

EMS Interface User Guide

# **Oracle FLEXCUBE Universal Banking**

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EMS Interface User Guide  
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# 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 Critical Patches

Oracle advises customers to get all their security and vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches, Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

## 1.5 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.             |

## 1.6 Acronyms and Abbreviations

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

## 1.7 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

## 1.8 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. At the top, there's a title bar with 'Media Maintenance' and two buttons: 'New' and 'Enter Query'. Below the title bar, there are several input fields arranged in a form. On the left side, there are five text input fields labeled 'Media Code \*', 'Description \*', 'Media Number', 'Message Suffix', and 'Message Terminator'. To the right of these, there's a larger text area. Below the left-side fields, there are three more input fields: 'Number of Characters', 'Media Priority \*', and a section for 'Compatible Media' which includes a checkbox and a dropdown menu. Further down, there are three checkboxes: 'Test Word Required', 'Stop Processing', and 'Padding Required'. At the bottom of the form, there's a table with the message 'No data to display.' The bottom of the window has a toolbar with '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**

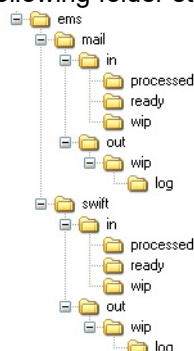
Select the queuing software being used in bank.

## **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<br>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. At the top, there is a title bar with a maximize button and a close button. Below the title bar, there is a toolbar with 'New' and 'Enter Query' buttons. The form is divided into several sections: 1. 'Statement Reference Number' and 'Statement Status' fields. 2. 'Account Selection Type' with radio buttons for 'One Account', 'Multiple Account', and 'Range'. 3. 'Statement Type' with radio buttons for 'Brief' and 'Detailed'. 4. 'Date Range' section with 'From Date' and 'To Date' fields. 5. 'Single Account' section with 'Account', 'Branch', and 'Charge' fields, and 'Account Currency' field. 6. 'Book Date' with radio buttons for 'Booking Date' and 'Value Date'. 7. 'Show Linked Account Details' checkbox. 8. 'Multiple Account' section with a list box and a 'Print Options' button. 9. Bottom buttons: 'Charges', 'Events', 'View/Print', 'Exit', and 'Save'.

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.

### Message Media Control Maintenance

 New  Enter Query

|                        |                      |                                                                                    |
|------------------------|----------------------|------------------------------------------------------------------------------------|
| Node *                 | <input type="text"/> |  |
| Media Control System * | <input type="text"/> |                                                                                    |
| Media *                | <input type="text"/> |  |
| Status                 | Active               |                                                                                    |

#### Delivery Preference

**Delivery Type** ☒ Folder  
☐ Queue  
☐ Message over Rest

**In Directory**    
**Out Directory**    
**File Prefix**

**Unix In-Directory**  

Fields

### 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

|                                                      |                         |
|------------------------------------------------------|-------------------------|
| <b>Numerics</b>                                      | _TOC268532540 ..... 2-5 |
| 42248                                                | _TOC268532541 ..... 2-5 |
| Heading 3                                            | _TOC268532542 ..... 2-6 |
| 3.1.1 Maintaining Account State-<br>ment Handoff 3-2 | _TOC268532543 ..... 3-1 |
|                                                      | _TOC269133368 ..... 2-6 |
|                                                      | _TOC269136752 ..... 2-2 |
| <b>A</b>                                             | _TOC269136753 ..... 2-2 |
| ACDOPTN ..... 3-2                                    | _TOC269136754 ..... 2-2 |
|                                                      | _TOC269136755 ..... 2-2 |
| <b>M</b>                                             | _TOC269136756 ..... 2-2 |
| MSDMCS ..... 2-3                                     | _TOC269136757 ..... 2-2 |
| MSDMEDIA ..... 2-2                                   | _TOC269136758 ..... 2-2 |
|                                                      | _TOC269136759 ..... 2-2 |
| <b>T</b>                                             | _TOC269136760 ..... 2-2 |
| _TOC16309389 ..... 1-1                               | _TOC29108886 ..... 1-1  |
| _TOC16309390 ..... 1-1                               | _TOC294631657 ..... 1-1 |
| _TOC16309393 ..... 3-1                               | _TOC294701480 ..... 1-1 |
| _TOC16309394 ..... 3-1                               | _TOC294706578 ..... 1-1 |
| _TOC18230497 ..... 1-1                               | _TOC325373618 ..... 1-1 |
| _TOC18230498 ..... 1-1                               | _TOC325373619 ..... 1-1 |
| _TOC18230501 ..... 3-1                               | _TOC325373620 ..... 1-1 |
| _TOC18230502 ..... 3-1                               | _TOC325373621 ..... 1-1 |
| _TOC205185120 ..... 3-1                              | _TOC325373622 ..... 1-2 |
| _TOC205267935 ..... 3-1                              | _TOC325373623 ..... 1-2 |
| _TOC206499816 ..... 3-1                              | _TOC325373624 ..... 2-1 |
| _TOC210368899 ..... 1-1                              | _TOC325373625 ..... 2-1 |
| _TOC210369400 ..... 1-1                              | _TOC325373626 ..... 2-1 |
| _TOC210369405 ..... 3-1                              | _TOC325373627 ..... 2-2 |
| _TOC210372676 ..... 3-1                              | _TOC325373628 ..... 2-2 |
| _TOC2488346 ..... 3-1                                | _TOC325373629 ..... 2-3 |
| _TOC250026378 ..... 3-1                              | _TOC325373630 ..... 2-4 |
| _TOC250381833 ..... 1-1                              | _TOC325373631 ..... 2-5 |
| _TOC250381834 ..... 1-1                              | _TOC325373632 ..... 3-1 |
| _TOC250381835 ..... 1-1                              | _TOC325373633 ..... 3-1 |
| _TOC250381836 ..... 1-1                              | _TOC325373634 ..... 3-1 |
| _TOC250381837 ..... 1-2                              | _TOC325390730 ..... 1-1 |
| _TOC250381838 ..... 1-2                              | _TOC325447788 ..... 1-1 |
| _TOC250381839 ..... 3-1                              | _TOC40674509 ..... 1-1  |
| _TOC250381840 ..... 3-1                              | _TOC40674510 ..... 1-1  |
| _TOC250381841 ..... 3-1                              | _TOC40674511 ..... 1-1  |
| _TOC26344213 ..... 1-1                               | _TOC40674513 ..... 1-2  |
| _TOC26344214 ..... 1-1                               | _TOC40674515 ..... 3-1  |
| _TOC26344217 ..... 3-1                               | _TOC40678110 ..... 1-1  |
| _TOC26344218 ..... 3-1                               | _TOC40678111 ..... 1-1  |
| _TOC268532537 ..... 2-2                              | _TOC40678112 ..... 1-1  |
| _TOC268532538 ..... 2-2                              | _TOC40678114 ..... 1-2  |

|                     |     |
|---------------------|-----|
| _TOC40678116 .....  | 3-1 |
| _TOC491957283 ..... | 1-1 |
| _TOC491957574 ..... | 1-1 |
|                     |     |
| _TOC492014241 ..... | 1-1 |
| _TOC492267774 ..... | 1-1 |
| _TOC492268013 ..... | 1-1 |
| _TOC526853073 ..... | 1-1 |
| _TOC526853074 ..... | 1-1 |
| _TOC526853083 ..... | 3-1 |
| _TOC526853084 ..... | 3-1 |
| _TOC53203160 .....  | 1-1 |
| _TOC53203164 .....  | 3-1 |
| _TOC53203237 .....  | 1-1 |
| _TOC53203241 .....  | 3-1 |
| _TOC60825398 .....  | 1-1 |
| _TOC60825399 .....  | 2-1 |

|                    |     |
|--------------------|-----|
| _TOC60825400 ..... | 2-1 |
| _TOC60825401 ..... | 2-1 |
| _TOC60825402 ..... | 2-1 |
| _TOC61080513 ..... | 1-1 |
| _TOC61408947 ..... | 1-1 |
| _TOC68569 .....    | 1-1 |
| _TOC68570 .....    | 1-1 |
| _TOC68573 .....    | 3-1 |
| _TOC68574 .....    | 3-1 |
| _TOC7603902 .....  | 1-1 |
| _TOC85257458 ..... | 1-1 |
| _TOC96140551 ..... | 1-1 |

