

**Oracle Banking Microservices Platform Foundation
User Guide**

Oracle Banking Virtual Account Management

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Oracle Banking Microservices Platform Foundation User Guide

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Contents

1	Preface.....	1
1.1	Introduction.....	1
1.2	Audience	1
1.3	Documentation Accessibility	1
1.4	List of Topics	1
1.5	Related documents	2
2	Oracle Reporting Service	3
2.1	Overview	3
2.2	Buttons and Icons	5
2.3	Basic Actions.....	7
3	Report Template	11
3.1	Upload Report Template	11
3.2	View Report Template.....	13
3.3	Report Linkage	16
3.3.1	Create Report Linkage	16
3.3.2	View Report Linkage	18
4	File Management.....	20
4.1	File Upload	20
4.2	View File Upload Status	21
5	Error Codes and Messages	25
6	List of Menus.....	27

1 Preface

1.1 Introduction

This user guide is designed to help you quickly get acquainted with the many functions routinely executed every day.

1.2 Audience

This user manual is intended for the central administrator of the Bank who controls the system and application parameters and ensures smooth functionality and flexibility of the banking application.

1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

1.4 List of Topics

This manual is organized into the following topics:

Table 1: List of Topics

Topic	Description
Oracle Reporting Service (ORS)	Provides an overview of ORS and flow diagrams depicting information flow in ORS.
Report Template	Provides a brief description and the tasks to upload a template and configure an output format for the report.
File Management	Provides a brief description and the tasks for the bulk file uploads and view the status.
Error Codes and Messages	Provides brief description about the error and warning messages, which are displayed.
List of Menus	Provides the list of menus arranged in alphabetical order.

1.5 Related documents

For information related to other micro services of Oracle Banking Microservices Architecture, refer the following documentation:

- Oracle Banking Common Core User Guide

2 Oracle Reporting Service

2.1 Overview

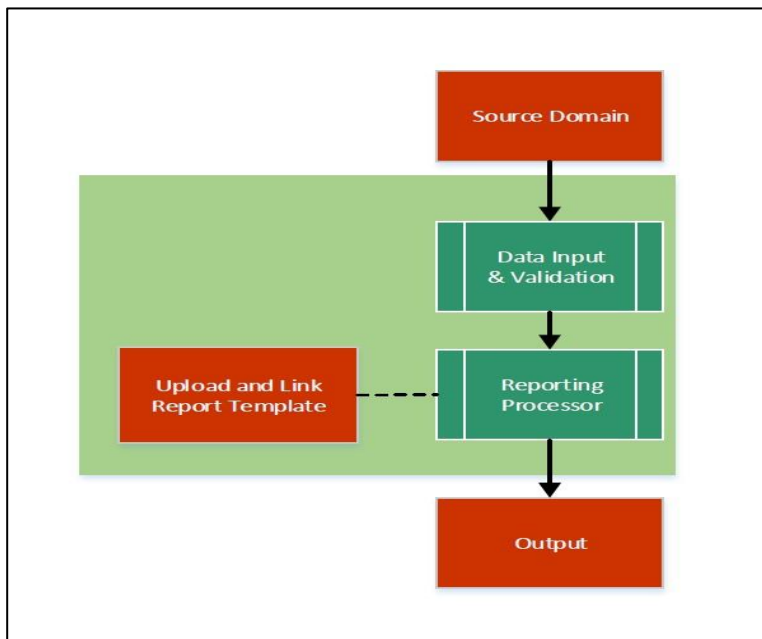
In Oracle Banking Microservices Architecture, a reporting subdomain is introduced to generate account statement and advices that can be printed or emailed.

Following are the generic areas, where these statements and advices are expected to be used:

- Periodic communication to customers (For example, Account Statements)
- Adhoc communication (For example, Advices)
- Internal Bank statements

The flowchart below gives a high-level knowledge about the process of collecting and generating the statement:

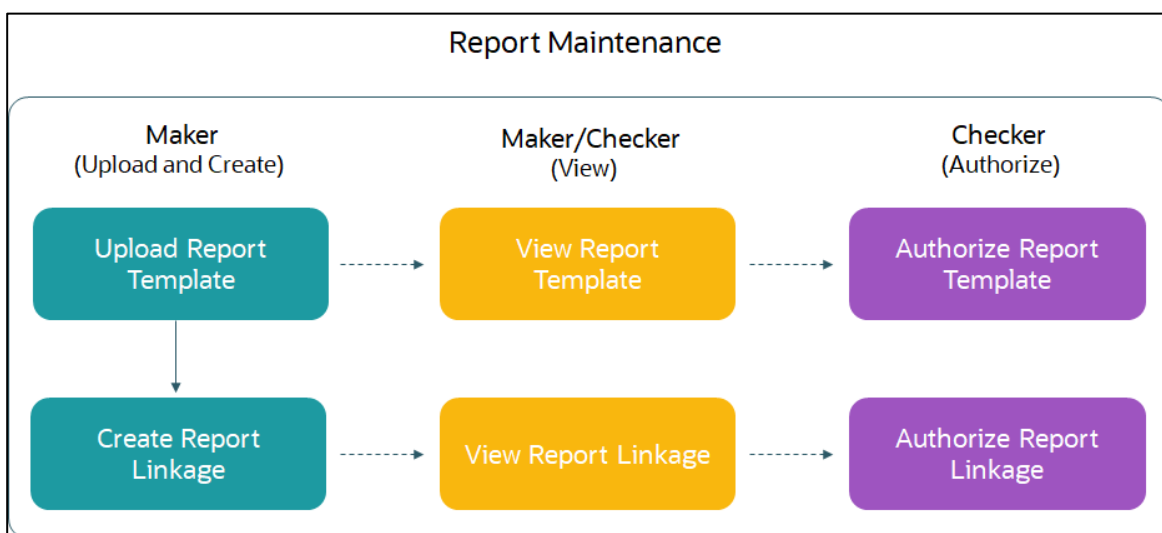
Figure 1: Oracle Reporting Service



A detailed explanation of the flowchart is as follows:

1. Financial institutions, wanting to generate a report in a specified format, can create their own report template.
2. The Report Services module accepts the template as input by way of upload. For each template, the output format and template ID is configured.

3. Once the report request is received from the Source domain, based on the report name, system identifies the report to be generated.
4. As per the template configuration, system fetches additional data from the source domain.
5. The Report Maintenance module generates the output file, as per defined format in report template linked to the report ID. Here,
6. Reports can be generated on adhoc or scheduled basis.
7. The output destination of the report is a file store location as per configuration.
8. Now, let's understand the role of a maker and checker in the reporting flow using the system:
Following actions can be performed on the Completed Tasks menu:

Figure 2: Report Maintenance**Maker:**

- Uploads a report template.
- View the report template.
- Link the uploaded report.
- View the report linkage.

Checker:

- View and authorize the report template uploaded.
- View and authorize the linkage created by the maker.

2.2 Buttons and Icons

The following icons are used in ORS.

Table 2: Action Icons














Icons	Function
	Minimize
	Maximize
	Close
	Perform Search
	Open a list
	Add a new record
	Navigate to the first record
	Navigate to the last record
	Navigate to the previous record
	Navigate to the next record
	Grid view
	List view
	Refresh

Table 3: Audit Icons










Icons	Function
	A user
	Date and time
	Unauthorized or Closed status
	Authorized or Open status

Table 4: Widget Icons

Icons	Function
	Open status
	Unauthorized status
	Closed status
	Authorized status
	Flip to view previous stage.

2.3 Basic Actions

Most of the screens contain buttons to perform all or few of the basic actions. The table below gives a snapshot of them:

Table 5: Basic Actions

Actions	Description
New	<p>To add a new record. When you click New, system displays a new record enabling you to specify the required data. It is mandatory to specify details for the fields marked with '*' symbol.</p> <p>This button is displayed during any of the following scenarios:</p> <ul style="list-style-type: none"> • Report linkage is created successfully. • Report template is uploaded successfully. • After you click a widget in the View Report Template screen and View Report Linkage screen.
Save	To save the details entered or selected in the screen.
Unlock	<p>To update the details of an existing record. System displays an existing record in editable mode.</p> <p>This button is displayed after any of the following scenarios:</p> <ul style="list-style-type: none"> • Report linkage is created successfully. • Report template is uploaded successfully. • After you click a widget in the View Report Template screen and View Report Linkage screen.
Authorize	<p>To authorize the report created. A maker of the screen is not allowed to authorize the report. Only a checker can authorize a report, created by a maker.</p> <p>This button is displayed after any of the following scenarios:</p> <ul style="list-style-type: none"> • Report linkage is created successfully. • Report template is uploaded successfully. • After you click a widget in the View Report Template screen and View Report Linkage screen. <p>For more information on the process, see Authorization Process.</p>

Actions	Description
Approve	To approve the initiated report. This button is displayed, once you click Authorize .
Audit	To view the maker details, checker details, and report status. This button is displayed after any of the following scenarios: <ul style="list-style-type: none"> • Report linkage is created successfully. • Report template is uploaded successfully. • After you click a widget in the View Report Template screen and View Report Linkage screen.
Close	To close a record. This action is available only when a report linkage is created.
Confirm	To confirm the action, you performed.
Cancel	To cancel the action, you performed.
Compare	To view the comparison through the field values of old record and the current record. This button is displayed in the widget, once you click Authorize .
View	To view the report details in a particular modification stage. This button is displayed in the widget, once you click Authorize .
View Difference only	To view a comparison through the field element values of old record and the current record, which has undergone changes. This button is displayed, once you click Compare .
Expand All	To expand and view all the details in the sections. This button is displayed, once you click Compare .
Collapse All	To hide the details in the sections. This button is displayed, once you click Compare .
OK	To confirm the details in the screen.

Authorization Process

To authorize and approve a report, you need perform the following actions:

1. Navigate to the required screen.
2. Click **Authorize**. The reports pending for authorization are displayed.
3. Select the required report and click **Approve**.

The report details are displayed in a widget. If you have modified the report twice, system displays two widgets with respective modification number along with the modified details.

4. Enter remarks for the approving the report in the **Remarks** field.
5. Click **Confirm** and authorize the reports.

The reports are authorized successfully.

A brief description of the fields is given below:

Table 6: Authorization Process - Field Descriptions

Field	Description
<Mod Number>	View the modification version number. NOTE: This field is displayed in the widget.
Done By	View the user who has done the modification. NOTE: This field is displayed in the widget.
Done On	View the date on which the modification was done. NOTE: This field is displayed in the widget.
Record Status	View the current record status of the report. The possible options are: <ul style="list-style-type: none"> • Open • Close NOTE: This field is displayed in the widget.
Once Auth	View whether the record is authorized at least once. NOTE: This field is displayed in the widget.

Field	Description
Compare	Click this button to view the following fields: <ul style="list-style-type: none"> Field Name Old Value New Value
Field Name	View the elements that are being compared.
Old Value	View the old values of the record.
New Value	View the new values of the record.
View	Click this button to view the following fields: <ul style="list-style-type: none"> Report Name Report Description Template Output Format
Report Name	View the report name.
Report Description	View the report description.
Template	View the template.
Output Format	View the output format.

3 Report Template

In this section, you can perform the following actions:

- Upload report template.
- View uploaded report template format.
- Update the report template format if required.
- User is allowed only to modify a Report Template once created. Option to delete is unavailable.

3.1 Upload Report Template

Using this screen, you can upload a template and configure an output format for the report as per your requirement.

To create a report linkage:

1. Click Maintenance > Report Maintenance > Report Template > Upload Report Template screen.

→ The **Upload Report Template** screen displays.

Figure 3: Report Template Screen

2. Enter a unique template name in the **Template Name** field.
3. Enter the template details in the **Template Description** field.
4. Select a template format to be uploaded from **Template Type** list.

5. In the Upload Template section, click **Add Template** to add template. You can upload a template from your local machine or from specific location.
 - If you need to change the uploaded template, you can click **Replace Template**.
6. In the Upload Images section, click **Add Images**. You can upload multiple images if required.
 - To delete the uploaded image, click **Delete** from the **Image Action** field.
7. Click **Save**.

The report is successfully uploaded and can be viewed using the **View Report Template** screen.

- For actions that can be performed further, refer the Basic Actions section.

Modify Fields

Click **Unlock**, to modify the following fields:

- Template Description
- Template Type
- Upload Template section
- Upload Images section

A brief description of the fields is given below:

Table 7: Upload Report Template-Field Description

Field	Description
Template Name	Enter the unique name for the template.
Template Description	Enter a short description of the template.
Template Type	Select the template format type being uploaded.
Upload Template	Displays the template filename and option to upload template.
Template Filename	View the template file name that is uploaded from your local system. You can view the name only after you click Add Template and upload a template.
Upload Images	Displays the following details only after you click Add Image and upload an image.

Field	Description
Image Filename	View the file name of the uploaded image.
Image Relative Path	View the file path of the server, where the image is stored.
Image Action	Click Delete from this field to remove an uploaded image.

3.2 View Report Template

Using this screen, you can view the template uploaded using the Upload Report Template screen. The status of the uploaded report is displayed as **Unauthorized** and **Open**. Once the checker authorizes the report, the status is updated to **Authorized** and **Open**.

To view an uploaded report:

1. Click Maintenance > Report Maintenance > Report Template > View Report Template screen.

→ The **View Report Template** screen displays.

Figure 4: View Report Template

2. Click .

3. Enter the search criteria to fetch the required report.

4. Click **Search**.

- Click the widget to view the uploaded report details.

The details are displayed in the Template Maintenance screen.

- After viewing the details, you can perform any action on a report mentioned in the Basic Actions section.


Modify Fields

Click **Unlock**, to modify the following fields:

- Template Description
- Template Type
- Upload Template section
- Upload Images section

A brief description of the fields is given below:

Table 8: View Report Template-Field Description

Field	Description
	Click this icon to view the following fields. <ul style="list-style-type: none"> • Template Name • Template Description • Authorization Status • Record Status
Template Name	Specify the uploaded template name.
Template Description	Specify the description for the uploaded report.
Authorization Status	Select the authorization status of the report. The options are: <ul style="list-style-type: none"> • Authorized • Unauthorized
Record Status	Select the record status of the report. The options are: <ul style="list-style-type: none"> • Open • Close: Available only for Authorized report record.

Field	Description
Template Name	View the uploaded template name. NOTE: This field is displayed in the widget.
Mod No	View the modification version number. NOTE: This field is displayed in the widget.
Template Type	View the template output type selected for the report. NOTE: This field is displayed in the widget.
Once you click the widget, the following fields are displayed in the Template Maintenance screen.	
Template Name	View the uploaded template name.
Template Description	View the description for the uploaded report.
Template Type	View the output format type for the template report.
Upload Template	Displays the template filename.
Template Filename	View the file name of the uploaded template.
Upload Images	Displays the following fields. <ul style="list-style-type: none"> • Image Filename • Image Relative Path • Image Action
Image Filename	View the file name of the uploaded image.
Image Relative Path	View the file path of the image that is stored in the server.
Image Action	This field displays a Delete button, which is not enabled.

3.3 Report Linkage

In this section, you can perform the following actions:

- Link uploaded report templates to specific reports.
- Select the output format for the report.
- View or update the report template linkage.

3.3.1 Create Report Linkage

Using this screen, you can link the uploaded report templates to the specific reports. The report templates are uploaded using the Upload Report Template screen. Once a report template is uploaded successfully, you can link it to multiple reports.

To create a report linkage:

1. Click Maintenance > Report Maintenance > Report Linkage > Create Report Linkage screen.

→ The **Create Report Linkage** screen displays.

Figure 5: Create Report Linkage Screen

2. Enter a unique report name in the **Report Name** field.
3. Enter the report details in the **Report Description** field.
4. Select a template to be attached to the report from **Template** list. You can use search to locate the required template.
5. Enter the name in the **Template Name** field.
6. Click **Fetch** and select the template displayed in the **Template Name** field.

7. Select the required output format for the report from the **Output Format** list.
8. Click **Save**.

The report is successfully linked and can be viewed using the View Report Linkage screen.

- For actions that can be performed further, see the Basic Actions section.

Modify Fields

Click **Unlock**, to modify the following fields:

- Report Description
- Template
- Output Format

A brief description of the fields is given below:

Table 9: Create Report Linkage- Field Description

Field	Description
Report Name	Enter the unique report name for linkage.
Report Description	Enter a short description for the report.
Template	Select the template from the uploaded and authorized template list.
Template Name	Enter the template name to fetch it from the list. This field is displayed, if you click the pick list from the Template list.
Output Format	Select the output format for the report. The options are: <ul style="list-style-type: none"> • RTF • PNG • PDF

3.3.2 View Report Linkage

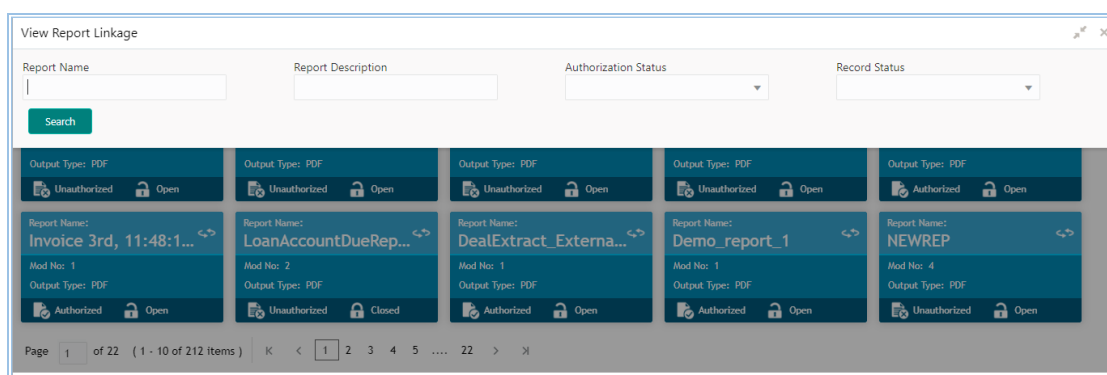
Using this screen, you can view the report linkage created using the Create Report Linkage screen. The status of the report linkage is displayed as Unauthorized and Open. Once the checker authorizes the report, the status is updated to Authorized and Open.


To view a report linkage:

1. Click Maintenance > Report Maintenance > Report Linkage > View Report Linkage screen.

→ **The View Report Linkage screen displays.**

Figure 6: View Report Linkage Screen



2. Click .
3. Enter the search criteria to fetch the required report.
4. Click **Search**.
5. Click the widget to view the report linkage details.

The details are displayed in the **Report Maintenance** screen.

6. After viewing the details, you can perform any action on a report mentioned in the Basic Actions section.


Modify Fields

Click **Unlock**, to modify the following fields:

- Report Description
- Template
- Output Format

A brief description of the fields is given below:

Table 10: View Report Linkage - Field Description

Field	Description
	<p>The following fields are displayed.</p> <ul style="list-style-type: none"> • Report Name • Report Description • Authorization Status • Record Status
Report Name	View the report name created for linkage.
Report Description	View the description for the report linkage.
Authorization Status	<p>Select the authorization status of the report.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Authorized • Unauthorized
Record Status	<p>Select the record status of the report.</p> <p>The options are:</p> <ul style="list-style-type: none"> • Open • Close
Report Name	<p>View the report name created for linkage.</p> <p>NOTE: This field is displayed in the widget.</p>
Mod No	<p>View the modification version number.</p> <p>NOTE: This field is displayed in the widget.</p>
Output Type	<p>View the output type selected for the report.</p> <p>NOTE: This field is displayed in the widget.</p>
Once you click the widget, the following fields are displayed in the Report Maintenance screen.	
Report Name	View the report name created for linkage.
Report Description	View the short description for the report.
Template	View the template selected for the report.
Output Format	View the selected output format for the report.

4 File Management

File Management enables the bank user to upload the files according to agreed operational and business rules, also allows the users to view the status of the files uploaded. The user can view and download the files which went to the error status.

The user can perform the following actions:

- Upload a File
- View Uploaded Files and status of file
- Approve a File
- Download a File
- View the Remarks (if any)

4.1 File Upload

Using this screen, you can upload single file or multiple files at once.

To upload a file:

1. On **Home** screen, click **File Management**. Under **File Management**, click **File Upload**.

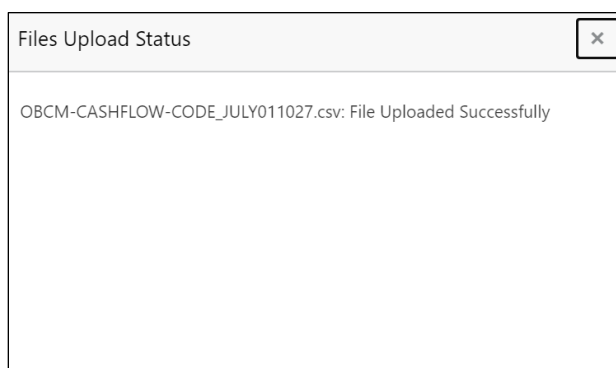
→ The **File Upload** screen displays.

Figure 7: File Upload



2. Drag and Drop the file or Select the file from the local drive.
3. Click **Upload** to upload the selected file.

→ The **Files Upload Status** popup screen displays.

Figure 8: Files Upload Status

4. Click **Clear All** to clear the selected file.

NOTE: Files which have the same name as the already existing file can't be uploaded.

4.2 View File Upload Status

Using this screen, you can view the status of the uploaded files and approve the same.

To view the status of the uploaded file:

1. On **Home** screen, click **File Management**. Under **File Management**, click **View File Upload Status**.

→ The **View File Upload Status** screen displays.

Figure 9: View File Upload Status



View File Upload Status										
Refresh		<input type="text" value="Filter by File name"/>		<input type="text" value="Filter by Maker ID"/>		<input type="text" value="Filter by Approver ID"/>				
File Name		Maker Id	Checker Id	Status	Action	Remarks	Total Records	Successful	Failed	View Details
virtualaccount_021722_1.csv		SHUB01		U	Approve		0	0	0	
JournalPosting_PC11.csv		SIVA01	SIVA02	P	Processed		2	0	2	Details
JournalPosting_PC10.csv		SIVA01	SIVA02	P	Processed		2	0	2	Details
virtualaccount_894049521801_PC1.csv		SIVA01		U	Approve		0	0	0	
virtualaccount_894049521801_PC.csv		SIVA01	SIVA02	P	Processed		1	1	0	Details
virtualaccount_350336312010.csv		OBVAMUSER1	OBVAMUSER2	F	Retry		0	0	0	
virtualaccount_894049521801.csv		OBVAMUSER1	OBVAMUSER2	F	Retry		1	1	0	
virtualaccount_892436611801.csv		OBVAMUSER1		U	Approve		0	0	0	
JournalPosting_Test82.csv		SYSTEM	AUTO	P	Processed		0	0	0	Details
virtualaccount_0105221_5.csv		SYSTEM	AUTO	P	Processed		1	0	1	Details
Page 1 (1-10 of at least 30 items) 										

2. Specify the following parameters in the respective fields.

- **File Name**
- **Maker ID**
- **Checker ID**

A brief description of the fields is given below:

Table 11: View File Upload Status - Field Description

Field	Description
File Name	Specify the unique file name to filter the uploaded files.
Maker ID	Specify the Unique ID of the maker to filter the uploaded files.
Checker ID	Specify the Unique ID of the checker to filter the uploaded files.
File Upload Data	
File Name	Displays the name of the file.
	Click this button to download the uploaded CSV file.
Maker Id	Displays the Unique ID of the maker.
Checker Id	Displays the Unique ID of the checker.
Status	<p>Select the status of the uploaded file.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • A – Processing Initiated • F - Failed • P - Processed • U - Unprocessed
Action	<p>Select the action performed for the uploaded file.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • Approve – Click this button to approve the file • Retry – Click this button to retry processing the failed file. • Processing Initiated • Processed
Remarks	Click  icon to view the remarks for the uploaded file.

Field	Description
Total Records	Displays the total count of records in the file.
Successful	Displays the count of successful records in the file.
Failed	Displays the count of failed records in the file.
View Details	Click Details button to view the details of the processed file.

- Click **Refresh** to refresh the file upload list.
- Click **Approve** to approve all the records in file.

→ The **Approve Remarks** screen displays.

Figure 10: Approve Remarks

- Specify the remarks in the text box and Click **OK** to approve all the records in the file.

To view the file data for Processed files:

- Click **Details** to view the details of the processed file.


→ The **File Data** screen displays.

Figure 11: File Data

Record Contents	Status	Status Description
000ZJNL011270CSQ	FAILURE	Failed while saving the record
000ZJNL011270CSR	FAILURE	Failed while saving the record
000ZJNL011270CSS	SUCCESS	Transaction successfully reversed.
000ZJNL011270CST	FAILURE	Failed while saving the record
000ZJNL011270CSU	FAILURE	Failed while saving the record

Page 1 of 1 (1-5 of 5 items) < 1 >

To view the remarks for Processed files:

7. Click  icon to view the remarks.

→ The **Remarks** screen displays.

Figure 12: Remarks

Remarks
test

5 Error Codes and Messages

This topic contains the error codes and messages:

Table 12: Error Codes and Messages

Error Code	Messages
REP-GEN-001	Report id: \$1 is not valid
REP-GEN-002	Unable to write file to the destination
REP-GEN-003	No data available for the report log id: \$1
REP-GEN-004	Unable to fetch the report
REP-GEN-005	Error while reading template from FileSystem
REP-GEN-006	Error while generating FO file
REP-GEN-007	\$1 destination not supported
REP-GEN-008	Error while generating report in File System
REP-GEN-009	\$1 output type not supported
REP-GEN-010	Invalid extension for the requested file
REP-GEN-011	Resource URL not found
REP-GEN-012	Error while procssing the payload file
REP-GEN-013	Template is not maintained against template id: \$1
REP-GEN-014	Transformer type \$1 not supported
REP-FEN-017	Since the output file type is PPDF, the user password needs to be sent in the request.
REP-ENRH-001	Error while adding main data to payload
REP-ENRH-002	Error while adding auxilliary data to payload
REP-ENRH-003	Error while preparing payload data for label - \$1
REP-ENRH-004	No data received while calling the retriever for label \$1
REP-ENRH-005	Cannot instantiate ReportDataExtractor instance
REP-ENRH-006	Illegal json: Json must contain one root node to properly make it interchangeable with XML

Error Code	Messages
REP-ENRH-007	Error while processing the input JSON cannot add root node to payload more than once
REP-ENRH-008	Cannot add root node to payload more than once.
REP-ENRH-009	Error while processing the XML response for label \$1
REP-ENRH-010	Error while processing the JSON response for label \$1
REP-ENRH-011	Unsupported data received for label \$1
REP-ENRH-012	Error while processing the JSON payload
REP-ENRH-013	Error while initializing XMLPayloadProcessor
REP-ENRH-014	Error while parsing payload
REP-ENRH-018	Unsupported data received for label \$1
REP-ENRH-019	Error while processing the XML payload
REP-MNT-001	Error while storing template to file system

6 List of Menus

1. Create Report Linkage - [3.3.1 Create Report Linkage](#) (pg. 16)
2. File Upload - [4.1 File Upload](#) (pg. 20)
3. Upload Report Template - [3.1 Upload Report Template](#) (pg. 11)
4. View File Upload Status - [4.2 View File Upload Status](#) (pg. 21)
5. View Report Linkage - [3.3.2 View Report Linkage](#) (pg. 18)
6. View Report Template - [3.2 View Report Template](#) (pg. 13)