

RTGS SKN Messages  
Oracle FLEXCUBE Universal Banking  
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# 1. About this Manual

## 1.1 Introduction

Oracle FLEXCUBE facilitates processing of SKN and RTGS messages for bank payments. The system dispatches and processes Incoming credit payment, Return of Incoming credit payment, Outgoing Credit Payment, Return of Outgoing Credit Payment in SKN and RTGS networks. Besides this User Manual, while maintaining the interface related details, you can invoke the context sensitive help available for each field. This help encapsulates the purpose of each field within a screen. Placing the cursor on the relevant field and striking the <F1> key on the keyboard can obtain information specific to a particular field.

## 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 Acronyms and Abbreviations


Abbreviation	Description
System	Unless and otherwise specified, it shall always refer to Oracle FLEXCUBE Corporate (FCC) system
GI	Generic Interface
RTGS	Real Time Gross Settlement
SKN	Sistem Kliring Nasional / <i>Indonesia</i> National Clearing system

## 1.4 Organization





This manual is organized into the following chapters:

Chapter 1	<i>About This Manual</i> – Provides an introduction to the organisation of the Manual
Chapter 2	<i>RTGS Messages</i> – Provides an overview of the messages in RTGS network.
Chapter 3	<i>SKN Messages</i> – Provides an overview of the messages in SKN network.

## 1.5 Conventions Used in this Manual

Important information is preceded with the  symbol.

## 1.6 Glossary of Icons

Icons	Function
	Exit
	Add row
	Delete row
	Option List

## 1.7 Related Documents

You may need to refer to any or all of the User Manuals while working on the IF RTGS SKN Messages module:

- Procedures User Manual
- GI
- CS
- FT
- MS
- PC
- LC

## 2. RTGS Messages

### 2.1 Introduction

Oracle FLEXCUBE supports processing of messages in RTGS network. Incoming credit payment, Return of Incoming Credit payment, Outgoing Credit payment, return of outgoing credit payment and Incoming debit are the messages dispatched and processed in RTGS networks..

### 2.2 Maintaining Details for RTGS Interface

You need to maintain the following details for this interface:

- Details of External System
- Details of the Interface
- Interface Parameterization
- Interface Translation

#### 2.2.1 Maintaining External System

You need to specify the external system connected to the interface by using the 'External System Maintenance' screen. You can invoke the 'External System Maintenance' screen by typing 'GWDEXSYS' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

External System Maintenance

Enter Query

External System \* Correlation Pattern

Request Message Id

Queue

Request Message Input Only

Response Message Full Screen

Default Response Queue

Dead Letter Queue

☐ XSD Validation Required

☐ Register Response Queue Message Id

External System Queues

\* In Queue \* Response Queue

Fields FTP Parameters

Input By Date Time Authorized By Date Time Modification Number

☐ Authorized ☐ Open

Exit

In this screen, you can specify the following details:

### External System

Specify 'RTGS' as the external system.

For more details refer *Maintaining External System(s) Details* section of *Generic Interface User Manual*.

## 2.2.2 Maintaining RTGS Interface Details

Generic Interface (GI) provides a facility to define format details and properties associated to interface file. You can maintain format details and properties associated with RTGS interface file in the 'Interface Definition' screen. You can invoke this screen by typing 'GIDIFTDF' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

The screenshot shows the 'Interface Definition' window with the following sections and fields:

- General Fields:** Branch Code, External System, Interface Code, Interface Type (dropdown), Format Type (dropdown), Delimiting Character, File Mask, File Path, Confirmation File Required (checkbox), CRC Required (checkbox), CRC Algorithm, Commit/Fetch Frequency, When To Run (dropdown), CRC File Mask, Date Format (YYYYMMDD), Mandatory (checkbox), Trigger Type (dropdown), Confirmation File Mask, and Confirmation File Path.
- Justification Section:** Date, Number, Text, Frequency Type (dropdown), Week Day (dropdown), Month (dropdown), Dates (dropdown), Last Run Date, and Next Run Date.
- Padding Character Section:** Date, Number, Text, Pre Message, Post Message, Pre Message AUDF, and Post Message AUDF.
- Incoming Section:** Function Id, Processed File Mask, Default Action (dropdown), On Override (dropdown), Outgoing Interface, Suppress Start Reference (checkbox), Incoming File Mask (dropdown), and Log Output (dropdown).
- Parallel Process Section:** Parallel Process Required (checkbox), Parallel Process (dropdown), No Of Records, and No Of Parallel Process.
- Component Details:** Input By, Authorized By, Modification Number, Authorized (checkbox), Open (checkbox), and Exit button.

The following details are maintained for PCRTGSIN interface here:

### External System

Specify 'BIS' as external system.

### Interface Code

Specify interface code as 'PCRTGSIN'.

### Interface Type

Select Incoming as interface type from the adjoining drop-down list.

### File Path

Specify the directory path of the incoming files to be processed.

### File Name

Specify the file name as per network.

### Frequency Type

Select Multiple times in a day as the frequency type from the adjoining drop-down list.

### Incoming File Mask

Select 'Start With File Name' as the incoming file mask from the adjoining drop-down list.

*The interface details and the external system details are maintained using the Interface Definition Details and External System Maintenance screens. For more details refer Specifying Interface Definition Details section of Generic Interface User Manual.*

## 2.2.3 Maintaining RTGS Messages

The following table specifies the various message types and the corresponding transaction code of RTGS Network:

Serial No	Network (from Product)	Message Type (Outgoing/Incoming)	Transfer Type	Product Type(from Product Category)	RTGS/SKN Message Name	Message Description
1	RTGS	Incoming	Customer	Incoming Credit Payment	607	This is an Incoming RTGS Payment to the Customer.  The Message Type received in the RTGS message will be "607" based on which the product type will be identified.  Mapping between the message type and the corresponding Payment product has to be provided based on which the transaction will be created.
2	RTGS	Incoming	Customer	Return of Outgoing Credit Payment	610	This message is for return of Outgoing Payment.  The first 16 characters of the "Payment field" in the message contain the Reference number based on which the transaction will be identified.
3	RTGS	Outgoing	Payment	Outgoing Credit	600	This message will be generated for the "Outgoing Payment" transaction using RTGS product.
4	RTGS	Outgoing	Payment	Return of Incoming	617	This message will be generated when the authorizer rejects the Incoming credit

				Credit		payment
5	RTGS	Incoming	Payment	RTGS Debit Notification	637	

#### **2.2.4 Processing Incoming RTGS Message**

The interface PCRTGSINC uploads the incoming payment files through RTGS networks. The incoming files uploaded in the ASCII format is placed in a specified folder and the path is mapped to GI maintenance.

Steps involved in File processing of Incoming RTGS Message:.

- When the file is uploaded, the network type is identified based on the file type.
- The file is parsed as per the message format and is uploaded in the GI interface table.
- From the interface table new program unit is written to call the PC service using the data available in the GI interface table.
- The RTGS file will be identified with RTGS file extension.
- The interface job is triggered manually to initiate manual processing.
- After the file processing and data processing, incoming job PC\_PRCSINMSG is executed from the job browser screen (CSSJOBBER)
- After job execution, system processes the data from the GI upload table and creates Incoming payment contracts.
- The following validation is done as part of file parsing and it will be rejected if validation fails
  - Incorrect credit count, debit count.
  - Incorrect total credit amount, total debit amount.
  - TRN code is incorrect or blank

#### **2.2.5 Processing Outgoing RTGS Message**

The interface PCRTGSOUT uploads the outgoing payment files through RTGS networks. The outgoing files uploaded in the ASCII format is placed in a specified folder and the path is mapped to GI maintenance.

Steps involved in File processing of Outgoing RTGS Message:

- All the outgoing payment contracts generated on the day along with the contracts generated after the cut-off time in the previous day is selected.
- All the fields required for the message is inserted into the GI upload interface table.
- From the interface table file is generated and placed in the directory location.
- A new parameter NO\_OF\_OUT\_TXN is introduced in CSTB\_PARAM. This parameter denotes the number of transaction to be grouped in a single file. If the number of transaction to be processed exceeds the count then multiple outgoing files are generated.
- The outgoing job PC\_PRCSOUTMSG is introduced for processing outgoing file generation.
- After the execution of job from the job browser screen, the system:



- Selects the set of contracts to be dispatched.
- Processes individual contracts to build the message body on per transaction basis.
- Based on the parameter count the individual transactions are grouped in the file and the corresponding header and footer are built.
- Multiple files are generated for both RTGS and SKN in case if the number of transactions exceeds the parameter count.
- New parameter PC\_OUTFILE\_PATH will be introduced in the CSTB\_PARAM table. Based on the path specified in the parameter, the outgoing file is placed in the path.

## 3. SKN Messages

### 3.1 Introduction

Oracle FLEXCUBE facilitates the outgoing and incoming payments with SKN network. SKN networks dispatches and processes Incoming Credit Payment, Return of Incoming Credit Payment, Outgoing Credit Payment and Return of Outgoing Credit Payment messages.

### 3.2 Maintaining Details for SKN Interface

You need to maintain the following details for this interface:

- Details of External System
- Details of the Interface
- Interface Parameterization
- Interface Translation

#### 3.2.1 Maintaining External System

You need to specify the external system connected to the interface by using the 'External System Maintenance' screen. You can invoke the 'External System Maintenance' screen by typing 'GWDEXSYS' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

The screenshot shows the 'External System Maintenance' application window. It features a search bar at the top, followed by input fields for 'External System' and 'Description'. To the right, there's a 'Correlation Pattern' section with a 'Request' dropdown menu currently showing 'Message Id'. Below these, the 'Queue' section contains dropdowns for 'Request Message' (set to 'Input Only') and 'Response Message' (set to 'Full Screen'), along with text boxes for 'Default Response Queue' and 'Dead Letter Queue'. There are also checkboxes for 'XSD Validation Required' and 'Register Response Queue Message Id'. A table titled 'External System Queues' is present, with columns for 'In Queue \*' and 'Response Queue'. The bottom of the window includes a footer with tabs for 'Fields' and 'FTP Parameters', and a status area with fields for 'Input By Date Time', 'Authorized By Date Time', 'Modification Number', and checkboxes for 'Authorized' and 'Open', alongside an 'Exit' button.

In this screen, you can specify the following details:

## External System

Specify 'SKN' as the external system.

For more details refer *Maintaining External System(s) Details* section of *Generic Interface User Manual*

### 3.2.2 Maintaining SKN Interface Details

Generic Interface (GI) provides a facility to define format details and properties associated to interface file. You can maintain format details and properties associated with SKN interface file in the 'Interface Definition' screen. You can invoke this screen by typing 'GIDIFTDF' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

The screenshot shows the 'Interface Definition' window with the following sections:

- General Fields:** Branch Code, Interface Type (dropdown), File Mask, CRC Algorithm, CRC File Mask, CRC File Path, External System, Format Type (dropdown), File Path, Commit/Fetch Frequency, Date Format, No Of Executions/Day, Interface Code, Delimiting Character, Confirmation File Required, When To Run, Trigger Type, Confirmation File Mask, Confirmation File Path.
- Justification:** Date, Number, Text, Frequency Type, Week Day, Month, Dates, Last Run Date, Next Run Date.
- Padding Character:** Date, Number, Text, Pre Message, Post Message, Pre Message AUDF, Post Message AUDF.
- Incoming:** Function Id, Processed File Mask, Default Action, On Override, Outgoing Interface, Suppress Start Reference, Incoming File Mask, Log Output.
- Parallel Process:** Parallel Process Required, Parallel Process, No Of Records, No Of Parallel Process.

At the bottom, there is a 'Component Details' section with 'Incoming File Names' and a status bar with 'Input By', 'Authorized By', 'Modification Number', 'Authorized', 'Open', and an 'Exit' button.

The following details are maintained for PCSKNSIN interface here:

## External System

Specify 'BIS' as external system.

## Interface code

Specify interface code as 'PCSKNSIN'.

## Interface Type

Select Incoming as interface type from the adjoining drop-down list.

## File Path

Specify the directory path of the incoming files to be processed.

### File Name

Specify the file name as per network.

### Frequency Type

Select Multiple times in a day as the frequency type from the adjoining drop-down list.

### Incoming File Mask

Select 'Start With File Name' as the incoming file mask from the adjoining drop-down list.

*The interface details and the external system details are maintained using the Interface Definition Details and External System Maintenance screens. For more details refer Specifying Interface Definition Details section of Generic Interface User Manual.*

## 3.2.3 Maintaining SKN Messages

The following table specifies the various message types and the corresponding transaction code of SKN Network:

Serial No	Network (from Product)	Message Type (Outgoing/Incoming)	Payment /Collection	Product Type(from Product Category)	Message Name	Message Description
1	SKN	Incoming	Customer	Incoming Credit Payment	S01	<p>This is an incoming SKN Payment message for the Customer.</p> <p>The message type received in the message will be "BMSKN01" based on which the product type will be identified.</p> <p>Mapping between the message type and the corresponding Payment product has to be provided based on which the transaction will be created.</p>
2	SKN	Incoming	Customer	Return of Outgoing Credit Payment	S03	<p>The message is the return of "Outgoing credit payment".</p> <p>The first 16 characters of the "Remarks field" in the message contain the Reference number based on which the transaction will be</p>

						identified.
3	SKN	Outgoing	Payment	Outgoing Credit	S05	This message will be generated for the "Outgoing Payment" transaction using the SKN product
4	SKN	Outgoing	Payment	Return of Incoming Credit	S07	This message will be generated when the authorizer rejects the Incoming credit Payment

### 3.2.4 Processing Incoming SKN Messages

The interface PCSKNSINC uploads the incoming payment files through SKN networks. The incoming files uploaded in the ASCII format is placed in a specified folder and the path is mapped to GI maintenance.

Steps involved in File processing of Incoming SKN Message:.

- When the file is uploaded, the network type is identified based on the file type.
- The file is parsed as per the message format and is uploaded in the GI interface table.
- From the interface table new program unit is written to call the PC service using the data available in the GI interface table.
- The SKN file is identified with SKN file extension.
- The interface job is triggered manually to initiate manual processing.
- After the file processing and data processing, incoming job PC\_PRCSINMSG is executed from the job browser screen (CSSJOBBER)
- After job execution, system processes the data from the GI upload table and creates Incoming payment contracts
- During the data process stage the transaction will be rejected for the following cases:
  - Corrupted input file
  - Invalid record (e.g. account number missing)
  - Account number field will be checked for the presence of any special characters, if found then the transaction will be rejected.
  - TRN code is incorrect or blank.

### 3.2.5 Processing Outgoing SKN Messages

The interface PCSKNOUT uploads the outgoing payment files through SKN networks. The outgoing files uploaded in the ASCII format is placed in a specified folder and the path is mapped to GI maintenance.

Steps involved in File processing of Outgoing SKN Message:

- The cut-off time maintained is validated for the network in order to check if the current time is within the cut-off time.
- All the outgoing payment contracts generated today along with the contracts generated after the cut-off time in the previous day is selected.
- All the fields required for the file will be inserted into the GI upload interface table.
- The PC\_OUTFILE\_PATH parameter is inserted in CSTB\_PARAM table.
- The outgoing file is placed in the path based on the path specified in the parameter.

## 4. Annexure

### 4.1 Accounting Entries

The following are the various accounting entries for RTGS and SKN Messages.

#### 4.1.1 Accounting entries for RTGS Incoming Debit (from Central Bank)

If the transaction does not fall in to any of the exception queues, then both 'DRLQ','CRLQ' will be processed.

Event	Account	Debit/Credit	Amount
DRLQ	Network GL	Credit	Charge Amount
DRLQ	Intermediary GL	Debit	Charge Amount

Event	Account	Debit/Credit	Amount
CRLQ	Charge/Fees GL	Debit	Charge Amount
CRLQ	Intermediary GL	Credit	Charge Amount

#### 4.1.2 Accounting Entries for SKN/RTGS incoming payments

If the transaction does not fall in to any of the exception queues, then both 'DRLQ','CRLQ' will be processed.

Event	Account	Debit/Credit	Amount
DRLQ	Incoming Network GL (NOSTRO)	Debit	Transaction Amount
DRLQ	Intermediary GL	Credit	Transaction Amount

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Customer Account	Credit	Transaction Amount

If the transaction falls on incoming authorization queue then 'DRLQ' event will be processed.

Event	Account	Debit/Credit	Amount
-------	---------	--------------	--------

DRLQ	Incoming Network GL (NOSTRO)	Debit	Transaction Amount
DRLQ	Intermediary GL	Credit	Transaction Amount

If the transaction is completely authorized from the incoming authorization queue that means the transaction not falls on any exception queue then system will process the 'CRLQ' event.

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Customer Account	Credit	Transaction Amount

If the incoming payment is rejected from the incoming authorization queue then system will process 'CRLQ' event

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Unsettle GL(will be picked up from Product Category)	Credit	Transaction Amount

If the incoming payment or return of outgoing payment is suspended from the incoming authorization queue then system will process the 'CRLQ' event with following accounting entries

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Unsettle GL(will be picked up from Product Category)	Credit	Transaction Amount

If the incoming payment or return of outgoing payment is authorized from the repair queue then system will not post any accounting entries and the transaction will be moved into incoming authorization queue.

If the incoming payment is rejected from the repair queue then system will process "CRLQ event

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Unsettle GL(will be picked up from Product Category)	Credit	Transaction Amount

#### 4.1.3 Accounting Entries for SKN/RTGS outgoing payments

If the contract is moved to release queue, then 'DRLQ' event will be processed.

Event	Account	Debit/Credit	Amount
DRLQ	Customer Account	Debit	Transaction Amount
DRLQ	Intermediary GL	Credit	Transaction Amount

If the contract is released from Release queue, then CRLQ event will be processed.

Event	Account	Debit/Credit	Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Outgoing Network GL (NOSTRO)	Credit	Transaction Amount

If the contract does not require any manual authorization or release action then both 'DRLQ' and 'CRLQ' event will be processed. Accounting entries will be posted as below:

Event	Account	Debit/Credit	Amount
DRLQ	Customer Account	Debit	Transaction Amount
DRLQ	Intermediary GL	Credit	Transaction Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Outgoing Network GL (NOSTRO)	Credit	Transaction Amount

If the contract is rejected from Release queue, then contract will be reversed and the accounting entries will be as given below:

Event	Account	Debit/Credit	Amount
REVR	Customer Account	Debit	Negative transaction Amount
REVR	Intermediary GL	Credit	Negative transaction Amount

If the contract is rejected from Authorization (A1, A2) queues, then system will not process any accounting entries.

For Reject of Incoming Payments (IN) contracts following accounting entries will be posted for DRLQ and CRLQ events.

Event	Account	Debit/Credit	Amount
-------	---------	--------------	--------



DRLQ	Unsettle GL	Debit	Transaction Amount
DRLQ	Intermediary GL	Credit	Transaction Amount
CRLQ	Intermediary GL	Debit	Transaction Amount
CRLQ	Outgoing Network GL (NOSTRO)	Credit	Transaction Amount

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## 5. Screen Glossary

### 5.1 Function ID List

The following table lists the function id and the function description of the screens covered as part of this User Manual.

Function ID	Function Description
GIDIFTDF	Interface Definition
GWDEXSYS	External System Maintenance



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