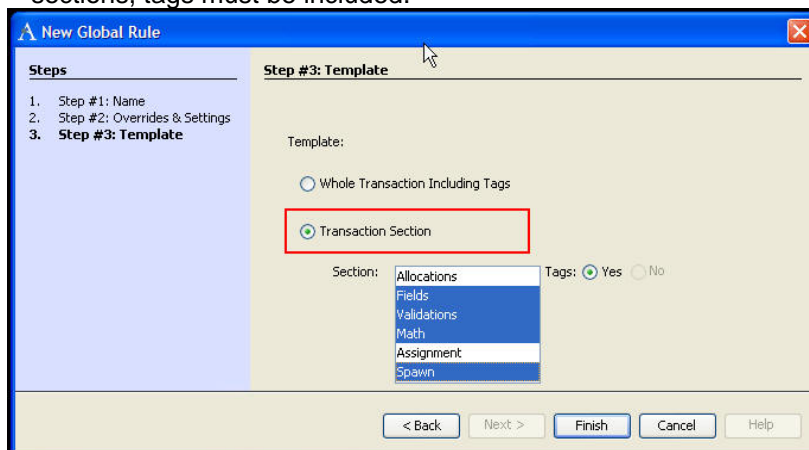
1. Select the radio button next to Whole Transaction Including Tags.
2. Select **Finish**.



#### Use a Transaction Section

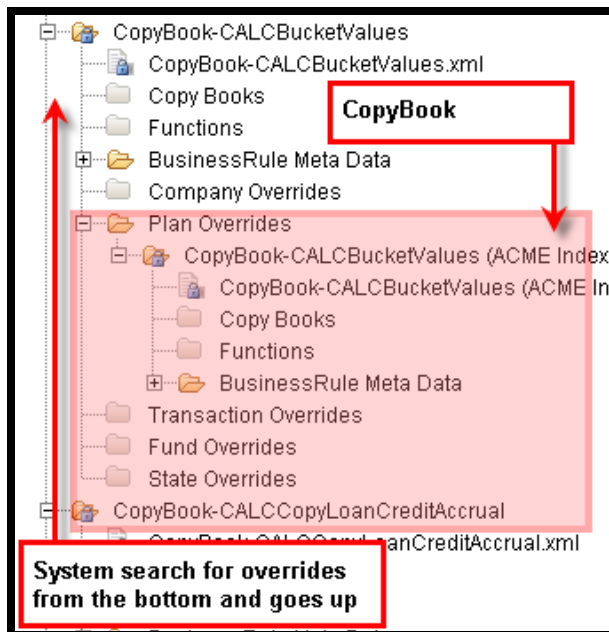
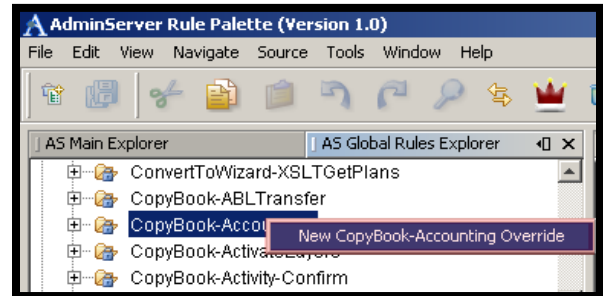
1. Select the radio button next to Transaction Section.
2. Select the section of the transaction you want to use. If you need to include multiple sections, hold the CTRL key down as you click the transaction sections.
3. Select **Finish**.

**Note:** If you only select one section, you can choose to include it without tags. If you select multiple sections, tags must be included.



## CopyBook Overrides

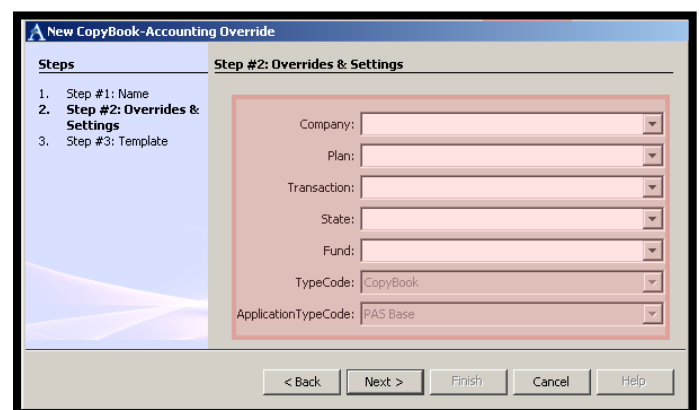
You must go to the Global Business Rule CopyBook via the **AS Global Rules Explorer** to create an override. Your override will then be populated in a sub-folder according to level in the CopyBooks folder. You may configure your override via its XML file in the **AS Global Rules Explorer** window.



CopyBook override system search order

### Steps to Create an override of a CopyBook

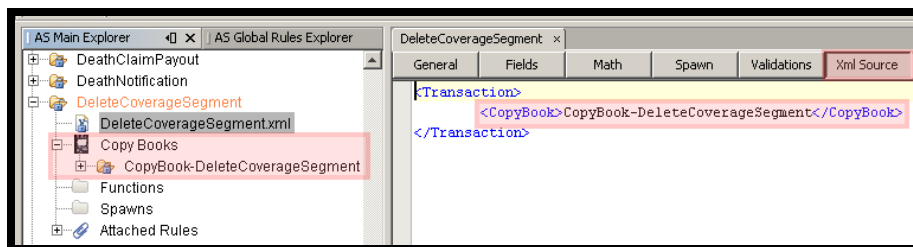
1. Go to **AS Global Rules Explorer** window.
2. Locate the CopyBook and right-click on the CopyBooks folder.
3. Select **New CopyBook**.
4. Select **Next**.
5. Select the appropriate override level.
6. Make sure CopyBook is selected for **TypeCode** and PAS Base for **VBOTypeCode** and select **Next**.
7. Select **Finish**.
8. Right-click on the CopyBook Override XML.
9. Select **Check out**.
10. Configure as necessary.



### Steps to Call a CopyBook in XML Source

1. Navigate to the rule you want to call a CopyBook in.
2. Right-click on the XML file.
3. **Check out** the rule.
4. Open the **Xml Source** Pane.
5. At the point of configuration you want the CopyBook to run, type the start and end `<CopyBook></CopyBook>` tags with the **CopyBook-Name** as the value.
6. **Save** the rule.
7. **Check in** the rule.

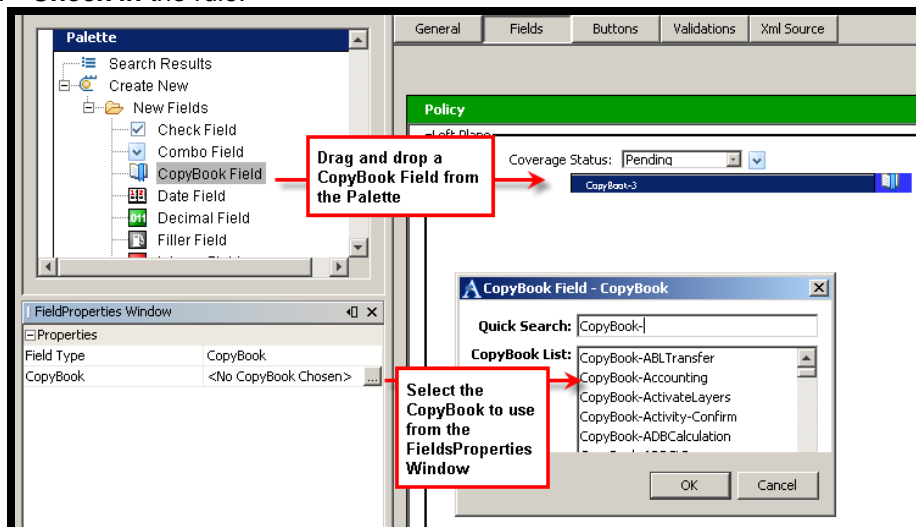
When you open the rule's CopyBook folder via **AS Main Explorer** window, you will see the CopyBook you are calling listed.



CopyBook Call

### Steps to Call a CopyBook in Fields

1. Navigate to the rule you want to call a CopyBook in.
2. Right-click on the XML file.
3. **Check out** the rule.
4. Open the **Fields** Pane.
5. Using the Palette, drag and drop a CopyBook Field onto the screen.
6. In the FieldProperties Window, select the **...** button.
7. Select the CopyBook from the **CopyBook List** and select **OK**.
8. **Save** the rule.
9. **Check in** the rule.




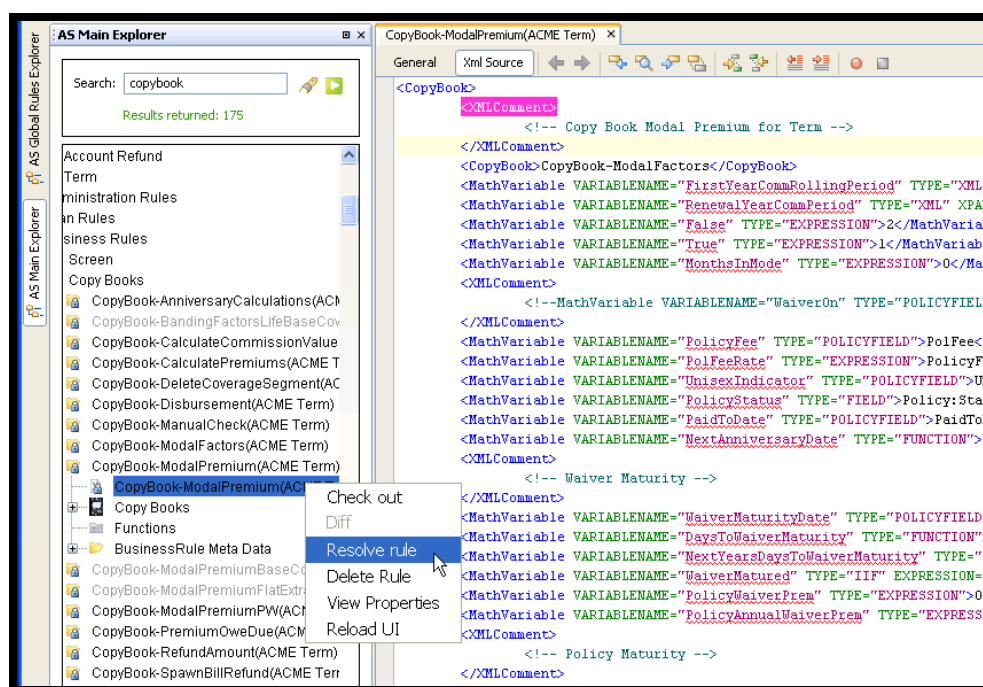
CopyBook from the Palette

## Resolving Rules

You can view all the XML code in a Rule's configuration by selecting **Resolve rule**. Resolving a rule will show CopyBook information instead of just the CopyBook call. This allows you to see the configuration in its entirety so you can analyze the code thoroughly.

### Steps to Resolve Rules

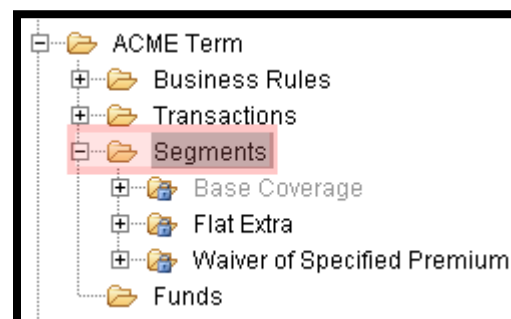
1. Navigate to the Rule and expand  its folder before checking it out.
2. Right-click on the Rule's XML file.
3. Select **Resolve rule**. The Resolved rule displays in the Configuration Area.



Resolve Rule

## Segments

Segments contain the information about the base policy as well as additional riders or features of the policy. Segment rules are used to configure Segments for each Plan. In PAS, the Segment Screen can display multiple Segments that the user can select in a drop-down box. When the user selects a specific Segment, the Segment Screen populates with the associated data. Segments are configured similar to Business Screen Rules but allow for additional validations.



Segments can invoke 'Calculate' Business Rules. In the Rules Palette you see that Segment has its own calculate folder that stores these Business Rules.

**Note:** With the Segment Screen business rule you can set-up the screen layout for any Segments you add to the policy. You can view the [Screen Business Rule](#) section of this manual and Appendix 1 – Business Rule Configuration of the Technical Manual for further information.

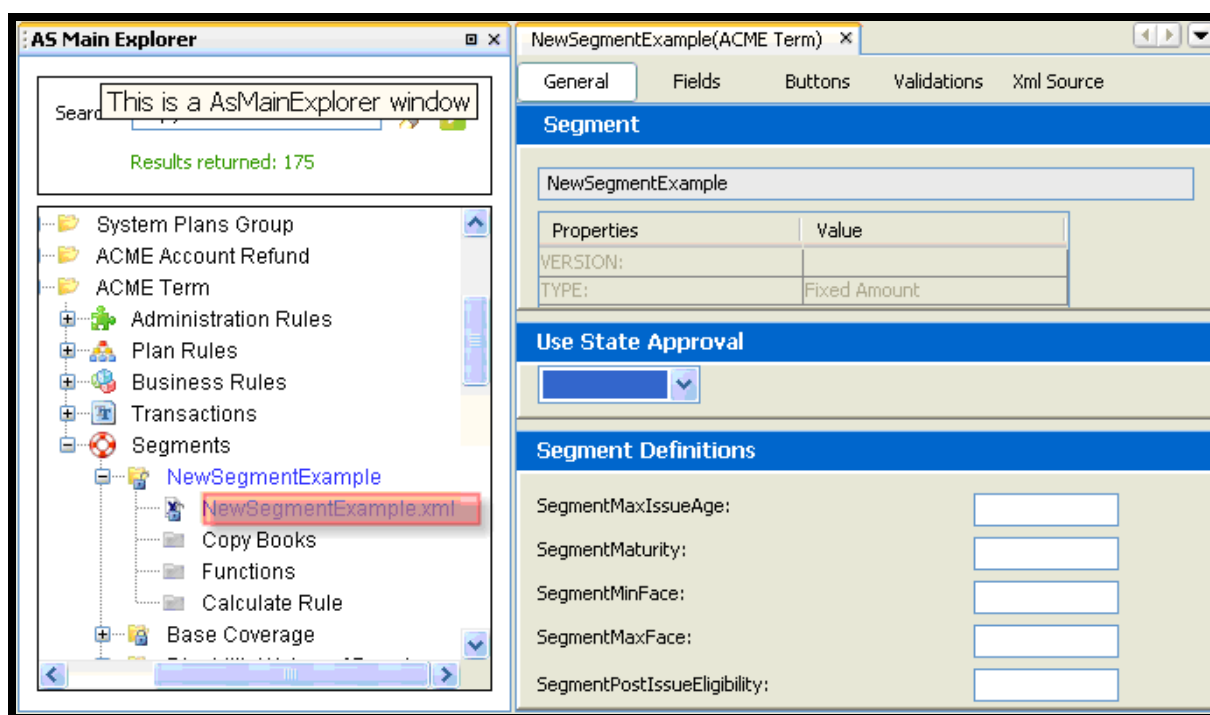
**Note:** You must configure Program Screen functionality in the Xml Source Pane.

### Steps to Create a New Segment

1. Navigate to the Plan.
2. Right-click on the Segment Folder.
3. Select **New Segment**.
4. Enter the Segment name and select **Next**.
5. Select the TypeCode for the Segment and select **Next**. (Please see [Transaction Types, Status and Processing Order](#) for further detail.)
6. Select the sections of the Segment you want to configure on the template in Step 3 of the Wizard and select **Finish**.

The Segment will then appear in Segment folder and will be in blue. You will need to check in the Segment in order for it to be saved.

**Note:** You will configure [Fields](#), [Validations](#) and [XML Source](#) the same way explained in the Transaction section of this manual.



Segment Configuration

## General Pane

In the General pane, you can select whether the State approval is necessary for the Segment or not. Segment

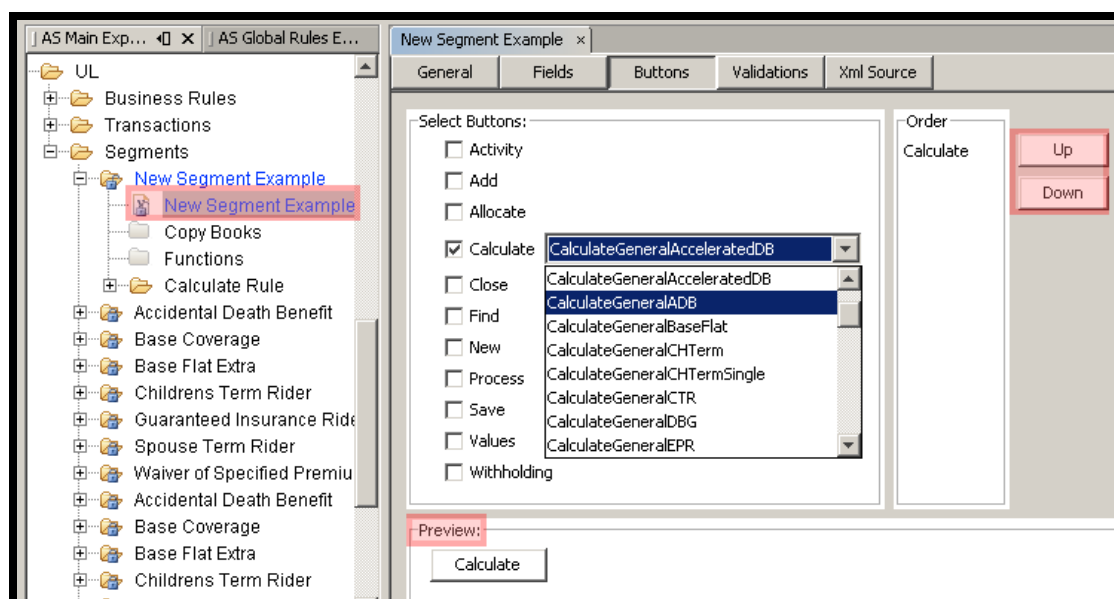
Definition Values can be added and XML is updated accordingly.

## Fields Pane

This pane is used to create Fields that will display on the Segment's Screen. The functionality is exactly the same as the Fields pane described in the Rules section of this guide. Please see the [Fields Pane](#) for more information.

## Buttons Pane

The Buttons pane allows the selection of the type of button you want to be displayed on the Segment Screen. Checking the box next to the button adds the button name to the right in the Order column. The **Up** and **Down** buttons can be used to change the order of the buttons on the Screen. There is a preview of the buttons located in the Preview box at the bottom of the Configuration Area.



Button Pane

**Calculate Button** has a drop-down box where you can select a Calculate Business Rule for the Segment. When a Segment is calculated, the Math configured in a Calculate Business Rule takes into account various aspects of the policy and arrives at the values that are critical to the policy. Calculate Business Rules will all start with CalculateGeneral as a standard.

The Calculate Business Rule selected is then stored in the Segments Calculate Rule folder in the **AS Main Explorer** window for that plan. The Calculate Business Rule can be edited from this folder by double-clicking on its XML file. For more information regarding configuring Calculate Business Rules please see the Appendix 1 – Business Rule Configuration of the Technical Manual.

## Validations Pane

This pane is used to create Validations that will display on the Segment's Screen. The functionality is exactly

the same as described in the Rules section of this guide. Please see the Rule [Validation Pane](#) for more information.

## **XML Source Pane**

This pane allows individuals that prefer to configure in XML to do so. Please see the Technical Manual for a list of all elements, attributes and values needed for configuration.

The XML Source pane includes XML Editor, which enhances the configuration experience. Please see the [XML Source Editing](#) section of this guide for further information on the features of the XML Source pane.

## The Data Dictionary

The Data Dictionary found within Rules Palette is a tool to assist in the creation of a uniform set of Fields and MathVariables during configuration. When a Field or MathVariable is defined in the Data Dictionary, it can then be used in the configuration of a rule or Transaction. The Data Dictionary also tracks the dependencies between variables and rules.

### Value of Using Data Dictionary

- ✓ Data Dictionary and its enforcement is at the Global Level.
- ✓ Saves configuration time because you can use Fields or MathVariables that already exist.
- ✓ Prevents you from deleting what you think is an inactive Field because you see the rules and Transactions that use it.
- ✓ This tool can be used as a dictionary by entering definitions.
- ✓ Provides consistency during configuration because you are using common names.
- ✓ The Rules Palette can warn end users that they are attempting to configure a Field and/or MathVariable that is **not** defined in the Data Dictionary.

## Data Dictionary Enforcement

You can configure the system to enforce the use of the Data Dictionary. The **DataDictionaryEnforcement** Business Rule allows you to enforce the use of the Data Dictionary and how it is enforced. Configuration is done via XML.

### The three Enforcement options are:

1. No data dictionary enforcement.
2. Enforce all Fields and logged MathVariables.
3. Enforce all Fields and all MathVariables (logged and non-logged).


### Steps to Set Data Dictionary Enforcement

1. Locate the **DataDictionaryEnforcement** Business Rule in **AS Global Rules Explorer**.
2. Configure the **DataDictionaryEnforcement** Business Rule.
3. Check-In the XML file to save the changes.


**Note:** Available XML elements, attributes and values for the DataDictionaryEnforcement Business Rule are available in the Business Rules section of the Technical Manual.



## Accessing the Data Dictionary

When configuring, you can access the DataDictionary by clicking **Window** from the menu bar and then selecting **Open SearchPalette Window** . Procedures for using the drag and drop functionality in the Configuration Area are described in the [SearchPalette Window](#) description.

OR

Select the Book icon  found on the Tool bar or in Tools on the Menu bar. You cannot use drag and drop functionality from the DataDictionary when this access option is chosen. Instead, this option is used to manage and lookup variables and data dictionary categories.

## Managing the Data Dictionary

Selecting the Data Dictionary from the Tool bar opens up the Data Dictionary manager. You can Search, Manage Terms and Create New Categories in this window. This is the window that manages the Fields and MathVariables accessible via the Data Dictionary



**Important:** In the Data Dictionary the word **term** means either a Field or MathVariable.

The Data Dictionary

<b>Search Tab Buttons/Functions:</b>	
New	Allows creation of a new entry in the Data Dictionary by taking you to Manage Term
Edit	Edits the existing term
Delete	Allows you to delete a term. You will be prompted with a warning message asking if you are sure you want to delete the item before you actually delete it. Select Yes to delete the item or No to cancel the deletion.
Push	The Push button will display all the BusinessRules/Transactions/SegmentNames where the field/Math Variable is referenced...so this will prevent the user from deleting any field if it is used in other places.
Used In	Tells you where an item/term is used. Prevents you from deleting what you think is an inactive Field because you see the rules and Transactions that use it.

## Search in the Data Dictionary

You can select any of the methods below to perform a search:



- Enter the name of the Field or MathVariable into the Term Name box and select the **Search** button. You can use the % sign as a wildcard.
- Select a Term Category and the **Search** button to see all terms that are in that category.
- Select a Type and the **Search** button to search for terms of a particular type.
- Enter keywords and the % wildcard to search through term descriptions.

Search results are displayed in the **Results Returned** section. Selecting and highlighting the desired term will enable the user to view its details. Details include Name, Term Type, Term Category, Description and associated XML data.

## Manage Terms in the Data Dictionary

The Manage Term tab allows for the management of Fields and MathVariables. You can create a new term or edit existing ones.

### Steps to Create a New Field or MathVariable Term

1. Open the Data Dictionary  from the shortcut bar.
2. Select the **Manage Term** tab.
3. Enter the term name in **Term Name** box (this will be the name that will be reflected in the configuration as the Field or Math Variable name).
4. Select the data type from the **Term Type** drop-down box.
5. Highlight all Categories that apply and select the  button.
6. Select the **Create** button.

**Note:** Once a term has been created, the **Create** button turns into the **Update** button for editing purposes.

### Steps to Update a Field or MathVariable term

1. Search for the term.
2. Highlight the term in the Return Results.
3. Select the **Edit** button, which toggles to the **Manage Tab**.
4. Make necessary changes.
5. Select the **Update** button.

## Manage Categories

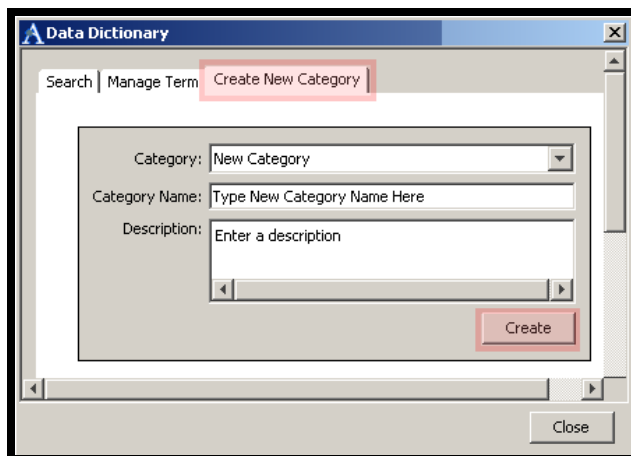
The **Create New Category** tab allows for the creation and editing of Categories used to associate with your Field and MathVariable terms.

### Steps to Create a New Category

1. Select **New Category** from **Category** drop-down box.
2. Enter the name in the **Category Name** text box.
3. Enter a **Description**.
4. Select the **Create** button.

### Steps to Edit a Category

1. Select the Category from **Category** drop-down box.
2. Edit the name or **Description**.
3. Select the **Update** button.



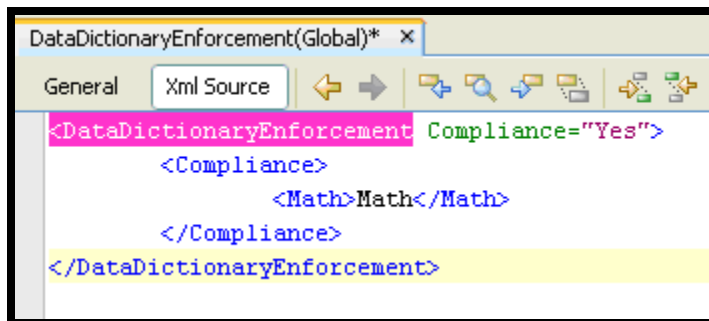
Create New Category Tab

## Data Dictionary Validation

Data Dictionary validation allows you to validate terms in the Data Dictionary and define a standard list of field names. You must validate any new term or field name that is being added to the system. In order to enable Data Dictionary Validation, you must first enable the DataDictionaryEnforcement business rule.

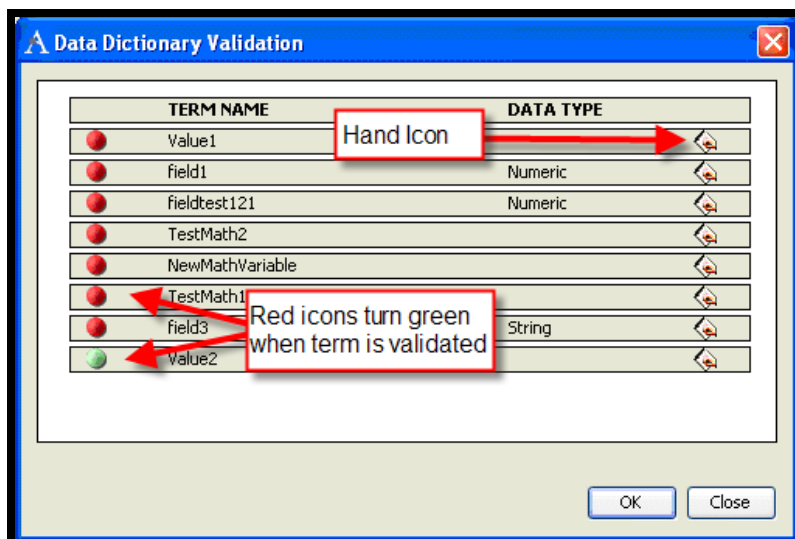
### Steps to Enable DataDictionaryEnforcement

1. Navigate to and check out the DataDictionaryEnforcement business rule in the **AS Global Rules Explorer**.
2. Click on the Xml Source tab and modify the first line to read: `<DataDictionaryEnforcement Compliance="Yes">`
3. Check the rule back in after making the modification.



DataDictionaryEnforcement

Enabling DataDictionaryEnforcement also enables the **Data Dictionary Validation** popup. This popup will be invoked upon clicking the **Save All** button in the Palette Toolbar after a field has been renamed in the Field Properties window in a transaction. It allows you to access the Manage Term tab or use an existing Field/Math Variable Name by changing the name. The **Data Dictionary Validation** popup displays all fields/terms that have been renamed in the **Term Name** column and the Data Type for each Term in the **Data Type** column.



Data Dictionary Validation Popup

It also displays a hand icon to the right of the Data Type column for each term listed. Clicking this hand icon will

invoke the Manage Term tab window. For each Term listed in the popup, there is a red or green circle icon located to the left of the term name. The icons are red when the term has not yet been validated in the system. The icon turns green once the term has been successfully validated.

### Steps to Validate a Field/Term Name

1. Click on the hand icon in the Data Dictionary Validation popup. The Data Dictionary Manage Term tab window appears.

Data Dictionary Manage Term Tab

2. Add the term/field name on the Manage Term tab and click the **Close** button.
3. The new term/field name should now have a corresponding green icon in the Data Dictionary Validation popup to indicate that it has been validated.
4. Close the Data Dictionary Validation popup when all terms have been validated.



**Important:** You cannot check in a business rule/transaction/segment until **all** fields/term/MathVariable names are validated.

## PAS and Command Center Configuration

Configuration tasks that should be performed in the PAS application and/or through the command center are listed below.

### **Use PAS to configure:**

#### *Plan Administration*

- Security
- Accounting
- Updating tables via Tables>Codes
- State Approvals
- Loading funds
- Rate Loads
- Batch
- Disbursement management
- Suspense management

#### *Client Administration*

- Search
- Edit
- Add New

#### *Policy Administration*

- Inquiry
- Activity processing
- Policy updates
- AsFile updates

### **Use the Command Center utilities to perform:**

- Plan copy
- Policy copy
- Client copy
- Migrations
- Integrity scripts

## Appendix 1 - Expressions and Condition Writing

In order to write expressions and conditions, OIPA uses HTML and JavaScript. We use the HTML DOM path to locate a field's value and JavaScript operators. Below is further information regarding Expression and Condition writing.

### Identifying the Value

In general the syntax contains three distinct parts:

1. **The Form Name (The PAS Screen)**
2. **The Name of the Field with its data type pre-fixed**
3. **The JavaScript Function**

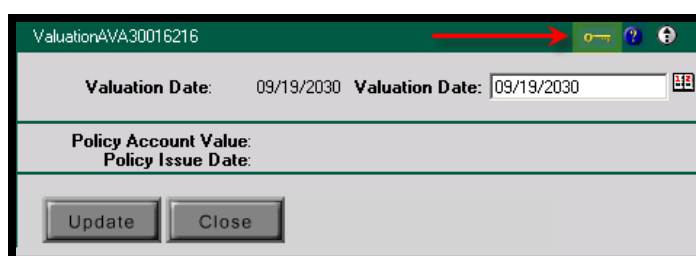
For example, the following Expression checks to see that a date has been entered in the Field called StartDate:  
`document.frmAsActivityDetail.txtStartDate.value == "`

### Identifying OIPA Form Name Table

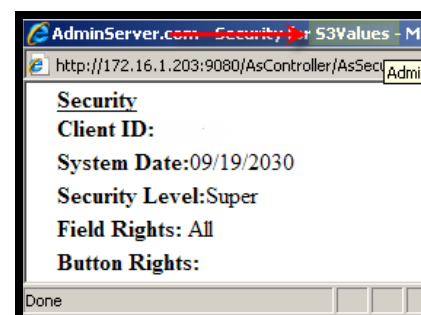
You can use the following HTML Form Names when trying to validate fields on a specific screen.

Screen Name	HTML Form Name
Transaction Detail	document.frmAsActivityDetail
Policy Screen	document.frmS3Policy
Segment Screen	document.frmS3Segment
Plan Screen	document.frmAsPlan
Role Detail	document.frmS3RoleDetail
PolicyOverviewScreen	document.frmS3PolicyOverview
Client Screen	document.frmS3Client

You can identify the HTML Form Name by clicking on the Security Key Icon on the screen. It opens a second window with the name of the Form in the title bar.



Security Key



Form Name in title bar

### Identify Field Name and prefix with DataType

When referencing the field name in an Expression, you must pre-fix the field name with its associated DataType. Use the following pre-fixes with DataType.

Prefix	Field Data Type	Description
chk	Check	Check box
cmb	Combo	Combination dropdown
txt	Date	Date field with calendar icon
txt	Decimal	Displays and stores as a decimal
txt	Integer	Formats to whole number
txt	Line	Displays line across frame for aesthetics
txt	Money	Stores as a decimal
dis		Controls the display on the screen, formats as currency
txt	Percent	Displays Percent Sign
rb	Radio	Displays mutually exclusive radio button options. Can be more than two. Selection on automatically deselects the other.
txt	Text	Free form entry
txt	Blank	Blank field
txt	Address	Creates a display field with a mailbox icon. When the icon is clicked, an address screen pops up.
txt	Comment	Displays a dynamic field for entry of a comment on any screen.
txt	Identifier	Used with dynamic fields only, the Identifier <DataType> will be stored as a unique value in the fields table generated from the sequence table.

Depending on what type of field it is, you need to use the following JavaScript functions to pull the value.

Command	Values	Applicable Data Types
Value	Any - both a txt and a dis value should be indicated	All, Text, Money, Integer
selectedIndex	0 to Infinity	Combo Box
checked	True (Checked) False (Unchecked)	Check, Radio
disabled	True (field becomes disabled) False (field becomes enabled)	All



## JavaScript Operators to Write Conditions

Once you have the value established then you want to write the condition. Use the following operators to write conditions.

### Comparison Operators

Operator	Description	Example
=	This <b>does not</b> compare a condition it assigns a value	<i>*Using = instead of == can change/alter the value of a combo box once you SAVE the information on the screen*</i>
==	is equal to	5==8 returns false
!=	is not equal	5!=8 returns true
>	is greater than <i>* This is an actually an HTML operator we need to use. The JavaScript operator – ‘&lt;’ would cause an error thinking a tag was not coded correctly</i>	5>8 returns false
<	is less than <i>* This is a actually an HTML operator we need to use. The JavaScript operator – ‘&lt;’ would cause an error thinking a tag was not coded correctly</i>	5<8 returns true
>=	is greater than or equal to	5>=8 returns false
<=	is less than or equal to	5<=8 returns true

### Logical Operators

Operator	Description	Example
&&	and	x=6 y=3 (x < 10 && y > 1) returns true
	or	x=6 y=3 (x==5    y==5) returns false
!	not	x=6 y=3 !(x==y) returns true

## Appendix 2 - Business Rules not required to list in the TransactionBusinessRulePacket

The following Business Rules should not be listed in the **TransactionBusinessRulePacket** Business Rule because they do not process data. All other Business Rules should be listed in the order in which they should be processed.

1. FundListForAllocation
2. ReportFile
3. ReportDetails
4. TransactionCosmetics
5. DisbursementNumber
6. ReverseScreen
7. SummaryFields