Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack

Release Notes Version 8.0.0.0.0

Part No. E62884-01



# **DOCUMENT CONTROL**

Version Number	Revision Date	Changes Done
1.0	Created: March 2015	Captured Software environment details, new features, fixed issues, limitations and known issues for Java 7 release.
2.0	Modified: June 2017	Replaced the old document links with the new OHC Library links.
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### Preface

This Preface provides supporting information for the Oracle Financial Services Advanced Analytical Applications Infrastructure Pack Release Notes and includes the following topics:

- Purpose of This Document
- Intended Audience
- Related Documents

#### **Purpose of This Document**

This document contains release information for the following products:

- Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)
- Oracle Financial Services Enterprise Modeling (OFS EM)
- Oracle Financial Services Inline Processing Engine (OFS IPE)

#### Intended Audience

This document is intended for users of Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack.

#### **Related Documents**

This section identifies additional documents related to OFS AAAI Application 8.0.0.0.0. You can access the following documents from <u>OHC Documentation Library</u>.

- OFS Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack 8.0.0.0.0
  Installation and Configuration Guide
- OFS Analytical Applications Infrastructure Environment Check Utility Guide
- OFS Analytical Applications Infrastructure Administration Guide
- OFS Analytical Applications Infrastructure User Guide
- OFS Inline Processing Engine User guide
- OFS Enterprise Modeling User Guide
- OFS Forms Manager User Guide

Additional documents are:

- OFS Analytical Applications v8.0 Technology Matrix
- OFS Analytical Applications Infrastructure Security Guide
- OFSAAI FAQ Document



### **1** Release Information

This release of Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack is for Java 7 and Java 8. You can access the latest information and additions to these on <u>OHC Documentation Library</u>.



### 2 Introduction

Starting 8.0 release, OFSAA applications are packaged, and released as Application Packs. An Application Pack is a group of OFSAA products packaged together in a single installer and addresses specific functional area via its products that are grouped together. Packaging applications in a group ensures simplified installation, maintenance, development and integration in an integrated deployment.

#### Products of OFS AAAI Application Pack

Oracle Financial Services Analytical Applications Infrastructure (OFS AAAI) Application Pack consists of three products that powers the Oracle Financial Services Analytical Applications (OFSAA) family of products to perform the processing, categorizing, selection and manipulation of data and information needed to analyze, understand and report on specific performance, risk, compliance and customer insight issues by providing a strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack includes Financial Services Analytical Applications Infrastructure, Financial Services Enterprise Modeling, and Financial Services Inline Processing Engine.

#### • Oracle Financial Services Analytical Applications Infrastructure:

Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) is comprised of a set of frameworks that operates on and with the Oracle Financial Services Analytical Applications Data Model. This infrastructure delivers metadata across the stack and provides a single set of computational engines, and business rules.

#### • Oracle Financial Services Enterprise Modeling:

Oracle Financial Services Enterprise Modeling offers banking institutions identify business opportunities and to measure the risk prevailing in the competitive market to safeguard the regulatory and economic capital of banks.

It features an integrated stress testing and modeling capabilities that you can readily apply across multiple risk areas enabling institutions to devise appropriate enterprise-wide and holistic risk and economic capital strategies. The Enterprise Modeling application helps to build robust models or validate the existing models to quantify and predict the risk involved. It also helps banks to conform to prevalent regulatory and supervisory standards based on constant monitoring. Previously, models were built using various pre-packaged statistical functions/ techniques within the system. The Enterprise Modeling application enables a unique scripting environment that allows business analysts to develop R scripted techniques (using R functions as well as ORE functions), which can be used in defining the models. In addition, modelers can directly script the model in the application. Thus, it provides a unified



environment to build, host, and execute models across risk categories and a common framework to manage stress scenarios.

#### • Oracle Financial Services Inline Processing Engine:

Oracle Financial Services 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 will enable banks to identify events earlier alert more losses, and minimize customer service and retention issues.

The combination of real-time detection and interdiction, real-time alert correlation, and sophisticated behavior detection provided by the Inline Processing Engine, will result in a competitive fraud prevention offering.

Refer to the subsequent chapters to know more about this release.

- Oracle Financial Services Analytical Applications Infrastructure
- Oracle Financial Services Enterprise Modeling
- Oracle Financial Services Inline Processing Engine



### **3** Oracle Financial Services Analytical Applications Infrastructure

This chapter includes the following topics:

- New Features
- Limitations and Known Issues
- Bugs addressed in this release

#### 3.1 New Features

The following new features are supported in this release:

#### Unified Install Experience:

Install multiple applications/ products using a single installer. This release of OFSAA ships various Application Installers with related applications packaged together in groups. User can install all applications that belong to a group, but choose to enable only the licensed applications.

#### • Schema Creator:

This release of OFSAA comes with a utility to allow hassle-free creation of database schemas required for the OFSAA installation. The utility avoids user errors in schema creation/ assigning grants for the multiple schemas required.

#### Common Landing Page and Application Context:

A common landing page is available for all users until a preferred application landing page has been set. The landing page is divided into multiple tabs and each tab has specific links to OFSAA Infrastructure and/ or Application modules. Depending on the OFSAA Application being accessed and the access roles mapped to the logged in User, the TAB and links would be displayed.

#### • Applications Tab:

This tab lists the various OFSAA Applications that are installed in the OFSAA setup and the "Select Application" drop-down lists the OFSAA Applications based on the logged in User and mapped OFSAA Application User Group(s). Links to related modules within Applications and Infrastructure are grouped appropriately to maintain a unified experience.

#### • Sandbox Tab:

This tab lists the various OFSAA Sandboxes created in the OFSAA setup and the "Select Sandbox" drop-down lists the OFSAA Sandboxes based on the logged in User and mapped OFSAA Application User Group(s). Links to modules that operate only on Sandbox features are grouped in this tab.

#### • Object Administration Tab:

This tab lists the various OFSAA Information Domains created in the OFSAA setup and the "Select Information Domain" dropdown lists the OFSAA Information Domains based on the logged in User and mapped OFSAA Application User Group(s). ). Links to modules that enable object traceability and migration of objects are grouped in this tab.



#### • System Configuration & Identity Management Tab:

This tab lists the OFSAA Infrastructure System Configuration and Identity Management modules. These modules work across Applications/ Information Domains and hence there are no Application/ Information Domain dropdown list in this tab). Links to modules that allow the maintenance of setup installation and identity management tasks are grouped together in this tab.

#### • Application Context:

The AAI objects such as Run, Process, Rule, and Cube are now made "Application" aware. These are infrastructure modules and when launched in the context of a particular application filter these objects for display.

#### • Dynamic update of application to object mapping for Run:

Starting this release, no explicit application to object mapping needs to be done for Run object. The mapping is achieved implicitly as part of the "Application Context" feature.

#### • Model Upload changes:

Use the NO VALIDATE option to bypass referential integrity checks during the model upload process.

#### • Forms Manager Utility:

This utility can be used to create and modify user interfaces in applications which support Forms Framework. For more information, see <u>Oracle Financial Services Advanced Analytical</u> <u>Applications Infrastructure Forms Manager User Guide</u>.

#### • Support for new technologies

Additional support for Oracle Database12c, WebLogic Server 12c, WebSphere Application Server 8.5 +, Internet Explorer 11(Compatability Mode), Windows 8.1 & Office 2010 & 2013 is available in this release. Encryption uses SSL 3.0 and TLS 1.2

#### 3.2 Limitations and Known Issues

Component	Sub component	Bug ID	Description
	Metadata Browser	20112950	MDB Object View does not apply application filter within an Infodom
Unified Metadata Manager	Object Migration	20567945	Support of Object Migrations between different OFSAAI versions (Ex: 7.3.5 to 8.0).
	Business Metadata Management	18958361	Data Source formed during Information domain creation is stored as RAC Source Type.
	Business Metadata Management	10089640	A derived entity cannot be created using a Business Processor with placeholder



Component	Sub component	Bug ID	Description
	Business Metadata Management	20280645	Maximum limit of Hierarchy level is 17.
	Business Metadata Management	20268074	Oracle cube definition failed: Cube is not saved in the AW due to initialization error
	Business Metadata Management	20691981	OLAP cube execution fails with "error in connecting to app layer" on Solaris x86.
	Business Metadata Management	20795863	ESSBASE Cube executions will not work on Solaris x86-64.
	Metadata Browser	19215984	In Metadata Browser- Input Parameters section, the details are not displayed for Models based on External Library based techniques.
	Metadata Browser	17192482	Expression object details are not supported in MDB Object view.
	Metadata Browser	18271975	Application, Statistics, and Audit Trail details are not displayed in the exported PDF from Object view of Metadata Brower.
	Metadata Browser	20668510	Script based models does not display in MDB.
Data Loading	Т2Т	20343855	If target column is an expression in T2T, then DC will not be applied on the source column mapped.
	Rules Fwk: Rules	16286806	In Rules - Add Business Processor screen, clicking on the Parameters button may redirect to OFSAAI login page.
Rules Framework		16287180	The Rule execution is successful even if the Rule, Process or Run Name is not available for logged in locale. But if the BMM Dataset, Hierarchy, Measure or Business Processor description is not available for logged in locale, then the Rule execution fails.
	Rules Fwk: Run	17332652	Breadcrumb feature under Rule- Run Framework is a static indicator only to describe its traversal path.



Component	Sub component	Bug ID	Description
	Forms: ROR	16594419	On selecting the currency control feature along with field chooser option, some fields are displayed as blank even if there is data.
Forms Framework	Forms: ROR	10090072	Export does not work if the column name and mapper information have special characters such as '& and <' and '&' respectively.
	Forms: ROR	12678207	Quick Select does not display the Key Business Dimensions combinations when any of the selected hierarchy node descriptions contain = and ` characters.
Operations	Batch Cancellation	16281369	Batch Monitor screen displays the DCDQ Batches as Ongoing even if they have been cancelled or aborted from the Batch Cancellation screen.
Publish	Catalog	19333496	Online Help is not available for Catalog
	Security Management	18937484	Segments/ Folder is not deleted if objects are present in it.
Administration	Security Management	12744050	Users exceeding the Number of Invalid Login attempts / dormant day / Inactive Days are sent to System Authorizer for authorization even if there is an authorization pending for the same user whose details are modified.
Expressions		12663701	Expressions containing special characters such as @, ~, # are displayed as "undefined" under Variants in Entity Group Selection pane
Others		9540094	Keyboard backspace button when clicked from Infrastructure home page logs out from the application



Component	Sub component	Bug ID	Description
		9883414	Opened child window from the home page remains active even after the parent window is closed by clicking on "X" button; operations performed on child window are getting saved
		10144582	OFSAAI Login page cannot be accessed when Google toolbar for Internet Explorer is enabled. <b>Workaround</b> : Disable the "Google toolbar" from the tools properties of your browser.
		20160461	Tooltip is not available for following screens: Attributes, Members, Hierarchies (Dimension Management), Filters, Expressions, Business Metadata (Alias, Build Hierarchy, Dataset, Measure, Business Processor, Derived Entity), and Object Migration

## 3.3 Bugs addressed in this release

Component	Sub component	Bug ID	Description
Administration	Object Migration	19473092	DQ group object migration works when usernames are different.
	Data Entry	19685649	Clicking on grid view & then copy is shifting to the right by one column.
Data Entry Forms and	Data Entry	19685570	Data Entry screen allows to enter special characters in tables using copy/paste
Queries		19635350	"Invalid input found for parameter table name" error on clicking column header
		19635289	Search functionality works when a form is created with two tables



Component	Sub component	Bug ID	Description
Dimension	Members	18622015	Export icon is not available in AMHM
Dimension Management		10298590	"Select a node error" message when searching for a dimension member.
Expressions		14721941	Build expression window is resized.
Install and Upgrade Issues	Base Installer	19434764	Appropriate message not prompted during OFSAAI server start up for first time.
Metadata such as T2T, F2T, etc	T2T Issues	19353736	Specified Hints to be part of count query during T2T execution
	T2T Issues	18631137	Count query should not be fired if threshold is not set, in case of bulk mode.
System Configuration	Information Domain	20042362	Generate BI hierarchy option in Infodom creation is removed & defaulted as None
	Configuration	19332737	Database server details name can be only 20 characters
	Configuration	19073237	In clustered environment, configuration parameter updated are getting refreshed
Unified Metadata Manager	Business Metadata Management	13864672	PC hierarchy, nodes description to be sorted in alphabetical order

Note: All the bugs of earlier release (up to 7.3.5.0.0) are addressed in this Release.



### 4 Oracle Financial Services Enterprise Modeling

This chapter includes the following topics:

- New Features
- Limitations and Known Issues
- Bugs addressed in this release

#### 4.1 New Features

Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAAI) is renamed as Oracle Financial Services Enterprise Modeling (OFS EM), which supports the same setup of features as AAAI. This allows users to create and edit the frameworks for their own applications using the models.

#### • Common Landing Page:

The common landing page for EM includes the default applications for all users. This Application has following menu items:

- Data Management
- Sandbox Maintenance
- Model Execution
- Technique Registration
- Stress Testing
- Metadata Browser

#### Application Context:

- An Application filter is added for model objects.
- The AAI objects such as Run, Process, Rule, Model, and Cube are now made "Application" specific. When these AAAI modules/objects are launched in the context of a particular application filter, these modules/objects will display.



4.2 Limitations a	and Known Issues
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Component	Sub Component	Bug ID	Description
	Modeling	20160088	Model executed from physical sandbox cannot be monitored or scheduled from Operations.
	Modeling	20091042	Parameter format should be mandatory for its parameters defined in Non- Executable external library technique.
	Modeling	20072895	Tooltips not available in enterprise modeling screens
Enterprise Modeling	Modeling	20056532	Model execution fails with third party technique having more than one external library selected.
	Modeling	17346228	For R based model execution, \$RUNSKEY is supported only in Date filter of the dataset.
	Modeling	19786674	Models executed with third party techniques, its execution status are not completed displayed under execution status panel in Model Creation.
	Modeling	18244272	The "Evaluation Type" cannot be selected as "Row" For R based models.



Component	Sub Component	Bug ID	Description
	Modeling	18115259	Datasets with inner joins cannot be used for R based models.
	Modeling	18271506	Datasets with Derived Entity objects cannot be used for NAG based models.
	Modeling	9540296	NAG based Hierarchical Clustering technique execution takes long time for completion when the number of records is more than 5000.
Enterprise Modeling	Modeling	9575262	Opening of Hierarchy Browser takes long time when the number of members in the selected hierarchy is more than 1000.
	Modeling	20795888	Model execution using NAG techniques will not work on Solaris x86-64.
	Stress testing	20014270	Baseline runs displayed in stress definition screen irrespective of application mapping
	Sandbox Definition	19159749	Datasets based on Derived Entities are not supported in Modeling and Stress Testing frameworks.

## 4.3 Bugs addressed in this release

Not applicable



## 5 Oracle Financial Services Inline Processing Engine

The Inline Processing Engine is a new application introduced as a part of this Release.

This chapter includes the following topics:

- Features
- Limitations and Known Issues

#### 5.1 Features

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

IPE analyzes the incoming transaction data by a combination of Evaluations and Assessments against the profiling captured against entities or transactions.

Evaluations can compare data from the provided record or related records or aggregated values on historical data .The aggregated values of historical data is stored in profiles. Profiles can be based on different grouping entities (e.g., account, customer, etc.), or on time (last 3 months) or transaction counts (last 100 transactions) and can be filtered to only look at particular kinds of transactions. Profiles can also be setup to either include the current transaction in calculations or omit it. Two or more profiles on different activities can be merged and run a measure by means of a Virtual Profiles which is a wrapper around one or more profiles.

The final decision on a transaction is made by an Assessment that can be made up of one or more Evaluations, where Evaluations defines a set of logical conditions and the resulting score when those conditions are met. In the simplest case, the logical conditions are evaluated and a fixed score is assigned.

The Inline Processing Engine application has following features:

- Association and Configuration: This is grouped into following sections:
  - Processing segments are the logical sections in an Infodom where all the inline processing Metadata are mapped.
  - The Business Entities are metadata defined on database tables, synonyms, and views..
  - Inline Datasets are joins between two Business Entities.
  - The traversal paths defined are path between activity business entity to any other business entity or virtual profile.
- **Expression**: Expressions are logical unit which is build using one or more business entities, profiles and virtual profiles. This is used in evolution filters and evaluation scoring, and profile 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 3 months) or transaction counts (last 100 transactions).
- Virtual Profiles: Virtual Profiles are the wrapper around one or more profiles. This is used to merge the profiles on two different activities or same activity and a reduced look back on the same profile.
- **Evaluation**: Evaluations are logical comparisons against conditions that result in a score.
- **Assessment**: An assessment is a collection of individual Evaluations, each of which can return a score. Assessment will normalize/sum individual evaluation scores to create an assessment score.

Component	Sub Component	Bug ID	Description
	Inline Processing Engine	19132263	Tomcat is not supported for IPE.
	Inline Processing Engine	19820953	Profile periodic refreshment mode is not supported.
Inline Processing		20043917	Action "Send message for cross selling-RTD" is not supported.
		20323036	Processing of assessments works with only default port for SIB_ENDPOINT_ADDRESS which is 7276 in WebSphere 7.0+.

#### 5.2 Limitations and Known Issues



## 6 Features/Modules De-supported

This chapter lists the features and modules that are de-supported from this release.

- Metadata Browser (Object View)
- Design Reveleus Menu
- Rules Setup Configuration
- Firerun component in ICC
- Batch Group
- Insight
- Process Run Rule Framework (PR2): The applet based UI for PR2 framework has been desupported starting this release. A new framework "Run Rule Framework" has been introduced which yields better performance and new features.



## 7 Hardware/Software Tech Stack Details

The hardware/software combinations required for OFS AAI/AAAI 8.0.0.0.0 are available at <u>OHC</u> <u>Tech Stack</u>.



## 8 Information of third party software tools used

For details on the third party software tool used, see *OFSAA Licensing Information User Manual Release 8.0* available in the <u>OFSAA Generic Documentation Library</u>.





Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack

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