

**Oracle Banking Microservices Platform Foundation
User Guide**

Oracle Banking Liquidity Management

Release 14.5.2.0.0

Part Number F46760-01

August 2021

Oracle Banking Microservices Platform Foundation User Guide

Oracle Financial Services Software Limited

Oracle Park

Off Western Express Highway

Goregaon (East)

Mumbai, Maharashtra 400 063

India

Worldwide Inquiries:

Phone: +91 22 6718 3000

Fax: +91 22 6718 3001

<https://www.oracle.com/industries/financial-services/index.html>

Copyright © 2018, 2021, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited. The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

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 | 1 |
| 2 | Document Generation Service..... | 2 |
| 2.1 | Overview | 2 |
| 2.2 | Buttons and Icons | 4 |
| 2.3 | Basic Actions..... | 6 |
| 3 | Report Template | 10 |
| 3.1 | Upload Report Template | 10 |
| 3.2 | View Report Template..... | 12 |
| 3.3 | Report Linkage | 15 |
| 3.3.1 | Create Report Linkage | 15 |
| 3.3.2 | View Report Linkage | 17 |
| 4 | Error Codes and Messages | 19 |
| 5 | List of Menus..... | 21 |

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 guide 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 user guide is organized into the following topics:

Table 1: List of Topics

| Topic | Description |
|-----------------------------|--|
| Document Generation Service | Provides an overview of Document Generation Service and flow diagrams depicting information flow. |
| Upload Report Template | Provides a brief description and the tasks to upload a template and configure an output format for the report. |
| 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 Document Generation Service

2.1 Overview

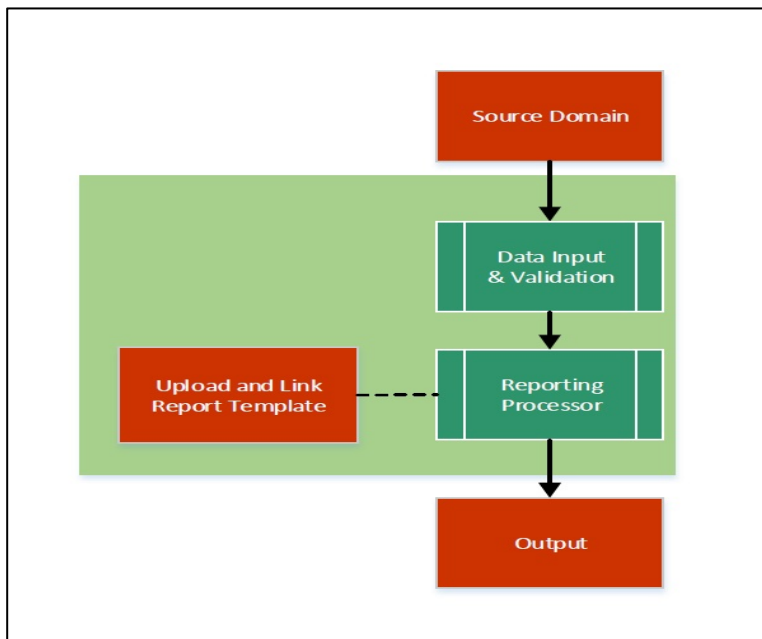
In Oracle Banking Microservices Architecture, a reporting subdomain is introduced to generate account statement and advices that can be printed or emailed.

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:

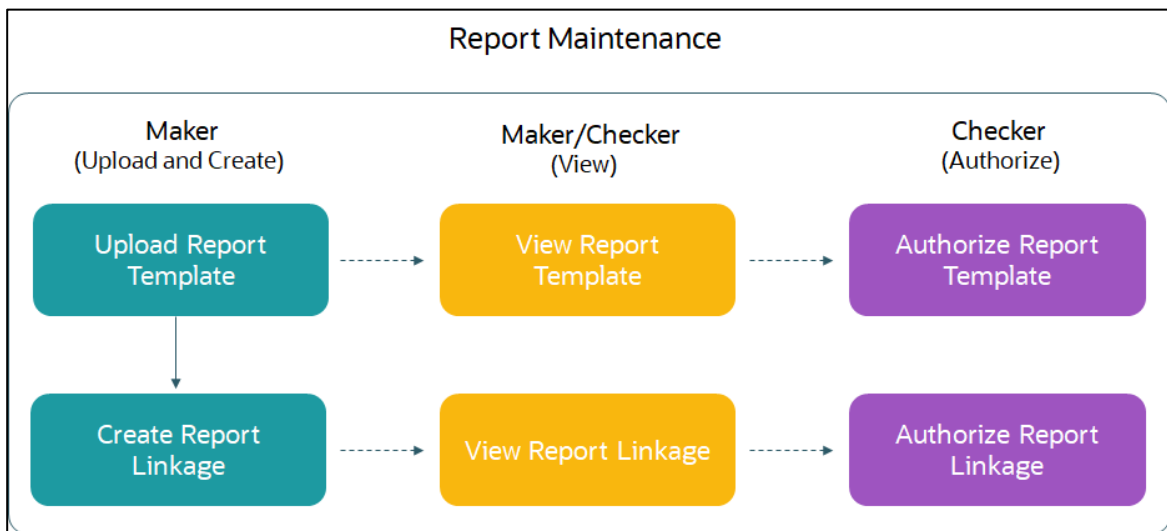
Figure 1: Document Generation Service



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 Document Generation Service.

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 is displayed.

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

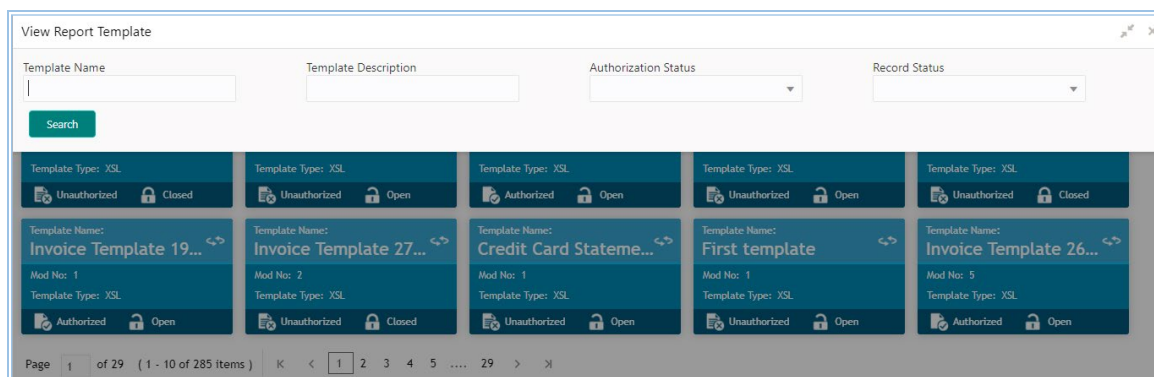
Using this screen, you can view the template uploaded using the Upload Report Template screen. The status of the uploaded report is displayed as **Unauthorized** and **Open**. Once the checker authorizes the report, the status is updated to **Authorized** and **Open**.


To view an uploaded report:

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

→ The **View Report Template** screen is displayed.

Figure 4: View Report Template



2. Click .
3. Enter the search criteria to fetch the required report.
4. Click **Search**.
5. Click the widget to view the uploaded report details.
The details are displayed in the Template 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:

- 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. |
| 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. |

| Field | Description |
|--|--|
| 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

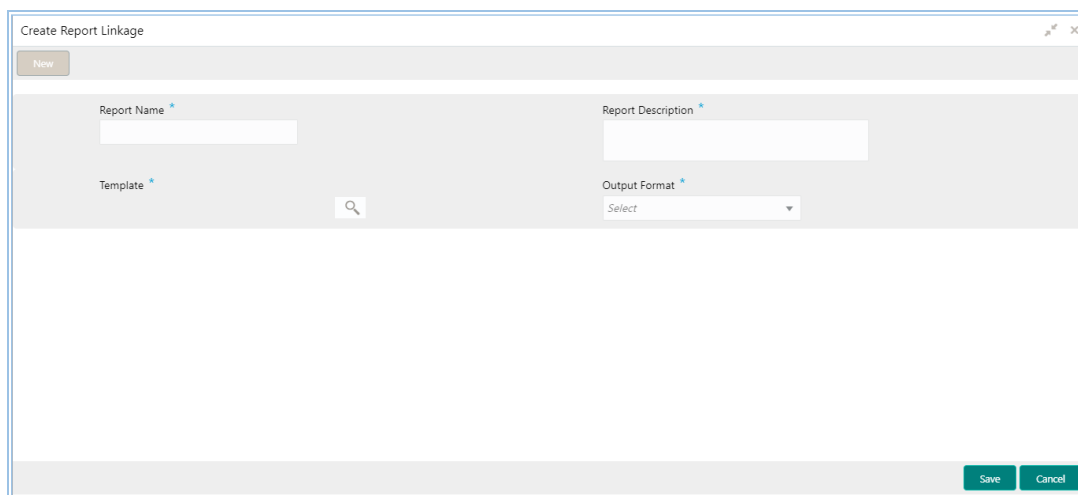
Using this screen, you can link the uploaded report templates to the specific reports. The report templates are uploaded using the Upload Report Template screen. Once a report template is uploaded successfully, you can link it to multiple reports.

To create a report linkage:

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

→ The **Create Report Linkage** screen is displayed.

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

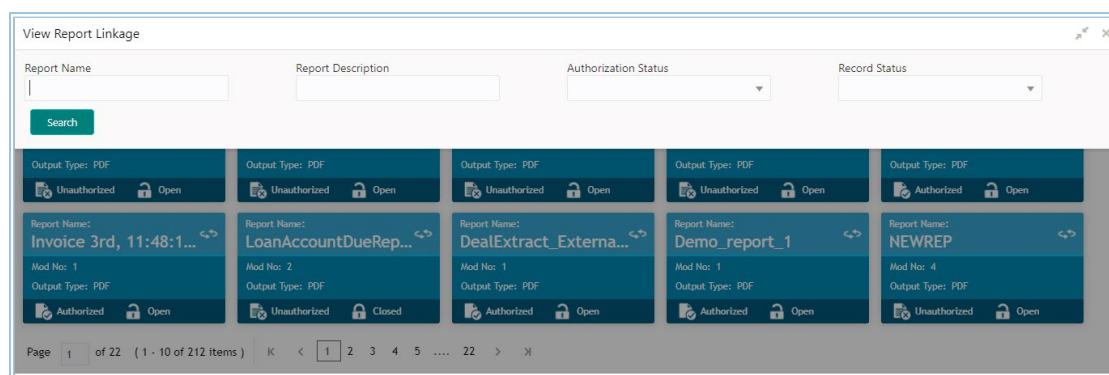
Using this screen, you can view the report linkage created using the Create Report Linkage screen. The status of the report linkage is displayed as Unauthorized and Open. Once the checker authorizes the report, the status is updated to Authorized and Open.


To view a report linkage:

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

→ The **View Report Linkage** screen is displayed.

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 Error Codes and Messages

This topic contains the error codes and messages:

Table 11: 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 |

5 List of Menus

1. Create Report Linkage - [3.3.1 Create Report Linkage](#) (pg. 15)
2. Upload Report Template - [3.1 Upload Report Template](#) (pg. 10)
3. View Report Linkage - [3.3.2 View Report Linkage](#) (pg. 17)
4. View Report Template - [3.2 View Report Template](#) (pg. 12)