# Inline Processing Engine User Guide

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FINANCIAL SERVICES



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Part Number: E60863-01

Oracle Financial Services Software Limited Oracle Park Off Western Express Highway Goregaon (East) Mumbai, Maharashtra 400 063 India

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# Preface

This guide explains the concept behind the Inline Processing Engine (IPE) and step-by-step instruction to use the application.

This preface includes the following topics.

- Audience
- Prerequisites
- Limitations
- Related Documents
- Conventions

## Audience

This guide is intended for the following users:

- **Business Analysts** (BA) who are instrumental in solution design and creating statistical models using historical data.
- System Administrators (SA) who maintain and execute batches, make the Infrastructure Application secure and operational, and configure users and security.

## Prerequisites

Before using the Inline Processing Engine application, the following prerequisites are required:

- Successfully installed infrastructure and related software
- Good understanding of business needs and administration responsibilities
- In-depth working knowledge of business statistics
- Sample Application installation mandatory for IPE Framework

## Limitations

The Inline Processing Engine Application has the following limitations:

- IPE and OFSAAI must be installed in the same profile
- IPE is not qualified for Tomcat Webserver
- The Action Send Message for Cross Selling-RTD is not supported in OFSAA 8.0.0.0.0 Release

## **Related Documents**

For more information about the Inline Processing Engine, refer to the following documents in OHC:

- OFS Inline Processing Engine Configuration Guide 8.0
- OFS Inline Processing Engine Sample Application Installation Guide 8.0
- OFS Advanced Analytical Applications Infrastructure Application Pack Installation and Configuration Guide 8.0
- OFS Analytical Applications Environment Check Utility Guide 8.0

## Conventions

Table 1 provides the conventions used in this guide.

Convention	Meaning
Italics	<ul> <li>Names of books, chapters, and sections as references</li> </ul>
	Emphasis
Bold	<ul> <li>Object of an action (menu names, field names, options, button names) in a step-by-step procedure</li> </ul>
	<ul> <li>Commands typed at a prompt</li> </ul>
	User input
Monospace	<ul> <li>Directories and subdirectories</li> </ul>
	<ul> <li>File names and extensions</li> </ul>
	<ul> <li>Process names</li> </ul>
	<ul> <li>Code sample, including keywords and variables within text and as separate paragraphs, and user-defined program elements within text</li> </ul>
<variable></variable>	Substitute input value

#### Table 1. Conventions Used in this Guide

## Acronyms

This guide uses the following acronyms.

Table	2.	Acronyms

Acronyms	Meaning
HTML	Hyper Text Markup Language
HTTP	Hypertext Transfer Protocol
Infodom	Information Domain
IP	Internet Protocol

Table 2.	Acronyms
----------	----------

IPE	Inline Processing Engine
OFSAA	Oracle Financial Services Analytical Applications
OFSAAA	Oracle Financial Services Advanced Analytical Applications
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
OHC	Oracle Help Center
LHS menu	Left hand side menu
PDF	Portable Data Format
URL	Uniform Resource Locator
XML	Extensible Markup Language

Acronyms Preface

# CHAPTER 1 About Inline Processing Engine (IPE)

The Oracle Financial Services Inline Processing Engine application creates an infrastructure for real time monitoring of incoming messages. This capability will enable you to identify fraud events earlier, avert more losses, and minimize customer service and retention issues.

This chapter covers the following topics:

- Overview
- Workflow of Inline Processing Engine application
- Users, Roles, and Actions

#### Overview

The Inline Processing Engine supports the ability to rapidly provide knowledge of related suspicious behavior back to individual business units, and even alert customers about any unpredicted activity.

This capability helps to identify events earlier, avert more losses, and minimize customer service and retention issues. This combination of real-time detection and interdiction, real-time alert correlation, and sophisticated behavior detection provided by the application, will result in a competitive fraud prevention offering.

The system uses cases from risk and performance OFSAA Applications, where real time monitoring is required.

#### **Key Features**

The Inline Processing Application has the following key features:

- Association and Configuration- The Association and Configuration menu has the following sections:
  - Processing Segments
  - Business Entities
  - Inline Datasets
  - Traversal Path
- Expressions Expressions are used in Evaluation scoring and Filters.
- **Post Processing Actions** Post Processing Actions are the actions which can be triggered by the outcome of the Assessment.
- **Profiles** A profile is an aggregation of information. Profiles can be based on different grouping entities (for example, account, customer, and so on). This can be filtered to only look at particular kinds of transactions. Profiles can be based on time (last three months) or transaction counts (last 100 transactions).

- **Evaluations** An assessment is made up of multiple individual evaluations. These evaluations start with information on the incoming transaction and check logical conditions.
- Assessments When a transaction is received, an Assessment is performed. The assessment is a collection of individual evaluations, each of which can return a score.

## Workflow of Inline Processing Engine application

The process flow of the Inline Processing Engine application is shown below.

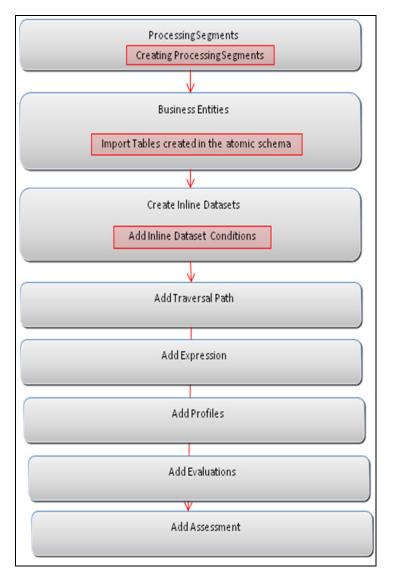


Figure 1. Workflow

## Users, Roles, and Actions

The Inline Processing Engine application consists of the following users and their actions:

#### Users

Business Analyst and System Administrator.

The user group IPEADMN must be mapped to the user to access the Page.

## Actions

- Business Analyst- This user assesses and analyses the data.
- System Administrator- This user configures the system.

# CHAPTER 2 Getting Started

This chapter describes how to get started with Inline Processing Engine. This chapter discusses the following topics:

- Accessing OFSAA Applications
- Navigating to Inline Processing Engine Home Page
- Using Common Buttons

## Accessing OFSAA Applications

To access the OFSAA Applications, follow these steps.

1. Enter the URL in below format in your browser.

```
<scheme/ protocol>://<ip address/ hostname>:<port>/<context-name>/login.jsp (for exam-
ple, https://myserver:9080/ofsaaapp/login.jsp). The OFSAA Login page is displayed.
```

ORACLE"	Financial Services Analytical Application	ns		
		Language User ID Password	US-English	

#### Figure 2. OFSAA Login page

- 2. Select the Language from the Language drop-down list.
- 3. Enter your User ID and Password.
- 4. Click Login. The OFSAA Application page is displayed.

plications Sandbox Object Administration System Configura	tion & Identity Management	
Select Applications Financial Services Asset Liability Management	🖌 🛖 Common Object Maintenance	
4 🛱 Common Object Maintenance	ALM Common Object Maintenance	
Data Model Maintenance	Data Model Maintenance	Data Management Tools
G Data Management Tools	Data Model Maintenance Upload Data Model in Incremental/ Append/ Complete Refresh Modes	Data Management Tools  Tools for Data Management
Data Entry Forms and Queries	opidad Data industri incrementali Appendi Complete Renesi induss	Totia to Data management
En Dimension Management	Data Entry Forms and Queries	Dimension Management
▼ Filters	Data Entry Forms and Queries	Dimension Management
2 Expressions		
Rate Management	Filters Filters	Expressions
I Holiday Calendar	Fillets	Expressions
Operations	Rate Management	Holiday Calendar
Process Tuining	Rate Management	Holiday Calendar
🖬 Admin Bl		
Asset Liability Management	Operations  Tools for Data Center operations	Process Tuining Process Tuining
Application Preferences	Tools for Data Center operations	Process running
🕨 😻 ALM Maintenance	Admin Bl	
ALM Assumption Specification	Admin BI	
ALM Processing		
🛗 Metadata Browser	🔺 💇 Asset Liability Management	
	Asset Liability Management	
	Application Preferences	ALM Maintenance
	Application Preferences	ALM Maintenance
	ALM Assumption Specification	ALM Processing

Figure 3. OFSAA Home page

The OFSAA Application page is a common landing page for all users until a preferred application page is set. The OFSAA Application page has multiple tabs and each tab has specific links to OFSAA Infrastructure and/or Application modules. Depending on the user roles, you are mapped and OFSAA Application you select, relevant the tabs and links are displayed.

This page is divided into two panes:

- Left pane: this pane displays the menu(s)/link(s) to modules in a tree format based on the application being selected in the Select Application drop down.
- **Right pane**: this pane displays menu(s)/ link(s) to modules in a navigational panel format as per the selection of the menu on the Left pane. It also provides brief description of each menu or link.

## Navigating to Inline Processing Engine Home Page

To navigate to the Inline Processing Engine, follow these steps:

1. Select **Inline Processing Engine** from the Select Application drop-down list. The Inline Processing Engine Home page is displayed.

ORA								
Applications	Sandbox	Object Administration	System Config	uration & Identity Management				
Select Appli	cations			<b>A</b>				
Financial Se	ervices Inline	Processing Engine		Financial Services Inline Processing Engine				
Financial Services Inline Processing Engine Inline Processing			10	Inline Processing				

#### Figure 4. OFSAA Home page

2. Click Inline Processing in the right pane. The Inline Processing Home Page is displayed.

#### **Components of Inline Processing Engine page**

Following are the components of Inline Processing Engine Home page:

- Sandbox Tab
- Object Administration Tab
- System Configuration and Identity Management Tab

#### Sandbox Tab

Sandbox is a restricted environment in which you can analyze the data on a trial and errors basis and come up with actual analysis that helps predict the risks and business opportunities for banking institutions. You can create a sandbox by selecting the required datasets and the information domain which you want to implement as the sandbox.

The Sandbox tab lists the various Sandboxes created in the OFSAA setup based on the logged in user and mapped OFSAA Application User Group(s).

To access the Sandbox tab, select the required Sandbox from the Select Sandbox drop-down list. Based on your selection, the page refreshes the menus and links across the pane.

Applications Sandbox	Object Administration	System Configu	uration & Identity Management	
Select Sandbox			⊿ 🞦 Modeling	
OFSCAPADQINFO:NON	ISAND		Maintain analytical modeling definitions, view model outputs etc.	
Modeling			m#	
Model Execu			Model Creation Create and maintain an analytical Model	Model Execution Status View analytical model execution status
Model Outpu				
🔀 Model Deplo	yment		Model Output	Model Deployment
Application			View analytical model outputs	Manage analytical model deployment
Cash Flow E	quations		Application	
<ul> <li>Ø Operations</li> <li>Batch Mainte</li> </ul>			Application Create and maintain application related information	
Batch Execut				
Batch Sched			Cash Flow Equations	
C Batch Monito	r		Create and maintain cash flow equations for specialized lending exposures	
Batch Cance	llation		Operations	
View Log			Tools for Data Center operations	
Processing F	Report			85%
			Batch Maintenance Define and maintain a set of executable tasks as a Batch	Batch Execution Manage Batch execution rules
				Manage Datch execution rules
			Batch Scheduler	Batch Monitor
			Schedule a Batch execution	Monitor a batch status
			Batch Cancellation	View Log
			Cancel an ongoing/ scheduled batch execution	View log for batch executions

#### Figure 5. Sandbox tab

#### **Object Administration Tab**

Object Administration is an integral part of the Infrastructure system and facilitates system administrators to define the security framework with the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. These activities are mainly done at the initial stage and then on need basis.

The document deals with the information related to the workflow of Infrastructure Administration process with related procedures to assist, configure, and manage the administrative tasks effectively.

The Object Administration tab lists the various OFSAA Information Domains created in the OFSAA setup based on the logged in user and mapped OFSAA Application User Group(s)

To access the Object Administration tab, select the required Information Domains from the Select Information Domains drop-down list.

Based on your selection, the page refreshes the menus and links across the pane.



Figure 6. Object Administration tab

#### System Configuration and Identity Management Tab

System Configuration and Object Administration is an integral part of Infrastructure administration process and facilitates System Administrators to provide security and operational framework required for Infrastructure.

System Administrators can configure the Server details, Database details, OLAP details, and Information Domain along with the other Configuration process such as segment and metadata mapping, mapping segment to security and rules setup. System Configuration is mostly a one time activity which helps System administrator to make the Infrastructure system operational for use.

The System Configuration and Identity Management tab lists the OFSAA Infrastructure System Configuration and Identity Management modules. These modules work across Applications and Information Domains and hence, there are no Application and Information Domain drop-down list in this tab.

To access the System Configuration and Identity Management tab, select the required Information Domains from the Select Information Domains drop-down list.

Based on your selection, the page refreshes the menus and links across the pane.



Figure 7. System Configuration and Identity Management Tab

## **Using Common Buttons**

#### Table 3. Common Buttons

Button	Description
	To create a function.
	To view the details of a function.
	To edit the details of a function.
2	To clear the fields and reset to default values.
	To select a new member.
Y	To select a filter / run condition/ define sub process.
8	To select a source / component / job.
E	To select a hierarchies / measures / job condition.
蛊	To set precedence for members.
<b>\$</b>	To execute a Run definition.
ria.	To select hierarchical members
ī	To delete a function.
	To select the entities.
8	To validate grid data.
	To save the details.
💷 / 菖 / 📑	To view the properties.
<b>1</b>	To Refresh the grid details.
2	To erase a specific value.
Σ%.	To define an expression.
&	To generate source model.
00	To add attributes / add Source Configuration / Authorize a function.
8	To generate Source Models.
<b>i</b>	To generate a logic and view the SQL query / check syntax of the stored procedure.
Ē	To add the source database configuration details.
0	To view the dependencies of the selected Object.
🕞 / 🔜	To Export data.
<b>B</b>	To trace a definition details.
( <u>i</u> )	To receive instant on-window help.
×Q.	To view the log.

#### Table 3. Common Buttons

Image: Construction of the second		
Image: To View Dependencies.         Image: To view Dependencies.         To run the object migration rule.         To interrupt the object migration rule.         To add and view the source database configuration details         Image: To add and view the source database configuration details         Image: To add and view the source database configuration details         Image: To add and view the source database configuration details         Image: To add and view the source database configuration details         Image: To add and view the source tables to columns.         Image: To authorize or reject a function / definition.         Image: To view the time dependencies.         Image: To view the time dependencies.         Image: To view the pagination option.         Image: To view sQL statement.         Image: To view and enter the details in the Expression window.         Image: To oreate a Rule function.         Image: To oreate a Rule function.         Image: To save a Rule function.         Image: To save a Rule function.         Image: To view the rule properties.         Image: To all this	E.	To view the
Image: Constraint of the constraint	0	To specify a date using calendar.
Image: Second	ęĢ	To View Dependencies.
Image: Constraint of the second se	×	To run the object migration rule.
Image: Constraint of the second se	À	To interrupt the object migration rule.
Image:	₩ <b>₩</b> / ₩ <b>₩</b>	To add and view the source database configuration details
Image:	01 / 💷	To authorize or reject a function / definition.
Image: Second	💟 / 🥙	
Image: Constraint of the second system of	🐻 <sub>/</sub> 🔞	To map / un-map source tables to columns.
To view SQL statement.         Image: SQL statement. <t< th=""><th>4</th><th>To view the time dependencies.</th></t<>	4	To view the time dependencies.
Image: Constraint of the second system       To view and enter the details in the Expression window.         Image: Constraint of the system       To view and enter the details in the Expression window.         Image: Constraint of the system       To create a Rule function.         Image: Constraint of the system       To open and view the rule details.         Image: Constraint of the system       To save a Rule function.         Image: Constraint of the system       To search / find a member.         Image: Constraint of the system       To search / find a member.         Image: Constraint of the system       To save with customized details.         Image: Constraint of the system       To view the rule properties.         Image: Constraint of the system       To view the rule properties.         Image: Constraint of the system       To select a member.         Image: Constraint of the system       To sort in ascending order.         Image: Constraint of the system       To sort in descending order.         Image: Constraint of the system       To sort in descending order.	<b>\</b>	To view the pagination option.
Image: Second	<b>1</b>	To view SQL statement.
Image: Constraint of the second system of		To view and enter the details in the <i>Expression</i> window.
Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To save a Rule function.         Image: Constraint of the second system       To sort in ascending order.         Image: Constraint of the second system       To sort in descend system		To create a Rule function.
Image: Second Address of		To open and view the rule details.
Image: Non-Arrow of the second details of the second details.         Image: Non-Arrow of the second details.	F	To save a Rule function.
Image: Second and a second	🕰 / 🔍 / M	To search / find a member.
To map between hierarchies.         To select a member.         To deselect a member.         To sort in ascending order.         To sort in descending order.		To Save with customized details.
To select a member.       To deselect a member.       To sort in ascending order.       To sort in descending order.		To view the rule properties.
To deselect a member.       To sort in ascending order.       To sort in descending order.	-	To map between hierarchies.
To sort in ascending order.       To sort in descending order.	>	To select a member.
To sort in descending order.	<	To deselect a member.
		To sort in ascending order.
		To sort in descending order.
Help or ?	Help or ?	To access the documentation resources.

## CHAPTER 3

# Managing Association and Configuration

This chapter provides detail information about Association and Configuration functionality and step-by-step instructions to use this module.

This chapter discusses the following topics:

- Managing Processing Segments
- Managing Business Entities
- Managing Inline Datasets
- Managing Traversal Paths

## Accessing Association and Configuration Menu

To access Association and Configuration, follow these steps:

- 1. Navigate to Inline Processing Home Page.
- 2. Select Association and Configuration. The Association and Configuration Details page is displayed.

Association and Configuration	Expressions	Post Processing Actions	Profiles	Evaluations	Assessments	5
Home >>> Association and Confi	quration >> Proce	essing Segments				
🖃 Search 📫 Go 🛛 🌙 Reset						
Processin	ig Segment Code					Processing Segment Name
Processing Segments (3)	🛨 Add   📓 Sa	ve 🛙 🗐 Delete				
A Processing Segment Co	ode Processing	Segment Name 🔺 Descr	ption			
ATD	ATMDEMO	ATMD	emo			
FRA	FRAUD	FRAU	)			
<b>—</b>	-	-				
⊞ Business Entities (0)						

Figure 8. Association and Configuration Details page

## Managing Processing Segments

The Processing Segments are the logical sections in an Infodom where all the real-time Metadata is mapped. Through Processing Segments, you can add and save a new segment or search for existing segments for modification or removal a segment.

This section covers the following topics:

- Adding Processing Segment
- Maintaining Processing Segment

#### **Adding Processing Segment**

To add a Processing Segment, follow these steps:

- 1. Navigate to Association and Configuration. Select Processing Segment.
- 2. Click **Add**. A new empty row is displayed in the list. Select the empty checkbox. The Add Processing Segment fields are enabled.

Home >> Association and Confi	Home >> Association and Configuration >> Processing Segments							
E Search 🖒 Go I 🍛 Reset								
Processin	g Segment Code		Processing Segment Name					
Processing Segments (4)	王 Add 🛛 🔚 Save 🗏 🧐 Delete							
Processing Segment Co	de Processing Segment Name	Description						
ATD	ATMDEMO	ATMDEMO						
FRA	FRAUD	FRAUD						
GFH	HGH	HGFHF						
Business Entities (0)								

#### Figure 9. Add Processing Segment

Note: If you click Add when a row is empty in the list then the following warning message is displayed: Row is empty in Processing segment.

3. Enter the following details:

#### Table 4. Add Processing Segment

Fields	Description
Processing Segment Code	Enter the processing segment code.
Processing Segment Name	Enter the processing segment name.
Description	Enter description for processing segment.

4. Click **Save**. The following message is displayed: *The Update Operation is Successful*. The new Processing Segment is added to the list.

#### **Maintaining Processing Segment**

This section covers the following topics:

- Viewing and Editing Processing Segment
- Deleting Processing Segment
- Searching Processing Segment

#### **Viewing and Editing Processing Segment**

To view and edit Processing Segment, follow these steps:

- 1. Navigate to Processing Segment details page.
- 2. Select the Processing Segment to modify. The Processing Segment fields are enabled. You can also view the business entities mapped to this Processing Segment in the Business Entities section.

🗏 Search 📫 Go 🖣	Reset	» Processing Segmen					
	rocessing Segme	ent Code					
Processing Segment	nts (4)   🛨 Add	🔚 Save   🔕 Delete	,				
Processing Se	gment Code Pro	cessing Segment Name	•	Descriptio	on		
✓ ATD	ATM	DEMO		ATMDEMO			
FRA	FRA	(UD		FRAUD			
GFH	HGI	н		HGFHF			
-				-			
🗏 Business Entities (	5)						
Business Name			*	Туре		Physical Name	
ATMDETAILS				Activity		ATMDETAILS	
COUNTRY_DETAIL	S			Refere	ence	COUNTRY_DETAILS	
DEVICEDETAILS				Looku	p	DEVICEDETAILS	
Frequent cnt of ATM	withdrawals			Profile		P_2485	
MF_MODEL_ORE_	PK_DETAILS			Refere	ence	MF_MODEL_ORE_PK_DET	AILS

Figure 10. Modify Processing Segment

- 3. Modify the necessary information. For more information on Processing Segment fields, refer to the *Adding Processing Segment* table.
- 4. Click Save. The Processing Segment is updated.

#### **Deleting Processing Segment**

This option allows you to delete Processing Segments which are not required.

To delete a Processing Segment, follow these steps.

- 1. Navigate to Processing Segment Details page.
- 2. Select the Processing Segment to delete.
- 3. Click **Delete**. The Processing Segment details page is updated.

#### **Searching Processing Segment**

To search Processing Segments, follow these steps.

- 1. Navigate to the Processing Segment Details page.
- 2. Enter the following details:

Table 5. Searching Processing Segment

Fields	Description
Processing Segment Code	Enter the unique code for the processing segment.
Processing Segment Name	Enter an unique name for the processing segment.

3. Click Go. The respective search details are displayed.

## Managing Business Entities

Business Entity is a metadata layer on Database Tables. Through Business Entities, you can add a new business entity and also search for existing business entities for modification or removing a business entity.

This section covers the following topics:

- Importing Tables
- Maintaining Business Entities
- Updating Table Details
- Updating Business Entity Attributes

#### **Importing Tables**

This option allows you to import database tables to Inline Processing.

To import a Table, follow these steps:

- 1. Navigate to Association and Configuration. Select **Business Entities**. The Business Entities Details page is displayed.
- 2. Go to Select Table section. Click Import Table. The Import Table page is displayed.

				<li>3 Hell</li>
🖃 Search   🖨 Go   🌙 Reset				
Table Name JDK				
Table List				
🖧 Table Name				
FSI_DB_INFO				
MF_MODEL_ORE_PK_DETAILS				
Business Entity Details				
Business Name*	FSI_DB_INFO		Entity Type *	•
Processing Segment*			Set Primary Key Attribute *	
	ATMDEMO FRAUD	* [E]		
	•			
		Save	Cancel	

Figure 11. Adding Business Entities

- 3. Enter the Table Name and select the table from the Table list (this shows all the Database Tables, Views, and Synonyms in atomic schema). The Business Entity fields are enabled.
- 4. Enter the following details.

#### Table 6.

Filed	Description
Business Name	Enter the Business Name of the Entity. By default, the business name is the name of the table but you can edit the business name.
Entity Type	<ul> <li>Select the entity type from the drop-down list.</li> <li>Activity: This is the Table whose message is received by ILP from the client code. For example: Transaction, ATM, POS, and so on.</li> </ul>
	• <b>Reference:</b> This table is used as a reference data. For example: Account, Customer, and so on.
	• Lookup: This table is used for scoring of Evaluation .For example: Country, Score, and so on.
Processing Segment	Select the processing segment from the multi-select drop-down list.
Set Primary Key Attribute	Select the set primary key attribute from the drop-down list. This shows all the columns of the table.
Set Sequence ID Attribute	Select the set sequence ID attribute from the drop-down list. <b>Note:</b> This field is enabled if you select Activity in the Entity Type.
DB Sequence Name	Enter the DB sequence name. <b>Note:</b> This field is enabled if you select Activity in the Entity Type.
Set Processing Status Attribute	Select the set processing status attribute from the drop-down list. <b>Note:</b> This field is enabled if you select Activity in the Entity Type.
Set Processing Period Attribute	Select the set processing period attribute from the drop-down list. <b>Note:</b> This field is enabled if you select Activity in the Entity Type.
Score	Select the score from the drop-down list. <b>Note:</b> This field is enabled if you select Lookup in the Entity Type.

5. Click Save. The following message is displayed: Import Successfully.

#### **Maintaining Business Entities**

This section has following topics:

- Adding Business Entity
- Editing Business Entity
- Deleting Business Entity

#### **Adding Business Entity**

To add Business Entities, follow these steps:

- 1. Navigate to the Processing Segment details page.
- 2. Go to Business Entities section.

	Processing										rtiuser   Friday, October 17, 2014
Association and Configuration	Expressions	Post Processing Actions	Profiles	Evaluations	Assessments						
Home >>> Association and Confi	Home >> Association and Configuration >> Business Entities										
E Select Table 🗊 Import Tab	ble										
		Choose Table*				•	]				
∃ Business Entities (0)   🗂 A	dd 🛛 🏹 Edit 🗍	🔕 Delete									
🗄 Table Details 📓 Save											
	Set Prima	ry Key Attribute*				•	]	Entity Type		v	
	Set Sequ	ence Id Attribute				Ŧ	]	DB Sequence Name			
	Set Processing	Status Attribute				Ŧ	]	Set Processing Period Attribute		Ŧ	
	Set B	atch ld Attribute				Ŧ	]				
⊞ Business Entitiy Attributes (	0)   🋃 Edit										

#### Figure 12. Adding Business Entities

- 3. Select the table you wish to add entities to from the Choose Table drop-down list.
- 4. Click **Add** in the Business Entities section.
- 5. The Business Entity Details dialog box is displayed.

🟉 Business Entity Details ·		
Name*		*
Processing Segment*	×	
Set Score Attribute		
	Add Cancel	
		-

Figure 13. Add Business Entity

6. Enter the following details in the Business Entity Details dialog box:

Filed	Description
Name	This is a mandatory Field. Enter a name to the selected table in this field.
Processing Segment	This is a mandatory Field. Select the Processing Segment(s) to which you want to add the selected entity, from the multi-select drop-down list.
Set Score Attribute	Select the attribute which you want to set as score from the drop-down list.

7. Click Add. The following message is displayed: The add operation successful. The new table is added in the list.

#### **Editing Business Entity**

To edit the Business Entity, follow these steps:

- 1. Navigate to the Business Entity Details page.
- 2. Select the Business Entity to modify. The Business Entity edit dialog box is displayed.
- 3. Modify the necessary information. For more information on Business Entity fields refer to the *Adding Business Entity* table.
- 4. Click Save. The Business Entity is updated.

#### **Deleting Business Entity**

This option allows you to delete a Business Entity which is not required. To delete Business Entity, follow these steps.

- 1. Navigate to the Business Entity Details page.
- 2. Select the Business Entity to delete.
- 3. Click Delete. The Business Entity details page is updated.

#### **Updating Table Details**

To update table details, follow these steps.

- 1. Navigate to the Business Entity Details page.
- 2. Select the table from the Choose Table drop-down list.

Home >>> Association and Configuration >>> Business Entities	ome >> Association and Configuration >> Business Entities								
Select Table 률 Import Table	] Select Table 💼 Import Table								
Choose Table*	ATM and POS	•							
🗄 Business Entities (2)   📩 Add 🛛 🧟 Edit 🗍 🧐 Delete	🗄 Business Entities (2)   📩 Add     🌌 Edit   🧐 Delete								
Name Processing S	legments		Score Attribute						
ATM and POS FRAUD			-						
konda FRAUD			-						
Table Details 📓 Save									
Set Primary Key Attribute*	Transaction Sequence Identifier	•	Entity Type	Activity					
Set Sequence Id Attribute	Transaction Sequence Identifier	•	DB Sequence Name	SEQ_ATM_POS_TXN					
Set Processing Status Attribute	Processing Flag	•	Set Processing Period Attribute	Transaction Time					
Set Batch Id Attribute	Account Identifier	•							

Figure 14. Updating Table

- 3. Enter or modify the necessary information. For more information on Business Entity fields refer to the *Importing Tables* table.
- 4. Click Save. The following message is displayed: Update operation successful.

#### **Updating Business Entity Attributes**

To update the Business Entity Attributes, follow these steps.

- 1. Navigate to the Business Entity Details page. Go to the Business Entity Attributes section.
- 2. Select the PDM name and click **Edit**.

Business Entitiy Attribut	te Details - Windows Internet Explorer		×	
Name* Processing Segment* Display as Standard Measure	Account Identifier FRAUD	?	Help ^	

#### Figure 15. Updating Table

- 3. Modify the necessary information. For more information on Business Entity fields refer *Adding Business Entity* table. Select Display as Standard Measure or not.
- 4. Click Update. The following message is displayed: Update operation successful.

## Managing Inline Datasets

This section describes the Inline Datasets functionality and gives step-by-step instructions to use this module. This section covers the following topics:

- Overview
- Accessing Inline Datasets
- Adding Inline Datasets
- Maintaining Inline Dataset

#### Overview

Inline Datasets are joins between two Business Entities. The Inline Datasets need at least one condition.

For example, the following conditions are used for an Inline Dataset between Wire Transaction and Beneficiary Account:

Wire Transaction. Beneficiary Account ID=Beneficiary Account. Account ID

Through Inline Datasets, you can add a new Inline Dataset and search for existing Inline Datasets for modification or removal.

#### Accessing Inline Datasets

To access Inline Datasets, follow these steps:

- 1. Navigate to the Inline Processing Home Page.
- 2. Select Association and Configuration. Select Inline Datasets. The Inline Datasets Details page is displayed.

ociation and Configuration Expressions	Post Processing Actions Profiles	Evaluations Assessments	
ome >> Association and Configuration >> Inline D	atasets		
Search 📫 Go   🌙 Reset			
Inline Dataset Name			
Start Table		· •	End Table
Inline Dataset List (28)   🛀 Add 🛛 🙆 Delete			
	Start Table	End Table	Associations
ATM POS to Total POS,ATM and MT for a day	ATM and POS	Total POS,ATM and MT for a day	Account Identifier = Account Identifier
ATM Withdrawals	ATM_TRANSACTIONS	DEVICE	DEVICE_ID = DEVICE_ID
ATMPOS Merchant Details	ATM and POS	Merchant Details	Merchant Reference Identifier = Merchant Code
Custdetails to Swipe	CUST_DETAILS	SWIPE_DTL	CUST_ACCNT_NO = SWIPE_ACCNT_NUMBER
DS1	Import Table testing Activity	MER_TEST_REF	MERCHANT_REF_ID = MERCHANT_ID
FT MT to Total POS,ATM and MT for a day Vir	T and MT	Total POS,ATM and MT for a day	Accounts Source Unique Identifier = Account Identifier
FTMT Transaction Types	FT and MT	Transaction Types	Transaction Channel Code = Transaction Type Code
ID1	ABCTST	COUNTRY_DETAILS	ABCDTE > COUNTRY_NAME
ID2	ACCNT_DETAILS1	ATMandPOS2	ACCNTID = SWIPEID
ID3	ATM and POS	ATMandPOS1	Base Amount > SWIPE_AMOUNT
ID4	ABCTST	ACCNT_DTLS	ABCNAME = BANK_ACCNT_NAME
TEST_PROFCUST	TEST_SWIPE	Import Table testing Activity	SWIPEID = FO_TRXN_SEQ_ID
<u>aa</u>	ATM and POS	COUNTRY_DETAILS1	Authorized Credit Limit = COUNTRY_DAT
abc	TEST_SWIPE	SWIPE_DTL	PROCESSING_PERSION = SWP_ST_DATE ; SWIPEID = SWIPE_ID
abcde	SWIPE_DTL	CUST_DETAILS	SWIPE_AMNT = CUST_ACCNT_NO

Figure 16. Inline Datasets Details page

#### Adding Inline Datasets

The add Inline Dataset option allows you to define an Inline Dataset by adding a name and selecting the Start and End tables.

To add new Inline Dataset paths, follow these steps:

- 1. Navigate to Inline Dataset from the Association and Configuration menu.
- 2. Click Add from the Inline Dataset List toolbar. The Inline Dataset dialog box is displayed.

ine Datase Name	A IN TO ACCOUNT OCT Dan	k			
Start Table* ATM_TRANS_UCT		<ul> <li>End Table*</li> </ul>		ACCOUNT_UCT	]
Inline Da	taset Condition   🛅 Add   🔞	Delete			
Start Field		Operator	End Fie	eld	
Account ID 🗸		= •	ACCT	INTRL_ID 🔹	
Save Cancel					
				🕄 100% ·	•

#### Figure 17. Adding Inline Dataset

3. Enter the following details.

#### Table 8. Adding Inline Dataset

Field	Description	
Inline Dataset Name	Enter the Inline Dataset Name.	
Start Table	Select the start table from drop-down list.	
End Table	Select the end table from drop-down list.	

#### Adding Inline DataSet Condition

To add new Inline Dataset condition follow these steps:

- 4. Click Add from the Inline Dataset Condition toolbar. The Inline Dataset Condition dialog box is displayed.
- 5. Enter following details.

#### Table 9. Adding Inline DataSet Condition

Field	Description
Start Field	Select the start field of the condition from the drop-down list. This shows all Fields (Columns) of the Start Table.
Operator	Select the operator from the drop-down list. The available operators are =, >, <, >=, <=, and <>.
End Field	Select the end field of the condition from the drop-down list. This shows all the Fields (Columns) of the End Table.

6. Click **Save** to save the details.

## **Maintaining Inline Dataset**

This section covers following topics:

- Editing Inline Dataset
- Deleting Inline Dataset
- Searching Inline Dataset

#### **Editing Inline Dataset**

To edit Inline Dataset, follow these steps:

- 1. Navigate to the Inline Dataset Details page.
- 2. Select the Inline Dataset to modify. The Inline Dataset Edit dialog box is displayed.
- 3. Modify the necessary information. For more information on Business Entity fields refer to the *Adding Inline Datasets* table.
- 4. Click Save. The Inline Dataset is updated.

#### **Deleting Inline Dataset**

To delete the Inline Dataset, follow these steps.

- 1. Navigate to Inline Dataset Details page.
- 2. Select the Inline Dataset to delete.
- 3. Click **Delete**. The Inline Dataset Details page is updated.

#### **Searching Inline Dataset**

To search Inline Dataset, follow these steps.

- 1. Navigate to Inline Dataset details page.
- 2. Enter the following details:

#### Table 10. Searching Inline Dataset

Fields	Description	
Traversal Path Name	Enter the traversal path name.	
Start Table	Select the start table from drop-down list.	
End Table	Select the end table from drop-down list.	

3. Click Search. The Search Details are displayed.

## Managing Traversal Paths

This section describes the Traversal Path functionality and provides step-by-step instructions to use this module.

This section discusses the following topics:

- Overview
- Accessing Traversal Paths
- Adding Traversal Path
- Maintaining Traversal Path

#### Overview

Traversal Paths are the paths between two or more entities. The traversal paths defined can be used for creation of expressions, evaluations, and profiles. The start entity for the path should be the Activity Entity. There are intermediate Entities in the path.

For example, if we must have a path between Wire Transaction and Beneficiary Customer Email entities, then we must have path like Wire Transaction' Beneficiary Account' Beneficiary Customer' Beneficiary Customer Email.

Inline Dataset (Joins) between are compulsory.

- Wire Transaction-Beneficiary Account
- Beneficiary Account- Beneficiary Customer
- Beneficiary Customer- Beneficiary Customer Email

## **Accessing Traversal Paths**

To access the Traversal Paths, follow these steps:

- 1. Navigate to the Inline Processing Home Page.
- 2. Select Association and Configuration. Select Traversal Paths. The Traversal Paths Details page is displayed.

	-			7	
	Traversal Path Name				
	Start Table		•	End Table	
Trav	versal Path List (43) 🛛 📩 Add 🛛 🥘 Delete				1/3 《   《   >
	Traversal Path Name	Start Table	End Table		Traversal Path Flow
	ACH-AccountParamters	ACH	ACCOUNT_F	PARAMETERS	-
	ATM POS to Total POS, ATM and MT for a day Virtual Profile Pa	th ATM and Point of Sale Transactions	Total POS,AT	M and MT for a day	ATM and Point of Sale Transactions : Total POS,ATM and MT for a day
	ATM TRNX PATH UCT	ATM_TRANS_UCT	Customer U	ct Bank	ATM_TRANS_UCT : ACCOUNT_UCT , ACCOUNT_UCT : ACCOUNT_TO_C
	ATMPOS Merchant Path	ATM and Point of Sale Transactions	Merchant De	tails	ATM and Point of Sale Transactions : Merchant Details
	Access Event- Account	Account Bank	Customer		Account Bank : UserEvents
	AccessEvent-Acct	Account Access Event	Account		WEB_SESSIONS : Score Originating Country
	AccessEvent-BenificiaryAccount	Account Access Event	BenificiaryAc	count	-
	AccessEvent-BenificiaryCustomer	Account Access Event	BenificiaryCu	istomer	Account Access Event : BenificiaryAccount , BenificiaryAccount : BenificiaryC
	AccessEvent-Customer	Account Access Event	Customer		Account Access Event : Account
	AccessEvent-OriginatorAccount	Account Access Event	OriginatorAc	count	-
	AccessEvent-OriginatorCustomer	Account Access Event	OriginatorCu	stomer	Account Access Event : OriginatorAccount
	AccessEvent-Trans	Account Access Event	Wire Transa	ction	Account Access Event : Wire Transaction
	Account Event	Account Bank	UserEvents		-
	Cross Path	FT and MT	ATM and Poi	nt of Sale Transactions	FT and MT : ATM and Point of Sale Transactions
	Events	Transaction	UserEvents		

Figure 18. Traversal Paths Details page

### **Adding Traversal Path**

The add traversal path option allows you to define a traversal path by adding a name and selecting the Start and End tables.

To add new a Traversal Path, follow these steps:

- 1. Navigate to Association and Configuration. Click Traversal Path.
- 2. Click Add from the Traversal Path List toolbar. The Traversal Path Maintenance dialog is displayed.

⊟ Traversal Path Details			? Help
Traversal Path Name Start Table	 ↓ Add   2 Delete	End Table	
Source Entity		Destination Entity	Sequence ID
	Sav	/e Cancel	

#### Figure 19. Adding Traversal Path

3. Enter the following details.

#### Table 11. Adding Traversal Path

Field	Description
Traversal Path Name	Enter the Traversal Path Name name.
Start Table	Select the start table from drop-down list.
End Table	Select the end table from drop-down list.

### **Adding Traversal Path Flow**

- 4. Click **Add** in the Traversal Path Flow section. The new Traversal Path fields are expanded.
- 5. Enter following details.

#### Table 12. Traversal Path Flow

Field	Description					
Source Entity	This is pre-selected for the first row. For the further rows, it lists all Entities which have Inline Dataset joins with the previously selected entities (both source and destination).					
Destination Entity	Select the Destination Entity from the drop-down list. This option shows the business entities and Virtual Profile who has Inline Datasets defined to Source Entity.					
Sequence ID	The sequence ID is auto-generated. When the source and destination entity are added for the first time, the sequence ID generated is 1. On subsequent addition of source and destination entities, the sequence ID will be 2, 3, and so on. This reflects the sequence in which the path has to be traversed.					

- 6. Click Save. The following message is displayed: The operation successful.
- 7. To delete the Traversal Path entity, select the Traversal Path and click Delete.

### **Maintaining Traversal Path**

This section covers following topics:

- Editing Traversal Path
- Deleting Traversal Path
- Searching Processing Segment

### **Editing Traversal Path**

To edit Traversal Path, follow these steps:

- 1. Navigate to the Traversal Path Details page.
- 2. Select the Traversal Path to modify. The Traversal Path Edit dialog box is displayed.
- 3. Modify the necessary information. For more information on Business Entity fields, refer to the *Adding Traversal Path* table.
- 4. Click Save. The Traversal Path is updated.

#### **Deleting Traversal Path**

To delete a Traversal Path, follow these steps.

- 1. Navigate to the Traversal Path Details page.
- 2. Select the Traversal Path ID or name to delete.

3. Click **Delete**. The Traversal Path Details page is updated.

### **Searching Traversal Path**

To search Traversal Paths, follow these steps.

- 1. Navigate to Traversal Path Details page.
- 2. Enter the following details:

#### Table 13. Searching Traversal Path

Fields	Description
Traversal Path Name	Enter the traversal path name.
Start Table	Select the start table from drop-down list.
End Table	Select the end table from drop-down list.

3. Click Go. The Search Details are displayed.

# CHAPTER 4 Managing Expressions

This chapter provides detail information about Expressions functionality and provides step-by-step instructions to use this module.

This chapter discusses the following topics:

- Overview
- Accessing Expressions Menu
- Adding an Expression
- Maintaining Expression

## Overview

An Expression Builder is used to build expressions using Entities, Attributes, Functions, Mathematical Operators, and Constant Values. For example: FT and MT Amount for a day: Accounts Source Unique Identifier\_cnt. The examples of expressions are as follows:

- A
- A+B
- (A + B)/C
- (ATM and POS: Base Amount)

(Get Last Characters ((ATM and POS: Merchant Address) 2) The Expression Builder allows you to add and remove expressions.

## Accessing Expressions Menu

To access Expressions, follow these steps:

- 1. Navigate to Inline Processing Home Page.
- 2. Select the Expressions. The Expressions Details page is displayed.

ssociation and Configuration Expressi	ons Post Processing Actions Profiles Evaluations Assessments			
Home >> Expressions	Lý			
🗄 Search 📫 Go   🍛 Reset				
Expression Name	Activity		Processing Segment	•
🗄 Expression List (100)   🛗 Add 🛛 🎯	Delete			1/7 《   <   >   >
👗 Expression Name 🔺	Description	Activity	Processing Segment ID	
111	(BenificiaryAccountAccount Status)	ATM_TRANS_UCT	Banking	
80 percent of total incoming trans	(Multiply(( Total Incoming Transaction:Base Amount_sum),0.8))	Transaction	Payment	
AAA Test	(Substract)(Substract)(Wire Transaction.Channel Risk+ Benificiar)Customer.Custom Risk 1),45))* (Benificiar)Account:Custom 1 Real+ Benificiar)Customer.Custom 2 Real+ LAST 3 DAYS COUNTS Receiving Institution Fee - Activity_max+ LAST 3 DAYS COUNTS:Receiving Institution Fee - Activity_max;77)	Wire Transaction	Banking	
AAAA	(Multiphy)(BenificiaryAccountCustom 1 Real)+ (BenificiaryCustomer.Custom Risk 2)* (BenificiaryCustomer.Years of Equity Experience)+ (Wire Transaction.Secondary Beneficiary Entity Risk),34)	Wire Transaction	Banking	
ACH Direction	(ACH:DIRECTION)	ACH	Payment	
ATM ACCOUNT UCT	(ATM_TRANS_UCT:Account ID)	ATM_TRANS_UCT	UCT_BANK	
ATM AMT Withdrawvals UCT	(ATM_TRANS_UCT:ATM_TRXN_OUT_AM)	ATM_TRANS_UCT	UCT_BANK	
ATM Device UCT	(ATM_TRANS_UCT:DEVICE_ID)	ATM_TRANS_UCT	UCT_BANK	
ATM POS Channel Code	(ATM and Point of Sale Transactions:Transaction Channel Code)	ATM and Point of Sale	Allied Bank	
ATM POS MERCHANT ADDRESS	(Get Last Characters (( ATM and Point of Sale Transactions:Merchant Address),2))	ATM and Point of Sale	Allied Bank	
ATM TRANK TYPE UCT	(ATM_TRANS_UCT:TRXN_TYPE)	ATM_TRANS_UCT	UCT_BANK	
ATM card UCT	(ATM_TRANS_UCT:card id)	ATM_TRANS_UCT	UCT_BANK	
ATM POS Amount	(ATM and Point of Sale Transactions:Base Amount)	ATM and Point of Sale	Allied Bank	
Account no activity time period	(Add(( Previous Account Transaction Date:Posting Date_max),21))	Transaction	Payment	
Advance Transaction Score	(Wire Transaction:Custom 1 Real+ OriginatorAccount:Custom 1 Real)* (HIGH RISK CUST AVG:Custom 1 Real_cir)	Wire Transaction	Banking,Trade	

Figure 20. Expressions Details page

## Adding an Expression

This option allows you to define an expression by adding a name and selecting the Activity and Processing Segment from the drop-down list.

This section covers following topics:

- Adding Standard Measures
- Adding Variables

To add an Expression, follow these steps:

- 1. Navigate to the Expressions Details page.
- 2. Click Add on the Expressions tool bar. The Add Expressions dialog box is displayed.

Expression Name*		Activity*	•
Processing Segment*			
	Energy Banking Trade Dev Unit Test		

#### Figure 21. Expressions Details page

3. Enter the following details:

Table 14.	Adding an	Expression
-----------	-----------	------------

Field	Description
Expression Name	Enter a name for the expression.
Activity	Select the activity from the drop-down list.
Processing segment	Select the processing segment from the drop-down list (Energy, Banking, and so on).

### **Adding Variables**

This is used to define variables for expressions.

1. Click Add on the Variables toolbar. The Add Variables dialog box is displayed.

🗏 Variables   🕂 Ad	ld   🧐 Delet	e   🔀 Apply Function To Group   🚺 Remove Fun	ction From	Group   ∑ <sub>×</sub> A	pply Function to Expression
🕺 Group Order	Operator	Business Property (Business Entity, Business Att	ribute)	Function	Function Parameter
Variable					🔚 Save 🐼 Cancel
Ор	erator	~			
Business	Entity*				•
Business Attr	ibute*				▼
		C Add to Current Group Crea	ate New Gro	up	
		Submit Close			

#### Figure 22. Variable page

2. Enter the following details:

#### Table 15. Adding Variables

Fields	Description				
Operator	Select the operator from the drop-down list. This is disabled for the first variable.				
Business Entity	Select the business entity from the drop-down list. The list is based on selected Activity and processing segment.				
Business Attribute	Select the business attribute from the drop-down list. The list is based on the selected business entity.				
Create New Group	If this option is selected, new Group ID is created.				
Add to Current Group	If this option is selected, new variable is added to existing selected Group ID.				
Apply Function to Group	Select the function from the drop-down list. The list of function is based on variable data type and function argument data type. If the selected function has additional argument mapped, then Literal Value should be entered in the Text box.				
Remove Function from Group	Select a group and then click <b>Remove</b> the Function from Group to remove the function from the selected group.				
Apply Function to Expression	Select the function from the drop-down list. The list of function will be based on variable data type of expression and variable. If the selected function has additional argument mapped, then Literal Value should be entered in the Text box.				

3. Click Save to refresh the Variables Grid.

	Expression Name*				AAAA		Activity*	Wire Transactio	n
Pro	oces	sing !	Segmen	it*	Energ Bank Trade Dev U	ng			
Vari	able	s   <del>  +</del>	Add	🗵 De	elete	The second secon	tion Fror	n Group   📐 App	ly Function to Expression
2	G	roup	Order	Ope	rator	Business Property (Business Entity. Business	Attribute)	Function	Function Parameter
0	1		1			BenificiaryAccount : Custom 1 Real			
0	2		1	+		BenificiaryCustomer : Custom Risk 2			
0	3		1	*		BenificiaryCustomer : Years of Equity Experience	)		
0	4		1	+		Wire Transaction : Secondary Beneficiary Entity F	lisk		
ariabl	е								🔚 Save 🐼 Canc
			Opera	tor	3	•			
	B	Busine	ess Enti	ty*					•
	Business Attribute*								•
						C Add to Current Group C Cre	ate New	Group	
						Submit Close			

#### Figure 23. Variable page

4. Click Submit. The following message is displayed: The operation successful.

## Maintaining Expression

This section covers following topics:

- Deleting Expression
- Searching Expression

### **Deleting Expression**

To delete an Expression, follow these steps.

- 1. Navigate to the Expression details page.
- 2. Select the required Expression.
- 3. Click **Delete**. The Expression Detail page is updated.

### **Searching Expression**

To search Expressions, follow these steps.

1. Navigate to the Expression Details page.

### 2. Enter the following details:

#### Table 16. Searching Expression

Fields	Description
Expression Name	Enter the Profile Name.
Activity	Select the activity from the drop-down.
Processing Segment	Select the Processing Segment from the drop-down.

3. Click Go. The Search Details are displayed.

# CHAPTER 5 Managing Post Processing Actions

This chapter describes Post Processing Actions functionality and provides step-by-step instructions to use this module.

This chapter discusses the following topics:

- Overview
- Accessing Post Processing Actions Menu
- Adding Post Processing Actions
- Maintaining Post Processing Action

## Overview

Post Processing Actions are the actions which can be triggered by the outcome of Assessment.

In Post Processing Actions, you can add a new post processing action and also search for existing post processing actions for modification or removing a post processing action.

## Accessing Post Processing Actions Menu

To access Post Processing Actions, follow these steps:

- 1. Navigate to the Inline Processing Home Page.
- 2. Select Post Processing Actions. The Post Processing Actions Details page is displayed.

ORACLE	Inline Processing		rtiuser   Friday, October 17, 2014
Association and Config	ration Expressions Post Pro	cessing Actions Profiles Evaluations Assessments	
Home >> Association a	nd Configuration >>> Processing Seg	ients.	
🗏 Search 📫 Go 🛛	Reset		
Pi	ocessing Segment Code	Processing Segment Name	
Processing Segme	ts (9)   🕂 Add   📓 Save   🥘 D	iete .	
- 11 1	ment Code Processing Segment N		
ATM	ATMWD	ATM WITHDRAWALS	
FRA	FRAUD	FRAUD	
Sts	Swptst	Swipe testing	
📺 tst	TEST	Test	
🔝 abc	abcd	abcd	
🔄 evt	evalutioantest	testforevaluation	
🛅 dfg	fgfg	fgfg	
🛅 tes	test1	test1	
m wed	wedb	ewewe	

Figure 24. Post Processing Actions Details page

## Adding Post Processing Actions

This option allows you to define a post processing action.

This section covers following topics:

- Adding a Post Processing Action
- Adding an Action Parameter

### Adding a Post Processing Action

To add a Post Processing Action, follow these steps:

- 1. Navigate to the Post Processing Actions Details Page.
- 2. Click Add on the Post Processing Actions tool bar. The Add Post Processing Actions dialog box is displayed.

🏉 Post	Processing Action De	etails - Windows Internet Explorer	X
ß	Name* [ Action Type*		 *
		Add Cancel	~

#### Figure 25. Post Processing Actions page

3. Enter the following details:

#### Table 17. Post Processing Actions

Field	Description
Name	Enter the name of Post Processing Actions.
Action Type	Select the Post Processing Actions from the drop-down list. (For example, Generate Alert, sent JMS Message, and "Send RTD Message) Note: Additionally, the user can also add a new Action Type.

4. Click Add. The new Post Processing Actions is added.

## Adding an Action Parameter

To add Action Parameters, follow these steps:

- 1. Navigate to Post Processing Actions Details Page.
- 2. Click Add on the Action Parameters tool bar. The Add Action Parameters dialog box is displayed.

Action Parameter Code* Action Parameter Name*	
Action Parameter Type* Action Parameter Value*	Text 🗸
	Save Close

#### Figure 26. Action Parameter page

3. Enter the following details:

#### Table 18. Action Parameter

Field	Description
Action Parameter Code	Enter the code of action parameter.
Action Parameter Name	Enter the name of action parameter.
Action Parameter Type	Select the action parameter type from the drop-down list (Text or Password)
Action Parameter Value	<ul> <li>Enter the value for action parameter.</li> <li>If the action parameter type is text, enter text box.</li> <li>If the action parameter type is password, enter password field.</li> </ul>

4. Click Save. The following message is displayed: The operation successful. The new action parameter is added.

## Maintaining Post Processing Action

This section covers following topics:

- Editing Post Processing Action
- Maintaining Post Processing Action
- Searching Post Processing Action

### **Editing Post Processing Action**

To modify Post Processing Action details, follow these steps.

- 1. Navigate to the Post Processing Action Details page.
- 2. Select the required Post Processing Action.
- 3. Modify the necessary information. For more information on Processing Segment fields, refer to the *Adding Post Processing Actions* table.
- 4. Click Save. The Post Processing Action Detail page is updated.

## **Deleting Post Processing Action**

To delete a Post Processing Action, follow these steps.

- 1. Navigate to the Post Processing Action Details page.
- 2. Select the required Post Processing Action.
- 3. Click **Delete**. The Post Processing Action Detail page is updated.

## **Searching Post Processing Action**

To search Post Processing Action, follow these steps.

- 1. Navigate to the Post Processing Action Details page.
- 2. Enter the Post Processing Action name.
- 3. Click Go. The Search Details are displayed.

# CHAPTER 6 Managing Profiles

This chapter describes Profiles functionality and provides step-by-step instructions to use this module. This chapter discusses the following topics:

- Overview
- Accessing Profile Menu
- Adding a Profile
- Maintaining Profile
- Managing Virtual Profiles

## Overview

Profiles are an aggregation of information. Profiles can be based on different grouping entities (For example, account and customer) and can be filtered to only look at particular kinds of transactions. Profiles can also be based on time (last three months) or activity counts (last 100 transactions).

## Accessing Profile Menu

To access the Profile, follow these steps:

- 1. Navigate to the Inline Processing Home Page.
- 2. Select **Profile**. The Profile Details page is displayed.

Association and Configuration Expressions Post F	Processing Actions Profiles	valuations Assessmen	its					
Home >> Evaluations								
Search 🖨 Go 🛛 🌙 Reset								
Evaluation Name			Activity			-		Processing Segment
Evaluations (50)   📩 Add								
🚣 Evaluation Name	Score	Activity	Processing Segment	Status	Updated By	Updated On	History	
BLOCK HIGH RISK BEN CUST	Score Destination Country:Score	Wire Transaction	Banking	VALID	RTI User	06/19/2014 17:59:05	<b>1</b>	
COUNTRY SCORE EVAL	Trading Score	Wire Transaction	Banking	INVALID	RTI User	04/23/2013 16:03:24	1	
Card charged on POS at any specific merchant	Merchant Details:Score	ATM and Point of Sal	Allied Bank	INVALID	RTI User	06/23/2014 14:58:27	<b>1</b>	
Card is charged on POS outside Pakistan	100	ATM and Point of Sal	Allied Bank	INVALID	RTI User	06/23/2014 11:27:17	0	
Check Previous Frauds on Device for Count	100	Transaction	Payment	VALID	RTI User	01/15/2014 12:37:03	<i>(</i> )	
Check Previous Frauds on Device for Time Window	100	Transaction	Payment	INVALID	RTI User	09/30/2013 17:39:39	1	
Cross Prof Eval	200	FT and MT	Allied Bank	INVALID	RTI User	09/16/2013 16:41:00	<b>1</b>	
Debit High Risk Withdrawls	100	Transaction	Payment	INVALID	RTI User	04/23/2013 18:58:38	1	
Debit Suspicious ATM Withdrawl	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:18:49	<b>1</b>	
Debit Trans and WT	100	Transaction	Banking,Payment	VALID	RTI User	03/05/2014 10:48:11	1	
Debit Withdrawls after Cutoff Period	100	Transaction	Payment	VALID	RTI User	03/31/2014 03:07:02	1	
Debit-MultipleTransOnATM	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:19:51	1	
DebitMultipleDepositWithdrawl	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:20:54	1	
DevUnitTest	Device Time Window	Transaction	Allied Bank,Banking,Energy,Payn	VALID	RTI User	03/05/2014 12:39:16	1	
Eval Ex	Trading Score	Wire Transaction	Banking,Payment	INVALID	RTI User	04/22/2013 11:30:55	1	

Figure 27. Profile Details page

## Adding a Profile

This section covers following topics:

- Adding Standard Measures
- Adding Customer Measures
- Adding Measures Application Group

To add a Profile, follow these steps:

- 1. Navigate to Profile Details Page
- 2. Click Add on the Profile tool bar. The Add Profile fields are expanded.

ORACLE Inline Processing								tober 20, 2014		
Association and Configuration Expressions	Post Processi	ng Actions Profiles	Evaluations Assessme	ents						×
🔗 Profile Details - Windows Internet Explorer										
E Profile Details 🗂 Add Expression										History
Profile Name* Count of ATM Tr	Transactions per o	device Id for last 10 mins		Status V	UD	Processing Segment	FRAUD		Y	
Last Updated By RTIUSR				Last Updated On 1	008/2014 07:05:54 PM					
Profile Overview										
	Activity*	TRANSACTION			•	LookBack Type*	C Count @ Time			
Lo	ookBack Value*	10			5	Unit	Minutes			•
Aggre	regate Grouping	Each Record			•	Aggregate On Business Property				w
		COUNT OF TRANSACTION Where (TRANSACTION:T) Group By TRANSACTION.D Look Back Of 10 Minutes	(N_SOURCE_TYPE_CODE)	i = 'ATM'						
E Standard Measures (1) E Add   Delete	le									
A Business Property				Measure Name				Measure Aggregation Type		E
TRANSACTION : AMOUNT_BASE				AMOUNT_BASE_crit				COUNT		
🗄 Custom Measures (0)   🛨 Add   🌌 Edit   (	🙆 Delete									
🖃 Filters (1)   🛨 Add   🌌 Edit   🍏 Delete										
📩 Filter Name				Filter Clause						
ATMTRNS				(TRANSACTION:TXN_SOURCE_TYP	E_CODE) = 'ATM'					
E Measure Aggregation Groups (1)   🗄 Add	🛃 Edit   🍪 De	elete								
🚈 Business Property				Function						
TRANSACTION : DEVICE_ID										
Profile Refresh Method										
Change Description										
										0
				1	Save Cancel					•

Figure 28. Profile details page

3. Enter the following details:

#### Table 19. Profile

Field	Description
Profile Name	Enter the name of the virtual profile.
Processing Segment	Select the processing segment from the drop-down list.
Activity	Select the activity from the drop-down list.
LookBack Type	Select the LookBack type.

#### Table 19. Profile

LookBack Value	Enter the LookBack value.
Unit	This option is enabled only when Time is selected as lookback. Select the unit from the drop-down list.
Aggregate Grouping	<ul> <li>Select the type from the drop-down list. The list shows all Time columns of the activity:</li> <li>Each Record- shows the activity for each record</li> </ul>
	Daily- shows the daily record
	Monthly- shows the monthly record
Aggregate Grouping on Business Property	This option is enabled if Aggregate Grouping is Daily or Monthly. It lists all Time columns of the activity.

### **Adding Standard Measures**

This is used to define a measure on the pre-marked columns in Business Entities module.

- 1. Click Add on the Standard Measures toolbar. The Add Standard Measures fields are expanded.
- 2. Enter the following details:

#### Table 20. Standard Measures

Fields	Description
Business Attribute	Select the business attribute from the drop-down list. The list shows all Standard Measurable columns of the activity.
Measure Aggregation Type	Select the measure aggregation type from the drop-down list. The list shows the Standard Measurable functions.

### **Adding Customer Measures**

This is used to define a Customer measure on the pre-marked columns in Business Entities module.

- 1. Click Add on the Customer Measures toolbar. The Add Customer Measures fields are expanded.
- 2. Enter the following details:

#### Table 21. Customer Measures

Fields	Description
Business Entity	Select the business entity from the drop-down list. The list is based on selected activity and processing segment.
Business Attribute	Select the business attribute from the drop-down list. The list is based on the selected business entity.
Measure Aggregation Type	Select the measure aggregation type from the drop-down list.

## **Adding Measures Application Group**

This is used to define a Application Group on the pre-marked columns in Business Entities module.

- 1. Click Add on the Measure Application Group toolbar. The Measures Application Group fields are expanded.
- 2. Enter the following details:

#### Table 22. Measures Application Group

Fields	Description
Business Entity	Select the business entity from the drop-down list. The list is based on selected Activity and processing segment
Business Attribute	Select the business attribute from the drop-down list. The list is based on the selected business entity.
Measure Aggregation Type	Select the measure aggregation type from the drop-down list.

## Adding Profile Refresh Method

This is used to define a Profile Refresh Method on the pre-marked columns in Business Entities module.

- 1. Click Add on the Profile Refresh Method toolbar. The Add Profile Refresh Method fields are expanded.
- 2. Enter the following details:

#### Table 23. Profile Refresh Method

Fields	Description
Profile	Select the profile option. <ul> <li>Live</li> </ul>
	Periodic
	<b>Note:</b> <i>Live</i> : Updates the profile whenever the activity is being processed. <i>Periodic</i> : Updates the profile periodically.
Updated Frequency	This field is enabled if the Periodic profile is selected.
Unit	Select the type from the drop-down list. This option is enabled if Time is selected as lookback.
Include Activity to Profile	This checkbox is enabled if the Live profile is selected.
Change Description	Enter the details in the field.

3. Click Save. The following message is displayed: The operation successful.

## Maintaining Profile

This section covers following topics:

• Editing Profile

- Deleting Profile
- Searching Profile

## **Editing Profile**

To modify the Profile details, follow these steps.

- 1. Navigate to Profile Details page.
- 2. Select the required Profile.
- 3. Modify the necessary information. For more information on Processing Segment fields, refer to the *Adding a Profile* table.
- 4. Click Save. The Profile detail is updated.

**Note:** When you edit a profile and cancel the same, still the modifications are saved. When you add a measure or filter it is stored in database tables. Profit Save will save the direct profile related data and generate the queries and table. Profile Refreshment Method Periodic is not supported. By default Profile Refreshment is not selected. You have to select the profile refreshment method explicitly. The system allows you to save the profile without any refreshment method.

When a Standard Measure, Custom Measure, and so on are added in profile, the same would get saved to the profile definition irrespective of saving or cancelling the Profile changes, as these measure creation has the save button in the popup during which it is saved to the database. This holds good for the similar operation everywhere in the Framework.

Once a Profile is re-save, irrespective of the changes to the profile, the profile tables p\_<profile\_id> will be recreated ,hence all the existing records gets deleted.

## **Deleting Profile**

To delete a Profile, follow these steps.

- 1. Navigate to the Profile details page.
- 2. Select the required Profile.
- 3. Click **Delete**. The Profile Detail page is updated.

## **Searching Profile**

To search Profiles, follow these steps.

1. Navigate to the Profile Details page.

2. Enter the following details:

#### Table 24. Search Profile

Fields	Description
Profile Name	Enter the Profile Name.
Activity	Select the activity from the drop-down.
Processing Segment	Select the Processing Segment from the drop-down.

3. Click Go. The Search Details are displayed.

## Managing Virtual Profiles

Virtual Profiles are the wrapper around one or more profiles.

Virtual Profile can be used when:

- A user wants to merge profiles on two different activities or same activity
- A user wants to use a reduced look back on the same profile.

Through Virtual Profiles, you can add a new virtual profile and also search for existing virtual profiles for modification or removing a virtual profile

This section covers following topics:

- Adding Virtual Profile
- Maintaining Virtual Profile Details

## **Adding Virtual Profile**

Adding a Virtual Profile allows you to define a virtual profile by adding the profile details.

This section covers following topics:

- Adding Linked Profile
- Adding Measures
- Adding Associated Inline Datasets
- Adding Associated Paths

To add a Virtual Profile, follow these steps:

- 1. Navigate to the Inline Processing Home Page
- 2. Select Virtual Profile. The Virtual Profile Details page is displayed.
- 3. Click **Add** on the Virtual Profile tool bar.

援 Virtual Profile Details - Windows I	Internet Explorer			_	
Virtual Profile Details					
Name*		Processing Segment*	~		
Virtual Profile Overview					
LookBack Type*	C Count @ Time	LookBack Value*	l	Init	
Aggregate Grouping	Each Record 🔹				
🗄 Linked Profiles (0)   🕂 Add	i 🎯 Delete				
🗄 Measures (0)   🛨 Add   🛃	🛿 Edit   🍪 Delete				
Change Description					
					\$
		Save Cancel			

#### Figure 29. Profile details page

4. Enter the following details:

#### Table 25. Virtual Profile

Field	Description				
Profile Name	Enter the name of the virtual profile.				
Processing Segment	Select the processing segment from the drop-down list.				
Activity	Select the activity from the drop-down list.				
LookBack Type	Select the LookBack Type value. The options are: Count or Time				
LookBack Value	Enter the LookBack Value.				
Unit	This option is enabled only when Time is selected as lookback. Select the unit from the drop-down list.				
Aggregate Grouping	<ul> <li>Select the type from the drop-down list. The list will show all the Time columns of the Activity:</li> <li>Each Record- Shows the activity for each record.</li> </ul>				
<ul> <li>Daily- Shows the daily record</li> </ul>					
<ul> <li>Monthly- Shows the monthly record</li> </ul>					

5. Click Save. The following message is displayed: The operation successful.

**Note:** It is to be noted that while adding the Traversal Path and Inline Dataset from Virtual Profiles, the current Virtual Profile should either be the Start table or the End table. If it is not so, then the added Inline Dataset or the Traversal Path will not be displayed under the corresponding toolbar. The same Traversal Path or Virtual Profile should be added in the Inline dataset list and traversal path list under Associations and configurations. Additionally, once the associated traversal path or associated the Inline dataset list and the Inline dataset list under Associations and Configurations.

#### **Adding Linked Profile**

Linked Profiles are the profiles which are used to create the Virtual profile. It can be one or more profiles.

6. Click **Add** on the linked profile toolbar and enter the following details:

#### Table 26. Linked Profile

Fields	Description
Profile Name	Select the virtual profile from the drop-down list. The first profile which is added will be considered as a primary profile. From the second profile onwards, the drop-down list will only show the Profiles with same number of Measure Aggregate Groups and Measures used in primary profile.

#### Adding Measures

- 7. Click Add on the Measures toolbar. The Add Measure fields are expanded.
- 8. Enter the following details:

#### Table 27. Measures

Fields	Description
Business Property	Select the business property type from the drop-down list.
Measure Aggregation Type	Select the measure aggregation type from the drop-down list.

#### **Adding Associated Inline Datasets**

Associated Inline Datasets are shown once user has saved the Virtual Profile.

- 1. Click Add on the Associated Inline Datasets toolbar. The Add Associated Inline Data set fields are expanded.
- 2. Enter the following details:

#### Table 28. Associated Inline Datasets

Fields	Description
Inline Dataset Name	Enter the Inline dataset name.
Start Table	Select the start table from the drop-down list.
Start Field	Select the start field of the condition from the drop-down list.
Operator	Select the operator from the drop-down list. The available operators are =, >, <, >=, <=, and <>.

#### **Adding Associated Paths**

Associated Paths are shown once the user has saved the Virtual Profile.

- 1. Click Add on the Associated Paths toolbar. The Add Associated Paths fields are expanded
- 2. Enter the following details:

#### Table 29. Associated Paths

Fields	Description
Traversal Path Name	Enter the traversal path name.

#### Table 29. Associated Paths

Start Table	Select the start table from the drop-down list.
End Table	Select the end table from the drop-down list.
Source Entity	Select the source entity from the drop-down list.
Destination Entity	Select the destination entity from the drop-down list.
Change Description	Enter the details in the field.

3. Click Save. The following message is displayed: The operation successful.

### **Maintaining Virtual Profile Details**

This section covers following topics:

- Editing Virtual Profile
- Deleting Virtual Profile
- Searching Virtual Profile

### **Editing Virtual Profile**

To modify Virtual Profile Details, follow these steps.

- 1. Navigate to the Virtual Profile details page.
- 2. Select the required Virtual Profile.
- 3. Modify the necessary information. For more information on Processing Segment fields, refer to the *Adding Virtual Profile* table.
- 4. Click Save. The Virtual Profile is updated.

### **Deleting Virtual Profile**

To delete the Virtual Profile details, follow these steps.

- 1. Navigate to Virtual Profile details page.
- 2. Select the required Virtual Profile.
- 3. Click **Delete**. The Virtual Profile page is updated.

#### **Searching Virtual Profile**

To search Virtual Profile, follow these steps.

1. Navigate to Virtual Profile details page.

2. Enter the following details:

#### Table 30. Searching Virtual Profile

Fields	Description
Profile Name	Enter the Profile Name.
Activity	Select the activity from the drop-down list.
Processing Segment	Select the Processing Segment from the drop-down list.

3. Click Go. The Search Details are displayed.

# CHAPTER 7 Managing Evaluations

This chapter describes Evaluations functionality and provides step-by-step instructions to use this module. This chapter discusses the following topics:

- Overview
- Accessing Evaluation Menu
- Adding a Evaluation
- Maintaining Evaluation

## Overview

Evaluations are logical comparisons against conditions that result in a score.

The essential evaluation types are listed below:

- Condition Evaluations: These can be checks against literals or against other attributes. For examples,
  - If the Transaction Origination Country is "Nigeria", then 10 points.
  - If the Transaction Origination Country is in High Risk Countries List, then 10 points.

These can involve other logical expressions for evaluating multiple conditions.

• Profile Comparison: These are not materially different than the condition evaluations. One of the things that can be on the right side of the equation is the profile check.

For example:

If the Transaction Amount is > High Risk Country Transactions 75th Percentile Amount then 10 points.

• Value Lookups: These evaluations use a dimensional table where the attribute values lead to a score that we lookup. This may not necessarily be a separate evaluation type, but rather a mechanism for getting the associated points. For example, the Conditional Checks evaluation could be an evaluation that awards points from a table, but only for transactions originated in Nigeria.

For example,

 If the Transaction Origination Country is 'Nigeria', then points based on High Risk Countries List using Transaction Origination Country.

For example, the evaluation only applies to Nigeria. If that was left out, the evaluation could simply be the following:

Get points based on High Risk Countries List using Transaction Origination Country.

Through Evaluations, you can add a new evaluation and also search for existing evaluations for modification or removing an evaluation.

## Accessing Evaluation Menu

To access Evaluation, follow these steps:

- 1. Navigate to Inline Processing Home Page.
- 2. Select **Evaluation**. The Evaluation Details page is displayed.

Association and Configuration Expressions Post	Processing Actions Profiles E	valuations Assessment	s					
Home >> Evaluations								
🖃 Search 📫 Go   🌙 Reset								
Evaluation Name			Activity			•		Processing Segment
Evaluations (50)   📩 Add								
🚣 Evaluation Name	Score	Activity	Processing Segment	Status	Updated By	Updated On	History	
BLOCK HIGH RISK BEN CUST	Score Destination Country:Score	Wire Transaction	Banking	VALID	RTI User	06/19/2014 17:59:05	<b>1</b>	
COUNTRY SCORE EVAL	Trading Score	Wire Transaction	Banking	INVALID	RTI User	04/23/2013 16:03:24	1	
Card charged on POS at any specific merchant	Merchant Details:Score	ATM and Point of Sal	Allied Bank	INVALID	RTI User	06/23/2014 14:58:27	<b>10</b>	
Card is charged on POS outside Pakistan	100	ATM and Point of Sal	Allied Bank	INVALID	RTI User	06/23/2014 11:27:17	1	
Check Previous Frauds on Device for Count	100	Transaction	Payment	VALID	RTI User	01/15/2014 12:37:03	<i>7</i>	
Check Previous Frauds on Device for Time Window	100	Transaction	Payment	INVALID	RTI User	09/30/2013 17:39:39	1	
Cross Prof Eval	200	FT and MT	Allied Bank	INVALID	RTI User	09/16/2013 16:41:00	<b>7</b>	
Debit High Risk Withdrawls	100	Transaction	Payment	INVALID	RTI User	04/23/2013 18:58:38	1	
Debit Suspicious ATM Withdrawl	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:18:49	<i>7</i>	
Debit Trans and WT	100	Transaction	Banking,Payment	VALID	RTI User	03/05/2014 10:48:11	1	
Debit Withdrawls after Cutoff Period	100	Transaction	Payment	VALID	RTI User	03/31/2014 03:07:02	1	
Debit-MultipleTransOnATM	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:19:51	<b>1</b>	
DebitMultipleDepositWithdrawl	100	Transaction	Payment	INVALID	RTI User	01/24/2013 09:20:54	0	
DevUnitTest	Device Time Window	Transaction	Allied Bank,Banking,Energy,Paym	VALID	RTI User	03/05/2014 12:39:16	<b>7</b>	
Eval Ex	Trading Score	Wire Transaction	Banking,Payment	INVALID	RTI User	04/22/2013 11:30:55	0	

Figure 30. Evaluation Details page

## Adding a Evaluation

This section covers following topics:

- Adding Filters
- Adding Evaluation Scoring

To add a Evaluation, follow these steps:

- 1. Navigate to Evaluations Details page.
- 2. Click Add on the Evaluations tool bar. The Add Evaluation page is displayed.

😸 Evaluation Details - Windows Internet Explorer			
Evaluation Details 📩 Add Expression			
Name Activity*	•	Processing Segment*	
🗄 Fäters (0)   🖶 Add   🛃 Edit   🍪 Delete			
E Evaluation Scoring			
Score Type C Fixed C Lookup C Expression			
Associated Assessments (0)			
Assosiated Profiles (0)			
Assosiated Virtual Profiles (0)			
Change Description			
		¢.	
	Save Cancel		

#### Figure 31. Evaluations page

3. Click Add Expressions. The Expressions dialog box is displayed.

Exp	ression Na	ime*				Activity*	ATM_TRANSAC	CTIONS	· · ·
Process	sing Segm	AT FR Sv	rMWD RAUD wptst EST						
	es   🕂 Add			Function To Group	Remove	Function F	rom Group   🔀	Apply Function to	Expression
Sta Grou	order	Operator	Business Pro	operty (Business E	ntity. Busines	s Attribute	) Function	Function Paran	neter
Variable								🔚 Sav	e 👿 Cancel
	Oper	ator	Ŧ						
В	usiness Er	ıtity*							•
Busir	iess Attrib	ute*							•
			C Add to Cu	urrent Group	⊙ Cr	eate New (	iroup		

#### Figure 32. Expression page

4. Enter the following details:

#### Table 31. Expression

Field	Description
Expression Name	Enter the name of the evaluation.
Processing Segment	Select the processing segment from the drop-down list.
Activity	Select the activity from the drop-down list.

## **Adding Filters**

1. Click Add on the Filters tool bar. The Add Filter Dialog box is displayed.

2. Enter the following details:

#### Table 32. Adding Expression

Fields	Description
Filter Name	Enter the name of the filter.
Source Expression	Select the source expression from the drop-down list. The list will be based on the selected Activity.
Operator	Select the operator from the drop-down list.
Comparator Type	<ul> <li>Select the Comparator type:</li> <li>If Expression type is selected, then a drop-down list is displayed.</li> <li>If Literal Value is selected, then a text field is displayed to enter the details.</li> </ul>

### **Adding Evaluation Scoring**

3. Expand **Evaluation Scoring**. Enter the following details:

#### Table 33. Evaluation Scoring

Fields	Description
Evaluation Scoring	<ul> <li>Select the score type. The options are:</li> <li>Fixed: If this option is selected, then the score should be entered in the text box displayed.</li> </ul>
	<ul> <li>Lookup: This option shows the lookup tables.</li> </ul>
	<ul> <li>Expression: This option shows the list based on the selected Activity.</li> </ul>
Change Description	Enter the change description details.

4. Click Save. The following message is displayed: The operation successful. The new Evaluation is added to the list.

## Maintaining Evaluation

This section covers following topics:

- Editing Evaluation
- Deleting Evaluation
- Searching Evaluation

## **Editing Evaluation**

To modify Evaluation details, follow these steps.

1. Navigate to Evaluation Details page.

- 2. Select the required Evaluation.
- 3. Modify the necessary information. For more information on Evaluation fields, refer to the *Adding a Evaluation* table.
- 4. Click Save. The following message is displayed: The operation successful. The Evaluation Detail page is updated.

### **Deleting Evaluation**

To delete a Evaluation, follow these steps.

- 1. Navigate to Evaluation details page.
- 2. Select the required Evaluation.
- 3. Click **Delete**. The Evaluation Detail page is updated.

### **Searching Evaluation**

To search Evaluation, follow these steps.

- 1. Navigate to Evaluation details page.
- 2. Enter the following details:

#### Table 34. Searching Evaluation

Fields	Description
Evaluation Name	Enter the Profile Name.
Activity	Select the activity from the drop-down.
Processing Segment	Select the Processing Segment from the drop-down.

3. Click Go. The Search Details are displayed.

# CHAPTER 8 Managing Assessments

This chapter explains about Assessments functionality and provides step-by-step instructions to use this module. This chapter discusses the following topics:

- Overview
- Adding an Assessment
- Maintaining Assessment

## Overview

Analysis of incoming data is handled in by a combination of Evaluations or a single Evaluation, which are created in Assessments.

The final decision on an activity is made by an Assessment, which can be made up of one or more Evaluations. A set of evaluations are assembled into an Assessment. Assessment performs the complete validation and returns a score.

Assessment will check multiple evaluation logic and consider the Sum of all Evaluation Score for the output score. There are two assessment scoring types:

- Normalized Base: It is the adjustments of score or distributions in statistics.
- Sum of Evaluation Score: It is the total sum score of all selected evaluations.

Through assessments, you can add a new assessment and also search for existing assessments for modification or removing an assessment.

## Accessing Assessment Menu

To access the Assessment menu, follow these steps:

- 1. Navigate to Inline Processing Home Page.
- 2. Select Assessment. The Assessment Details page is displayed.

ssociation and Configuration	Expressions	Post Processing Actions	Profiles	Evaluations	Assessments					
Home >> Assessments					43					
🖃 Search 📫 Go 🛛 🍛 Reset										
Assessment Name					Activity			•		Processing Segment
🖃 Assessments (23)   🛅 Add	I   🧠 Export									
Assessment Name			Activity		Processing Segment	Status	Updated By	Updated On	History	
AAAA Test			Wire Tran	saction	Allied Banking, Banking	VALID	RTI User	06/12/2014 11:22:37	<b>1</b>	
ATM Assessment			Wire Tran	saction	Payment	VALID	RTI User	05/14/2014 22:27:34	<b>10</b>	
ATM Assessment - Sbert	bank		Transactio	on	Payment	VALID	RTI User	05/29/2014 19:19:56	<b>2</b>	
Allied bank FT Assessme	ent		FT and MT	r	Allied Bank	VALID	RTI User	06/24/2014 17:10:02	<b>1</b>	
Assessment Test			Wire Tran	saction	Banking,Energy,Payment	VALID	RTI User	05/29/2014 11:07:42	<b>D</b>	
Banking Assessment			Wire Tran	saction	Banking	INVALID	RTI User	05/14/2014 18:57:46	<b>D</b>	
Debit Assessment			Transactio	on	Payment	VALID	RTI User	04/27/2014 17:28:12	<b>1</b>	
Dev Unit Test			Wire Tran	saction	Allied Bank,Banking,Energy,Payment,1	INVALID	RTI User	04/24/2014 15:51:48	<b>1</b>	
Device Assessment for T	ransaction		Transactio	on	Payment	INVALID	Rela Time AM Manager	10/01/2013 14:52:48	<b>D</b>	
Fraud Assessment			Wire Tran	saction	Banking,Payment	INVALID	RTI User	11/19/2013 15:43:53	<b>D</b>	
High Value Account Debi	t Transaction		Transactio	on	Payment	INVALID	RTI User	04/25/2014 13:19:39	<b>1</b>	
Monitoring ATM Withdraw	als UCT		ATM_TRA	NS_UCT	UCT_BANK	VALID	RTIUser	05/14/2014 18:39:16	<b>7</b>	
New Test			ATM and F	Point of Sale	Allied Bank	INVALID	RTIUser	05/29/2014 11:19:59	1	
New Test1			ATM and F	Point of Sale	Allied Bank	INVALID	RTI User	05/29/2014 11:21:33	<b>D</b>	
New Test2			ATM and F	Point of Sale	Allied Bank	INVALID	RTIUser	05/29/2014 11:50:04	2	

Figure 33. Assessment Details page

## Adding an Assessment

This option allows you to define an assessment by adding the assessment details.

This section covers following topics:

- Mapping Associated Evaluations
- Adding Assessment Score

To add an Assessment, follow these steps:

- 1. Navigate to Assessment Details Home Page.
- 2. Click Add on the Assessment tool bar. The Add Assessment page is displayed.

Assessment Details - Windows Internet Explorer				-			
E Assessment Details							
Name*		Activity*		•	Processing Segment*		*
Execution mode C Live @ Te:	st						
Associated Evaluations (0)							
Kolocated Evaluations (6)   Image integration     Kolocated Evaluations (6)   Image integration	Scol	0	Status		Updated By	Updated On	
No Data Found	300	0	Status		opulled by	opuated On	
							Þ
Evaluation Filters (0)							_
🙏 Filter Name	Filter Clause						
No Data Found							
4							Þ
Assessment Score							
Scoring* C Normalized Score @ SL Normalized To	um of Evaluation Score Normalization Base	Cut-Off 5	icore				
Assessment Outcome (4)   Save							
游. Action	Score Lower Limit	Score Upper Limit					
Hold Transaction JMS message	-	-					
FCCM Alert							
Send Message for Cross Selling-RTD	-	-					
Send message	-	-					
Assessment Action Parameters (0)							
⊞ Schedule							
Change Description							
							\$
			Save Cancel				

### Figure 34. Assessment page

3. Enter the following details:

#### Table 35. Adding Assessment

Field	Description
Assessment Name	Enter the name of the assessment.
Processing Segment	Select the processing segment from the drop-down list.
Activity	Select the activity from the drop-down list.
Execution Mode	Select the execution mode. The options are: • Live • Test

## **Mapping Associated Evaluations**

1. Navigate to Associated Evaluations section. Click **Map.** The Associated Evaluations Mapping Dialog box is displayed.

Available Evaluations	Included Evaluations
Frequent ATM Withdrawals	ATM Withdrawal ATM Withdrawal Amount

Figure 35. Assessment Evaluation Window

2. Select Evaluations from Available Evaluations pane. Click 🔛 :to move to Included Evaluation pane.

Note: Evaluation filter -This option gets populated for selected the evaluation in Associated Evaluations.

## Adding Assessment Score

- 1. Navigate to Assessment Scoring section.
- 2. Expand Assessment Scoring. The Assessment Score add fields are displayed.
- 3. Enter the following details:

#### Table 36. Adding Assessment Score

Fields	Description
Scoring	Select the score type. The options are: • Normalized Base
	Sum of Evaluation Score
Normalized to	Enter the normalized to score.
Normalization Base	Enter the normalization base score.
Cut-off score	Enter the cut-off score or the minimum score required to attain normalization.
Assessment Outcome	Select the type of action. Enter the upper limit and lower limit score.

## **Adding Action Parameters**

- 1. Navigate to Action Parameters section.
- 2. Expand Action Parameters. The Action Parameters add fields are displayed.
- 3. Enter the following details:

#### Table 37. Adding Action Parameters

Fields	Description
Parameter Name	Enter the parameter name.
Parameter value	Enter the parameter value.
Schedule	Select the schedule type. The options are: • Activate- To activate a Schedule • Deactivate- To deactivate a Schedule

4. Click Save. The following message is displayed: The operation successful. The new Assessment is added to the list.

**Note:** In the assessment details, for the Hold Transaction Message, user has to configure the Assessment Action Parameters manually in the Action Parameter Details page. It is to be noted that the message format can be changed as per the requirement of the user.

## **Exporting Assessment**

- 1. Navigate to Assessment section.
- 2. Select the Assessment Name in the list.
- 3. Click **Export**. The exported assessment details are stored as xml files. Once the assessment is exported, an xml file gets generated in the path <app\_layer\_ftpshare>/<INFODOM>/RTI>. Once the file is exported, the following message is displayed:



Assessment Export Window

## Maintaining Assessment

This section covers following topics:

- Editing Assessment
- Deleting Assessment
- Searching Assessment

### **Editing Assessment**

To modify Assessment details, follow these steps.

- 1. Navigate to the Assessment details page.
- 2. Select the required Assessment.
- 3. Modify the necessary information. For more information on Processing Segment fields, refer to the *Adding an Assessment* table.
- 4. Click Save. The following message is displayed: The operation successful. The Assessment Detail page is updated.

## **Deleting Assessment**

To delete an Assessment, follow these steps.

- 1. Navigate to Assessment Details page.
- 2. Select the required Assessment.
- 3. Click Delete. The Assessment Detail page is updated.

## **Searching Assessment**

To search Assessment, follow these steps.

- 1. Navigate to Assessment details page.
- 2. Enter the following details:

#### Table 38. Searching Assessment

Fields	Description
Assessment Name	Enter the Assessment Name.
Activity	Select the activity from the drop-down.
Processing Segment	Select the Processing Segment from the drop-down.

3. Click Go. The search details are displayed.

# CHAPTER 9 Managing Import and Export Utilities

This chapter provides detail information about Import and Export functionality and step-by-step instructions to use this module.

This chapter discusses the following topics:

- Overview
- Importing Functionality
- Exporting Functionality

## Overview

Import and Export utilities are provided, when performed through command line RTIImport.sh and RTIExport.sh. These are available in <FIC\_HOME>/ficapp/common/FICServer/bin

## Importing Functionality

To Import functionality, follow these steps:

- 1. Login to the Server where app layer is installed.
- 2. Navigate to the path.

<FIC\_HOME>/ficapp/common/FICServer/bin

Execute the below command

./RTIImport.sh \$1 \$2 \$3

Where \$1 is the File name which has to be imported along with the absolute path where file exists.

\$2 is infodom and \$3 is true or false. True Creates the profile tables in the atomic schema, false excludes the creation of profile tables during import

For example,

RTIImport.sh <APP LAYER FTPSHARE>/<INFO-DOM>/RTI/RTIExport\_RTIINFO\_2014.06.10.19.39.38.xml RTIINFO true

Note: The Import file name should always start with RTIExport\_

## **Exporting Functionality**

To Export functionality, follow these steps:

- 1. Login to the Server where app layer is installed.
- 2. Navigate to the path.

<FIC\_HOME>/ficapp/common/FICServer/bin

Execute the below command.

./RTIExport.sh \$1 \$2 \$3

\$2 is the Infodom name and \$3 is Assessment IDs Separated by Comma.

For example,

./RTIExport.sh <APP\_LAYTER ftpshare>/RTIINFO/RTI RTIINFO 1790,1802

## **APPENDIX A**

# Configuring an User Defined Function in IPE

This Appendix explains about configuring a user defined function in IPE, This Appendix covers following topics:

- Configuring a User Defined Function in RTI
- Configuring any User defined function

## Configuring a User Defined Function in RTI

To configure a User Defined Function in RTI, follow these steps:

```
1.
GETLASTCHARS (FUNCTION NAME) (PARAMETER NAME1 DATA TYPE1, PARAMETER NAME2
DATA TYPE 2)
return 'return data type'
Begin
Function Body
End
```

2. For Example, to create a Function GETLASTCHARS in the Atomic Schema, follow the steps below. create or replace function GETLASTCHARS(inputString varchar2, noOfChars number) return varchar2

```
is
v_chars varchar2(32767):='';
```

```
begin
select SUBSTR(inputString,0-noOfChars,noOfChars) into v_chars from dual;
return v_chars;
```

end GETLASTCHARS;

**Note:** At any point of time, the user created functions for use in Expression should have only two parameters. In the Example Function, the inputString and noOfChars are the two parameters.

## Configuring any User defined function

To Configure any User defined function, follow these steps.

- 1. The information to be inserted into the tables rti\_function, rti\_func\_arg\_map and rti\_func\_data\_type.
- 2. To configure the above Created Function to appear in the Select Function drop-down, execute the below Scripts in the Config Schema.

```
The values should be added to the tables according to the format shown below:
insert into RTI_FUNC_ARG_MAP (N_MAP_ID, N_FUNC_ID, V_ARG_DESC,
V_ARG_DATA_TYPE, N_ARG_NUM)
values(value1,value2,value3....)
Example,
insert into RTI_FUNCTION (N_FUNC_ID, V_RETURN_TYPE, V_FUNC_CODE, V_FUNC_NAME,
V_DESC, V_NOTES, V_FUNC_TYPE, V_FUNC_STR, V_MAX_PARAM)
values (30, 'VARCHAR2(200)', 'GETLASTCHARS', 'Get Last Characters ', 'Gets
the Last Characters.', null, 'F', 'GETLASTCHARS(@1@,@2@)', 2);
insert into RTI_FUNC_ARG_MAP (N_MAP_ID, N_FUNC_ID, V_ARG_DESC,
V_ARG_DATA_TYPE, N_ARG_NUM)
values(value1,value2,value3....)
Example,
insert into RTI_FUNC_ARG_MAP (N_MAP_ID, N_FUNC_ID, V_ARG_DESC,
V_ARG_DATA_TYPE, N_ARG_NUM)
values (40, 30, 'Char Value to be evaluated', 'char', 1);
insert into RTI_FUNC_ARG_MAP (N_MAP_ID, N_FUNC_ID, V_ARG_DESC,
V_ARG_DATA_TYPE, N_ARG_NUM)
values (41, 30, 'Number of places', 'char', 2);
insert into RTI_FUNC_DATA_TYPE (N_MAP_ID, N_FUNC_ID, V_DATA_TYPE)
values (70, 30, 'CHAR');
values(value1, value2, value3....)
Example,
insert into RTI_FUNC_DATA_TYPE (N_MAP_ID, N_FUNC_ID, V_DATA_TYPE)
values (70, 30, 'CHAR');
insert into RTI_FUNC_DATA_TYPE (N_MAP_ID, N_FUNC_ID, V_DATA_TYPE)
values (71, 30, 'VARCHAR');
```

