

EMS Interface User Guide

Oracle FLEXCUBE Universal Banking

Release 14.7.2.0.0

Part No. F87755-01

November 2023

EMS Interface 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 © 2007, 2023, 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
1.1 Introduction.....	1-1
1.2 Audience.....	1-1
1.3 Documentation Accessibility.....	1-1
1.4 Organization	1-1
1.5 Acronyms and Abbreviations.....	1-2
1.6 Related Documents	1-2
1.7 Glossary of Icons.....	1-2
2. The Oracle FLEXCUBE EMS Interface	2-1
2.1 Brief Description of the Process	2-1
2.1.1 <i>For Incoming Messages</i>	2-1
2.1.2 <i>For Outgoing Messages</i>	2-1
2.2 EMS Details Maintenance	2-2
2.2.1 <i>Maintaining Message Media</i>	2-2
2.2.2 <i>Message Media Control</i>	2-3
2.2.3 <i>Maintaining Folder Structure</i>	2-4
2.2.4 <i>Specifying Parameters and Values for fcubs.properties File</i>	2-5
3. Maintaining Interface specific Details	3-1
3.1 Account Statement Report	3-1
3.1.1 <i>Maintaining Account Statement Handoff</i>	3-2
4. Function ID Glossary	4-1

1. Preface

1.1 Introduction

This manual is designed to help acquaint you with the interface between Oracle FLEXCUBE and the other systems within your bank.

This manual provides you extensive explanations about the various maintenances required for the smooth exchange of data between Oracle FLEXCUBE and the applicable systems through the interface. It also gives you an insight into the processes involved in the actual exchange of data.

1.2 Audience

This manual is intended for the following User/User Roles:

Role	Function
Back office data entry Clerks	Input functions for maintenance related to the interface.
Back office Managers/Officers	Authorization functions.

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 Organization

This manual is organized as follows:

Chapter	Description
Chapter 1	<i>About this Manual</i> gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	<i>The Oracle FLEXCUBE EMS Interface</i> explains about the EMS (Electronic Messaging Service) interface between external systems and Oracle FLEXCUBE.
Chapter 3	<i>Maintaining Interface specific Details</i> deals with the maintenance of various customer account transactions through EMS.
Chapter 4	<i>Function ID Glossary</i> has alphabetical listing of Function/Screen ID's used in the module with page references for quick navigation.

1.5 Acronyms and Abbreviations





Abbreviation	Description
System	Unless and otherwise specified, it shall always refer to Oracle FLEX-CUBE system

1.6 Related Documents

- XML Interface document – outlines the details of the interface mechanism between Oracle FLEXCUBE and a system external to it
- The Procedure User Manual

1.7 Glossary of Icons

This User Manual may refer to all or some of the following icons.

Icons	Function
	Exit
	Add row
	Delete row
	Option List

2. The Oracle FLEXCUBE EMS Interface

The EMS or the Electronic Messaging Service is a messaging interface between external systems and Oracle FLEXCUBE. This interface is implemented with the help of two windows services, one each for In and Out processing. This interface enables a connection to be established between Oracle FLEXCUBE and the external systems network resource for sending and receiving information.

The in-service connects to the external system resource (Windows machine, UNIX machine or MSMQ server) and transfers the data to the local windows machine, where the message is processed and uploaded to Oracle FLEXCUBE.

The out-service polls on an Oracle FLEXCUBE out table. As soon as a message is generated in the out table, it is picked up, formatted if required (for example, as a MS-Word document) and delivered to the external system through one of the delivery modes (FTP, MSMQ etc.).

This chapter contains the following sections:

- [Section 2.1, "Brief Description of the Process"](#)
- [Section 2.2, "EMS Details Maintenance "](#)

2.1 Brief Description of the Process

This section contains the following topics:

- [Section 2.1.1, "For Incoming Messages"](#)
- [Section 2.1.2, "For Outgoing Messages"](#)

2.1.1 For Incoming Messages

For the delivery modes NT and FTP

The message files are to be placed in the EMS\SWIFT\In\Ready, in the EMS server. The incoming message service (In-service) copies the file to the folder EMS\SWIFT\IN\WIP and performs further processes like formatting etc. Once the processes are completed, the file is moved to the folder EMS\SWIFT\IN\PROCESSED.

Though all the folders are maintained in the EMS server, they can be mapped to any system.

For the QUEUE delivery mode

The messages are placed by the external system in the in queue. They are moved from there to the backup queue and sent for processing. Once processing is successful, the message is moved to the final queue.

2.1.2 For Outgoing Messages

For delivery modes NT and FTP

The messages are selected from the Oracle FLEXCUBE out table, formatted if required and moved to the folder EMS\SWIFT\OUT\WIP. From here, the file is picked up and moved to EMS\SWIFT\OUT.

For the QUEUE delivery mode

The messages are sent to the out queue.

2.2 EMS Details Maintenance

The following maintenances are required for the EMS:

- Message Media Maintenance
- Message Media Control Maintenance
- Maintaining Folder structure
- Specifying Parameters and Values

This section contains the following topics:

- [Section 2.2.1, "Maintaining Message Media"](#)
- [Section 2.2.2, "Message Media Control "](#)
- [Section 2.2.3, "Maintaining Folder Structure"](#)
- [Section 2.2.4, "Specifying Parameters and Values for fcubs.properties File"](#)

2.2.1 Maintaining Message Media

You can invoke the 'Message Media Maintenance' screen by typing 'MSDMEDMT' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button. The below given screen displays:

The screenshot shows the 'Media Maintenance' application window. The window title is 'Media Maintenance'. The interface includes a toolbar with 'New' and 'Enter Query' buttons. The main area contains several input fields: 'Media Code *', 'Description *', 'Media Number', 'Message Suffix', and 'Message Terminator'. Below these are checkboxes for 'Test Word Required', 'Stop Processing', and 'Padding Required', along with a 'Number of Characters' field. To the right is a 'Media Priority *' field. At the bottom, there is a 'Compatible Media' section with a dropdown menu and a 'No data to display.' message. The footer includes 'Fields', 'Audit', and 'Exit' buttons.

Specify the following details:

Media Code

Specify the media used for message propagation. For instance, SWIFT, MAIL etc

Media Description

Describe the media code.

Message Suffix

Specify the suffix to be added in the message.

Message Terminator

Specify the terminator to be used for terminating the message.

Number of Characters

Specify the total length of the message.

Media Priority

Specify the media priority. Based on the priority, the messages are processed with the media concerned.

Padding Required

Check this option if padding is required. Padding letters will be added at the end of each message.

2.2.2 Message Media Control

You can invoke the 'Message Media Control Maintenance' screen by typing 'MSDMGMCS' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button. The below given screen displays:

Message Media Control Maintenance

New Enter Query

Node *
Media Control System *
Media *
Status Active

Delivery Preference

MX Preference

Delivery Type Folder
 Queue
 Message over Rest

In Directory
Out Directory
File Prefix

Unix In-Directory
Unix SWIFT Server

Fields Audit Exit

Specify the following details:

Node

Specify the DB instance name.

Media

Select the media from the adjoining option list. The option list displays all the valid media maintained in the system.

Status

Select the status. The following are the options available:

- Active
- Passive

Delivery Type

Indicate the Mode of delivery. The following are the options available:

- Folder
- Queue

In Directory

Specify the directory in which the message files are to be placed by external system (Only for EMS_IN if delivery type is 'Folder').

Out Directory

Specify the directory in which the message files are sends to external system (Only for EMS_OUT).

In Queue

Specify the queue in which the message files are to be placed by external system (Only for EMS_IN if Delivery type is 'Queue').

Out Queue

Specify the queue in which the message files are sends to external system (Only for EMS_OUT).

Message Queue

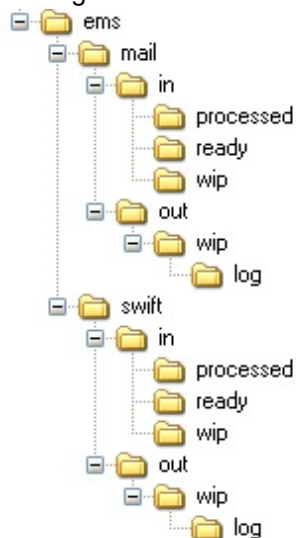
Select the queuing software being used in bank.

2.2.3 Maintaining Folder Structure

Maintain the following folder structure:

2.2.3.1 Folder Structure for Delivery Mode Folder

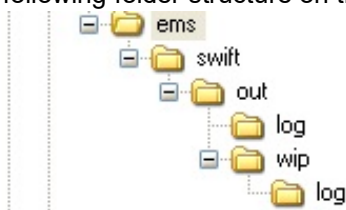
You should maintain the following folder structure on the Application server machine:



The sub-folders for the media – MAIL and SWIFT – exist under the parent folder EMS.

2.2.3.2 Folder Structure for Delivery Mode Queue

You should maintain the following folder structure on the Application server machine:



The sub-folders for the media – SWIFT – exist under the parent folder EMS.

2.2.4 Specifying Parameters and Values for fcubs.properties File

You should specify the following parameter values in fcubs.properties file.

2.2.4.1 For Delivery Mode Folder

Parameter	Description
EMS_INT_QCF	Internal Queue Connection Factory. Example: (EmsQcf)
EMS_OUT_JMS_DLQ	Out messages dead letter queue. Example: (NOTIFY_QUEUE_DLQ)
EMS_IN_JMS_DLQ	In messages dead letter queue. Example: (NOTIFY_QUEUE_DLQ)
EMS_FILE_TRANSFER_MODE	Mode of file transfer. Example: FTP etc.
FTP_SRVR	FTP Server IP Address. Example: 169.165.98.11(if file Transfer Mode is ftp)
FTP_ID	FTP Server userId (if file Transfer Mode is ftp)
FTP_PWD	FTP Server Password. Example: 2fb0x66QSug=(FTP Server Password in encrypt format)
FILE_TYPE	file type. Example: .txt,.xlsx etc
SWIFT_FORMAT	1
MSG_DELIMITER	YES
MSG_TERMINATOR	YES
MEDIA	SWIFT

2.2.4.2 For Delivery Mode Queue

Parameter	Description
EMS_EXT_QCF	Out Queue Connection Factory - External System
EMS_INT_QCF	Internal Queue Connection Factory Examples(EmsQcf)
EMS_OUT_JMS_DLQ	Out messages dead letter queue Examples (NOTIFY_QUEUE_DLQ)
EMS_IN_JMS_DLQ	in messages dead letter queue Examples (NOTIFY_QUEUE_DLQ)
EMS_INIT_CTX_FACT	Application server context factory class in which server external queue create examples (weblogic.jndi.WLInitialContextFactory)
EMS_PRVDR_URL	Application server ip address in which server external queue create example weblogic server t3://127.0.0.1:7001
EMS_QUEUE_PRINCIPAL	Application server User Id in which external queue create.
EMS_QUEUE_CREDENTIALS	Application server Password in which external queue create.
EMS_FILE_TRANSFER_MODE	Mode of file transfer Examples FTP etc..
FTP_SRVR	FTP Server IP Address Examples 169.165.98.11(if file Transfer Mode is ftp)
FTP_ID	FTP Server userId (if file Transfer Mode is ftp)
FTP_PWD	FTP Server Password Examples 2fb0x66QSug=(FTP Server Password in encrypt format)
FILE_TYPE	file type examples .txt,.xlsx etc ..
SWIFT_FORMAT	1
MSG_DELIMITER	YES
MSG_TERMINATOR	YES
MEDIA	SWIFT

3. Maintaining Interface specific Details

Oracle FLEXCUBE is an international universal banking solution catering to the treasury back office functions among other modules.

The details of all customer account transactions can be handed off to the external systems existing within your bank, through an interface. This document outlines the specifications of the interface between Oracle FLEXCUBE and the external systems.

The interface handles (hands off) data pertaining to the following functions:

- Account Statement hand off – the account statement hand off is performed based on the account statement cycle, maintained in the customer account maintenance, whereby the details of all account statements are generated.

The salient features of the interface are as follows:

- Data is transferred to the external system (s) through ASCII files in predefined file formats.
- Data is handed off at the end of the business day as a Batch file to the external system.

Note

If Handoff fails you will need to trigger it once again.

This chapter contains the following section:

- [Section 3.1, "Account Statement Report"](#)

3.1 Account Statement Report

This section contains the following topic:

- [Section 3.1.1, "Maintaining Account Statement Handoff"](#)

3.1.1 Maintaining Account Statement Handoff

In Oracle FLEXCUBE, you can trigger the account statement generation online by typing 'ACDOPTN' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button. System generates one file for each account.

The screenshot shows the 'Account Statement Report' form in Oracle FLEXCUBE. The form is titled 'Account Statement Report' and has a close button (X) in the top right corner. Below the title bar, there are two buttons: 'New' and 'Enter Query'. The form is divided into several sections:

- Statement Reference Number**: A text input field with a magnifying glass icon.
- Statement Status**: A text input field.
- Account Selection Type**: Three radio buttons: 'One Account' (selected), 'Multiple Account', and 'Range'.
- Statement Type**: Two radio buttons: 'Brief' (selected) and 'Detailed'.
- Date Range**: Two text input fields labeled 'From Date' and 'To Date'.
- Single Account**: A section with four text input fields: 'Account', 'Branch', 'Charge', and 'Account Currency'. Each field has a magnifying glass icon. Below these fields is a checkbox labeled 'Show Linked Account Details' which is currently unchecked.
- Book Date**: Two radio buttons: 'Booking Date' (selected) and 'Value Date'.
- Multiple Account**: A section with a text input field and a 'Print Options' button.
- Bottom Bar**: Three buttons: 'Charges', 'Events', and 'View/Print'. On the right side, there are 'Exit' and 'Save' buttons.

In this screen you can capture the following attributes for generating the account statement:

Specifying the account number

This is a valid account number maintained in the system. The branch where the account is held will be displayed upon selecting the account.

Specifying the date range for account statement

The From and To date represent the date range for generating the account statement for the account. Enter the dates in date-month-year format.

Specifying the account currency

This is a valid currency of the account for which the statement needs to be generated.

After the fields have been entered, the following screen with the account details will be displayed.

The screenshot shows a software interface titled "Message". At the top right, there are window control icons (minimize, maximize, close). Below the title bar is a search bar with the placeholder text "Enter Query". The main content area is divided into several sections. The top section contains a grid of input fields: "Reference Number", "Receiver or Sender", "Sub Message Type", "DCN *", "Message Type", "SWIFT Sub Message Type", "Event Sequence Number or Version Number" (with the value "1"), and "SWIFT Message Type". The bottom section is a large empty box labeled "Message". On the right side of this box, there are navigation icons: "10/1" and "+ -". At the bottom right corner, there is an "Exit" button.

Selecting multiple account numbers

In this section you can capture the following attributes for generating consolidated account statement for the customer having many accounts:

- Customer Number – a valid customer number maintained in the system.
- To Date – the date till which the account statement has to be generated.

4. Function ID Glossary

A

ACDOPTN3-2

M

MSDMCS 2-3

MSDMEDIA 2-2