File Upload Report Configuration Guide Oracle Banking Digital Experience Patchset Release 22.2.3.0.0

Part No. F72987-01

February 2024

ORACLE

File Upload Report Configuration Guide February 2024

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

www.oracle.com/financialservices/

Copyright © 2006, 2024, 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.

Table of Contents

1.	Pref	face1	_1
1	.1	Intended Audience1	-1
1	.2	Documentation Accessibility1	-1
1	.3	Access to Oracle Support 1	-1
1	.4	Structure1	-1
1	.5	Related Information Sources1	_1
2.	File	Uploads2	2—1
2	.1	OutsideIn (For MS Excel processing)	2—1
2		Configuration for storing key for decrypting uploaded files and creating encrypted response file 2–2	€S
2	.3	Using Enrichers in File Uploads2	2–3
3.	Rep	oorts	3–1
3	.1	Reports – Internal Report Engine	3—1

1. Preface

1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

1.2 **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.

1.3 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs_if you are hearing impaired.

1.4 Structure

This manual is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the User Manual.

The subsequent chapters describe following details:

- Introduction
- Preferences & Database
- Configuration / Installation.

1.5 **Related Information Sources**

For more information on Oracle Banking Digital Experience Patchset Release 22.2.3.0.0, refer to the following documents:

Oracle Banking Digital Experience Installation Manuals



2. File Uploads

2.1 Outsideln (For MS Excel processing)

Outside Inn - This is used for parsing XLS, XLSX in file uploads module. This library is not shipped with OBDX but needs to be downloaded from below link for required platform (OS on which app server is running)

http://www.oracle.com/technetwork/middleware/webcenter/content/oit-dl-otn-097435.html

Search Export - (Refer Pre requisite installation document for version)

Unzip the downloaded file and copy all contents of 'redist' folder to config/outsidein/<os> directory

Then copy all contents (except jar & sh files) of 'sdk/demo' directory to config/outsidein/<os>

Use sx.cfg (replace/merge contents if required) shipped in installer from folder config/outsidein/<os>

Confirm/update path \rightarrow select * from digx_fw_config_all_b where prop_id = 'OUTSIDE_IN_SDK'

Default config/outsidein/linux64

Grant 777 privileges for OutsideIn directory

📙 lin 🔹 🚰 🔽 🖛 🔹 🔶 🔹 🔂 🏠 🥭	🔯 Find Files 🗧						
📔 Download - 📝 Edit - 🗶 🚜 🕞 Properties 📑 New - 🛛 🛨 💌							
cratch/config/outsidein/linux64/							
lame ^	Size	Changed	Rights	(
		7/8/2018 6:28:01 PM	rwxrwxrwx	5			
adinit.dat	255 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	s			
batch_process_ex	33 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	s			
cmmap000.bin	373 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
exporter	113 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] exsimple	113 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] extract_archive	10 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] libccbf.so	89 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] libde_wp.so	310 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
libex_bf.so	8 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
] libex_ihtml.so	8 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	s			
libex_itext.so	8 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
libex_ixml.so	8 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
libex_page.so	37 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
libfreetype.so.6	546 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
] libib_fpx2.so	114 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	s			
] libib_gp42.so	62 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	s			
] libib_jpg2.so	86 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] libib_pcd2.so	159 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] libib_psd2.so	59 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
] libib_xbm2.so	58 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
] libib_xpm2.so	97 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
libib_xwd2.so	62 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			
] libim_cdr2.so	472 KB	7/8/2018 6:28:02 PM	rwxrwxrwx	5			
libim_cmx2.so	143 KB	7/8/2018 6:28:03 PM	rwxrwxrwx	5			



2.2 <u>Configuration for storing key for decrypting uploaded</u> <u>files and creating encrypted response files</u>

The key used for file decryption by default decryptor is stored in database in digx_fw_config_all_b with prop_id as 'ENCRYPTION_KEY'. If this is to be stored in WLS connector update the property as below

update digx_fw_config_all_b set prop_value='KEY_STORE' where prop_id='ENCRYPTION_KEY_LOCATION';

CRACLE WebLogic Server Asministration Concelle 12c (change Center Amministration Concelle 12c (change Center Concelle 12c) Inter-Stammary of Deployments Change Center View changes and restarts Click the *Lock & Elde* button to modify, add or delete items in this domain. Summary of Deployments
Configuration Control Monitoring Lock & Edit
Release Configuration This pape displays the list of zero EE applications and standardone application modules installed to this doma You can update (mission) at delete installed applications and modules from the domain by selecting the ch To install a new application or module for deployment to targets in this domain, click **Install**. © Customize this table Deployments Install Update Detote
 Imme
 (Unscript)
 (Unscript)

 Imme
 Amme
 (Unscript)

 Imme
 Imme
 (Unscript)

 Imme
 Imme
 (Unscript)

 Imme
 Imme
 (Unscript)

 Imme
 Imme
 (Unscript)

 Imme
 (Unscript)
 (Unscrin)

 Imme
 State Health Type Targets Scope Do ions ent Order
 Active
 Final Control

 Active
 Ubrary

 Active
 Ubrary

 Active
 Ubrary

 Active
 Ubrary

 Active
 Enterprise Application

 Active
 Intervention
 AdminServer, tobt_claster Gobal AdminServer, tobt_claster Gobal AdminServer, tobt_claster Gobal obdx_cluster Gobal tow do 1... obdx_cluster Install an ent Configure an Update (rede Classification
 Classification obdx_cluster Global Active 📽 OK Resource Adapter Honitor the modul application Deploy EIB module Install a Web appl Global Global Active 🔮 OK Enterprise Application obdx_cluster source Adapter tealth of Running Servers as of 2:09 PM In Falls None to display E Web Services None to display
 None to display

 Image: A state of the erming (0) Active VOK Enterprise Application abdx_cluster Clobel
 Active
 If CK
 Enterprise Application
 abdx_cluster

 Active
 If CK
 Enterprise Application
 abdx_cluster
 Global Active Library Active CK Web Application E DHS Application (12-2-1-1-0) AdminServer, obdk_cluster Global Active 🔮 OK E Beu mplpriv_jar(12.4,12.1.0.4.0) 100 Library Global Active AdminServe

Update the encryption key in connector as below -

Normal Section Control Section Sectim Section Sectimado Section Section Section Section Section Section							
Note in the information and definition and and and and and and and and and an							
Monometric and conservation Construction Constructio	je Center	A Home Log Out Preferences M Record Help	Welcome, shantanu.d Connected to: obdx_domain				
Operation Operation Operation Operation Operation Interaction Interaction Interaction Interaction Interaction Interaction Interacti	changes and restarts	Home >Summary of Deployments >com.ofex.digx.connector.cur >Roles >com.ofes.digx.connector.	or the				
Image: Control Optimized Control	items in this domain.						
and Loans Description Descrip	6	Refer Refer Outboard Credential Happings Istown Principal Happings Principal					
Bit descention Description State Description State Description State	foman main Partitions Versionent ployments vices	je Costanize Bis Lable					
INS New A ISS New Outhound Connection Fiel In befort administrative mg/End/connect/BHP00075	eroperability						
	agnostics	🖸 WLS User 🔅 ETS	TS User	Outbound Connection Pool			
Line Caller Share to di Penna h		Default edm	dministrator	ra/DIGKConnectorBIREPORTS			
		New Dolote		Showing 1 to 1 of 1 Previous Next			
How do L. 8	do I 8						
Order of bond of bond of anguing Order of bond of bond of anguing Order of bond of bond of bond of bond Order of bond Orderof bond Order of bond Order of bond Order of bond	In Statue Contential mappings In Statue Contential mappings In Statue Contentiate Contentiate Contentiate Contentiate Contentiated (Contentiated Contentiated Con						



Click New > Select ra/DIGXConnectorFILEUPLOAD > Next > Select Default User

In password field, enter the encryption key

ORACLE WebLogic Server Ad	ministration Console 12c					
Change Center	🙆 Home Log Dut Preferences 🖂 Record Help	Welcome, shantanu.d Connected to: obdx_domain				
View changes and restarts	Home Stammary of Deployments scansolin dipsionendos are silvers some afree departmented on an					
Cick the Lock & ER button to modify, add or delete items in this domain.	Create a New Security Credential Mapping					
Lock & Edit	Back Wett Insti Cancel					
Release Configuration	ELS User Name and Password					
Domein Structure obdx_domen	Configure the ES User Name and Password that you would like to map the WebLogic Server User te: * Indicates required fields					
B-Domain Partitions B-Environment Deployments B-Services Security Realms	Exter the EB User Name * EIS User Name:					
H+Interoperability H+Diagnostics	Detr de CB Pasiveri. "EIS Pasiveri.					
	* Confirm Password:					
How do I	(Basi (Wett) (Dase) (Case)					
System Status						
Health of Running Servers as of 2:12 PM						
Tailed (0) Critical (0)						
Overloaded (0)						
Warning (0) OK (2)						
WebLege Sarver Venion: 12.2.1.2.0 Copyright (r) 1199, 1026, Oracle and/or its affiliates. A Grade is a registered testernark of Grade Copyrable	l regles neurosci. André de scilibilitas, Other nannes may he tradorazion di thor eseperture aurores.					

2.3 Using Enrichers in File Uploads

(For custom defined templates only, not required for out of box templates)

- Enrichers are used to enrich or fetch a value for a given field. Let's say the field is Debit Account Id and enricher is Account Currency, so it means that the currency for that debit account Id needs to be fetched or enriched.
- Enricher can have enricher arguments. These arguments are passed when the enricher is invoked.
- Enrichers are of 2 types
 - > Upload File Enrichers
 - Static arguments (enricherArgs) Value is passed directly from template to enricher as label string
 - Dynamic arguments (enricherDynArgs) Value is derived from a previous field of the record.
- Extract (Response) File Enrichers

How Enrichers are used in File Upload ?

- In File Upload XML template, the field **which will** enrich other fields must have 'enricher' attribute. This attribute **must not be specified for the fields which would be** enriched.
- The value of this 'enricher' attribute is the 'ENRICHMENT_ID' which is a column in table 'DIGX_FW_ENRICHMENTS_B'. Currently OBDX support only Java enrichers. Enrichers can be in any package but must implement the 'IEnrichment' interface.
- On the basis of the 'enricher' attribute value mapping is done from table 'DIGX_FW_ENRICHMENTS_B' and the corresponding 'ENRICHMENT_VALUE' column value is fetched and enrich() method of the specified Java class is invoked Eg.
- Refer to the following figure of File Template : InternalFT.xml .



```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<FileDefinition fileName="InternalFT"
   <RecordDefinition
       recordHandlerClassName="com.ofss.digx.app.fileupload.handlers.InternalFTRecHandler"
       recordTvpe="B"
       dtoClassName="com.ofss.digx.domain.fileupload.entity.InternalFTDTO"
       multiplicity="-1" maxFields="10" comments="
       parent="" length="" transaction="ITG"
       mixedIdentifier="A">
       <Field name="mixedIdentifier"/>
       <Field name="partyId"/>
       <Field name="debitAccountId" enricher="ACCTCURR" enricherArgs=""/>
       <Field name="amount" type="CD"/>
       <Field name="amountCurr"/>
       <Field name="valueDate" enricher="DATE" enricherArgs="dd-MM-yyyy"/>
       <Field name="creditAccountId" enricher="ACCTDETAILS"/>
       <Field name="debitNarrative"/>
       <Field name="creditNarrative"/>
       <Field name="purpose"/>
   </RecordDefinition>
   <RecordDefinition
       recordHandlerClassName="com.ofss.digx.app.fileupload.handlers.InternalFTRecHandler"
       recordType="B"
       dtoClassName="com.ofss.digx.domain.fileupload.entity.InternalFTBeneDTO"
       multiplicity="-1" maxFields="10" comments="
       parent="" length="" transaction="ITGBEN"
       mixedIdentifier="B">
       <Field name="mixedIdentifier"/>
       <Field name="partyId"/>
       <Field name="debitAccountId" enricher="ACCTCURR" enricherArgs=""/>
       <Field name="amount" type="CD"/>
       <Field name="amountCurr"/>
       <Field name="valueDate" enricher="DATE" enricherArgs="dd-MM-vvvv"/>
       <Field name="beneId" enricher="BENE" enricherArgs="INTERNAL"/
       <Field name="debitNarrative"/>
       <Field name="creditNarrative"/>
       <Field name="purpose"/>
    </RecordDefinition>
</FileDefinition>
```

Static Enrichers

 In above template, the field name 'debitAccountId' has a enricher 'ACCTCURR' with no enricherArgs. In this case 'DIGX_FW_ENRICHMENTS_B' will be queried and search for 'ACCTCURR' and 'AccountCurrencyEnricher' class is invoked.

This enricher derives the debitAccountCurr. Hence this attribute must be present in the record DTO with its setters defined.

```
@Override
public HashMap<String, Object> enrich(HashMap<String, Object> parameters) throws Exception {
    SessionContext sessionContext = (SessionContext) ThreadAttribute.get(ThreadAttribute.SESSION_CONTEXT);
    FileUploadPolicyHelper policyHelper = FileUploadPolicyHelper.getInstance();
    policyHelper.fetchAccountId(sessionContext, new Account(parameters.get("value").toString()),
        parameters.get("fileRefId").toString());
    HashMap<String, Object> fields = new HashMap<String, Object>();
    String curr = policyHelper.fetchCurrencyForAccount(new Account(parameters.get("value").toString()),
        parameters.get("fileRefId").toString());
    fields.put("debitAccountCurr", curr == null ? "" : curr);
    fields.put("debitAccountId", parameters.get("value"));
    return fields;
}
```



 The field name 'valueDate' has static enricherArgs 'dd-MM-yyyy' meaning that the date has to be specifically in 'dd-MM-yyyy' format. This value is simply available to the enricher for processing purpose. This enricher does not add any new field but simply modifies the value of the current field.

```
@Override
public HashMap<String, Object> enrich(HashMap<String, Object> parameters) throws Exception {
   DateFormat df = new SimpleDateFormat(parameters.get("enricherArgs").toString());
   Date date = null;
   HashMap<String, Object> fields = new HashMap<String, Object>();
   try {
      df.setLenient(false);
      date = df.parse(parameters.get("value").toString());
      fields.put(parameters.get("field").toString(), new com.ofss.fc.datatype.Date(date));
   } catch (ParseException el) {
      Exception e = new Exception();
      e.setErrorCode(UploadErrorConstants.FU_INVALID_VALUE_DATE);
      throw e;
   }
   return fields;
}
```

Dynamic Enrichers

If 'enricherDynArgs' is specified

Eg. enricherDynArgs="beneId~beneName" on beneficiary address field, the parser simply invokes getters on beneId and beneName fields and passes the values to the enricher in a map. It should be noted that these fields must be defined previously/above the beneficiary address field, so that parser has already completed the setter operation.

<Field name=" beneId"/> <Field name=" beneName "/> <Field name="beneAddr" enricher="ADDRESSENRICHER" enricherDynArgs=" beneId~beneName "/>

Eg.

Extract (Response) File Enrichers

1	xml version="1.0" encoding="UTF-8" standalone="yes"? ¶
2	<filedefinition delimiter="," encryptionclass="" filetype="csv" handler="com.ofss.digx.framework.fileupload.extract.CSVHandler">¶</filedefinition>
3	9
4	<recorddefinition recordtype="H">¶</recorddefinition>
5	<field label="RECORD" name="record"></field> ¶
6	<field label="RECORD REF NO" name="recRefId"></field> ¶
7	<field label="FILE REF NO" name="fileRefId"></field> ¶
8	<field label="E-BANKING REF NO" name="digxRefId"></field> ¶
9	<field label="CONTRACT REF NO" name="contractRefId"></field> 1
.0	<field label="RECORD STATUS" name="recStatus"></field> ¶
.1	<field label="STATUS CODE" name="errCode"></field> 1
.2	<field label="STATUS DESCRIPTION" name="errMsg"></field> ¶
.3	1
.4	
.5	<recorddefinition_query="responselist" recordtype="B">¶</recorddefinition_query="responselist">
.6	<field name="record" no="1" wrapchar=""></field> ¶
.7	<field name="recRefId" no="2"></field> ¶
.8	<field name="fileRefId" no="3"></field> "
.9	<field name="digxRefId" no="4"></field> ¶
:0	<field name="contractRefId" no="5"></field> ¶
11	<field name="recStatus" no="6"></field> ¶
2	<field enricher="ERRORMSG" enricherargs="" name="errCode" no="7"></field> ¶
:3	<field name="errMsg" no="8"></field> ¶
:4	¶
:5	1
:6	×



Enrichers can be added to response file templates. The enricher class is invoked in the same way as upload templates. Eg, in above case, localized error message need to be added to extracts from 'errCode'. Extract enrichers do not support dynamic arguments

File Copy Configuration

In case of OBPM as host, for **file level** uploads in OBDX, the files are generated in PAIN001001/PAIN001001 formats after approval at OBDX end is complete. These files are stored in a directory on OBDX server. For record level, service is used same as of single screen transactions.

Configs

- Set this path as the value for prop_id = 'UBS_HANDOFF_FILE_PATH' in the DIGX_FW_CONFIG_VAR_B table against th`e required entity (Empty folder with full permission).
- 2. Copying the file to host system

File is copied via REST service to OBPM

- 3. Debtor BIC FI Configuration
 - a. Provision to set Debtor BIC has been provided at entity level.
 - b. The same can be configured in the following path by System Administrator user:
 - i. Toggle menu > Configuration > System Configuration > Click on Continue > Select Entity > Dynamic Module Tab > File Upload

≡ (p futura	a bank Search		Q,		Contemporation (Contemporation) (Contem
Select Host	Oracle FLEXC	UBE Universal Banking 14.	4.0.0.00		
Entity : UBS 1	14.4 HEL Branch				
Ø Basic Det	tails	Handoff File Path for UBS	/scratch/deployables/handoff/UBS	Work Area Path	/home/devops/obdx/fileupload
⊘ Host Deta	ails	UBS File Handoff Host	10.40.90.47	UBS File Handoff Host Port	7203
Ø Bank Deta	ails	Response File Path	/scratch/deployables/fileupload	Handoff File Path for FCORE	/scratch/deployables/handoff/FCORE
Branch D	etails	Maximum Records for File Uploads	10000	Maximum Length of File	5242885
Ourrency	Payments	Debitor BIC FI	PPBKGB21456	110	
⊘ SMTP					
O Third Par	ty Configuration				

Home



3. Reports

Reports in OBDX can be used with Internal Reports Engine or Oracle BI.

3.1 <u>Reports – Internal Report Engine</u>

In installer scripts, all reports point to Internal report engine, no additional configuration is required.

Note : A8_C2_PENDING_APPROVALS works only with BI.

For API Summary reports, internal engine works for maximum 500 records only. For higher load BI is recommended.

Home

