OFS Price Creation and Discovery Cloud Service

Service Operations Guide

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FINANCIAL SERVICES



OFS Price Creation and Discovery Cloud Service

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Download Oracle Financial Services Price Creation and Discovery Run Chart

Oracle Financial Services Price Creation and Discovery provides the Run Chart listing the tasks required for population of data for OFS PCD Reports. This covers the following tasks:

• Set up table population

1

- Stage Dimension Load
- Seeded Dimension Data Population
- Common data Population
- Common Tasks like Exchange Rate Population
- Derived Entity Refresh

Download the OFS PCD 9.0 Run chart from the MOS page.

Operations refers to administration and processing of business data to create the highest level of efficiency within the system and to derive results based on a specified rule. Operations framework within the Infrastructure system facilitates you (system administrator) to:

- Configure and operate the business processes effectively.
- Maintain the Operator Console by Defining and Executing Batches through the Operations menu.
- Monitor the Batches scheduled for execution.

The roles mapped for Operations module are Batch Access, Batch Advanced, Batch Read Only, and Batch Write. For more details on roles and functions, refer to the following table:

V_ROLE_CODE	V_ROLE_NAME	V_ROLE_DESC
BATCH_ACSS	Batch Access	Batch Access
BATCH_ADVN	Batch Advanced	Batch Advanced
BATCH_READ	Batch Read Only	Batch Read Only
BATCH_WRIT	Batch Write	Batch Write

The operation section discusses the following sections:

- Batch Maintenance
- Batch Execution
- Batch Scheduler
- Batch Monitor
- Processing Report
- Batch Cancellation
- <u>View Log</u>

2.1 Batch Maintenance

Batch refers to a set of executable processes based on a specified rule. Batch Maintenance framework within the Infrastructure system facilitates you to create and maintain the Batch Definitions. You can process the Batch scheduled for execution from Batch Maintenance and also from other modules and applications such as Rules Run Framework and Enterprise Modeling respectively.

You should have Batch Write User Role mapped to your User Group to cancel a Batch. The *Batch Maintenance* window displays a list of Batches scheduled for maintenance with the other details such as Batch ID, Batch Description, and the editable state of the Batch.

Batch Maintenance							0.0.10	0
			Patela Description				Search J F	leset
Batch ID Like OFSAAAI	INFO_		Like	2				
Module		~	Last Modification Date	Between		📫 Ar	nd	
→Batch Name	View 💇 Edit 💼 Delete							
□ Batch ID ▲		Batch Description			Batch Edit/	Non Edit		
OFSAAAIINFO_152394976	0113	TEST1232			NE			
☑ OFSAAAIINFO_BATCH1	☑ OFSAAAIINFO_BATCH1 BATCH1			E				
OFSAAAIINFO_BATCH2		BATCH2			E			
OFSAAAIINFO_OFFLINE_O	BJECT_MIGRATION	OFSAAAIINFO_OFFL	LINE_OBJECT_MIGR	ATION	NE			
Page 1 of 1 (1-4 of 4 item	ns) K < > X						Records Per Page	15
∼Task Details +Add	View 🖉 Edit 💼 Delete							
□ Task ID ▲	Task Description	Metadata Valu	Je Co	mponent ID		Precedence		
□ Task1	null	143386136770	04 RU	LE_EXECUTIO	N			
Page 1 of 1 (1-1 of 1 item	ıs) К < > Ж						Records Per Page	15

In the Batch Maintenance window, you can do the following:

- Create Batch Definitions and assign task details to a Batch. You can also set the task precedence, specify component, and define the dynamic parameters based on the component.
- View the Batch Definition details.
- Change the Batch Definition Status as Non Editable (NE).
- Delete Batch Definition details.

You can also search for a specific Batch based on the Batch ID, Batch Description, Module, or Last Modified Date.

You can transfer batch ownership from one user to another user. For details, see Transferring Batch Ownership section in the <u>OFSAAI Administration Guide</u>.

2.1.1 Adding Batch Definition

You can either define an empty Batch or duplicate an existing Batch and specify the task details. To add Batch definition in the *Batch Maintenance* window:

1. Click + Add button from the Batch Name tool bar. The Add Batch Definition window is displayed.

Batch Maintenance			0
			Save
∼Batch Maintenance			
Batch Name	BATCH1	Batch Description	
Duplicate Batch		Batch ID	\checkmark
Sequential Batch			

2. Enter the Batch details as tabulated.

Field	Description
	The Batch Name is auto generated by the system. You can edit to specify a Batch name based on the following conditions:
	The Batch Name should be unique across the Information Domain.
Batch Name	The Batch Name must be alphanumeric and should not start with a number.
	The Batch Name should not exceed 41 characters in length.
	The Batch Name should not contain any special characters except "_".
	Enter a description for the Batch based on the Batch Name.
Batch Description	Batch description should be alphanumeric. The allowed special characters are "_", "-", ":", ".", and " <blank space="">".</blank>
Duplicate Batch	(Optional) Select the checkbox to create a new Batch by duplicating the existing Batch details.
	On selection, the Batch ID field is enabled.
Batch ID (If duplicate Batch is selected)	It is mandatory to specify the Batch ID if Duplicate Batch option is selected.
Butternis selectedy	Select the required Batch ID from the list.
Sequential Batch	Select the checkbox if the Batch has to be created sequentially based on the task specified. For example, if there are 3 tasks defined in a Batch, task 3 should have precedence as task 2, and task 2 should have precedence as task 1.

3. Click **Save** to save the Batch definition details. The new Batch definition details are displayed in the Batch Name section of *Batch Maintenance* window with the specified Batch ID.

In the Batch Name tool bar of *Batch Maintenance* window, you can select the Batch ID and do the following:

- Click View button and view the Batch Definition details.
- Click Edit button to change the status of the Batch as Non Editable (NE).

NOTE Non Editable batch status cannot be reverted to Editable status later.

By default the new Batch created will have the status set as **Editable (E)**.

Click Delete button to delete the Batch definition details.

2.1.2 Specify Task Details

The Tasks Details section of *Batch Maintenance* window displays the list of tasks associated with a specific Batch definition. In the Task Details section you can do the following:

- Update the pre-defined task and assign new tasks.
- Specify the Task Precedence.
- Update the pre-defined Component or specify new component.
- Specify the Dynamic Parameters based on the component selected.

2.1.2.1 Adding Task Details

To specify the task details in the *Batch Maintenance* window:

1. Click **+** Add from the Task Details tool bar. The Add Task Definition window is displayed.

Task Definition				0
			Sar	ve Reset Close
∼Task Definition				
Task ID	Task2	Description		
Components	EXTRACT DATA			
✓Dynamic Parameters	List			
Property		Value		
Datastore Type		EDW	~	
Datastore Name		OFSAAAIINFO	~	
IP Address		whf00ayr	~	
Source Name			\checkmark	
Extract Name			~	
Default Value				

2. Enter the task details as tabulated.

Field	Description
Task ID	The task ID is auto generated by the system depending on the precedence level and is not editable.

Field	Description
Description	Enter the task description. No special characters are allowed in Task Description. The words like Select From or Delete From (identified as potential SQL injection vulnerable strings) should not be entered in the Description.
Components	Components refers to individual functional units that are put together to form a process. A component triggers its own set of processes in the back-end to achieve the final output. For more information on each component Property and Value Description, see <u>Task Component Parameters</u> . Select the required component from the drop-down list.
Dynamic Parameters List	On selecting a task component, a list of dynamic parameters is displayed. It is mandatory to select the parameter values based on the component. Specify the value for each parameter by selecting from the drop-down list. Click the following links to view the component parameter details. • AGGREGATE DATA • CREATE CUBE • EXTRACT DATA • LOAD DATA • MODEL • PROCESS_EXECUTION • RULE EXECUTION • RULE EXECUTION • RUN DO RULE • RUN EXECUTABLE • SQL RULE • TRANSFORM DATA • VARIABLE SHOCK • WORKELOW EXECUTION
Datastore Type	Refers to the type of data store such as Enterprise Data Warehouse (EDW) which refers to the Multi-dimensional Database/Cubes.
Datastore Name	Refers to the name of the Information Domain. By default the Information Domain to which the selected Application is mapped, is selected. The unique combination of the Datastore Name and the Datastore Type determine the physical machine on which the task will be executed. It is assumed that the user gives the correct information else task invocations may fail at runtime.
Primary IP For Runtime Processes	Refers to the IP Address of the primary machine for runtime processes. Select the IP address of the machine on which you want to execute the task, from the drop-down list.

3. Click **Save** to save the task definition details. The new task details are displayed in the Task Details of the *Batch Maintenance* window with the Task ID.

In the Task Details tool bar of *Batch Maintenance* window you can select the Task ID and do the following:

- Click **+ Add** button to add another Task.
- Click View button and view the selected Task details.
- Click C Edit to modify the selected Task details.
- Click Delete button to delete the selected Task details.

2.1.2.2 Defining Task Precedence

Task Precedence indicates the execution-flow of a Batch. Task Precedence value in the Task Details facilitates you to determine the order in which the specific Tasks of a Batch are executed.

For example, consider a Batch consisting of 4 Tasks. First 3 Tasks does not have a precedence defined and hence will be executed simultaneously during the Batch execution. But, Task 4 has precedence value as task 1 which indicates that, Task 4 is executed only after Task 1 has been successfully executed.

You can set Task precedence between Tasks, or schedule a Task to run after another Task, or even define to run a Task after a set of other tasks. However, multiple tasks can be executed simultaneously and cyclical execution of tasks is not permitted. If the precedence for a Task is not set, the Task it is executed immediately on Batch execution.

To define the task precedence in the *Batch Maintenance* window:

1. Click ^{ICB} button under the Precedence column of the task for which you want to add precedence task. The Task Precedence Mapping browser is displayed.

NOTE Task Precedence option is disabled if a batch has only one task associated.

- Select the required Task from the Task List and click . You can press Ctrl key for multiple selections.
- To select all the listed Tasks, click ²⁰.
- To remove a Task, select the task from Select Tasks pane and click
- To remove all the selected Tasks, click
- 2. Click **OK** and update Task Precedence definition.

2.2 Batch Execution

Batch Execution refers to the process of initiating a Batch for current processing. When a Batch is submitted for execution, a series of commands are sent to the database with respect to the defined

component parameters. This in turn returns an array of update counts (required value definitions) when the commands are executed successfully.

Mode Run Restart Rerun					
√ Search			C	Search 🖶 Re	
Batch ID Like OFSAAAIINFO_	Batch Descripti	on ke			
Module	Last Modificati Da	on Between	m And		
✓Batch Details					
Batch ID 🔺	Batch Descri	ption			
OFSAAAIINFO_1504592297638	AutoRun_15	04592271236_Descripti	on		
OFSAAAIINFO_1504594057119	AutoRun_15	AutoRun_1504592271236_Description			
OFSAAAIINFO_1504594918810	AutoRun_15	AutoRun_1504592271236_Description			
OFSAAAIINFO_1504595042392	AutoRun_15	04592271236_Description	on		
OFSAAAIINFO_BATCH1	OFSAAAIINF	O_ICC_T2T_CHANGE			
OFSAAAIINFO_BATCH_PMF	desc				
OFSAAAIINFO_DMT_T2T_004	DMT_T2T_00	4			
Page 1 of 2 (1-7 of 9 items) K < > ≫ Task Details			Reco	rds Per Page	
ask ID Task Description Metadata Value	Component ID	Precedence		Task Statu	
lo data found					
Page 0 of 0 (0-0 of 0 items) K < > ≫			Reco	rds Per Page	
Date					

You should have Batch Advanced User Role mapped to your User Group to execute a Batch.

The *Batch Execution* window displays the list of only those Batches which have at least one task associated, with the other details such as Batch ID and Batch Description. When you select a Batch ID in the list, the Task Details sections displays all the defined Tasks associated with the Batch.

The Batch Details section in the *Batch Execution* window lists the Batches depending on the Batch Mode selected.

- The **Run** mode displays the Batch definitions which are newly defined and which have been scheduled for execution.
- The **Restart** Mode displays the Batch definitions which are not executed successfully or either has been interrupted during the previous Batch execution.
- The **Rerun** mode displays the Batch definitions which have been successfully executed, failed, cancelled, or even interrupted during the previous Batch execution.

You can search for a specific Batch based on the Batch ID, Batch Description, Module, or Last Modified Date. The pagination option helps you to view the list of existing Batches within the system.

2.2.1 Executing Batch

You can Run/Execute the Batches which are scheduled for execution in the *Batch Execution* window. You can also modify the pre-defined Batch schedule or define a new schedule using the Batch Scheduler. In the *Batch Execution* window you can execute a Batch in Run, Restart, or Rerun modes.

On completion of batch execution, if the batch fails, a notification mail is sent to all users mapped to the user group with the OPRMON role mapped to them.

2.2.1.1 Run/Execute Batch

You can Run/Execute Batch(s) which have been scheduled for execution in the *Batch Execution* window. You can also Run/Execute a Batch using the External Scheduler (ES) which has the "External Scheduler Interface Component" (ESIC) integrated with Infrastructure system.

To execute a Batch in the *Batch Execution* window:

1. Select **Run** as **Mode** in the Batch Mode section. The list of Batches scheduled for execution is displayed in the Batch Details section.

∨Batch Det	ails 🛛 🏼 Schedule B	atch				
Batch ID 🔺				Batch Description		
OFSAAAII	NFO_150459229763	8		AutoRun_150459	2271236_Description	
OFSAAAII	NFO_150459405711	9		AutoRun_150459	2271236_Description	
OFSAAAII	NFO_150459491881	0		AutoRun_150459	2271236_Description	
✓ OFSAAAII	NFO_150459504239	2		AutoRun_150459	2271236_Description	
OFSAAAII	NFO_BATCH1			OFSAAAIINFO_IC	C_T2T_CHANGE	
OFSAAAII	NFO_BATCH_PMF			desc		
OFSAAAII	NFO_DMT_T2T_004			DMT_T2T_004		
√Task Details Task ID ▲	Exclude/Includ	e 🖾 Hold/Release Metadata Value	Con	nponent ID	Precedence	Task Status
Task1	DMT_T2T_001:NA	DMT_T2T_001	LOA	D DATA		N
Page 1 of 1	Page 1 of 1 (1-1 of 1 items) K <>>> X Records Per Page 15					
Date Date						
			Execute	Batch		

- **2.** Select the checkbox adjacent to the Batch ID which has to be executed. The specified task(s) defined to the selected Batch are displayed in the Task Details section.
 - In the Batch Details tool bar, click Schedule Batch button to define new or modify the pre-defined Batch Schedule. For more information, see <u>Batch Scheduler</u>.

∼Task Details 🖾 Exclude/Include Hold/Release							
Task ID 🔺	Task ID ▲ Task Description Metadata Value Component ID Precedence Task Status						
Task1	DMT_T2T_001:NA	DMT_T2T_001	LOAD DATA		N		
Page 1 of 1 (1-1 of 1 items) K<<>>> X					15		

In the Task Details tool bar, click Exclude/Include button to Exclude/Include a task, or click Hold/Release button to hold or release a task before executing the Batch. For more information, see Modify Task Definitions of a Batch.

3. Specify the **Information Date** (mandatory) by clicking button. The specified date is recorded for reference.

NOTE You can also modify the required task parameters of the selected Batch and include the changes during the Batch rerun. For more information, see <u>Specify Task Details</u>.

4. Click **Execute Batch** button and select **OK** in the information dialog to confirm Batch Execution.

An information dialog is displayed indicating that Batch Execution is triggered successfully.

2.2.1.2 Restart Batch

You can restart a Batch which has not been executed successfully or which has been explicitly interrupted, or cancelled, or put on hold during the execution process. These Batches are categorized separately and listed in the **Restart** mode within the *Batch Execution* window. By restarting a Batch, you can continue Batch execution directly from the point of interruption or failure and complete executing the remaining tasks.

To Restart a Batch in the Batch Execution window:

1. Select **Restart** as **Mode** in the Batch Mode section. The list of interrupted/failed Batches during execution is displayed in the Batch Details section.

Batch II	۵ (Batch Description			
OFSAA	AIINFO_150459491881	0		AutoRun_15045922	71236_Description		
OFSAAA	AIINFO_DMT_T2T_004			DMT_T2T_004			
Page 1	of 1 (1-2 of 2 items)	к < > א				Records Per Page	e 7
⊺ ∼Task Deta	information Date 201	170907 le 📴 Hold/Release	~	Batch	Run ID OFSAAAIINFO_1504	594918810_20170 🗸	
Task ID	Task Description	Metadata Value	Com	ponent ID	Precedence	Task S	tatus
Task1	DMT_T2T_001:NA	DMT_T2T_001	LOA	D DATA		F	
Page 1 o	f 1 (1-1 of 1 items) K	к <>				Records Per Page	e 15

- Select the checkbox adjacent to the Batch ID which has to be executed. The specified Task(s) defined to the selected Batch are displayed in the Task Details section.
 - In the Batch Details tool bar, click ⁴¹¹ Schedule Batch button to define new or modify the pre-defined Batch Schedule. For more information, see <u>Batch Scheduler</u>.
- 3. Select the Information Date from the drop-down list. This is a mandatory field.
- 4. Select the **Batch Run ID** (mandatory) from the drop-down list. This is a mandatory field.

In the Task Details tool bar, click Exclude/Include button to exclude or include a task, or click Additional Hold/Release button to hold or release a task before executing the Batch. For more information, see Modify Task Definitions of a Batch.

NOTE The Tasks in a Batch which have failed during the execution process are indicated in Red in the Task Details section. You can modify the required task parameters in <u>Specify Task Details</u> window and include the changes during the Batch restart. Else, the tasks fail again during the Batch **Restart**.

5. Click **Execute Batch** button and select **OK** in the information dialog to confirm Batch Execution. An information dialog is displayed indicating that Batch Execution is triggered successfully.

2.2.1.3 Rerun Batch

You can rerun a Batch which has previously been executed. Rerun Batch facilitates you to run the Batch irrespective of the previous execution state. A new Batch Run ID is generated during the Rerun process and the Batch is executed as similar to the new Batch Run.

To rerun a Batch in the *Batch Execution* window:

- 1. Select **Rerun** in the Batch Mode section. The list of executed Batches is displayed in the Batch Details section.
- **2.** Select the checkbox adjacent to the Batch ID which has to be executed. The specified Task(s) defined to the selected Batch are displayed in the Task Details section.
 - In the Batch Details tool bar, click Schedule Batch button to define new or modify the pre-defined Batch Schedule. For more information, see <u>Batch Scheduler</u>.
- 3. Select the Information Date from the drop-down list. This is a mandatory field.
- 4. Select the **Batch Run ID** from the drop-down list. This is a mandatory field.
 - In the Task Details tool bar, click Exclude/Include button to exclude or include button a task, or click B Hold/Release button to hold or release a task before executing the Batch. For more information, see Modify Task Definitions of a Batch.

NOTE You can also modify the required task parameters of the selected Batch and include the changes during the Batch rerun. For more information, see <u>Specify Task Details</u>.

5. Click **Execute Batch** button and select **OK** in the information dialog to confirm Batch Execution. An information dialog is displayed indicating that Batch Execution is triggered successfully.

2.2.2 Modifying Task Definitions of a Batch

You can modify the task definition state in the *Batch Execution* window to exclude or hold the defined task in a Batch from execution. The excluded tasks are therefore assumed to have completed execution and get excluded during the Batch Run.

While executing a Batch in the *Batch Execution* window, you can:

- Exclude a task or Include the excluded task.
- Hold a task and Release the held task.

When you modify the task definition(s) in the Task Details section:

- The Excluded task(s) are displayed in "Grey" with the Task Status set to "K".
- The task(s) on Hold are displayed in "Red" with the Task Status set to "H".

NOTE In the combination, you are not permitted to Hold/Release an Excluded task or Exclude/Include a task which is on Hold.

2.2.2.1 Exclude Task Definitions

You can Exclude Task(s) definition or Include the Excluded task(s) during Batch Execution. The excluded task components are therefore executed in the normal process assuming that the Excluded Task(s) have completed execution.

To exclude Task(s) in the in the *Batch Execution* window:

- 1. Click Exclude/Include button in the Task Details tool bar.
- 2. In the Task Mapping window, do one of the following:
 - To exclude a task, select the required task from the Available Tasks list and click . You can
 press Ctrl key for multiple selections.
 - To exclude all tasks in the Available Tasks list, click .
- 3. Click **OK** and return to the *Batch Execution* window.

The Excluded Task(s) in the task details section are marked in "**Grey**" with the Task Status set to "**K**".

2.2.2.2 Include Excluded Task Definitions

To include an Excluded Task(s) in the in the *Batch Execution* window:

- 1. Click 🔤 Exclude/Include button in the Task Details tool bar.
- 2. In the *Task Mapping* window, do one of the following:
 - To include an excluded task, select the required task from the Set Tasks list and click
 You can press Ctrl key for multiple selections.
 - To exclude all tasks in the Set Tasks list, click

3. Click **OK** and return to the *Batch Execution* window.

2.2.2.3 Hold Task Definitions

You can Hold task(s) definition or Release the held task(s) during Batch Execution. In the Batch Run, the task(s) which are on Hold along with the defined components are skipped during execution. However, at least one task should be available in a Batch without being held/excluded for Batch execution.

To hold Task(s) in the in the *Batch Execution* window:

- 1. Click Details tool bar.
- 2. In the *Task Mapping* window, do one of the following:
 - To Hold a task, select the required task from the Available Tasks list and click . You can press **Ctrl** key for multiple selections.
 - To Hold all tasks in the Available Tasks list, click .
- 3. Click **OK** and return to the *Batch Execution* window.

The Task(s) on Hold in the task details section are marked in "**Red**" with the Task Status set to "**H**".

2.2.2.4 Release Held Task Definitions

To Release Task(s) on Hold in the in the *Batch Execution* window:

- 1. Click 🕮 Hold/Release button in the Task Details tool bar.
- 2. In the *Task Mapping* window, do one of the following:
 - To release a held task, select the required task from the Set Tasks list and click
 You can press Ctrl key for multiple selections.
 - To release all tasks in the Set Tasks list, click
- 3. Click **OK** and return to the *Batch Execution* window.

2.3 Batch Scheduler

Batch Scheduler in the Infrastructure system facilitates you to schedule a Batch for later processing. You can define a new Batch schedule or update a previously defined Batch schedule for processing.

You should have Batch Advanced User Role mapped to your User Group to schedule a Batch. The *Batch Scheduler* window displays the list of Batches scheduled for execution with the other details such as Batch ID and Batch Description. When you select a Batch in the list, the Batch Scheduler options are displayed.

You can click **Refresh** button in the Server Time section to view the Current Sever Time while defining a Batch schedule. You can search for a specific Batch based on the Batch ID Like, Batch Description Like, Module, or Last Modified Date.

2.3.1 Creating Batch Schedule

You can define a new schedule for processing Batch by specifying the required day(s) and time intervals. The Batch is executed when the server time synchronizes with the scheduled time.

NOTE Any change made to the Server Time to accommodate for Daylight Savings Time will not be reflected automatically in the Batch Scheduler. All OFSAA services have to be restarted after the time has been changed in the server to reflect the change in time in the Batch Scheduler.

Batch Scheduler								0
							Q	Search 🖱 Reset
Batch ID Like	OFSAAAIINFO_		Batch D	escription Like				
Module		~	Last Mod	dification Date	Between	Ê	And	#
~Server Time								🖱 Refresh
	Current Server Time:	17/04/2018	3 14:38:08					
~Batch Name								
Batch ID 🔺				Batch Descripti	ion			
✓ OFSAAAIINFO_1523	949760113			TEST1232				
OFSAAAIINFO_BATC	CH1			BATCH1				
OFSAAAIINFO_BATC	CH2			BATCH2				
OFSAAAIINFO_OFFL	INE_OBJECT_MIGRATION			OFSAAAIINFO	OFFLINE_OB	JECT_MIGRATION		
OFSAAAIINFO_PMF_	_T2T			pmf t2t				
Page 1 of 1 (1-5 of 5 i VBatch Scheduler	tems) K < > >						Record	ds Per Page 15
Doma	in: OFSAAAIINFO				Batch:	OFSAAAIINFO_152	23949760113	
Schedu	■ Ile ● New Schedule ○ Existin	g Schedule						
✓New Schedule								
Schedule Nan	ne							
● Once ○ Daily ○ Weel	kly \bigcirc Monthly \bigcirc Adhoc							
∽Schedule Time								
Dates	Start Date	End Date						
Run Time	00 Hours		00 Minut	es	Lag	9	0 Days	
			Save	Cancel				

To create a schedule for Batch processing in the *Batch Scheduler* window:

1. Select the checkbox adjacent to the Batch ID whose details are to be updated.

The options to schedule a new Batch are displayed. By default, the Schedule type is selected as **New Schedule** in the Batch Scheduler section.

- 2. In the New Schedule section, enter the **Schedule Name** to identify the task.
- 3. Select the **Schedule** option as one of the following, and specify the related details as tabulated:

Schedule Option	Schedule Task Details
Once (default option)	Specify the Date on which the Batch has to be scheduled for processing using the Calendar. Enter the Run Time during which the Batch Scheduling should be run, in hours (hh) and minutes (mm) format. Enter the number of Lag days which signifies the misdate when the Batch is currently run. For the schedule type "Once" lag days is optional
Daily	Specify the Dates , Start and End dates during which the Batch has to be scheduled for processing using the Calendar. Enter the Run Time during which the Batch Scheduling should be run, in hours (hh) and minutes (mm) format. Enter the number of Lag days which signifies the misdate when the Batch is currently run. Enter the frequency of Batch Run in the Every field as per the defined schedule type. For example, Every 2 day(s)
Weekly	 Specify the Dates, Start and End dates during which the Batch has to be scheduled for processing using the Calendar. Enter the Run Time during which the Batch Scheduling should be run, in hours (hh) and minutes (mm) format. Enter the number of Lag days which signifies the misdate when the Batch is currently run. Enter the frequency of Batch Run in the Every field as per the defined schedule type. For example, Every 2 week(s). Select the checkbox adjacent to the Days of the Week to specify the days on which you need to run the Batch schedule.
Monthly	 Specify the Dates, Start and End dates during which the Batch has to be scheduled for processing using the Calendar. Enter the Run Time during which the Batch Scheduling should be run, in hours (hh) and minutes (mm) format. Enter the number of Lag days which signifies the misdate when the Batch is currently run. Select Interval option to enter the frequency of Batch Run in the Every field or select Random to select the checkbox adjacent to Months on which you need to run the Batch schedule. Do one of the following: Select Dates (default) option and enter the Dates of the Month on which you need to run the Batch schedule. Also select the checkbox Include Month's Last Date to do so. -Or- Select Occurrence and specify the day of the week days and select the specific weekday by clicking on the drop-down list.

Schedule Option	Schedule Task Details
	Specify the Information Date of Batch schedule using the Calendar. Specify the Run Date of Batch schedule using the Calendar.
Adhoc	Enter the Run Time of Batch schedule in hours (hh) and minutes (mm) format.
	You can also click 🛨 to add another row or click $^{\oplus}$ to delete the row in the Schedule Time tool bar.

4. Click **Save** to save the new Batch schedule details.

2.3.2 Updating Existing Batch Schedule

You can modify the required details and later schedule the previously defined Batch for processing.

To update existing Batch schedule in the *Batch Scheduler* window:

- 1. Select the checkbox adjacent to the Batch ID whose details are to be updated. The various Batch schedule options are displayed.
- **2.** In the Batch Scheduler section, select **Existing Schedule** as the **Schedule** type. The window is refreshed and displays the Existing Schedule options.
- 3. Select the Schedule name whose details you want to modify from the drop-down list.
- **4.** Click Sutton in the Existing Schedule toolbar. The details of the scheduled Batch are displayed in the Batch Scheduler pane.
- Modify the required details. You can modify the Start and End dates, Run Time, Lag days, and other details depending on the Schedule Type selected. For more information, see <u>Creating</u> <u>Batch Schedule</u>.
- 6. Click **Save** to save the modified details of an existing Batch schedule.

You can also do the following in the Existing Schedule section of the *Batch Scheduler* window:

- Click button to view details of the selected Batch schedule. = and = buttons are displayed.
- Click 🗮 button to view **Task Logs**.
- Click ^{III} button to view all the log details for the selected Batch.
- Click i button to delete the selected Batch schedule.
- Click ^D button to reset the Batch scheduler details.

2.4 Batch Monitor

Batch Monitor in the Infrastructure system facilitates you to view the status of executed Batch definitions along with the tasks details. You can track the issues if any, on regular intervals and ensure smoother Batch execution. An event log provides you the real time status of the executed Batches.

You should have Batch Read Only User Role mapped to your User Group to monitor a Batch. The *Batch Monitor* window displays a list of Batches with the other details such as Batch ID and Batch Description.

You can search for a specific Batch based on Date range, Module, Status, and Batch Description. The Batches listed in the Batch Details section can be sorted based on the current state as Successful, Failed, Held, or New.

2.4.1.1.1 Crash Handling of Backend Servers

There are 3 different servers to execute a specific executable such as ICC, Router and Activation Manager (AM). Request from ICC goes to Router and get forwarded to Activation Manager (AM). Then AM executes the task and sends result back to Router which further gets forwarded to ICC.

If any of the server crashes while executing the batch and when recovery happens, the status is sent back to ICC server.

- **Router goes down**: When router goes down, the Task Status will become indeterminate and the Batch Status will become **Failed**.
- **AM goes down:** If AM goes down while executing a task, as soon as AM comes up, status of all tasks in the Batch will change to Indeterminate and the Batch Status will become **Failed**.
- **ICC goes down**: When ICC goes down, the status of the task will become interrupted and the Batch Status will become **Failed**.
 - ICC will mark all the task status as interrupted even though some of the tasks might have executed successfully.
 - You have to manually validate the data before you re-trigger the batch again.

2.4.2 Monitoring Batch

The Batch Details section in the *Batch Monitor* window lists all the Batches which are schedule or executed within the Infrastructure system.

				S	
				Q Search "D F	teset
Batch ID Like OFSA	AAIINFO_	Batch Description Like			
Module	~	Status		~	
Start Date	m	End Date	66		
vBatch Details					
Batch ID 🔺		Batch Description			
OFSAAAIINFO_BATCH1		BATCH1			
OFSAAAIINFO_BATCH2		BATCH2			
OFSAAAIINFO_OFFLINE_OBJECT_	MIGRATION	OFSAAAIINFO_OFFLINE_OBJECT_MIG	RATION		
OFSAAAIINFO_PMF_T2T		pmf t2t			
Page 1 of 1 (1-4 of 4 items) K <	к			Records Per Page	15
🗸 Batch Run Details 🛛 📓 Start Mon	itoring 🖉 Stop Monitoring 🖱 Reset				
Information Date	~	Monitor Refresh Rate (seconds) 5			
Batch Run ID		×			

You can view and monitor the required Batch definitions and the corresponding task details. You can also export the values in Microsoft Excel format for reference.

To monitor a Batch in the *Batch Monitor* window:

1. Select the checkbox adjacent to the Batch ID whose details are to be monitored.

You can also search for a specific Batch by using the Search option and filter the search results by selecting the required Status as Successful, Failed, Held, or Not Started in the drop-down list.

2. Enter the Batch Run Details as tabulated.

Field	Description
Information Date	Select the information date from the drop-down list which consists of recently executed Batch Information dates.
Monitor Refresh Rate	Specify the refresh rate at which the latest Batch status details have to be fetched in seconds. You can enter a value between 5 to 999 seconds.
Batch Run ID	Select the Batch Run ID from the drop-down list which consists of Batch ID's form which the Batch has been executed.

3. Click 🎽 Start Monitoring button in the Batch Run Details tool bar.

The state of the selected Batch is monitored and status is displayed in the following order:

~Batch Status								
Batch Run ID			Batch Status					
OFSAAAIINFO	_BATCH1_20180417_1		Successful					
√Task Details								
Task ID 🔺	Task Description	Metadata Value	C	omponent ID	Task St	atus	Task Log	
Task1	null	1433861367704	RI	JLE_EXECUTION	[13314] Success	i sful	View Log	
Page 1 of 1 (1-	1 of 1 items) K < > 거 Export					Recon	ds Per Page	15
Message ID ▲	Description			Severit	y	Time		
1	[1707] Batch started by AAAIUSER			INFOR	M	2018-04	-17 05:29:53	
7	[1708] Batch Complete			INFOR	м	2018-04	-17 05:33:50	
Page 1 of 1 (1-	2 of 2 items) K < > >					Recon	ds Per Page	15

- The **Batch Status** section displays the Batch Run ID with the Batch Status as Successful, Failed, Held, or Not Started.
 - Successful- Batch execution is successful.
 - Failed- Batch execution failed. A notification mail is sent to all users mapped to the user groups with the OPRMON role mapped to them. The mail will show the exact task status as Not Run, Excluded, Held, Interrupted, Indeterminate and Cancelled.
 - Held- Batch execution is put on hold.
 - Not Started- Batch execution has not started.
- The Task Details section displays the executed task details such as Task ID, Task
 Description, Metadata Value, Component ID, Task Status and Task Log. Click View Log link
 to view the View Logger window. You can select the checkbox adjacent to the Task ID to
 view the task component execution details in Event Log section.

- **NOTE** If the component used in the task is Data Transformation, the status will be **Successful** or **Failed** based on the invocation of function/procedure is successful or failure. The errors produced by PL/SQL will not have impact on task status unless it throws an oracle exception.
- The **Event Log** section displays the list of errors and events of the Batch being executed. The events are displayed in the ascending order with the latest event being displayed at the top. The Event log consists of:
 - Message ID, which is auto generated.
 - Description, which has the error details.
 - Severity, which can be Fatal, Inform, or Successful.
 - Time, which indicates the time of the event.
- 4. In the Batch Run Details tool bar, you can do the following:
 - Click a button to stop the Batch monitoring process.
 - Click ^D button to reset Batch Run Details.
- 5. In the Event Log tool bar, you can click **Export** button to export the event log details to Microsoft Excel file for reference.

2.5 Processing Report

Batch Processing Report in the Infrastructure system facilitates you to view the execution status of each task component defined in a Batch. The *Batch Processing Report* window displays the Batch execution details such as Component, Task, Parameters, and Status. By default, the details of the Latest Batch Run are displayed.

You should have Batch Read Only User Role mapped to your User Group to cancel a Batch.

Batch Processing Repo	ort		Ø
Search			
Information Da	ate: 20180417	▼ Batch Sta	tus: ALL
Batch Processing Report as o	of Tuesday, April 17,	018 11:31:19 AM GMT for Information domain: OFSAAAIINFO	_
~ Execution Date : 2018-	04-17 07:13:38	Batch Run ID : OFSAAAIINFO OFFLINE OBJECT MIGRATION	20180417 8
Component	Task	Parameters	Status
RUN EXECUTABLE	TASK1	Batch Parameter : Y	S
		Datastore Name : OFSAAAIINFO	
		Datastore Type : EDW	
		Executable : ObjectMigration_ULsh	
		IP Address : whf00alh	
		Optional Parameters : NULL	
		Wait : Y	
 Execution Date : 2018- Execution Date : 2018- 	04-17 06:38:11 04-17 05:47:44	Batch Run ID : OFSAAAIINFO_OFFLINE_OBJECT_MIGRATION Batch Run ID : OFSAAAIINFO_T2T_TEST_20180417_2	20180417_7
> Execution Date : 2018-	04-17 05:45:01	Batch Run ID : OFSAAAIINFO_1523958300303_20180417_1	
> Execution Date : 2018-	04-17 05:36:29	Batch Run ID : OFSAAAIINFO_T2T_TEST_20180417_1	
> Execution Date : 2018-	04-17 04:41:42	Batch Run ID : OFSAAAIINFO_PMF_T2T_20180417_1	
> Execution Date : 2018-	04-17 04:27:42	Batch Run ID : OFSAAAIINFO_BATCH2_20180417_2	

To view the status of the required Batch, in the Batch Processing Report window:

- 1. Select the **Information Date** from the drop-down list. The list consists of executed Batch Information dates in the descending order with the latest Batch Run details being displayed at the top.
- 2. Select the required **Batch Status** from the drop-down list. The available batch statuses are:
 - ALL
 - Not Started
 - Ongoing
 - Complete
 - Failed
 - Cancelled

The window is refreshed and displays the status of each executed component of the selected Batch with the Task ID, defined Parameters, and the Status.

See the following table to know the available Status Codes of the task and their description.

Status Code	Description
Ν	Not Run - Task has not been executed.
F	Failed- Task execution failed due to some error.
S	Success- Task has been successfully executed.
0	Ongoing - Task is being executed.

Status Code	Description
С	Completed – Task execution completed.
R	Restart - Task restarted.
н	Held- Task is on Hold.
К	Excluded - Task has been excluded.
1	Interrupted - Task has been interrupted since ICC server was down.
Q	Task Cancelled - Task has been manually cancelled during execution.
D	Indeterminate – When Router or AM server goes down and is up again during task execution, the task status becomes Indeterminate.

2.6 Execution View Log

The Execution View Log feature allows to view, on the *View Logger* window, the log files generated in a batch execution.

- 1. Login to OFSAA.
- 2. Click i from the header to display the applications in a Tiles menu.
- **3.** Select the **Financial Services Enterprise Modeling** application from the Tiles menu. The Navigation list to the left is displayed.
- 4. Click **Common Tasks** to expand the list.
- 5. Click **Operations** to expand the list further.
- 6. Click **Execution View** Log to display the *View Logger* window.

.∡ View Logger									
* MIS Date	4/23/18	=	* Infodom	OFSAAAJINFO		Wildcard	Search Code.	🕑 Reset	Q View Log
* Component	RULE_EXECUTION	٠	Log File	PR2_OFSAAAJINFO_1397553081636	¥				
∡ Log File Contents									
									Download
[23-04-18 09:35:33.965 G [23-04-18 09:35:33.968 G [23-04-18 09:35:33.968 G [23-04-18 09:35:33.968 G [23-04-18 09:35:33.968 G [23-04-18 09:35:33.969 G	MT AM] [FATAL] [BACKEND] MT AM] [FATAL] [BACKEND]	[RuleExecution] [ma [RuleExecution] [ma [RuleExecution] [ma [RuleExecution] [ma [RuleExecution] [ma [RuleExecution] [ma	in] Ftpshare path - in]Generation o in]Request I in]Request I in] Infodom OFSAA	/scratch/ofsaobie/ff f Rule Execution Log started on :Mon Ap Parameters AlINFO	tpshare/ pr 23 09:35	33 GMT 2018			Í

- 7. Enter the details on the window as instructed in the following:
 - **a. MIS Date** (mandatory): Click and select the Management Information System date for the log from the Date Editor.
 - **b.** Infodom (mandatory): Select the required Infodom from the drop-down list.
 - c. Wildcard (optional): Enter any wildcard value to filter the search.

- d. Component (mandatory): Select the required component from the drop-down list.
- e. Log File: Select the required log file from the drop-down list.
- 8. Click **View Log** to run the log details in the Log File Contents pane. Click **Download** and download the log file if required. Click **Reset** to remove the selected data on the window.

2.7 Batch Cancellation

Batch Cancellation in the Infrastructure system facilitates you to cancel or abort a Batch, or a specific Task, which is either scheduled or is in the process of execution.

In the Batch Cancellation,

- When a Batch is **aborted**, the Task which is in the process of execution will be interrupted and a scheduled task is cancelled from execution.
- When a Batch is **cancelled**, the Task which is in the process of execution will be executed completely and a scheduled task is cancelled from execution.
- When a Task is **cancelled**, all the dependent Tasks are also cancelled automatically.

You should have Batch Advanced User Role mapped to your User Group to cancel a Batch. The *Batch Cancellation* window displays a list of scheduled and current processing Batches with the other details such as Batch Run ID, Batch ID, Batch Description, Start Time, and Elapsed Time.

~Refresh Interval				"D Refresh
Refresh Rate (seconds)	10			
Batch Details Ell Fetch Ta	isk Details 🕮 Cancel Batch 🖽 Abort B	atch		
- Datch Destans				
] Batch Run ID	Batch ID	Batch Description	Start Time	Elapsed Time
Batch Run ID Io Data Found	Batch ID	Batch Description	Start Time	Elapsed Time
Batch Run ID Io Data Found Task Details	Batch ID	Batch Description	Start Time	Elapsed Time 🖌
Batch Run ID No Data Found Task Details Cancel Ta Legend	Batch ID	Batch Description	Start Time	Elapsed Time

In the Batch Cancellation window, you can do the following before cancelling a Batch/Task:

• In the Refresh Interval section, you can define the required **Refresh Rate** in seconds to fetch the current status of Batches being executed.

Click **Refresh** button to refresh the window and fetch the current status of Batches being executed.

• win the Legend section, you can refer to know the specific defined colors which are used to indicate a particular state of a Task during Batch execution.

Indicates - Not Started Indicates - On Going Indicates - Successful Indicates - Cancelled

2.7.1 Cancelling Batch

You can cancel a Batch or a specific Task within the Batch, when you want to postpone or reschedule the Batch for later execution. To cancel a Batch in the *Batch Cancellation* window:

- 1. Select the checkbox adjacent to the Batch Run ID which has to be cancelled.
- 2. Click Cancel Batch in the Batch Details tool bar. The selected Batch is cancelled from processing and the results are displayed in a confirmation dialog. Click **OK**.

The Tasks associated with the cancelled Batch are also cancelled excluding the ongoing Tasks. The cancelled Batch can be viewed in Restart and Rerun Batch list, within the *Batch Execution* window.

2.7.1.1 Cancel Task Details

To cancel the specific Task(s) in a Batch from processing:

- 1. Select the checkbox adjacent to the Batch Run ID.
- 2. Click E Fetch Task Details in the Batch Details tool bar. The defined Task(s) are displayed in the Task Details section.
- 3. Click Cancel Task in the Task Details tool bar.



The selected Task is cancelled from processing and the results are displayed in a confirmation dialog. Click **OK**.

2.7.2 Aborting Batch

You can abort a Batch when you want to terminate the Batch execution before completion. To abort a Batch in the *Batch Cancellation* window:

- 1. Select the checkbox adjacent to the Batch Run ID which has to be aborted.
- 2. Click **Abort Batch** button in the Batch Details tool bar. The selected Batch is aborted from processing and the results are displayed in a confirmation dialog. Click **OK**.

NOTE The **Batch** button is disabled if you are not mapped to OPRABORT function role.

The Tasks associated with the cancelled Batch are also cancelled including the ongoing Tasks. The cancelled Batch can be viewed in Restart and Rerun Batch list within the *Batch Execution* window.

2.8 View Log

View Log in the Infrastructure system facilitates you to view the execution status of each task component defined in a Batch.

NOTE Currently only limited number of Component Types are supported for viewing log. The supported component types can be viewed from the **Component Type** drop-down list in the Search grid.

You should have Batch Read Only User Role mapped to your User Group to cancel a Batch.

View Log View Log								② Q Search ℃ Reset
Component Type Model Upload		~		As	s of Date		0	
Folder		~	Task Name					
	User				Batc	h Run ID		
VTask ID Information (Click on the Task ID for More Information)			Refresh					
Component	Task Name		Task ID	Status	Start Date	End Date	Elapsed Time	User
Model Upload	MODEL_CM	ID_EXECUTE_200001	200001	Success	04/16/2018 19:03:34	04/16/2018 19:26:49	00:23:15	AAAIUSER
Model Upload	MODEL_CM	1D_EXECUTE_200000	200000	Success	04/16/2018 18:30:32	04/16/2018 18:43:33	00:13:01	AAAIUSER
Page 1 of 1 (1-2 of 2 items) K < > > X Records Per Page 2								

The *View Log* window displays Task ID's Information such as Component, Task Name, Task ID, Process Type, Status, Start Date, End Date, Elapsed Time, User, Batch Run ID, As of Date, Process Step, Records Processed, and Number of Errors for the respective Component Type selected.

2.8.1 Search and View Task ID Log

To search for a Task ID and view the log information:

1. Specify the details in any or all of the following parameters:

Field	Description
	Select the Component Type from the drop-down list. The available component types are listed and based on the component type selected, the Task ID details are displayed.
Component Type	For example, if the component type is selected as Object Validation, then the Task ID Information section displays the Date, Component, Batch Run ID, and Task ID.
	Note : No Log records are displayed for some component types such as SQL Rules. This is a limitation.
As Of Date	Select the date using the Calendar. This field is not applicable for some component types.

Field	Description
Folder	Select the folder from the drop-down list. This field is not applicable for some component types.
Task Name	 This field is not applicable for some component types. Click button, the <i>Task Name Browser</i> window is displayed. Search for the required Task by entering the keyword in the Search field and click . Select the required task from Available Task list and click . You can also click button to deselect a Task from the selected list. Click OK.
User	This field is not applicable for some component types. Enter the user details.
Batch Run ID	This field is not applicable for some component types. Enter the Batch Run ID which has a unique ID (timestamp) and a short description for identification.

2. Click **Search**. The Task ID Information section displays the search results based on the specified parameters.

You can click **Reset** to reset the search fields.

3. In the Task ID Information section, click the Task ID of the required component. The *View Log Details* window is displayed with additional information.

NOTE There are differences in time stamp between View Log and FSI_MESSAGE_LOG.

2.9 References

This section of the document consists of information related to intermediate actions that needs to be performed while completing a task. The procedures are common to all the sections and are referenced where ever required. You can refer to the following sections based on your need.

2.9.1 Task Component Parameters

Components are individual functional units that are put together to form a process. Task Component Parameters reflect the parameters that are being applied to the selected task. Each component triggers its own set of processes in the back-end to achieve the final output.

The parameters required for each of the component ID's are as tabulated.

NOTE

The FIRERUN Component in ICC is not supported.

2.9.1.1 Component: AGGREGATE DATA

Property	Description
Cube Parameter	Refers to the cube identifier as defined through the Business Metadata (Cube) menu option. Select the cube code from the drop-down list.
Operation	Select the operation to be performed from the drop-down list. The available options are ALL , GENDATAFILES , and GENPRNFILES .
Optional parameters	Refers to the additional parameter that has to be processed during runtime. You can specify the runsk value that should be processed as a runtime parameter during execution. By default, the value is set to "null".

2.9.1.2 Component: CREATE CUBE

Field	Description		
Cube Parameter	Refers to the cube identifier as defined through the Business Metadata (Cube) menu option. Select the cube code from the drop-down list.		
	Refers to the operation to be performed. Select the required Operation from the drop-down list. The options are:		
	ALL – This option will execute BUILDDB and DLRU.		
	 BUILDDB – This option should be used to build the outline in Essbase Cube. The outline is built based on the parentage file(s) contents. 		
	 TUNEDB – This option should be used to analyze data and optimize cube settings. For example, if you are trying to achieve the best block size, where 64K bytes is the ideal size. 		
Operation	 PROCESSDB – This option will execute BUILDDB and DLRU, and is same as All option. Selecting this option will internally assign as ALL. 		
	 DLRU – This option should be used to Load Data in the Essbase Cube and trigger a Rollup. 		
	 ROLLUP – ROLLUP refers to populating data in parent nodes based on calculations (E.g. Addition). This option should be used to trigger just the ROLLUP option where in the CALC scripts are executed. The same is applicable for DLRU option also. 		
	• VALIDATE – This option will validate the outline.		
	• DELDB – This option will delete the Essbase cube.		
	OPTSTORE – This option will create the Optimized outline for the cube.		

2.9.1.3 Component: EXTRACT DATA

Field	Description
Source Name	Select the source from which the extract you want to execute is derived, from the drop-down list.
	Sources defined from the <i>Source Designer</i> window of Data Management Tools are displayed in the drop-down list.
Extract Name	Select the required extract name from the drop-down list. The list displays the Data Mapping definitions (T2F and H2F) defined on the selected source, from the <i>Data Mapping</i> window.
Default Value	

2.9.1.4 Component: LOAD DATA

Field	Description
	Select the load mode from the drop-down list. The options are Table to Table and File to Table .
Load Mode	Table to Table should be selected for Data Mapping definitions such as T2T, T2H,H2T, H2H and L2H definitions.
	File to Table should be selected for Data Mapping definitions such as F2T and F2H definitions.
Source Name	Select the required source on which the Data Mapping or Data File Mapping definition you want to execute is defined, from the drop-down list.
	Based on the selection of Load Mode, the list displays the corresponding sources.
File Name	Select the Data Mapping or Data File Mapping definition you want to execute, from the drop-down list. Based on the selected Load Mode and Source Name , the list displays the corresponding definitions.
Data File Name	The data filename refers to the .dat file that exists in the database. Specifying Data File Name is mandatory for Load Mode selected as File to Table and optional for Load Mode selected as File to Table . If the file name or the .dat file name is incorrect, the task fails during execution. In case of L2H, you can specify the WebLog name.
Default Value	Used to pass values to the parameters defined in Load Data Definition.
	You can pass multiple runtime parameters while defining a batch by specifying the values separated by 'comma'.
	For example, \$MIS_DATE=value,\$RUNSKEY=value,[DLCY]=value and so on.
	Note the following:
	• The parameters can either be specified with \$ or within [] . For example, \$RUNSKEY=value or [RUNSKEY]=value. When the definition is saved from the UI, no value is assigned to these parameters and these are just passed for syntax correctness only. Actual values will be passed to these parameters while defining an ICC batch or a RUN.
	The list of valid Default Parameters are:
	 RUNID- Data type is String and can be mapped to VARCHAR2

Field	Description
	 PHID- Data type is String and can be mapped to VARCHAR2 EXEID- Data type is String and can be mapped to VARCHAR2 RUNSK- Data type is Integer and can be mapped to VARCHAR2 or INTEGER. SYSDATE- Data type is Date and can be mapped to DATE, VARCHAR2. TASKID- Data type is String and can be mapped to VARCHAR2 MISDATE- Data type is Date and can be mapped to DATE, VARCHAR2. BATCHRUNID- Data type is String and can be mapped to VARCHAR2.
	 Note: RUNID, PHID, EXEID, RUNSK, MISDATE and BATCHRUNID are implicitly passed through RRF. Rest must be explicitly passed. EXEC_ENV_SOURCE- This parameter is used to replace an External Data source or Infodom based Data Source of the T2T, T2H, H2T or H2H definition during run time, provided the structure of the source in the mapping definition is same as that of the replacing source. Hence you can convert a T2T definition into H2T or T2H into H2H and so on. If the resultant definition is T2T, then T2T execution using CPP engine is not supported.
	 For external Data Source, prefix it with 'EXT.' and for Infodom based sources, prefix it with 'INF.'. For example, [EXEC_ENV_SOURCE]=EXT.<newsourcename> or [EXEC_ENV_SOURCE]=INF.<newsourcename> Additionally, Cluster properties of the current logged-in Infodom will be considered for the execution of the Data Mapping definition.</newsourcename></newsourcename> EXEC_ENV_SOURCE_OWNER_INFODOM –This parameter is used to specify the Infodom where the Data Source being replaced (<newsourcename>) was created, in case that Infodom is different from the current Infodom where the batch is executed. If this is not provided, it will look for the Data Source in the current Infodom and may result in failed execution.</newsourcename> EXEC_ENV_TARGET- This parameter is used to replace the target Infodom of
	 EXEC_ENV_TARGET- This parameter is used to replace the target infodom of the T2T, T2H, H2T or H2H definition during run time, provided the structure of the target in the mapping definition is same as that of the replacing target. Hence you can convert a T2T definition into T2H or H2T into H2H and so on. But if the resultant definition is T2T, then T2Texecution using CPP engine is not supported. For example, [EXEC_ENV_TARGET]=newTargetName Also, DMT Configurations and Cluster properties of the new target Infodom will be considered for the execution of the Data Mapping definition. Note: You can use both EXEC_ENV_SOURCE and EXEC_ENV_TARGET together as well. Only limitation is, if the resultant definition is T2T, execution using CPP engine is not supported. Note: If you are converting a mapping definition to T2H using EXEC_ENV_SOURCE/EXEC_ENV_TARGET, there is no provision in UI to specify the Split By Column/Generic Options. In such scenarios, execution via Sqoop may fail, when the split by column is defaulted to a string/date column.
	• EXECUTION_ENGINE_MODE- This parameter is used to execute H2H on Spark. For example, [EXECUTION_ENGINE_MODE]=SPARK

Field	Description
	• CLOSE_SPARK_SESSION- This parameter is used to close the Spark session after executing the last H2H-Spark task in the batch.
	In a batch execution, a new Spark session is created when the first H2H- Spark task is encountered, and the same Spark session is reused for the rest of the H2H-Spark tasks in the same run. For the Spark session to close at the end of the run, user needs to set the CLOSE_SPARK_SESSION to YES in the last H2H-spark task in the batch.
	For example, [CLOSE_SPARK_SESSION]=YES
	 SRCHINT- This parameter is used to provide Source Hints. For example, [SRCHINT]= FIRST_ROWS(2)
	Note that the value should not contain $/*+ */$. Only the content should be given.
	• SRCPRESCRIPT- This parameter is used to provide Source Prescript.
	Note: ALTER keyword is not supported.
	 TARGETHINT- This parameter is used to provide Target Hints. For example, [TARGETHINT]= FIRST_ROWS(2)
	Note that the value should not contain $/*+ */$. Only the content should be given.
	TARGETPRESCRIPT - This parameter is used to provide Target Prescript.
	Note: ALTER keyword is not supported.
	Apart from these, L2H/H2H/T2H/H2T/F2H data mappings also support following additional default parameters. Values for these are implicitly passed from ICC/RRF.
	• \$MISD1_YYYY-MM-DD - Data type is string and can be mapped to VARCHAR2. Value will be the MISDATE in 'yyyy-MM-dd' format.
	• \$MISYEAR_YYYY - Data type is String and can be mapped to VARCHAR2. Value will be the year value in 'yyyy' format from MISDATE.
	 \$MISMONTH_MM - Data type is String and can be mapped to VARCHAR2. Value will be the month value in 'MM' format from MISDATE.
	 \$MISDAY_DD - Data type is String and can be mapped to VARCHAR2. Value will be the date value in 'dd' format from MISDATE.
	• \$SYSDT_YYYY-MM-DD- Data type is String and can be mapped to VARCHAR2. Value will be the System date in 'yyyy-MM-dd' format.
	 \$SYSHOUR_HH24 - Data type is String and can be mapped to VARCHAR2. Value will be the hour value in 'HH24' format from System date.
	Note : The aforementioned parameters are not supported for T2T/F2T/T2F/H2F.
	• Only those variable which start with \$ or [, will be replaced at run time and the value of this variable will be equal to anything starting after "=" and ending before comma ",".
	For example, if \$DCCY/[DCCY] ='USD', \$RUNSKEY=1, then the replaced value in query for \$DCCY will be 'USD' and for \$RUNSKEY will be 1.
	 If you are using "RUNSKEY" parameter in ICC Batch, then ensure that you specify the value of it instead of specifying \$RUNSKEY / [RUNSKEY]. For example, FCT_STANDARD_ACCT_HEAD.N_RUN_SKEY='\$RUNSKEY'. Since the value of RUNSKEY will not be replaced during runtime.
	• If there are quotes specified in parameter name, then ensure not to use quotes while defining the expression or vice versa to avoid SQL errors. For example, if

Field	Description
	the parameter name is \$DCCY='USD' and the expression is defined using '\$DCCY' instead of \$DCCY, then the final value will be ' 'USD' '.
	• When you execute a RUN, the run is always tagged with a RUNSK value (a unique value for each run fired directly from the RRF). You might have a DERIVED COLUMN in your T2T with expression like \$RUNSK. If you execute this T2T through a RUN, a unique RUNSK value is passed implicitly to the T2T engine, which then assigns that value wherever \$RUNSK is found. But if you try to execute the T2T through ICC, then you need to explicitly pass a \$RUNSK as a parameter so that the T2T engine can use it.
	Two additional parameters are now supported for L2H mappings:
	 [INCREMENTALLOAD] – Specify the value as TRUE/FALSE. If set to TRUE, historically loaded data files will not be loaded again (load history is checked against the definition name, source name, target infodom, target table name and the file name combination). If set to FALSE, the execution is similar to a snapshot load, and everything from the source folder/file will be loaded irrespective of load history.
	 [FOLDERNAME] – Value provided will be used to pick up the data folder to be loaded.
	 For HDFS based Weblog source: Value will be suffixed to HDFS File Path specified during the source creation.
	 For Local File System based Weblog source: By default the system will look for execution date folder (MISDATE: yyyymmdd) under STAGE/<source name>. If the user has specified the FOLDERNAME for this source, system will ignore the MISDATE folder and look for the directory provided as [FOLDERNAME].</source

2.9.1.5 Component: MODEL

Field	Description
Rule Name	Refers to the model that has to be processed. This is a system generated code that is assigned at the time of model definition.
Operation	The All definition for the Operation field conveys the process of extracting the data from the flat files and applying the run regression on the data extracted.
	For Batches that are being built for the first time the data will be extracted from the flat files and the run regression will be applied on it.
Optional Parameters	Refers to the set of parameters specific to the model that has to be processed. This set of parameters is automatically generated by the system at the time of definition.
	You must NOT define a Model using the Define mode under Batch Scheduling. You must define all models using the Modeling framework menu.

2.9.1.6 Component: PROCESS_EXECUTION

This component will combine all the rules to create single or multiple merge queries. Only rules defined on the same dataset can be merged. For creation of queries the current order of the rules

inside the process or sub-process will be taken into consideration. Following validations are performed to determine single or multiple DMLs for merging Rules that is, validation on subsequent rules.

- For classification-classification or classification-computation rule combination, the target column of the prior classification rule must not be used in any of the subsequent rules as source hierarchies in the executable process or sub-process. Also the same target hierarchy must not be used as a target in the subsequent rule.
- For computation-computation rule combination, the target measures of the prior computation rule must not be used in any of the subsequent computation rules in the executable process or sub-process.

All the merge queries created after satisfying all the conditions will be executed in a single transaction.

NOTE	 RRF framework cannot validate the semantic correctness of the rules grouped for merge. It is left to the application developer/user to make a conscious choice.
	 If the merge results in an ill-formed or runaway SQL, the framework will not be able to detect it at design time. This is again left to application developer/user to design the grouping that is syntactically valid.

Field	Description
Process Code	Display the codes of the RRF Processes defined under the selected Infodom. Select the required Process from the drop-down list.
Sub Process Code	Display the codes of the Sub Processes available under the selected Process. Select the required Sub Process from the drop-down list.
Build Flag	Select the required option from the drop-down list as " Yes " or " No ". Build Flag refers to the pre-compiled rules, which are executed with the query stored in database. While defining a Rule, you can make use of Build Flag to fasten the Rule execution process by making use of existing technical metadata details wherein the rule query is not rebuilt again during Rule execution. Built Flag status set to " No " indicates that the query statement is formed dynamically retrieving the technical metadata details. If the Build Flag status is set to " Yes " then the relevant metadata details required to form the rule query is stored in database on "Save" of a Rule definition. When this rule is executed, database is accessed to form the rule query based on stored metadata details, thus ensuring performance enhancement during Rule execution.
Optional Parameters	Refers to the set of parameters which would behave as filter criteria for the merge query.

2.9.1.7 Component: RULE_EXECUTION

Field	Description
Rule Code	Display the codes of the RRF Rules defined under the selected Infodom.

Field	Description
Build Flag	Select the required option from the drop-down list as " Yes " or " No ". Build Flag refers to the pre-compiled rules, which are executed with the query stored in database. While defining a Rule, you can make use of Build Flag to fasten the Rule execution process by making use of existing technical metadata details wherein the rule query is not rebuilt again during Rule execution. Built Flag status set to " No " indicates that the query statement is formed dynamically retrieving the technical metadata details. If the Build Flag status is set to " Yes " then the relevant metadata details required to form the rule query is stored in database on "Save" of a Rule definition. When this rule is executed, database is accessed to form the rule query based on stored metadata details, thus ensuring performance enhancement during Rule execution.
Optional Parameters	Refers to the set of parameters which would behave as filter criteria for the merge query.

2.9.1.8 Component: RUN DQ RULE

Property	Description
DQ Group Name	Refers to the Data Quality Groups consisting of associated Data Quality Rule definition(s). Select the required DQ Group from the drop-down list.
Rejection Threshold	Specify the percentage of Rejection Threshold (%) limit in numeric value. This refers to the maximum percentage of records that can be rejected in a job. If the percentage of failed records exceeds the Rejection Threshold, the job will fail. If the field is left blank, the default the value is set to 100%.
Additional Parameters	Specify the Additional Parameters as filtering criteria for execution in the pattern Key#Data type#Value; Key#Data type#Value;etc.
	Here the Data type of the value should be " V " for Varchar/Char, or " D " for Date with "MM/DD/YYYY" format, or " N " for numeric data. For example, if you want to filter some specific region codes, you can specify the Additional Parameters value as \$REGION_CODE#V#US;\$CREATION_DATE#D#07/06/1983;\$ACCOUNT_BAL#N#10000.50;
	Note : In case the Additional Parameters are not specified, the default value is fetched from the corresponding table in configuration schema for execution.
Parameters	Comma separated parameters where first value is considered as the threshold percentage, followed by additional parameters which are a combination of three tokens. Example, "90","PARAM1","D","VALUE1","PARAM2","V","VALUE2". Note: Parameter 'Fail if threshold is breached" is defaulted to "Yes" for RRF executions
Ontional Darameter	Ear DO Bulo execution on Sports specify EVECUTION VENUE-Sports in this field
	Note that, you should have registered a cluster from DMT <i>Configurations</i> > <i>Register Cluster</i> window with the following details:
	Name- Enter name of the Hive information domain.
	Description- Enter a description for the cluster.
	Livy Service URL- Enter the Livy Service URL used to connect to Spark from OFSAA.

2.9.1.9 Component: RUN EXECUTABLE

Field	Description
Executable	Refers to the executable path on the DB Server. The Executable parameter contains the executable name as well as the parameters to the executable. These executable parameters have to be specified as they are specified at a command line. In other words, the Executable parameter is the exact command line required to execute the executable file.
	The path to the executable has been entered in quotes. Quotes have to be used if the exe name has a space included in it. In other words, the details entered here should look exactly as you would enter it in the command window while calling your executable. The parameter value is case-sensitive. So, ensure that you take care of the spaces, quotes, and case. Also, commas are not allowed while defining the parameter value for executable.
	To pass parameters like \$RUNID, \$PHID, \$EXEID, \$RUNSK to the RUN EXECUTABLE component, specify RRFOPT=Y or rrfopt=y along with other executable details.
	When the file is being executed you have the choice to either wait till the execution is completed or proceed with the next task.
	Select Y (Yes) or N (No) from the drop-down list.
Wait	• Y- Select this if you want to wait for the execution to be completed
	• N - Select this if you wish to proceed.
	If the task is using FICGEN/RUN EXECUTABLE component and there is no precedence set for this task, then the WAIT should always be set to 'N' .
	Y - Select Yes if you want to pass the Batch parameters to the shell script file being executed.
Batch Parameter	 If Wait is selected as Y and Batch Parameter is selected as Y, following parameters are passed to the executable:
	NIL <batchexerunid> <componentid> <task> <infodate> <infodom> <datstoretype> <ipaddress></ipaddress></datstoretype></infodom></infodate></task></componentid></batchexerunid>
	 If Wait is selected as N and Batch Parameter is selected as Y, following parameters are passed to the executable:
	<batchexerunid> <componentid> <task> <infodate> <infodom> <datstoretype> <ipaddress></ipaddress></datstoretype></infodom></infodate></task></componentid></batchexerunid>
	N - Select No if the Batch parameters should not be passed to the shell script.
Optional Parameters	This field will be considered only if you have specified RRFOPT=Y or rrfopt=y in the Executable field.
	Specify the optional parameters that you want to pass to the executable. For example, \$RUNID, \$PHID, \$EXEID, \$RUNSK.

2.9.1.10 Component: SQLRULE

Field	Description
Folder	Refers to the location where the SQL Rule definition resides. Click the drop-down list box in the Value column to select the desired Folder.
SQL Rule Name	Refers to the defined SQL rule. Click the drop-down list in the Value column to select the SQL Rule.

2.9.1.11 Component: TRANSFORM DATA

Field	Description
Rule Name	Refers to the Data transformation name that was defined in the <i>Post Load Changes</i> window of Data Management Tools framework. Select the rule name from the drop-down list.
Parameter List	Is the list of parameters defined in Data Transformation check in which the parameters must be in the same order as in the definition and must be separated by a comma (","). Irrespective of the data type of the parameter defined in the procedure. The parameter specified through the front-end does not require to be specified within quotes (' ').
	Note : Commas are used as delimiters for parameter values internally by the ICC Batch component. Ensure that commas are not used in any of the parameter values, that is, "a, b, c" should not be a parameter value in the list of parameter values being passed to the TRANSFORM DATA task. For example, if the parameter values to this task are required to be passed as (val1, val2, (a, b, c), val4), the correct way would be to pass these values as (val1, val2, (a*b*c), val4). You can use any other character as a separator.

2.9.1.12 Component: VARIABLE SHOCK

Field	Description
Variable Shock Code	Refers to the variable shock that has to be processed. This is a system generated code that is assigned at the time of variable shock definition.
Operation	Refers to the operation to be performed. Click the drop-down list in the Value field to select the Operation. The available options are ALL , GENDATAFILES , and GENPRNFILES .
Optional Parameters	Refers to Process ID and the User ID. Click in the text box adjacent to the Optional Parameters field and enter the Process ID and User ID.

2.9.1.13 Component: Workflow Execution

Field	Description
Object ID	Enter an object ID of your choice. This ID will appear as Entity ID in the <i>Process Monitor</i> window.
Workflow	Select the workflow you want to execute from the drop-down list. It displays all the workflows defined in the <i>Process Modeller</i> window.
Optional Parameters	Enter the value you want to pass to the Dynamic Parameters of the Run Task during the execution of the workflow.

