

# Oracle FLEXCUBE Core Banking

System Operations User Manual  
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System Operations User Manual  
May 2017

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# 1. Introduction

## Purpose of the Manual

The purpose of this manual is to provide details into all the operations which would be required to be undertaken at the branch as well as the Data Center level. Banks can prepare an exhaustive operations manual using the contents of this manual as the base. This manual is not expected to provide an exhaustive checklist of all operations/tasks which are required to be done in particular operations.

Depending upon the configuration of **FLEXCUBE**, it is possible that some operations need not be undertaken or some additional steps would be needed to be undertaken to complete a task. For e.g., **Flexcube** as an external system may not be used at a particular site. In such a scenario, the related/brief operations pertaining to **Flexcube** should be disregarded.

As this manual refers to operations pertaining to **FLEXCUBE Core Banking**, the operations in other systems such as **Flexcube** would not be mentioned in detail.

## **Audience**

The audience of this manual would be:

- Branch personnel who are responsible for operations on branch server
- Data center personnel who are responsible for operations on Application and Database server
- EOD/EOM and batch operators

## Overview

The first task of the day for the System Operator is to prepare the bank for the day's operation. This Beginning of Day (BOD) operation is carried out by the System Operator at the Host server. Next, the designated supervisor at the branch carries out the Branch batch opening. This opens the branch for transactions. Then the vault operator opens the Vault batch for currency vault operations and the teller opens the Teller Batch for the teller counter transactions. The teller then gets cash for transactions from the Cash Officer using the Buy Cash from Vault option. The designated Supervisor checks transactions executed in EOD/BOD viz. Standing Instructions, Sweepin/Sweepout, Maturity Processing, and Interest compounding/payout using the EOD/BOD Reports.

After all the above basic operations, the bank begins transactions for the day. The transactions include clearing operations, customer/module transactions, CASA, RD, Term Deposit, Loans, and GL. Clearing Operations such as inward clearing, authorizing data entry batches are done with the help of **GEFU**<sup>1</sup> Upload.

At the end of the day's transactions, a sequence of steps is followed before the bank is closed for the day. The first operation is to balance the cash. This is done by the teller. Next, the teller hands over cash to the Cash Officer with the **Sell Cash to Vault** option. Then the teller closes its day's operations through the Close Teller Batch option. After this the vault operator closes the vault for the day. If for any reason the branch is cut off from host for some time, the transactions will be transferred from branch server to host server after the restoration of network. The Branch Batch Confirm option will show whether both are in sync. Finally, the supervisor will close the branch for the day.

After all the branches are closed, a pre cutoff backup is taken. Next, transactions done after the previous cutoff till current cut-off are taken up for processing in the EOD. Further transactions posted through TBS, POS, ATM, and INB will be taken up on the next day. The System Operator then starts the EOD operation and takes a post EOD backup.

---

<sup>1</sup>(Generic External File Upload)

## 2. Branch Server



## 1.1. Bank Maintenance

Bank maintenance is a key operation. The two important bank maintenance operations are: **Bank Master Maintenance** and **Bank Calendar Maintenance**.

## Bank Master Maintenance

The user can maintain the general information of the bank operating **FLEXCUBE** using Bank Master Maintenance. The Bank Master is a single record table, set up at installation. A user cannot add or delete data in it. The Bank Master contains all the bank level parameters such as the bank code, module-wise processing date, next process date, local currency of the bank, suspense GL and Inter-Branch (IB) GL codes that are used by all branches and modules.

It also enables the bank to maintain the name and address of the Head Office along with separate process date for each of the modules.

The various GLs such as the suspense GL, Inter-branch GL, With-Holding Tax GL, Cash Overage, Cash Shortage, Bank Cash GL and Branch Vault GL can also be specified in this maintenance.

For more information on bank codes refer to **Bank Codes Maintenance** (Fast Path: BAM20) option

## **Bank Calendar Maintenance**

You can maintain a calendar for the cost center or branch bank using **Bank Calendar Maintenance** ) option.

To view the bank calendar details:

## 1.2. Branch Operations

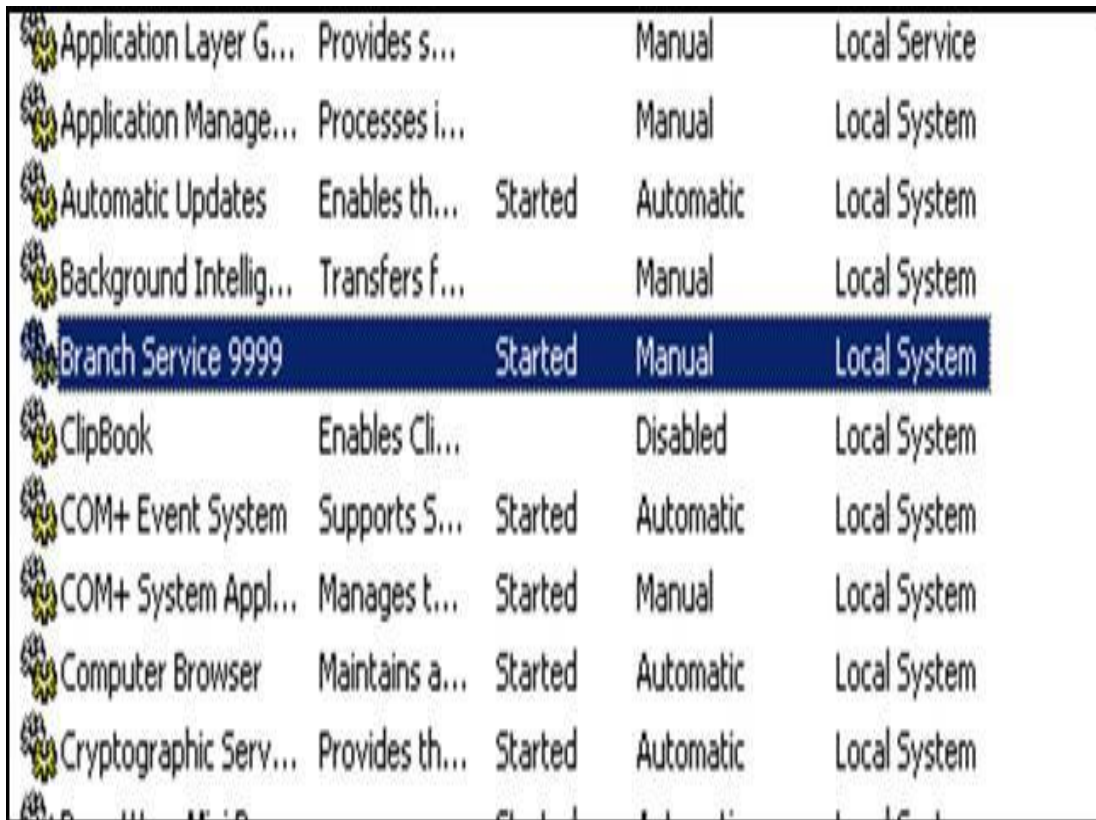
## Branch Server Start Operations

The activities mentioned in this section constitute the Beginning of Day operations for the Branch Systems. The Branch system administrator can perform these tasks.

From a **FLEXCUBE** perspective, the following services should be running on the branch server for effective operations:

| Sr. No. | Service Name | Order of Start | Description / Purpose of Service          |
|---------|--------------|----------------|---|
| 1       | IIS          | 1              | Web Service for publishing the branch URL |

## Branch Server Start Operations Screen



| Service Name           | Description    | Status  | Start Type | Path          |
|------------------------|----------------|---------|------------|---------------|
| Application Layer G... | Provides s...  | Stopped | Manual     | Local Service |
| Application Manage...  | Processes i... | Stopped | Manual     | Local System  |
| Automatic Updates      | Enables th...  | Started | Automatic  | Local System  |
| Background Intellig... | Transfers f... | Stopped | Manual     | Local System  |
| Branch Service 9999    |                | Started | Manual     | Local System  |
| ClipBook               | Enables Cli... | Stopped | Disabled   | Local System  |
| COM+ Event System      | Supports S...  | Started | Automatic  | Local System  |
| COM+ System Appl...    | Manages t...   | Started | Manual     | Local System  |
| Computer Browser       | Maintains a... | Started | Automatic  | Local System  |
| Cryptographic Serv...  | Provides th... | Started | Automatic  | Local System  |

Fig 1 - Branch Server Start Operations Screen

### To prepare the bank for the day's operation

1. Switch on the **UPS** and **Branch Server**, in that order.
2. After the Branch Server comes up, click the **Services** shortcut icon on the **Branch Server** desktop. (IT staff to ensure that the shortcut is created.)
3. Start the **Branch Service**.

4. Data Center will then download the previous day's EOD / Current day's BOD reports from the Data Center.
5. Double-click the **Download** icon on the desktop to start the automatic download operations.
6. Now the Branch server is ready for the branch to start the day's operations.

## **Cash and Transfer Operations**

This section deals with the workflow related to the cash and transfer operations in a typical business day, in chronological order, with respect to **FLEXCUBE**.

### **Start of Business Day**

## **Open Branch Batch**

The Branch Manager / Operations Manager opens the branch batch for a particular posting day in **FLEXCUBE** using the **Open Branch Batch** (Fast Path: 6001) option. Only after the branch batch has been opened will the vault teller and the other tellers be able to open their respective batches for that posting day. In case of split day processing, the Operations Incharge or the branch manager can open a branch batch for the next working day. At any point in time a maximum of 2 days including the current one can be opened.



## **Open Vault Batch**

The vault custodian should open the vault batch immediately after the branch batch has been opened. Execution of the **Open Vault Batch** (Fast Path: 9003) option also signifies the opening of the physical cash vault of the branch. While opening the vault batch, the system prompts the vault custodian to enter the physical count for the vault cash. This process also verifies whether the vault cash tallies at the start of the day. The related tellers can buy cash for their individual transactions for the day only after this process.

## Open Teller Batch

The Teller can start posting transactions for the day after the teller batch has been opened (**Open Teller Batch** (Fast Path: 9001) option) for the day. If the teller is a cash teller then the system prompts the teller to enter the physical cash position at the start of the day. This also ensures that the physical count matches the system count i.e. the cash position is tallied at the end of the day.

The basic order of activities is as listed below.

The order of the transactions need not be strictly followed and the same can be modified to suit the bank workflow.

- TC Balancing (Fast Path: 6203): If the teller is authorised to deal in foreign currency TC's, the teller can balance the TC's in his custody at the start of the day to ensure that the physical TC count matches the system count.
- Buy Cash from Vault (Fast Path: 9007): The teller would be required to buy cash if the entire cash has been returned to the vault at the end of the previous business day. Alternatively, the teller can retain a certain amount of cash in his cash-till which is equal to or less than the teller limit.
- The teller can also buy/sell cash from the vault anytime through the day whenever the teller cash falls below/above the drawer lower limit.
- Buy TCs from Vault (Fast Path: 9017): If the teller is authorized to deal in foreign currency TC's, he can buy/sell the TC's from the vault according to his requirement.
- General transactions.

After completion of the activities mentioned above, the tellers can proceed with their respective operations like:

- Cash Withdrawals (Withdrawal slips and Cheque withdrawals)
- Cash Deposits
- Cheque Deposits
- CASA related operations
- Remittance transactions like issuance of Bankers Cheques, Demand Drafts, and Telegraphic Transfers
- Term deposit related operations
- Loan related operations

## EOD and BOD Report Verification

The reports pertaining to the branch for previous day's EOD and the same day's BOD are available in a designated area on the host server to a designated area on the branch server. The default designated area is:

**<FLEXCUBE Installation Path>\rjsout\<mm>\<dd>**

where, mm: month of the posting date and dd: day of posting.

For example, reports for 15th June will be available in **<FLEXCUBE Installation Path>\rjsout/06/15** area.

The default designated area is rjsout area of the application server. This default area can be configured during **FLEXCUBE** installation. Then after the day is complete and the next set of reports are generated, the earlier reports move into the mmdd folder in the same area. For the specific reports to be downloaded to the branches, there are three methods. They are:

- Manually transfer the same to the respective branch servers' rjsout area, and the branches at their end will check the reports.
- Through the report download utilities (external utility and not part of FC), can be configured for the download of the reports to the respective branch servers.
- The reports are kept in an Intranet set up of the Bank and the branches will be authorised to view their reports.

The supervisors in the branch can refer to these reports and verify the transactions, mainly the GL postings for the previous day's transactions using the **Report Request** (Fast Path: 7775) option and selecting the relevant report. This activity should form a part of the supervisors' daily branch operations. The daily BOD reports also include important details like the SI success, failure, the TD maturity processing, the OD maturity processing related reports, etc.

### **Intermediate Cash Balancing and Verification**

The teller should balance his physical cash with the system count at an intermediate interval, e.g. before going for lunch.

The teller should also verify at frequent intervals whether he has submitted all the transactions which had been sent for remote authorisation and which have been subsequently authorised.

### **Closure of Business Day**

### **After Business Hours**

The teller should ensure that all the transactions, including batch data entry for the day, have been authorised. The teller should use the **Search Electronic Journal** (Fast Path: 6006) option to verify if there are any authorised transactions which are pending for submission. If there are any transactions pending, they should be completed by clicking the **Submit** button.

To verify whether all the batches have been authorised, the teller should use the **List Batch Status** (Fast Path: 5515) option. If any batches are pending for authorisation, then the system will not allow the user to close the batch for the day.

Before the teller closes his teller batch, he should print **TP5050 - Batch Journal Report** and verify the entries for correctness with actual vouchers/slips. This is a must so that if any entry has been posted wrongly, it can be reversed through the **Search Electronic Journal** (Fast Path: 6006) option.

## **End of Day Cash Balancing & Transfer of Cash to Vault:**

At the end of the day the teller should tally the physical cash with the system cash.

If there is any shortage or overage, the teller should try to resolve the difference by verifying the actual slips and details of denominations with the **TP5050 - Teller Transaction Report** and **TP5021 - Cash Position Report**. If the difference remains even after verification, a Shortage or Overage needs to be booked accordingly.

After the teller has tallied his physical cash with the system count, the cash can be retained in the teller's till-box to the extent of the teller drawer lower limit. However if the entire cash has to be turned over to the vault overnight, the teller can use the **Sell Cash to Vault** (Fast Path: 9008) option. Similarly for TCs, the **Sell TCs to Vault** (Fast Path: 9019) option needs to be used.

The teller should also print and verify the following reports to verify transactions posted through GL Voucher Data Entry GLM01:

**GL210 – GL Voucher TX's Summary**

**GL211 – GL Voucher batches not closed report**

## End of Day Teller Batch Closure

The teller should close the teller batch at the end of the day after the following has been done:

1. All data entry batches have been Authorised and Closed.
2. All transactions have been submitted.
3. Physical cash has tallied with the system count.
4. Entire / Excess cash has been transferred to the vault.

**Note:** The teller should not leave the branch while the teller batch is still open.

**Close Teller Batch** (Fast Path: 9005) option needs to be used for closing teller batches for a particular posting date.

In case the teller does not close batch, cannot be contacted, or password is not known, the password needs to be reset and the teller batch needs to be closed by the System Administrator.

## Batch Status Verification

Before the tellers leave for the day, the Supervisors should verify if the batches for the respective tellers are closed for the day. The supervisor can use the **Batch Status Enquiry** (Fast Path: 7017) option to inquire the batch status.

## End of Day Vault Teller Batch Closure

The vault custodian should close the vault teller batch at the end of the day after the following has been done:

1. All the tellers have closed their respective batches and successfully tallied their cash.
2. All transactions have been submitted.
3. The physical cash in the vault has tallied with the system count.

The vault custodian should not leave the branch while the vault teller batch is still open.

## End of Day Branch Batch Closure

The Branch Manager / Supervisor / Operator should ensure that all the branch reports listed below have been printed for the branch at the end of each business day using the **Report Request** (Fast Path: 7775) and **Advice / Report Status Enquiry** (Fast Path: 7778) options.

|        |   |   |
|--------|---|---|
| TP5021 | - | Cash Position                           |
| TP5023 | - | Teller Transaction Report               |
| TP5028 | - | Inter Branch Accounts Opened Today      |
| TP5029 | - | Teller Inter Branch Transactions Report |
| TP5049 | - | Cash Transactions Position              |
| TP5050 | - | Batch Journal Report                    |
| TP5051 | - | EOD Cash Position Report                |
| TP5052 | - | Authentication Report                   |
| TP5070 | - | Overage/Shortage Report                 |
| TP5033 | - | Instrument Details Report               |
| TP5080 | - | Travelers' Cheque Sold Report           |
| TP5081 | - | Travelers' Cheque Purchase Report       |

All reports generated through the **Adhoc Report / Advice Request** option are present in the following default area / dictionary on the branch server:

**<FLEXCUBE INSTALLATION PATH>\branch\brn\reports\**

After the above reports have been taken the branch supervisor /manager should ensure the following:

1. Supervisors should ensure that all the batches have been authorised and there is no batch pending for authorisation.
2. All tellers have tallied their cash and successfully closed their respective batches. The branch batch can be closed only after all the tellers belonging to that branch have successfully closed their batches.
3. The vault custodian has tallied the vault cash and successfully closed the vault batch.



4. The **Branch Batch Confirm** (Fast Path: 6005) option is executed successfully.

The supervisor should check for any differences in the transactions posted in branch and transactions updated in Data Center (host). If there is a difference between these transactions, the system will give a warning stating that branch batch confirmation is not successful and will not allow the supervisor to close the branch batch. In such cases, the supervisor should inform the data center about the difference immediately and seek guidance.

If the branch batch confirmation is successful, the supervisor should close the branch batch using **Branch Batch Close** (Fast Path: 6002) option.

If the branch batch confirmation is not successful, the supervisor should invoke the **Force Close Branch Batch** (Fast Path: 6009) option for closing the branch batch *on the advice of the data center*. The differences displayed in the branch batch confirmation should be accounted in the next business day and suitable remedial action should be undertaken.

### 1.3. Branch Tables Purging

All the temporary tables and the transaction history tables in the branch database need to be purged at periodic intervals through the option provided in the software. Before purging, take a full dump of the database on to a separate DAT with appropriate label.

The suggested purge tables and their retention frequency are mentioned below. Additional tables can be set up for purge whenever required and the purge retention period is set up depending on the data requirements of the bank.

#### Purge Mechanism for Dynamic Tables - Branch

| Table Name                | Purpose   | Recommended Purge Frequency | Recommended Purge Handling (Days retained) |
|---------------------------|---|-----------------------------|--|
| <b>sm_br_event_log</b>    | Login/Logout information for tellers  | Daily                       | 30   |
| <b>rec_bctl</b>           | Stores control information for Teller / Supervisor / Vault Teller Batch Opening/Reopening and closing | Daily                       | 60   |
| <b>rec_txnlog</b>         | Log of daily transaction details  | Daily                       | 120  |
| <b>rec_txnlog_rejects</b> | Log of rejected online branch transactions  | Daily                       | 120  |
| <b>rec_denm</b>           | Stores information of tellers cash position with the denomination details                             | Daily                       | 120  |
| <b>rec_auth</b>           | Stores information of (local/remote) authorisation granted in a branch for teller transactions        | Daily                       | 60   |
| <b>br_document_store</b>  | Log of all spooled documents  | Daily                       | 120  |
| <b>br_instr_issued</b>    | Log of instruments BC/DD issued from the branch   | Daily                       | 120  |

| <b>Table Name</b>              | <b>Purpose</b>  | <b>Recommended Purge Frequency</b> | <b>Recommended Purge Handling (Days retained)</b>         |
|--------------------------------|---|------------------------------------|---|
| <b>br_batch_details</b>        | Log of all batches – batch data entry option                | Daily                              | 60  |
| <b>br_consolidated_cheques</b> | Data for consolidated cheque batches inputted in the branch | Daily                              | 60  |
| <b>br_consol_chqs_data</b>     | Data for consolidated cheque batches inputted in the branch | Daily                              | 60  |
| <b>br_inward_chqs_data</b>     | Data for inward cheque batches inputted in the branch       | Daily                              | 60  |
| <b>br_outward_chqs_data</b>    | Data for outward cheque batches inputted in the branch      | Daily                              | 60  |
| <b>rjs_requests</b>            | Stores log of adhoc report / advice requests processed      | Daily                              | 0   |
| <b>br_salary_details</b>       | Data for salary details                                     | Daily                              | Delete all records with status 'Authorised' or 'Reversed' |
| <b>br_salary_chqs_data</b>     | Data for salary cheques data entry batches                  | Daily                              | Delete all records with status 'Authorised' or 'Reversed' |
| <b>ba_download_log</b>         | Stores information about the downloaded tables              | Daily                              | 15  |
| <b>rec_txnxmllog</b>           | XML log of daily transaction details                        | Daily                              | 120   |

The Recommended Purge Handling days data cannot be changed.

## Clearing File Uploads

## Inward Clearing batch Upload

If an inward clearing file format is different to that accepted by the system in the central bank file screens, or the clearing file format is available with the account number rather than the small clearing number then this method may be used.

The **Batch Inward-Clearing Cheque Data Entry** (Fast Path: 5521) option can be used for directly adding the inward clearing cheques to form a batch or to upload a file containing the records to be processed in inward clearing.

### Branch Inward-Clearing Cheque Data Entry Screen

**Batch Inward-Clearing Cheque Data Entry**

Batch Type :  Action :

Batch Number :  Batch Status :  End Point :

Currency :  No of Instrz :  IC Type :

| Srl No | Type              | A/C No       | Customer Name | Routing No | Cheque No | Amount |
|--------|-------------------|--------------|---------------|------------|-----------|--------|
| 1      | 00 Crossed Cheque | 000000003533 | JACK K JASON  | 0259999    | 2345      | 10.00  |
| 2      | 00 Crossed Cheque | 000000002394 | RIAZ AKHTAR   | 0259999    | 2346      | 10.00  |

Total Amount

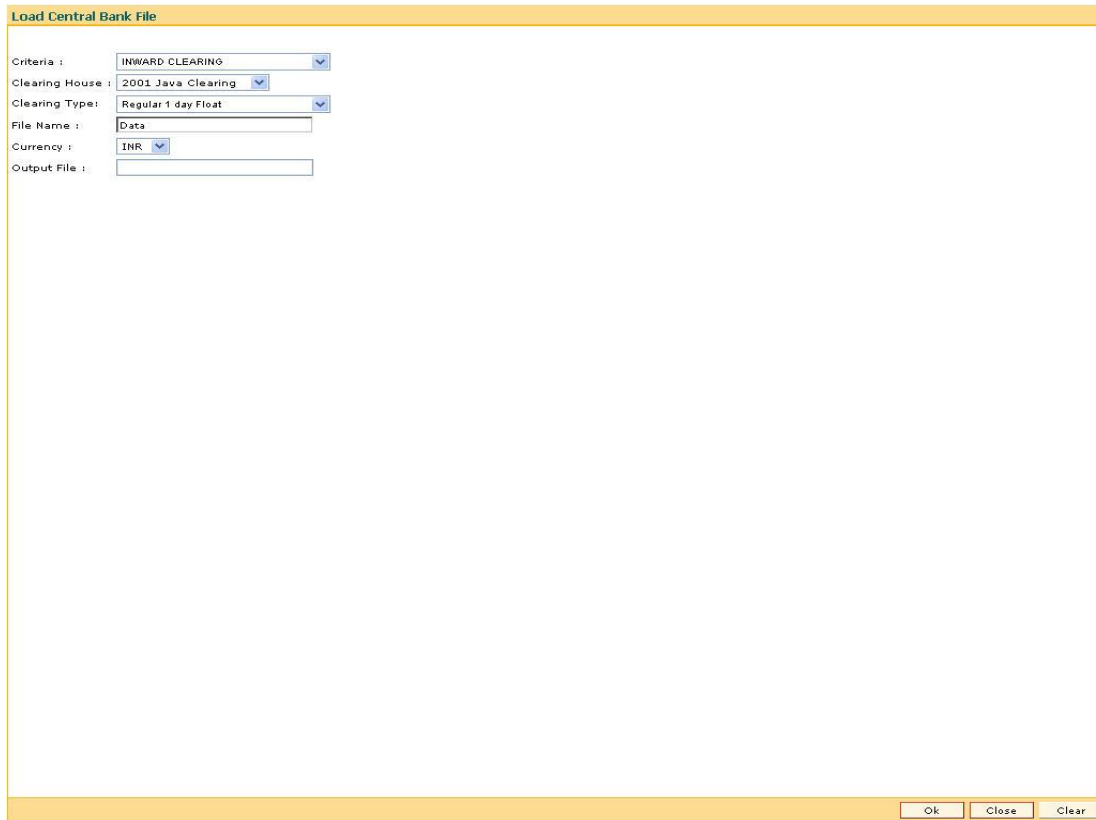
Fig 2 - Batch Inward-Clearing Cheque Data Entry Screen

The teller / data entry operator would use the **Branch** screen to directly upload the inward clearing file in XML format. This file can be present anywhere and can be selected using the **Browse** button. There is a utility available to convert the text file into an XML format (Utility Name: InwdFloopyUpld.exe). The data can then be loaded onto the screen using the **Load** button. Once the data is successfully loaded the operator can save and validate the batch. The rest of the processes would be the same as that for the batch data entry. The records uploaded and authorised using the above would be processed in the next Inward Clearing batch run.

## Load Central Bank Floppy File

The **Load Central Bank File** (Fast Path: ST042) option enables the user to upload the inward clearing flat file received from the central bank. **FLEXCUBE Retail** reads the input file and creates another flat file, which is used in the **Load Inward MICR File** (Fast Path: ST031) option.

### Load Central Bank File Screen



The screenshot displays a window titled "Load Central Bank File" with a yellow border. The window contains several input fields and dropdown menus:

- Criteria :** A dropdown menu with "INWARD CLEARING" selected.
- Clearing House :** A dropdown menu with "2001 Java Clearing" selected.
- Clearing Type :** A dropdown menu with "Regular 1 day Float" selected.
- File Name :** A text input field containing "Data".
- Currency :** A dropdown menu with "INR" selected.
- Output File :** An empty text input field.

At the bottom right of the window, there are three buttons: "Ok", "Close", and "Clear".

Fig 3 - Load Central Bank File Screen

There is a pre-specified format that can be used to directly load the data provided by the central bank. The file needs to be present in the **FLEXCUBE** branch data base area in the **Host \ rjsin** area. The system will convert the small clearing account numbers to the account numbers used by the **FLEXCUBE** system and use the same for further processing. Note down the batch number so generated.

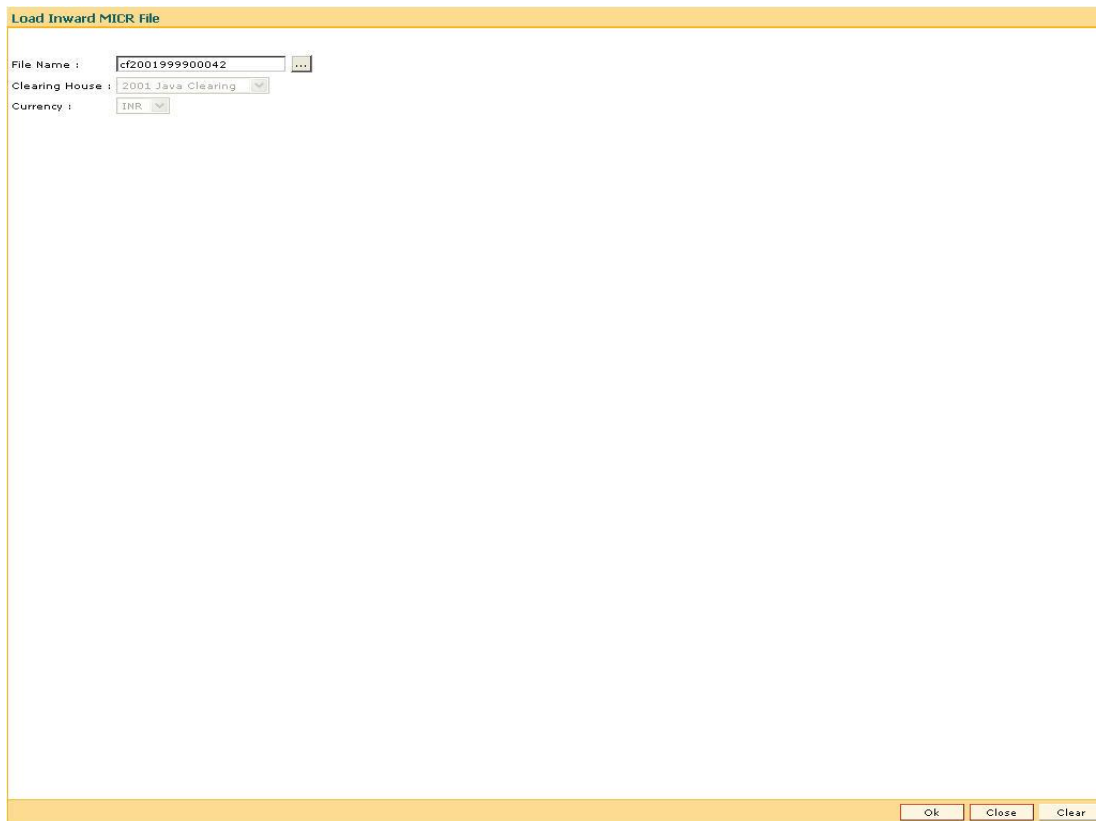
The system creates a MICR file and generates a file name for the same which requires to be noted down.

## Load the Inward MICR file

The **Load Inward MICR File** (Fast Path: ST031) option enables the user to complete the inward clearing data file upload process. Once the central floppy file is uploaded, the system generates a file name which has to be selected from this screen to complete the file upload. You can also load data directly for inward clearing of cheques from a flat file using this option. The file should be present in the appropriate area and in the correct format. Each flat file should have all cheques in the same currency and should be from the same endpoint.

When the upload from the central bank file upload screens is successful, the system generates a file number. Note down this file name. The file number which was generated will be available as part of the pick list under the file name.

## Load Inward MICR File Screen



The screenshot shows a window titled "Load Inward MICR File". Inside the window, there are three input fields: "File Name" with the value "cf2001999900042" and a browse button (...), "Clearing House" with a dropdown menu showing "2001 Java Clearing", and "Currency" with a dropdown menu showing "INR". At the bottom right of the window, there are three buttons: "Ok", "Close", and "Clear".

Fig 4: Load Inward MICR File Screen

In the **MICR Upload** screen, enter the **File Number** and the system will generate the host batch number. Note down this number for further processing.

## 1.4. Database Backups and Reports Backups



## **Database Backup**

Backup should be taken on the hard disk and DAT media provided on all the branch servers. There should be 6 DATs, one for each day of the week. Data backup should be taken daily through oracle export dump (using 'fastbackup.bat' provided to the branches) on the hard disk of a designated client machine. The same dump should also be taken to the appropriate DAT (DAT labeled for that day of the week). The media backup should be kept offsite.

Backup of the branch database schema should be taken every week on Saturday to a separate DAT with appropriate label. This ensures that at any point of time, branches can have the database schema with all updates till the previous week for restoration in case of need. Backups for the successive weeks can be appended to the same tape.

## **Reports Backups**

Backup of all the reports downloaded from the data center should be taken once in a month to a separate DAT with appropriate label. Backups for the successive months can be appended to the same tape.

## 1.5. Data Downloads

Once an entity is defined in the **FLEXCUBE Retail**, you need to download the entity to the respective branch, using the **Data Download** option. The user with specific access rights can download the product.

There are two different types of downloads:

- Automatic Download
- Manual Download

## Automatic Download

Automatic download is done using a download scheduler. Once the schedule is defined, download starts automatically. This schedule can later be changed or removed.

When the automatic download is enabled, the system automatically downloads the entity / entities at the pre-configured time provided the link to the branch server is working at that time. In case the link is not working at the time of download, the download process creates an output file in a pre-designated directory in the **FLEXCUBE** Application Server.

The type of Automatic download is defined in the TBL file. There are two types of Automatic downloads:

## Incremental Download

Incremental download only downloads the records which are added or updated after the sync point. This sync point is defined in the XML (TBL) file for a particular table.

In the incremental download, it will check for the latest records and download only the new records.

Use the following steps for a automatic incremental download:

- Open the **Download Service** (Fast Path: 8892) option.
- The [Download Service](#) screen is displayed.

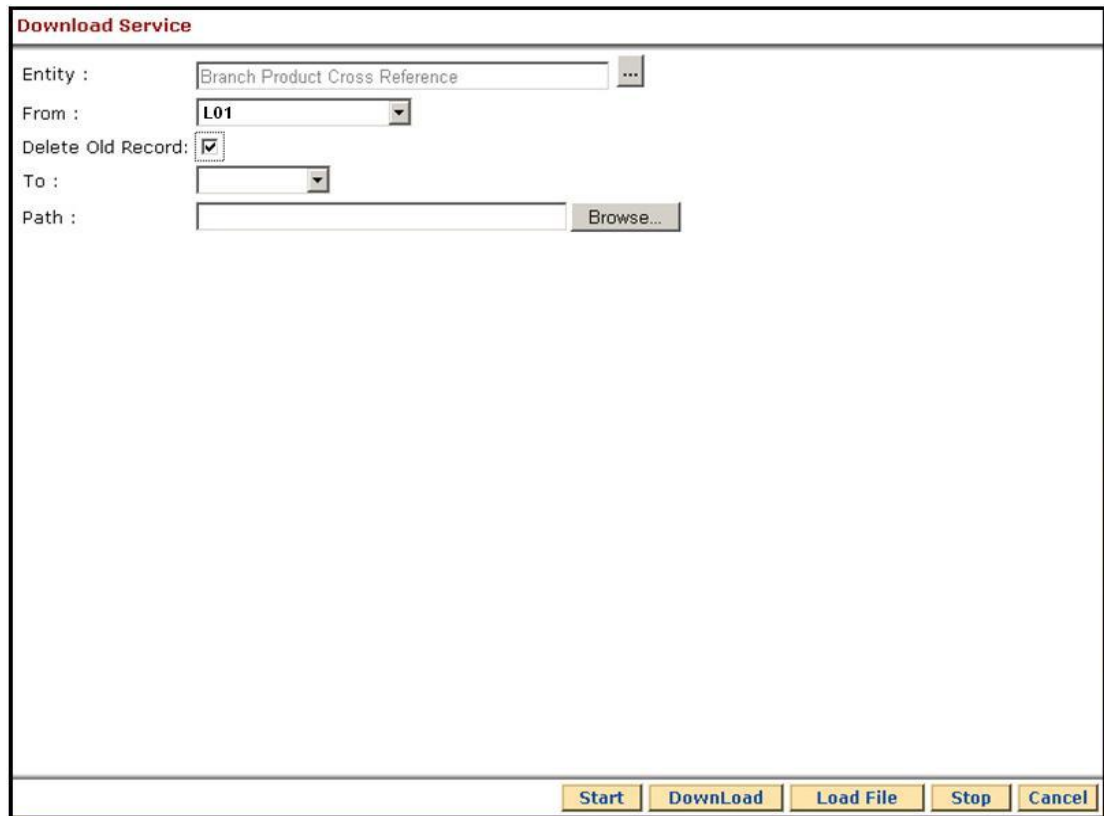


Fig 5 - Download Service Screen

- Type the appropriate information in the **Entity**, **From**, and **To** fields.
- Clear the **Delete Old Record** check box.
- Select the path in the **Path** field using the **Browse** button.
- Click the **Start** button. The system checks the entered data.
- Click the **Download** button.
- A request ID is generated. This ID should be noted down.

The Request ID is used to enquire the download status for a particular download. Request ID is a unique ID generated when the download starts.

To view the download status:

- Open the **Download-Upload Status Inquiry** (Fast Path: 5504) option. The [Download-Upload Status Inquiry](#) screen is displayed.

**Download-Upload Status Inquiry**

Request ID:

Fig 6 - Download-Upload Status Inquiry Screen

- Type the request ID in the **Request ID** field.
- Click the **Status** button.

## Full Download

Full download deletes all existing records and the new records are inserted in the table.

The procedure for a Full Automatic download is same as Incremental Automatic download except for a full download, the **Delete Old Record** check box is selected.

## **Manual Download**

Manual download can be used to download data in adhoc mode. In case of manual download, the user uses download service to download data at a particular time.

There are two types of Manual downloads:



## **Incremental Download**

Incremental download downloads only the records which are added or updated after the sync point. This sync point is defined in the XML (TBL) file for a particular table.

In the incremental download, it will check for the latest records and download only the new records.

Manual Incremental download is similar to Automatic Incremental download, except a Manual download has to be triggered by a user.

## Full Download

Full download deletes all existing records and the new records are inserted in the table.

Use the following steps for a manual full download:

- The **FLEXCUBE** download service runs on the branch server. It has to be invoked by double-clicking the shortcut to download on the branch server. The **Download** icon will appear on the bottom right on the status bar next to the date and time slot.
- Double-click the icon, and in the **Flexcube-Download** screen, type the appropriate information in the **Entity**, **From**, and **To** fields.
  - The [Flexcube-Download Screen](#) is displayed.

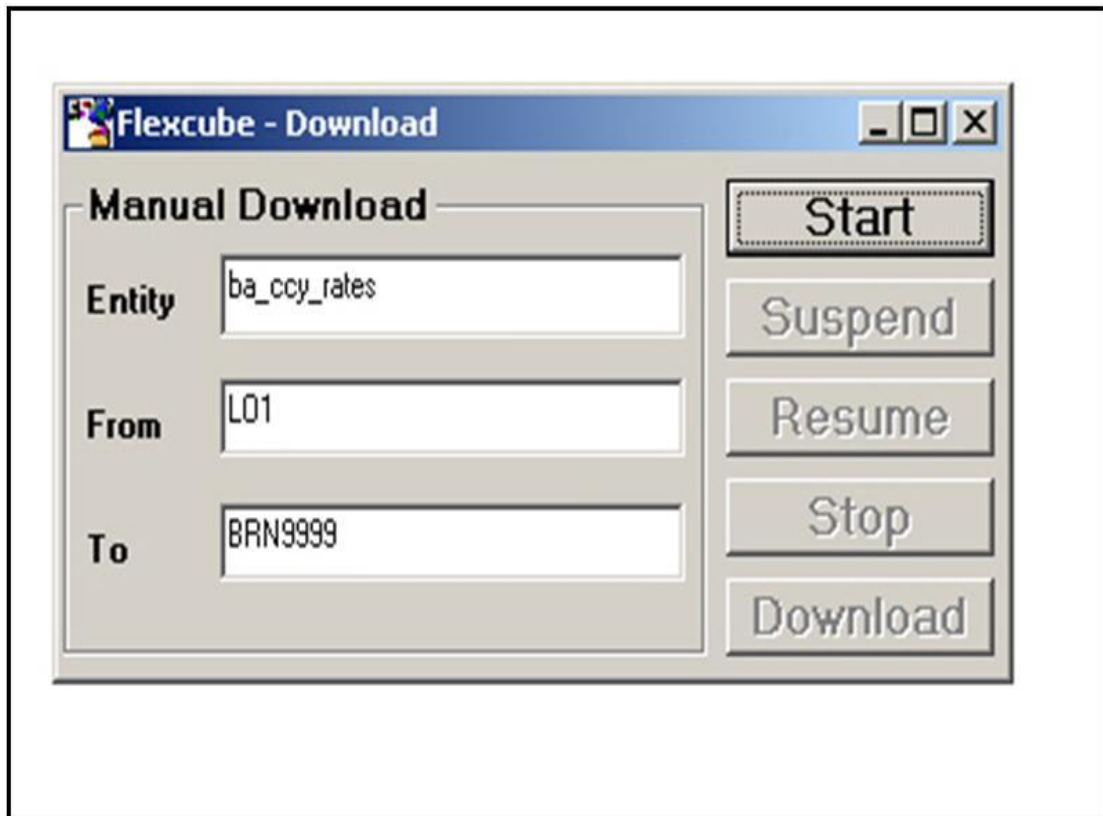


Fig 7 - Flexcube-Download Screen

- Click the **Start** button. The system checks the entered data and displays the [Flexcube-Downloadscreen](#).

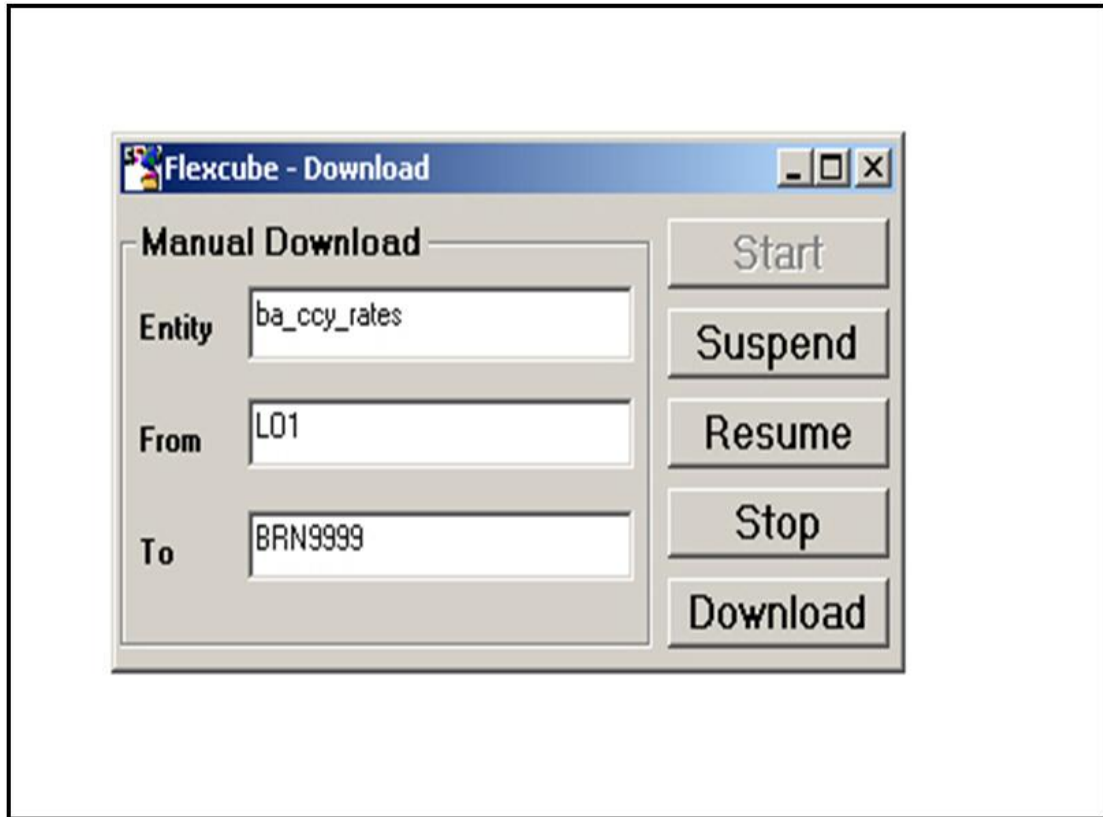


Fig 8 - Flexcube-Download Screen

**Note:** On the centralized branch server the download service should be running only on one of the branch server.

- Click the **Download** button to start the download service. If the trace file is viewed, it will display the contents of the data extraction and then the successful completion of the download. If there is a failure, then the error message can be viewed in the trace file.

By downloading this, the existing records in the branch table are deleted and the full data is downloaded.

## 1.6. GEFU File Upload

Generic file upload can be used for any bulk transactions like salary credits, utility payments, inward direct debit, inward direct credit, etc. The **GEFU<sup>2</sup> ++** functionality enables the user to define the file format in XML as per the utility requirement. It also continues to support the earlier GEFU functions.

A Global set up is required, which will capture the vital details for a specific file like the file format, required GL's, scheduler details, etc.

Following are the tabs for the **External File Setup** (Fast Path: BAM54) option:

### Common Parameters

External File Setup\*

External System Code : Casa Account Open AcctOpenSystem

File Type : DETAIL

Processor Type : UPLOAD

CommonParameters GefuSetup GLSetup GefxSetup

Output Template : Resp\_acct\_opening.txt

Deferred Auth Required :

Relative Path :

XFF File Name : ap\_ext\_resp\_acct\_ope

Output File Helper Class :

Output Folder Helper Class :

Record Details

Input By : TSUPP2 Authorized By : SSUPP2 Last Mnt. Date : 01/03/2006 00:00:00 Last Mnt. Action : Authorize Authorized :

Add  Modify  Delete  Cancel  Amend  Authorize  Inquiry

Ok Close Clear

Fig 9 - File Upload Setup (GEFU ++)

<sup>2</sup>(Generic External File Upload)

## GL Setup

External File Setup\*

External System Code : Casa Account Open ... AcctOpenSystem

File Type : DETAIL ...

Processor Type : UPLOAD

CommonParameters GefuSetup **GLSetup** GefxSetup

Generate Bridge GL Flag :

Bridge System Cash Debit GL : 0 ... Bridge System Cash Credit GL : 0 ...

Internal Transfer Debit GL : 0 ... Internal Transfer Credit GL : 0 ...

Balance Bridge Flag :

Generate InterBranch GL Flag :

DesignatedBranch : ...

Suspense Debit GL : 150130400 ... Suspense Credit GL : 150130400 ...

Record Details

Input By : TSUPP2 Authorized By : SSUPP2 Last Mnt. Date : 01/03/2006 00:00:00 Last Mnt. Action : Authorize Authorized :

Add  Modify  Delete  Cancel  Amend  Authorize  Inquiry

Ok Close Clear

Fig 10 - File Upload Setup (GEFU++) - GL Setup

The required data can be maintained in an XML file format and the different functions which can be performed through the GEFU file upload can be pre-defined. Only these functions can be done through the File Upload process.

The set up is also done if the user requires that the output of this processing should go for another interface or for another processing in **FLEXCUBE** itself.

The data which is to be uploaded into the system is entered into the Excel file as per the format mentioned in the file. The flat file is generated, which will be in the file format required for it to be uploaded in the application. The generated file, by running the macro in the Excel sheet, will have to be kept in the rjsin folder of the Branch server. This is as per the earlier GEFU file format. Alternately, the GEFU++ also supports the file in a comma separated format, which can be created and directly kept in the rjsin folder of the Branch Server.

Before uploading the file ensure that the GEFU service is up and running. If it is not, start the service as mentioned in the **Branch Server Start Operations** section of the document under the startup of online services.

## FLEXCUBE Retail Services Screen





















| Name ▲  | Description     | Status  | Startup Type | Log On As    |
|---|-----------------|---------|--------------|--------------|
|  FCR CIF5 Server 1       |                 | Started | Manual       | Local System |
|  FCR COMM Server ...     |                 | Started | Manual       | Local System |
|  FCR EODController ...   |                 |         | Manual       | Local System |
|  FCR FEPI Server 1       |                 |         | Manual       | Local System |
|  FCR GEFU Server 1       |                 | Started | Manual       | Local System |
|  FCR GENOLTP Serv...     |                 | Started | Manual       | Local System |
|  FCR HSFTS Server 1      |                 | Started | Manual       | Local System |
|  FCR HSSCS Server 1      |                 | Started | Manual       | Local System |
|  FCR POS Server 1        |                 |         | Manual       | Local System |
|  FCR RJS Server 1        |                 |         | Manual       | Local System |
|  FCR TBS Server 1        |                 |         | Manual       | Local System |
|  File Replication        | Allows files... |         | Manual       | Local System |
|  FTP Publishing Service  | Enables thi...  | Started | Automatic    | Local System |
|  Help and Support        | Enables He...   | Started | Automatic    | Local System |
|  HTTP SSL                | This servic...  | Started | Manual       | Local System |
|  Human Interface D...    | Enables ge...   |         | Disabled     | Local System |
|  IIS Admin Service       | Enables thi...  | Started | Automatic    | Local System |
|  IMAPI CD-Burning C...   | Manages C...    |         | Disabled     | Local System |
|  Indexing Service       | Indexes co...   |         | Disabled     | Local System |
|  Internet Connectio... | Provides n...   |         | Disabled     | Local System |

Fig 11 - FLEXCUBE Retail Services Screen

**Note:** The GEFU service can be shut down once the upload is over, and then restarted once the new files have to be uploaded. Only ensure that when the file is uploaded, the service is up for it to get processed.

## Upload Process

For the file to upload, use the **File Upload (GEFU ++)** (Fast Path: BA452) option. Depending on the set up done in the application the system code is selected from the pick list.

### File Upload (GEFU ++) Screen

The screenshot shows a web-based application window titled "File Upload (GEFU ++)". At the top, there are two input fields: "External System Code" containing "ADDRCHANGE" and "File Type" containing "addrFileDefn". Below these is a tabbed interface with three tabs: "Upload File" (selected), "File Details", and "Record Details". The "Upload File" tab contains a section titled "Handoff File Details" with three input fields: "Input File Name" containing "rtgs030511007incorrectaccount.txt", "Narration" containing "Test", and "Process Date" containing "15/02/2008". At the bottom right of the window are three buttons: "Ok", "Close", and "Clear".

Fig 12 - File Upload (GEFU ++) Screen

The file to be uploaded is kept in the rjsin directory of the Branch server. The file name is entered in the **Input File Name** field. It is case sensitive, so the name has to be entered accurately.

A proper description of the file which is uploaded is mentioned in the **Narration** field.

After adding the file details, before the actual upload, the user has the option of viewing/enquiry of the file being uploaded. The user can view the summary of all records in the file and also, on double-clicking each record, can view the further details of that particular record item. To do the upload, the screen requires online authorisation from an online Supervisor.

## Generic External File Upload Details Screen

| Generic External File Upload Details   |   |   |            |
|--|---|---|------------|
| System Code  | TCB_68  | External Stock Media Company                    |            |
| File Type  | FISC  | Dividend payment from stock company for Account |            |
| Input File Name  | BC7   | Upload Date                                     | 01/02/2006 |
|  |   | Process Date                                    | 01/02/2006 |
| Batch No   | 354   | No. of Records                                  | 4          |
|  |   | File Size                                       | 1234       |
| Record Type  | Record String   | Record Length                                   |            |
| Header   | 20060201  | 9   |            |
| Detail   | 03307031002<br>00010101020060201D20060201001010000000005000000000000500...      | 588   |            |
| Detail   | 0100011010000277<br>00010830220060201C20060201001010000000005000000000000500... | 588   |            |
| Footer   | 000000001000000000050000000000001000000000050000                                | 49  |            |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <span>&lt;&lt;</span> <span>&gt;&gt;</span> <span>Back</span> </div> |   |   |            |

Fig 13 - Generic External File Upload Details Screen



## Gefu Record Details Screen

| Gefu Record Details  |   |
|--|---|
| <b>Summary</b>   |   |
| System Code : External Stock Media Company                 | File Type : Dividend payment from stock company for Account |
| Input File Name : BC7                                      | Process Date : 01-FEB-2006                                  |
| <b>Record Details</b>                                      |   |
| Branch Name : HO Branch                                    |   |
| Account Number : 99992010000012                            |   |
| Txn Code : 1076  |   |
| Txn Date : 01/02/2006                                      |   |
| Dr \ Cr : Debit  |   |
| Value Date : 01/02/2006                                    |   |
| Amount : 300.00  |   |
| Currency Code : USD  |   |
| Full Name : Chulawan2 IC2                                  |   |
| Customer Address1 : 98/11                                  |   |
| Customer Address2 : Flora Ville Park City                  |   |
| Customer Address3 : Phase 5                                |   |
| City : Bangkok   |   |
| State : Bangkok  |   |
| Country : TH   |   |
| Zip : 10530  |   |
| Reference Number : 123456789012345678901234567890123456789 |   |
| Transaction Description : UTILITY COMPANY UPLOAD           |   |
| Future Dated : No  |   |
| <a href="#">Prev</a>                                       | <a href="#">Next</a>  |
| <a href="#">Back</a>                                       |   |

Fig 14 - Gefu Record Details Screen

## Inquiry

After the online authorisation, if the GEFU service is started, the file is processed. After the processing the operator can inquire on the status of the file in the **File Upload Inquiry (GEFU ++)** (Fast Path: BAM96) option.

### File Upload Inquiry (GEFU ++) Screen

The screenshot shows the 'File Upload Inquiry (GEFU ++)' window. It features several search filters: External System Code (ADDRCHANGE), File Type (adrFileDef), User Id (TDOC3), Upload Date (01/01/1800), Branch Code (HO), Status (All), and Process Date (01/01/1800). Below the filters are tabs for File List, File Details, File Summary, and Record Details. The File List tab is active, displaying a table with the following data:

| Upload Date            | Branch Code | File Name                        | User ID | Start Time             | End Time               | Total Records | Total Accepted | Total Rejected | Not Processed | Narration | Status      |
|------------------------|-------------|----------------------------------|---------|------------------------|------------------------|---------------|----------------|----------------|---------------|-----------|-------------|
| 06/05/2008<br>00:00:00 | 9999        | RSR030511007incorrectaccount.txt | TDOC3   | 06/05/2008<br>11:50:33 | 06/05/2008<br>11:50:33 | 1             | 0              | 0              | 1             | Test      | FAILED UPLD |
| 06/05/2008<br>00:00:00 | 9999        | DSR001_2.txt                     | TDOC3   | 06/05/2008<br>11:47:58 | 06/05/2008<br>11:47:58 | 1             | 0              | 0              | 1             | Upload    | FAILED UPLD |

Fig 15 - External File Processing - Upload File Status Inquiry Screen

The details and the status of the file can be selected by the **File Name** (which is case sensitive), the **Status** (Processed, unprocessed, all), the **Branch Code** from which the file was uploaded, **Upload Date** and the **User Id** fields.

The processing of the file is done and the status of success and failure along with the reasons will be given. If the file is rejected, the reason for the same will be displayed. The file should have matching credits and debits if the format demands else the file will be rejected. The related suspense will be generated only if the total details of the file are ok, but there are specific exceptions at the account or GL level like account status, balance issues, incorrect account numbers, etc.

Based on the functionality, the financial debits or credits occur online after the successful processing of the file. The non financial data files like customer creation or account opening also occur online.

## Reports

After a file is uploaded and if the auto report generation is set up, the reports are automatically generated in the reports folder of the **FLEXCUBE** in the application server.

Else the adhoc reports can be generated as shown below under 'File upload reports'.

### Report Request Screen

Report Request

Adhoc Reports  Batch Reports

| Loans                             | Billing | Term Deposit | Customer Information | Security Management | Settlement | Origination | Branch | Relationship Pricing | Limit Management | Savings | General Ledger | Others | Safe Deposit Box |
|-----------------------------------|---------|--------------|----------------------|---------------------|------------|-------------|--------|----------------------|------------------|---------|----------------|--------|------------------|
| <b>Report Group</b>               |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loan EOD Reports                  |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans deviations Report           |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans Interest and Arrears Report |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans Daily Exception Reports     |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans Advices and Statements      |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans NPA Report                  |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
| Loans Daily Transaction Reports   |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |

Ok Cancel

Fig 16 - Report Request Screen

## **1.7. Branch Server Maintenance**

Maintenance allows the user to up keep different activities. It also allows the user for the smooth functioning of various activities.

## Release Area Maintenance

The Release area is the main section where **FLEXCUBE** is installed. This area contains all the executable and supporting files. All the reports are also generated here. This makes the area very critical and should have strict controlling and restraining access.

The access to this area should be controlled. It should not be available to everyone. It should be monitored as users can go in that area and modify data, which could lead to disastrous effects.

## Branch Server Maintenance

Following are the options which can enhance the productivity of the branch server.

- Routine cleanup of C:\temp
- Regular backup and cleanup of event viewer (eventvwr)
- Regular clean up of %WinDir%\System32\LogFiles (IIS log)
- Regular space check and monitoring memory usage to enhance the server productivity
- Anti virus schedule set up (to ensure that scanning time does not coincide with branch working hours)
- Restarting server (frequency), restarting services (frequency), ready batch files on desktop for restart, etc.
- Check growth of branch tables (fast growing tables)
- Regular check on date-time synchronization on all branch servers in line with application/database server
- Auto download scheduler, set up, frequency set up, and monitoring for any failures

## 1.8. Security Management System Related Activities

## Transferring Users from One Branch to Another

An existing user belonging to one branch can be transferred to the other branch of the bank. That user has to be modified in the user profile maintenance using the modify option.

The cost center, i.e. the branch to which the existing user has been transferred will have to select from the available pick list, which is the listing of the branches of the bank.

The **User Profile Maintenance** (Fast Path: SMM02) option should be used for transferring users from one branch to another.

### User Profile Maintenance Screen

The screenshot displays the 'User Profile Maintenance' window. At the top, it shows 'User Id : TDOC1' and 'User Code : 187'. Below this is a checkbox for 'Modify User Details OnLine (Branch database only)'. The main area is divided into tabs: 'User Details', 'Branch Template Details', 'Host Template Details', and 'Modify User Details'. The 'User Details' tab is active, showing fields for 'User Name : First teller', 'Employee ID : 11111', 'Language Code : ENG', 'Host Template : 19', 'Primary Password : \*\*\*\*\*', 'Password Chg Flg : [checked]', 'Previous Password Count : 9', 'Profile Start Date : 03/07/2007', 'Profile End Date : 01/01/2049', 'Vacation Start Date : 30/04/2008', 'Vacation End Date : 30/04/2008', 'Organization Code : 001', 'Division Code : 001', and 'Department Code : 001'. There are also dropdown menus for 'Cost Center : HO', 'Branch Template : 19', 'Access Domain Code : 123', 'Password Reset Flag : None', and 'Email Id : AA@FF'. Below these fields are 'DEMO BANK', 'REGION 1', and 'ORIGINATION' labels. At the bottom, there is a 'Current Status : ENABLE' dropdown and a 'Permanently Disabled : [unchecked]' checkbox. The 'Record Details' section at the bottom shows 'Input By : SYSADM01', 'Authorized By : SYSADM02', 'Last Mnt. Date : 08/05/2008 14:45:31', 'Last Mnt. Action : Authorize', and 'Authorized : [checked]'. The bottom bar contains radio buttons for 'Add', 'Modify', 'Delete', 'Cancel', 'Amend', 'Authorize', and 'Inquiry', along with 'Ok', 'Close', and 'Clear' buttons.

Fig 17 - User Profile Maintenance Screen

After the branch code has been changed to the new branch, the download option for the user profile has to be done for both the previous branch as well as the new branch.



## Logging Out of User ID

Using the **Modify Login Status** (Fast Path: 755) option, the operator can log out the user at the branch level. This option is used when the teller has killed his **FLEXCUBE** session without a formal signoff.

### Modify Login Status Screen

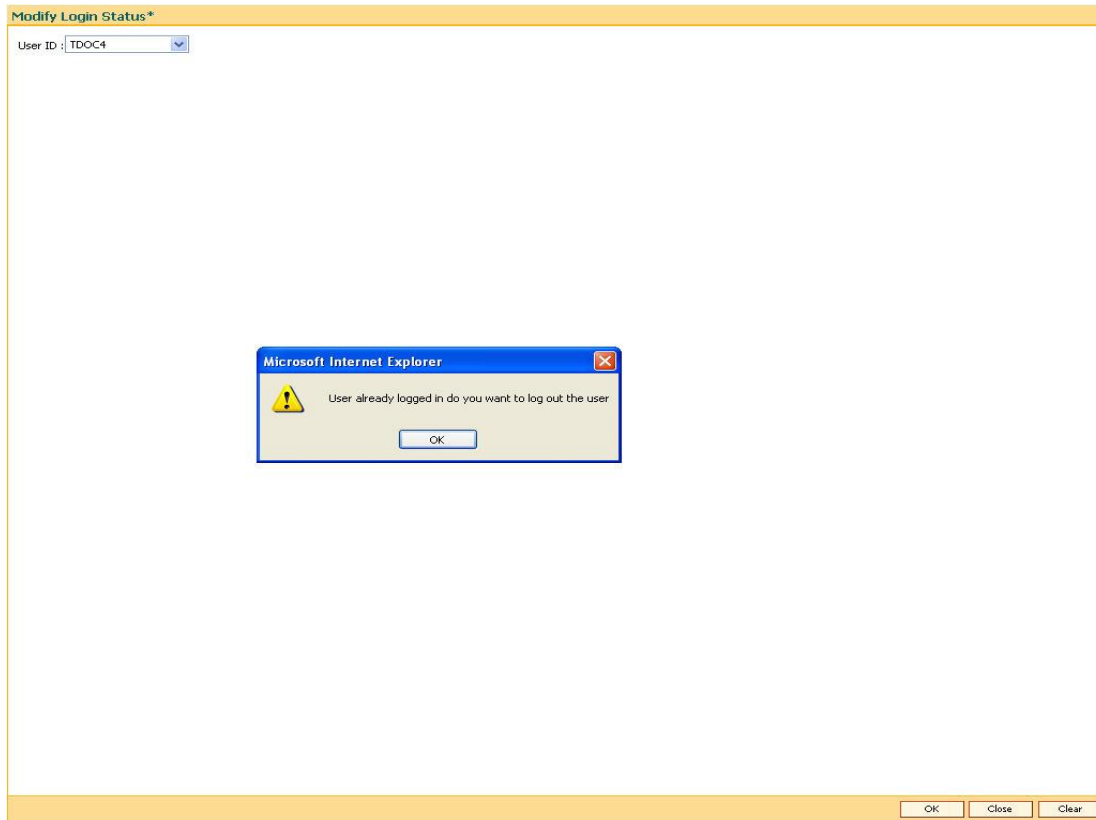


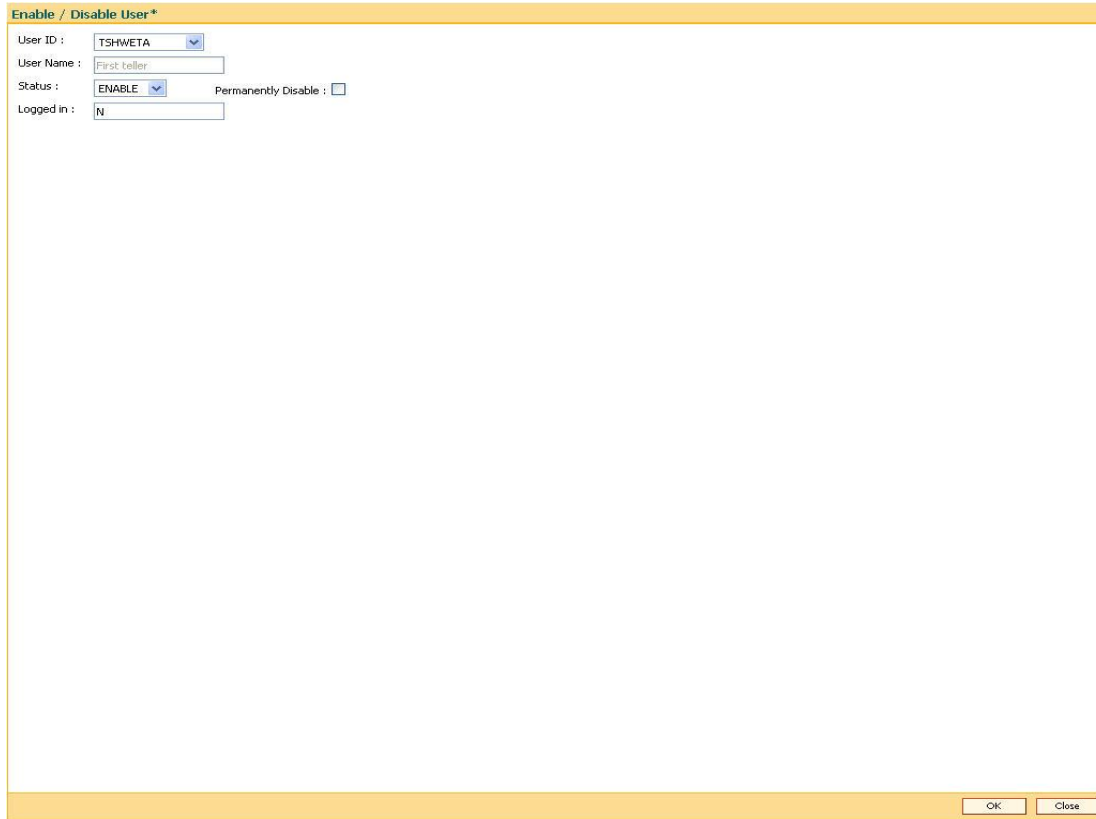
Fig 18 - Modify Login Status Screen

The pick list will give the listing of the users logged in. The operator can select the user and log the user out.

## Enable / Disable of user ID

Using the **Enable / Disable User** (Fast Path: 753) option the operator can enable or disable the user at the branch level.

### Enable / Disable User Screen



The screenshot displays a window titled "Enable / Disable User\*" with a yellow header and footer. The main area contains the following fields:

- User ID : TSHWETA (dropdown menu)
- User Name : First teller (text input)
- Status : ENABLE (dropdown menu)      Permanently Disable :
- Logged in : N (text input)

At the bottom right, there are two buttons: "OK" and "Close".

Fig 19 - Enable / Disable User Screen

## **Adhoc Reports**

Please refer to **Host & Branch Reports** section for details on generation of Adhoc Reports.

## **Branch Server Shutdown Operations**

After the branch batch is closed successfully, the branch system administrator should proceed to shutdown the branch server as per the steps explained in the section below.

- Take the branch database backup. Also transfer the data to a DAT drive. A standard naming convention of dumps is to be maintained.
- For example: BRNCODE\_date.
- Shutdown the Branch Server and power off the Branch Server and UPS.
- By default, the back up for Key Data tables (master tables, transaction log tables, etc.) is taken. Full database backup should be taken at periodic intervals.

## **Dos and Don'ts on the Branch Server**

### **Don'ts:**

- Do not remove any folders/files on the branch server without the explicit approval from the Datacenter.
- Do not create any new files and folders on the branch server hard disk.
- Do not power off the branch server when it is up and running.
- Do not change the system parameters or Oracle parameters without the explicit approval from Datacenter.
- Do not unplug the cables when the server is up and running.
- Do not connect the printers to the branch server, as it will reduce the server performance in case of continuous printing.

### **Dos:**

- Startup and shutdown the branch server as per the procedure explained above.
- Keep updating the branch server and clients with the latest anti-virus software.
- Change the power-on and administrator passwords of the branch server as per the password policy.

### 3. Data Center

## 1.9. Database Backups and Reports Backups

## Database Backup

Backups are an essential part of the EOD and BOD processing in **FLEXCUBE Retail**. It is a very important activity which has to be performed as a part of the batch processing activities.

In **FLEXCUBE Retail**, backups have to be taken at the following stages:

- PRECUTOFF
- POSTEOD
- POSTBOD

The stage names themselves clearly indicate the stage at which the **FLEXCUBE Retail** system will be when the backup is taken. For PRECUTOFF backup, it has to be taken before the operator initiates the cutoff process.

The POSTEOD backup has to be initiated once the entire End of Day category is over in **FLEXCUBE Retail** and End of Financial Input or EOFI has been marked in **Flexcube**.

This backup has to be taken before starting the Beginning of Day for the next process date.

The POSTBOD backup has to be taken after the operator runs the BOD process.

It is suggested that the backups follow a naming convention as follows:

**<FCR><Stagename><Date>**

For example:

Post BOD backup for 20/02/2006 can be named as **FCRPOSTBOD20062002**.

After the backup is over, the backups should be moved to the tape drive, which can be used later for any data restorations if required.

**Note:** Once in a while the backups should be restored in the support database to verify for the data consistency.

Apart from the regular data backups, there should be a schema backup of the Oracle database taken at a fixed interval.



## **Reports Backups**

The reports are generated daily during the process of EOD and BOD. These reports should be backed up on a monthly bases. The ATM transactions occupy significant space on the server. The user can take backup of the ATM trace files at regular intervals and can delete them.

## 1.10. Data Purging

The Purge shell which runs as part of the **FLEXCUBE** BOD process, enables a frequency based data purge from internal host tables that are used by the system for temporary storage.

In addition to the above daily purge process, financial and non financial data needs to be purged at specific frequency. The purge for financial tables like ch\_acct\_ledg, gl\_txnhist, etc. can be set up such that it is aligned with the financial year end of the bank.

Before running the purge process a database backup would be taken which can be retained and retrieved for any future reference to the purged data.

## **Host Tables Purging**

During the batch processing there is a shell called as purge shell which is run as part of BOD processing. This process purges data from transaction tables and temporary tables created for report generation, based on the pre-defined set-up in purge control table.

## **Log Files Purging**

Depending on the logging configuration done in Host, the log files need to be purged. In case LOG4J logging is used, no purging is required. If RAS logging is being used, it is recommended to purge the diagnostic trace log file once a week preferably on the Saturday before the host server is brought down. In addition, the host startup/shutdown log files can be purged after taking backup.

## Reports Purging

The EOD reports occupy significant space on the hard disk of the host server. In case a separate report server is not being used, after taking backup on a DAT or on another machine, the reports can be purged from the main host server at monthly intervals.

### Host Data Purge (Financial Tables)

| Table Name                      | Purpose   | Recommended Purge Frequency | Recommended Purge Handling (Months) |
|---------------------------------|---|-----------------------------|-------------------------------------|
| <b>ba_billing_details</b>       | Used in ASP mode for billing transactions   | Monthly                     | 6                                   |
| <b>ol_td_aux_table</b>          | Stores information of online TD transactions  | Monthly                     | 6                                   |
| <b>st_clrreg_mmdd</b>           | Stores details of cheques sent for clearing   | Monthly                     | 12                                  |
| <b>ol_sweepin_log_mmdd</b>      | History of online sweepins  | Monthly                     | 12                                  |
| <b>xf_ol_ch_ib_req_logs</b>     | Stores history of adhoc requests done through NetBanking                              | Monthly                     | 12                                  |
| <b>xf_ol_ch_requestlog_mmdd</b> | Stores history of adhoc requests (statements, cheque book, etc.) done across channels | Monthly                     | 12                                  |
| <b>xf_ol_st_txnlog_mmdd</b>     | Stores transactions from branch   | Monthly                     | 12                                  |
| <b>xf_stcap_gl_txns_mmdd</b>    | Stores GL handoff transactions  | Monthly                     | 12                                  |

| <b>Table Name</b>               | <b>Purpose</b>   | <b>Recommended Purge Frequency</b> | <b>Recommended Purge Handling (Months)</b> |
|---------------------------------|--|------------------------------------|--|
| <b>xf_st_cap_input_txn_temp</b> | History of transactions processed by CASA, Loans, and TD modules | Monthly                            | 12   |
| <b>xf_ol_st_txnlog_stl_mmdd</b> | Stores details of transaction details processed by STL EOD       | Monthly                            | 12   |
| <b>st_inward_temp_bkup</b>      | Stores details of records processed by Inward Clearing           | Monthly                            | 12   |
| <b>st_inwtxn_bkup</b>           | Stores details of records passed by Inward Clearing              | Monthly                            | 12   |
| <b>st_inwtxn_rej_bkup</b>       | Stores records rejected by Inward Clearing process               | Daily                              | 60   |
| <b>st_inwtxn_rej_hist</b>       | Stores records rejected by Inward Clearing process               | Monthly                            | 12   |
| <b>fct_all_fcr_txns_mmdd</b>    | Stores log of all transactions on GL accounts.                   | Monthly                            | 12   |

| Table Name             | Purpose                                      | Recommended Purge Frequency | Recommended Purge Handling (Months)  |
|------------------------|--|-----------------------------|--|
| <b>ba_cheque_issue</b> | Stores the details of MC/DD/TT Issued        | Bi-monthly                  | The MC/DD/TT which are issued to the customer and for which issue date is 7 days earlier from today's posting date are purged.   |
| <b>ch_acct_ledg</b>    | Ledger for the transactions on CASA accounts | Monthly                     | The data in CASA account ledger is retained for the period specified at the product level. All records in the ledger which are older than the data retention period specified at the product level from today's posting date are purged. |

| Table Name           | Purpose  | Recommended Purge Frequency | Recommended Purge Handling (Months)   |
|----------------------|--|-----------------------------|---|
| <b>ch_nobook</b>     | Stores the transaction details of CASA accounts to print passbook & statements | Monthly                     | In the third year, the transaction entries that are printed by the system of two years earlier than today's posting date are purged (For e.g. If Bank has data for 2000, 2001 & 2002 starting from 15th June 2000, Then on 15th June 2002 all transactions belonging to the period 15th June 2000 to 14th June 2001 are purged by the system). For the transactions that are yet not printed by the system and that are to be purged will be converted in to one entry after the consolidation. |
| <b>gl_txnhist</b>    | Stores log of transactions on GL accounts                                      | Yearly                      | In the second year, the transaction entries earlier than one year from today's posting date are purged.   |
| <b>st_bp_availed</b> | Stores the details of BP availed by CASA accounts                              | Daily                       | Records are purged on the value date of check from this table.  |



| <b>Table Name</b>             | <b>Purpose</b>  | <b>Recommended Purge Frequency</b> | <b>Recommended Purge Handling (Months)</b>   |
|-------------------------------|---|------------------------------------|--|
| <b>st_float_extension</b>     | Stores the details of float extensions performed (The data from this table is primarily used for report generation) | Weekly                             | The records pertaining to float extensions done seven days earlier than today's posting date are purged.                                 |
| <b>td_acct_ledg</b>           | Ledger of transactions on TD accounts   | Yearly                             | In the second year, the ledger transactions earlier than two years from today's posting date are purged.                                 |
| <b>td_int_payment_history</b> | Stores interest payment history for TD accounts   | Yearly                             | The records for which interest has been paid by the system and are two years earlier from today's posting date are purged by the system. |
| <b>td_renewal_history</b>     | Stores the log of automatic/on-line renewal done for TD accounts  | Yearly                             | In the second year, the transaction entries earlier than one year from today's posting date are purged.                                  |
| <b>xf_ol_st_chq_deposits</b>  | Stores details of cheque details  | Daily                              | After the outward clearing process is run for a posting date the records of the instrument that are processed in OWC are purged.         |

| Table Name                | Purpose   | Recommended Purge Frequency | Recommended Purge Handling (Months)   |
|---------------------------|---|-----------------------------|---|
| <b>ch_acct_mast</b>       | CASA Account Master   | None                        | No system purge set up on this table.   |
| <b>td_acct_mast</b>       | TD Account Master   | None                        | No system purge set up on this table.   |
| <b>ln_acct_mast</b>       | Loans Account Master  | None                        | No system purge set up on this table.   |
| <b>ln_acct_ledg</b>       | Ledger for transactions on Loan accounts  | None                        | No system purge set up on this table  |
| <b>ch_acct_statistics</b> | Stores the CASA account balances to be used for <b>ADB</b> <sup>3</sup> computation | None                        | At the beginning of financial year the balances from this table get initialized by the system. When ever CASA account is closed, corresponding record from this table is deleted by the system. |
| <b>ch_si_table</b>        | Stores the information of Standing Instructions on CASA accounts to be executed     | Monthly                     | Records pertaining to the standing instructions for which execution period has expired three months before the today's posting date are purged by the system                                    |

---

<sup>3</sup>(Average Daily Balance)

| Table Name               | Purpose  | Recommended Purge Frequency | Recommended Purge Handling (Months)   |
|--------------------------|--|-----------------------------|---|
| <b>ch_chqbk_issue</b>    | Stores cheque book issuance details for CASA accounts          | Monthly                     | The records of check books that are fully utilized/paid and for which cheque book issuance date is earlier than posting date by six months are purged |
| <b>ch_acct_stmt_hist</b> | The log of periodic account statements generated by the system | Monthly                     | The statement that are generated six months earlier than today's posting date are purged  |
| <b>xf_ol_st_late_clg</b> | Stores details of late cheque marking                          | Daily                       | Records pertaining to late clearing markings done one month earlier than today's posting date are purged  |
| <b>td_audit_trail</b>    | Stores details of transactions performed on TD accounts        | Yearly                      | In the second year, the transactions on TD account earlier than two years from today's posting date are purged  |
| <b>td_temp_ren_red</b>   | Stores information of online TD transactions                   | Daily                       | 90  |

**Host Data Purge (Non-Financial Tables)**

| Table Name | Purpose | Recommended Purge Frequency | Recommended Purge Handling (Months) |
|------------|---------|-----------------------------|-------------------------------------|
|------------|---------|-----------------------------|-------------------------------------|

| Table Name                | Purpose  | Recommended Purge Frequency | Recommended Purge Handling (Months) |
|---------------------------|--|-----------------------------|-------------------------------------|
| <b>ba_log_cube_txn</b>    | Stores log of transactions that happened to and from FCC                 | Daily                       | 6                                   |
| <b>ba_report_restart</b>  | Stores details of reports generated during EOD/BOD along with the status | Daily                       | 2                                   |
| <b>ba_tmp_r_ext_hoff</b>  | Stores details of files uploaded through <b>GEFU</b> <sup>4</sup>        | Daily                       | 6                                   |
| <b>ol_bots_bcl</b>        | Stores log of Branch Batch status for each posting date                  | Daily                       | 12                                  |
| <b>ol_batch_info</b>      | Stores log of Branch Batch status for each posting date                  | Daily                       | 12                                  |
| <b>mu_unauth_logtable</b> | Stores details of unauthorised maintenances                              | Daily                       | 12                                  |
| <b>rjs_requests</b>       | Stores log of adhoc report requested by the branch                       | Daily                       | 2                                   |
| <b>sm_evtlog</b>          | Stores the activity of maintenances                                      | Daily                       | 12                                  |

---

<sup>4</sup>(Generic External File Upload)

| <b>Table Name</b>                    | <b>Purpose</b>                                 | <b>Recommended Purge Frequency</b> | <b>Recommended Purge Handling (Months)</b> |
|--------------------------------------|--|------------------------------------|--|
| <b>xf_cap_cifs_handoff_temp</b>      | Stores history of balance change of accounts   | Daily                              | 12   |
| <b>ba_download_log</b>               | Stores information about the downloaded tables | Daily                              | 2  |
| <b>gl_batctrl</b>                    | Details of IC and Voucher Entry batches        | Daily                              | 1  |
| <b>ch_stop_chq_hist</b>              | History of Stopped cheques                     | Monthly                            | 1  |
| <b>ch_acct_activate_details_hist</b> | Stores the account activation history          | Monthly                            | 0  |

The Recommended Purge Handling (Days Retained) for a particular table can be changed by updating the retention period or frequency in `ba_purge_control` table. For adhoc purges, the frequency of running the purge needs to be changed.

## 1.11. Host Operations

**Note:** For more information to start the host server please refer to the **Installation Guide**. A detailed description to install and start the server is provided in the guide.

### Services Running at Application Server



Fig 20 - Services Running at Application Server Screen

From a **FLEXCUBE** perspective, the following services should be running on the application server for effective operations:

| Sr. No. | Service Name            | Order of Start | Description / Purpose of Service                |
|---------|-------------------------|----------------|---|
| 1       | IBM WAS or Oracle 10gAS | 2              | Host Application Server hosting <b>FLEXCUBE</b> |
| 2       | MQ Server               | 1              | Provides MQ support                             |
| 3       | Http Server             | 3              | For providing reports over http server          |

## 1.12. Interfacing with Flexcube

This section is applicable only for sites where **FLEXCUBE** is also installed.

There are some interdependencies between **FLEXCUBE Core Banking** and **Flexcube**. Though the End of Day / Month batch operations are commenced simultaneously in both the systems, there are some dependencies for commencement of Loans shell in **FLEXCUBE Core Banking** and GL processing in **FLEXCUBE**.

Regarding the EOD processing, the Retail EOD process category contains a sub process called **FLEXCUBE** Loans Shell. When the EOD runs, this process keeps on polling till the **Allow retail to run** flag is marked from **FLEXCUBE** module EOD. This flag will be marked when the IFPREGL shell is completed for all branches as a part of the corporate module EOD.

Also, the GL upload operation in **FLEXCUBE** should be performed only after the EOD process is completed in **FLEXCUBE Retail**.

Following is [EOD Flow of Events Screen](#).

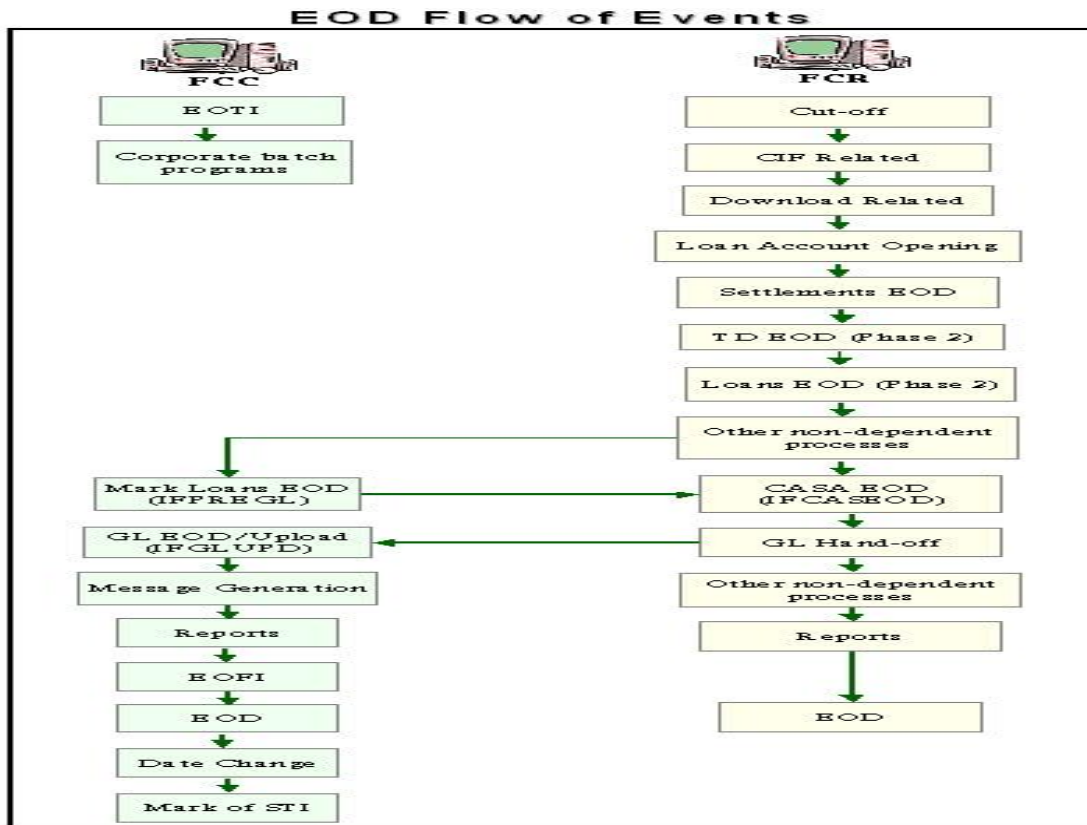


Fig 21 - EOD Flow of Events Screen

Pre-requisites for commencing the EOD

- Clear Corporate transaction log
- Clear Corporate maintenance log

- **Close All Teller Batches**
- **Close all Branch Batches**
- **Take Pre EOD Back Up**

Checklist for the EOD operator when there is an interface with the FCC:

| <b>Sr. No.</b> | <b>Description</b>                     |
|----------------|--|
| 1              | Accounting Statement Generation        |
| 2              | Spend Rule Evaluation                  |
| 3              | Cut Off                                |
| 4              | Eligibility Evaluation                 |
| 5              | CASA Stream Distribution (Category 91) |
| 6              | TD Action Stream (Category 92)         |
| 7              | EOD                                    |
| 8              | EOD Reports Category                   |
| 9              | Combined Statements                    |
| 10             | Monthly Statements                     |
| 11             | Cust Deactivation                      |
| 12             | Date Change                            |
| 13             | BOD                                    |
| 14             | ADHOC PURGE                            |
| 15             | Alerts Processing                      |
| 16             | Qtr End Form16 Gen                     |



## EOD Flow of Events for FCR

Following is the screen for EOD Flow of Events for FCR

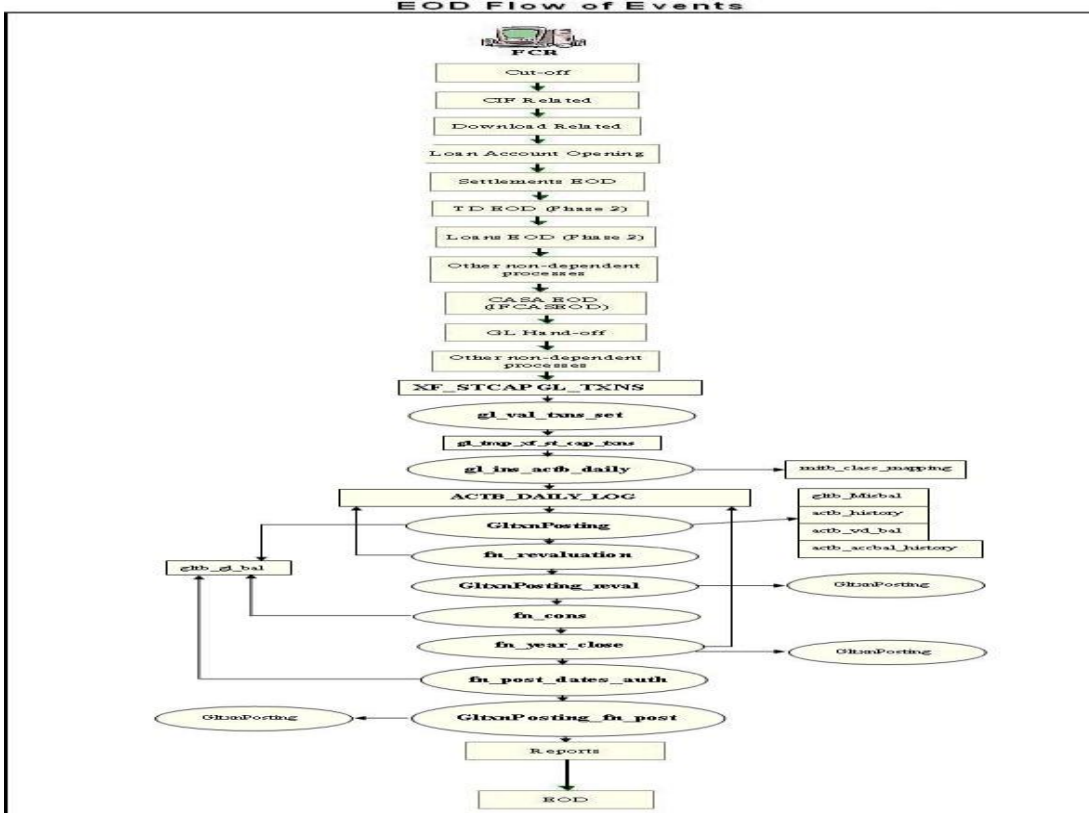


Fig 22 - EOD Flow of Events - FCR Screen

Checklist for the EOD operator for FCR:

| Sr. No. | Description  |
|---------|--|
| 1       | Closing of all teller, vault, and branch batches                         |
| 2       | FCR Branch Backup of the branch before running EOD                       |
| 3       | Eligibility Evaluation Category (if required)                            |
| 4       | FCR Pre-Cutoff Backup (host)   |
| 5       | Check if the Batch Application is running in Host. Start if not running. |
| 6       | Start the cutoff   |
| 7       | Run the EOD  |

**Sr.  
No.**      **Description**

---

8      Take Post EOD backup

9      Run BOD

10      Take Post BOD Backup

11      Run statement category to generate statements (on Month-ends)

## 1.13. Login for EOD Operations

## Control of EOD Services for Retail Application

For **FLEXCUBE Retail**, there are a number of services that are running and that can be viewed.

To view them, login to the **IBM WAS Admin Console**. This will invoke a window which will appear as follows:

### Enterprise Applications Screen

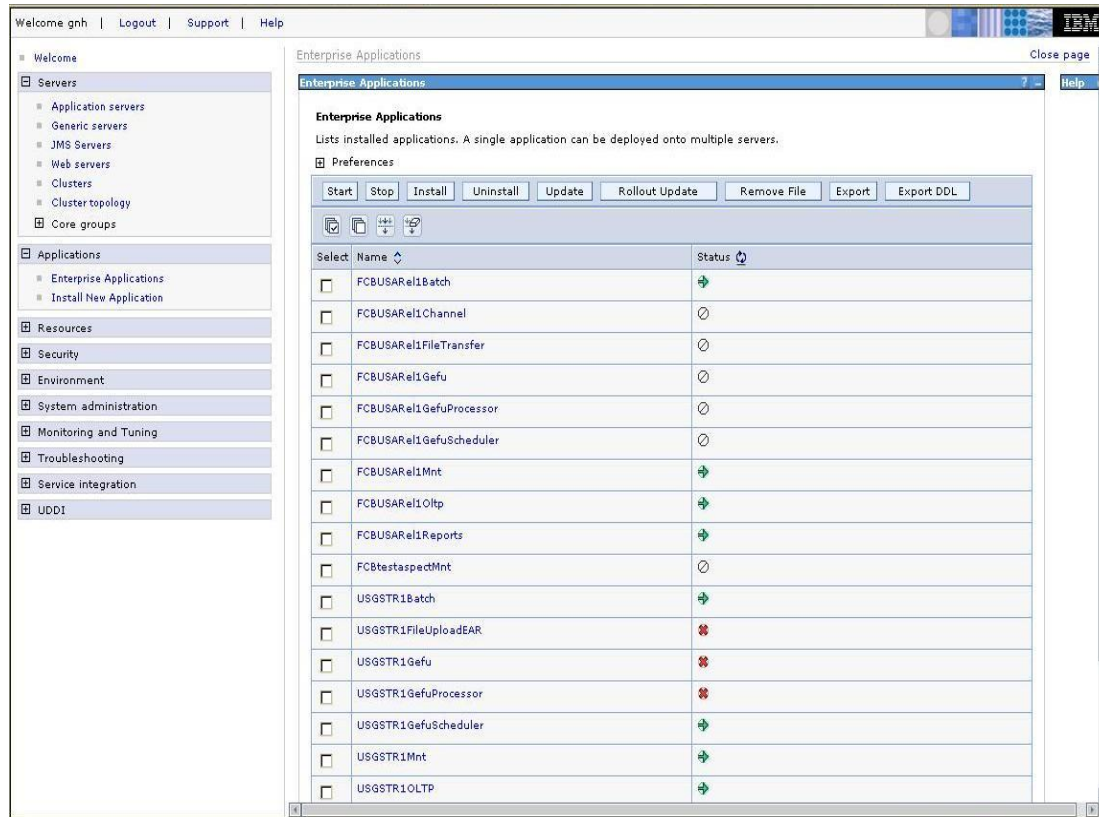


Fig 23 - Enterprise Applications Screen

When these services are running, the status should be shown with a green arrow Started, while if the service is not running then the status is a blank. It indicates that the service is not running any more.

For the EOD/BOD processing, the most important service Batch is required to be up and running.

Before starting off cutoff, this service should be stopped and started again. This is an ideal sequence before starting the batch processing activities of the bank.

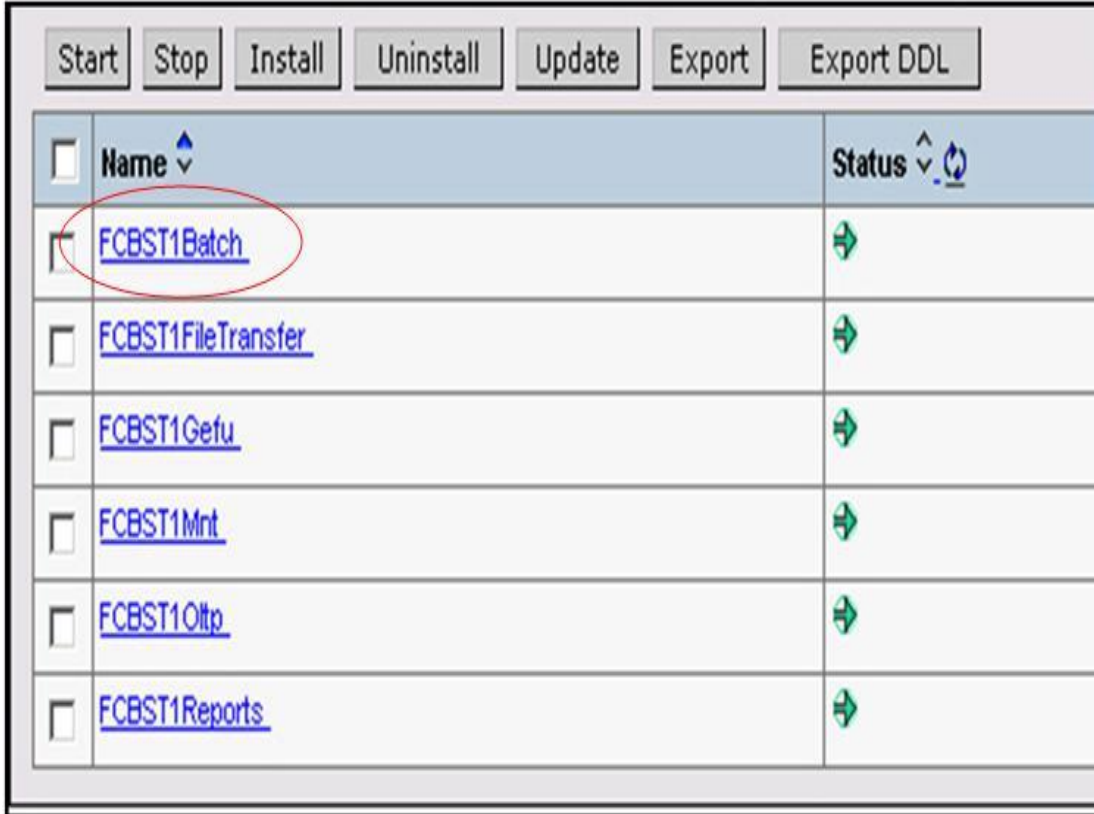
#### For this, the operator has to follow these steps.

- Go to **Applications** on the Web server application server.
- Select the **Batch** service.
- If the status for this shows Blank, select the check box and then start the service.
- Once this is completed, then the operator can start the **EOD Processing**.

- Before running any operation under the EOD Processing, the operator has to ensure that the service Batch is started using the Services window as follows:

**Note:** The service to check is the one which has been highlighted in the screen below.

#### EOD Services for Retail Application Screen











| <input type="checkbox"/> | Name  | Status   |
|--------------------------|--|--|
| <input type="checkbox"/> | <u>FCBST1Batch</u>   |   |
| <input type="checkbox"/> | <u>FCBST1FileTransfer</u>  |   |
| <input type="checkbox"/> | <u>FCBST1Gefu</u>  |   |
| <input type="checkbox"/> | <u>FCBST1Mnt</u>   |   |
| <input type="checkbox"/> | <u>FCBST1Oltip</u>   |   |
| <input type="checkbox"/> | <u>FCBST1Reports</u>   |   |

Fig 24 - EOD Services for Retail Application Screen

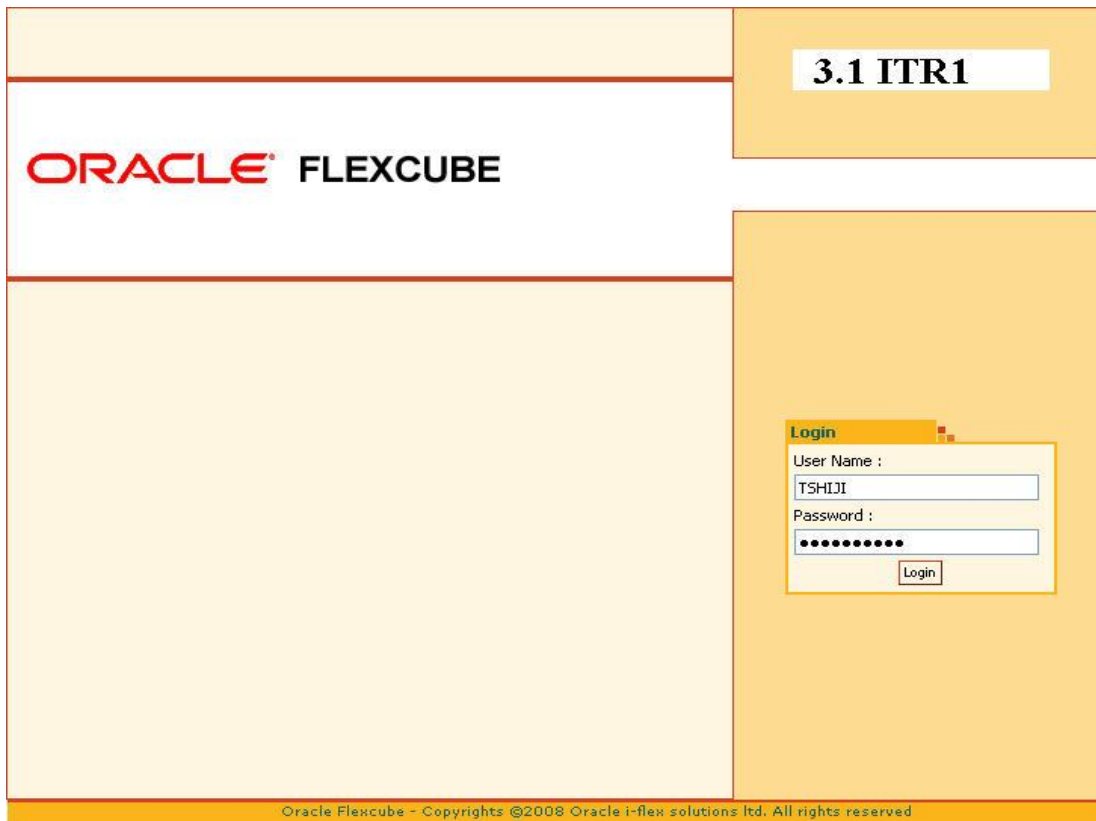
## Bringing Up the Operator Menu

The Beginning of Day (BOD) is run from an operator's login on **FLEXCUBE Retail**.

To open the operator menu:

- Logon to **FLEXCUBE** with a valid System Operator Login ID.

### Login Screen



The screenshot shows the Oracle Flexcube login interface. The main area contains the Oracle Flexcube logo. A version indicator '3.1 ITR1' is displayed in the top right. A login dialog box is open, showing the user name 'TSHIJI' and a masked password field. A 'Login' button is visible below the password field. The footer contains the text: 'Oracle Flexcube - Copyrights ©2008 Oracle i-flex solutions Ltd. All rights reserved'.

Fig 25 - Login Screen

## Invoking the EOD Console

All the batch processing operations mentioned above have to be run from the **EOD Processing** (Fast Path: EOD10) option.

### To invoke the EOD console:

1. Logon to **FLEXCUBE** with a valid System Operator Login ID.
  2. Enter the Fast Path : EOD10.
- OR
3. From the **EOD/BOD Operations** menu, select **EOD Processing**.
  4. **FLEXCUBE** displays the screen as shown in the following figure.

### EOD Client Screen

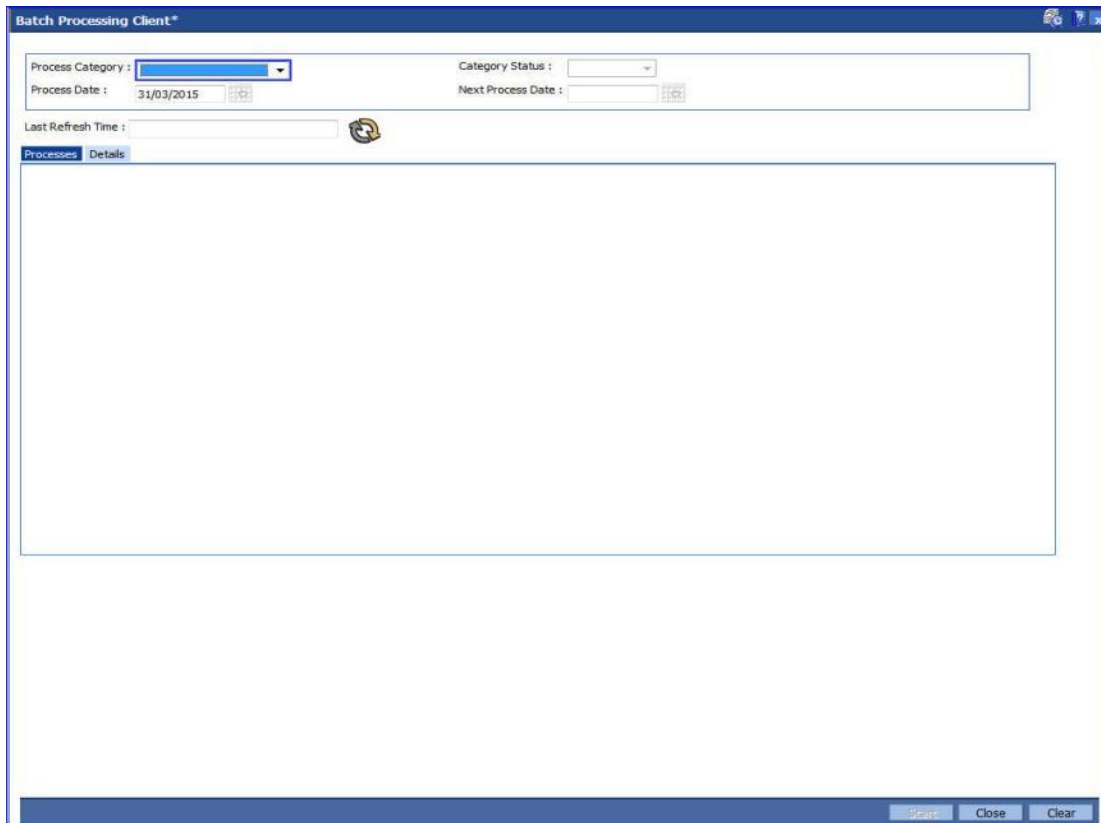


Fig 26 - EOD Client Screen

As can be seen from the screen above, there are two frames in this window. The top frame is called the General frame and the bottom frame is called the Status frame. Both the frames are disabled when no category is selected.

The General frame displays the status of the process category which will run once it is selected and also the current and next process date for which the category will be run.

From the General frame, the operator has to select the process category which has to be run for that process or system date in **FLEXCUBE Retail**. The other details are automatically populated in the two tabs, **Processes** and **Details**.

There is also a drop-down list of the various categories that can be run from **FLEXCUBE Retail**.

You can run all the batches for EOD ( Including FCUBS Corporate shells and FCR) using this console

It can be best explained with an example.

For e.g. Suppose the process category cutoff has to be run for 28th Nov 2004. Once the console is obtained, the operator just has to press the **Down Arrow** next to the **Process Category** field and select **Cutoff** from the options available as follows:

### EOD Client Screen

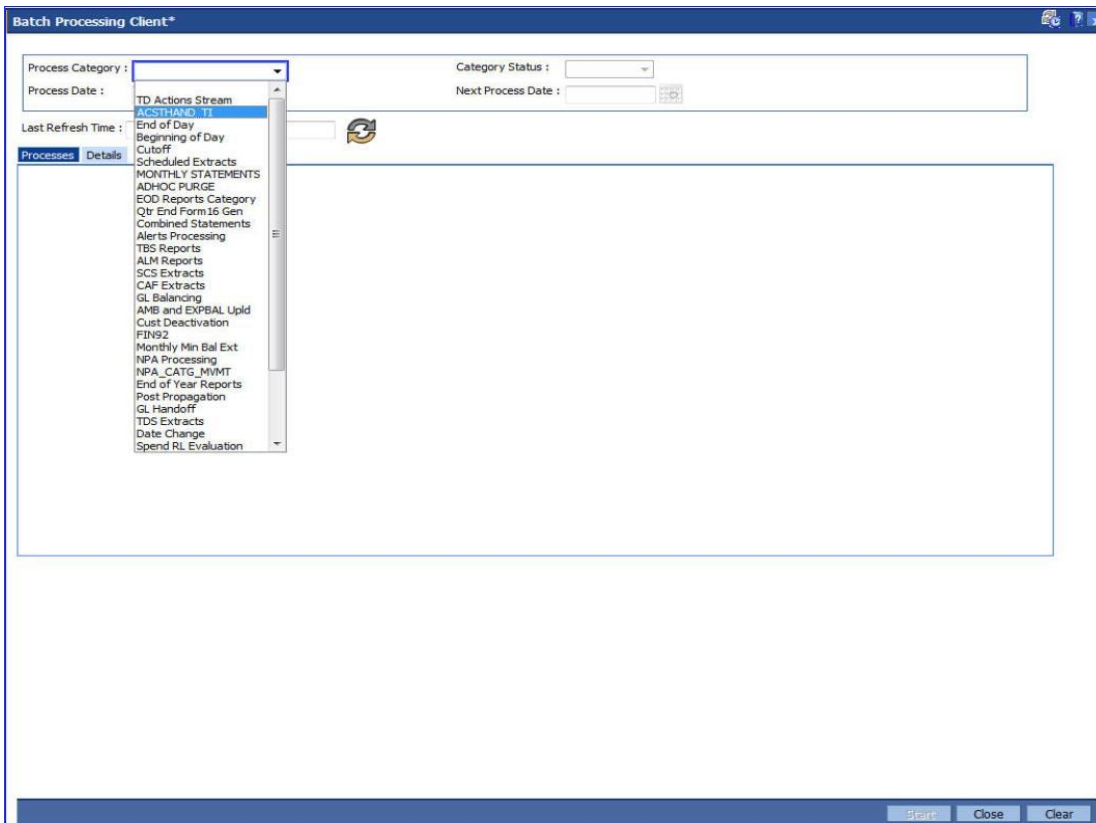


Fig 27 - EOD Client Screen

### FLEXCUBE Process Categories:

| Category Name | Category No. | Description |
|---------------|--------------|-------------|
|---------------|--------------|-------------|



| Category Name                     | Category No. | Description  |
|-----------------------------------|--------------|--|
| Eligibility Shell                 | 11           | <p>The eligibility shell is related with <b>RVT</b><sup>5</sup> (Relationship Value Tagging).</p> <p>Eligibility criteria can be defined under the tag of an “Eligibility Plan” in the Relationship Pricing Project. This Plan determines which set of customers will get benefits defined under a scheme, and thus helps identify the target customers for a scheme. The benefits available under a scheme can be reduction in Service Charges or positive variance in Credit Interest Rates.</p>   |
| Cut-off Processing                | 3            | <p>Cut-off is the process that operator must run at the end of every day before starting the EOD for that day, to ensure that all transactions done through the on-line delivery channels (including branch, ATMS, POS and Tele banking) are handed over to a log for batch processing. A fresh log is created for the next day’s transactions. Here it is important to note that while the processing date from the point of view of EOD processing is still today, the on-line processing date has moved to the next processing date and the online transactions done after cut-off will be processed in the next day’s EOD.</p> |
| End of Day (EOD) Processing       | 1            | <p>EOD refers to the processing required to be done for each functional module of <b>FLEXCUBE Retail</b> as well as some files that are generated for updating data in other <b>LO</b><sup>6</sup>s.</p>   |
| Beginning of Day (BOD) Processing | 2            | <p>Beginning of the Day process opens a new transaction day for the Bank. BOD as a process depends on EOD process for the previous working day. This means, if the EOD is not completed for a day, system will not allow the BOD for the next day to start. The days are always business days as specified in Branch Calendars. So, even if one branch is functioning on a particular day, BOD will have to be run for that day.</p>   |

<sup>5</sup>(Relationship Value Tagging)

<sup>6</sup>(Local Office)

| Category Name  | Category No. | Description   |
|--|--------------|---|
| MONTHLY STATEMENTS                                   |              | This process is used to generate the customer monthly statement in order to stream line the time during the actual EOM process. This process is run separately. This process can be run even after the BOD process next day.  |
| Handoff After EOD                                    |              | It is a process to extract specific schedule and to have a proper handoff to the interface.   |
| Elig Evaluation                                      |              | It is a process to evaluate the eligibility of the RVT schemes. For more information on RVT schemes refer to Relationship Pricing user manual.  |
| File Handoff   |              | It is a process to extract specific schedule and to have a proper handoff to the interface.   |
| Automatic <b>EFS</b> <sup>7</sup> for Converted Loan |              | This process is used to close the loan accounts with <b>Automatic EFS Date</b> falling on running day. If running of this process is skipped on a particular day, such accounts falling due for automatic closure on that day will be picked on next working day process. Future dated closure or back dated closure is not be supported. If the automatic closure date falls on a holiday, then such accounts will be picked up on the next working days process. All accounts attempted for such system initiated closure will be marked as <b>Tried</b> for both successful and failure cases. The accounts which are marked as <b>Tried</b> will not be picked up for further retries when the process is attempted at the later dates. |
| Mark for Write Off                                   |              | In this process system displays the "Accounts marked for write off are pending processing. Cannot proceed" message for the account which are marked for write off for which the write off process has not been executed. If there are no accounts marked for write off, <b>FLEXCUBE</b> will start the process of marking accounts for write off based on the parameters defined. The system displays the message "SUCCESS MESSAGE" after the process is completed.   |

<sup>7</sup>(Early and Final Settlement)

| Category Name        | Category No. | Description  |
|----------------------|--------------|--|
| Bulk Tax Certificate |              | This process is used to generate tax certificate of all the customers of the bank and stored in a spool file. The report is generated customer wise with page break and print can be taken whenever required.  |
| Automatic Write Off  |              | In this process system displays the “No accounts marked for write off, Cannot Proceed” message if no account is write off for which the write off process. Accounts manually marked for write off will be fully written off irrespective of the present <b>CRR</b> <sup>8</sup> status or the <b>DPD</b> <sup>9</sup> . If the accounts are marked for write off, <b>FLEXCUBE</b> will write off the accounts if the accounts meet the eligibility criteria as on the date of write off. Accounting entries including off balance sheet entries will be passed by the system pertaining to written off accounts. The system displays the message "SUCCESS MESSAGE" after the process is completed. |
| TD Actions Stream    |              | In this process system displays the “No  |
| ACSTHAND_TI          |              | In this process system displays the “No  |
| ADHOC PURGE          |              | In this process system displays the “No accounts marked for write off, Cannot  |
| EOD Reports Category |              | In this process system displays the “No  |
| Qtr End From 16 Gen  |              | In this process system displays the “No accounts marked for write off, Cannot  |
| Combined Statements  |              | In this process system displays the “No accounts marked for write off, Cannot  |
| Alerts Processing    |              | In this process system displays the “No  |
| Automatic Write Off  |              | In this process system displays the “No  |
| TBS Reports          |              | In this process system displays the “No accounts marked for write off, Cannot  |
| ALM Reports          |              | In this process system displays the “No accounts marked for write off, Cannot P.   |

<sup>8</sup>(Credit Risk Rating)

<sup>9</sup>(Days Past Due)

| Category Name                            | Category No. | Description  |
|--|--------------|--|
| SCS Extracts                             |              | In this process system displays the "No accounts marked for write off, Cannot    |
| CAF Extracts                             |              | In this process system displays the "No accounts marked for write off, Cannot    |
| GL Balancing                             |              | In this process system displays the "No MESSAGE" after the process is completed. |
| <b>AMB</b> <sup>10</sup> and EXPBAL Upld |              | In this process system displays the "No a  |
| Cust Deactivation                        |              | In this proc`  |
| FIN92                                    |              | In this proc   |
| Monthly Min Bal Ext                      |              | In this proc   |
| NPA Processing                           |              | In this proc   |
| NPA_CATG_MVMT                            |              | In this proc   |
| End of Year Reports                      |              | In this proc   |
| Post Propagation                         |              | In this proc   |
| TDS Extracts                             |              | In this proc   |
| Date Change                              |              | In this proc   |
| Spend RL Evaluation                      |              | In this proc   |
| CASA Stream Distribution                 |              | In this proc   |
| Statement Processing                     |              | In this proc   |
| Customer Dedup Full Rfrs                 |              | In this proc   |
| Customer Dedup Incr Rfrs                 |              | In this proc   |
| AML Integration                          |              | In this proc   |
| NPA Reports Category                     |              | In this proc   |

Once the process category is selected, the other details in the General frame will be populated.

---

<sup>10</sup>(Average Monthly Balance)

This can change depending on the status of the category. If the entire category is complete, the status will be displayed as Completed or if the category has aborted or fallen over, the status is Aborted.

**Note:** Whenever any process category is chosen, before the category is started, the operator must look at the process and next process date and confirm that these are the current and next working dates of the bank.

After the dates have been confirmed, the process category can be started by clicking the **Start** button.

As soon as this is done, the processing will begin and control will be taken over by the EOD Console. The first event to take place is that the Status frame will be enabled and the list of processes within that category or the jobs in that category will be thrown up on the console.

Once this is done, the initiation of the different processes will be controlled by the EOD Service that will be running on the Application Server for **FLEXCUBE Retail** and will not involve any intervention by the user in the sense of selection of processes and running them individually.

## Other Buttons on the EOD Console

There are two more buttons at the bottom right hand corner of the console next to the **Start** button. These are **Refresh** and **Close** button.

### Refresh Button

The **Refresh** button can be used by the operator to get the latest status of the various processes running for a particular category.

Alternatively, the system also has an auto-refresh feature which automatically updates the status of a particular process after a certain period of time. After refreshing the particular process, it regularly refreshes the status of the different processes.

### Close Button

The **Close** button is used for closing the EOD Console.

This can be done in a number of scenarios.

For example:

- The process category is completed successfully and the user wants to logout.
- OR
- The process category has aborted but the user wants to check some other or invoke another application and can use the **Close** button to close the EOD Console.

**Note:** Closing of the EOD Console when a process category has finished or aborted is acceptable. When the process is restarted, in case of an abort, then the status would have changed to Aborted, so the operator will know exactly what the status of the category is once the console is brought up or invoked again.

## Process Run and Status Update

When individual processes in a category are run, each process goes through various stages. The order in which these processes are run is pre-defined and will not change unless new processes / jobs have to be added to a category.

The various stages for a particular process that will be displayed, in the status window are as follows

- COMPLETE
- NOT STARTED
- STARTED
- ABORTED
- PREREQ\_ABORTED and
- PREREQ\_ABSENT

These are the stages that a process can be in. When the category is started, it builds a reference and pre-requisite list which determines the order in which the processes have to be run.

Once the process is started, it may resemble as follows:

## EOD Client Screen

Batch Processing Client\*

Process Category : Cutoff Category Status : In Progress  
 Process Date : 30/11/2007 Next Process Date : 15/12/2007  
 Last Refresh Time : Fri Nov 21 20:32:45 UTC+0530 2008

| Process Name               | Module Code | Flag Stream | Shell State | Status | Duration |
|----------------------------|-------------|-------------|-------------|--------|----------|
| Cutoff Combine Logs        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Epilogue            | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move ATM Txns       | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move BROP Txns      | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move Event Txns     | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move IB Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move POS Txns       | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move Prologue Shell | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move REQST Log      | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move SC Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move TB Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Move ZENGIN Txns    | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc ATM Txns       | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc BROP Txns      | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc Event Txns     | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc IB Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc POS Txns       | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc REQST Txns     | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc SC Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc TB Txns        | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Proc ZENGIN Txns    | CO          | N           | Not Started | 0%     | 00:00:00 |
| Cutoff Prologue            | CO          | N           | Complete    | 100%   | 00:00:00 |

Card Change Pin Cheque Cost Rate Denomination Instrument Inventory Pin Validation Service Charge Signature Travellers Cheque  
 UDF Restart Close Clear

Fig 28 - EOD Client Screen

The block next to the **Process Name** field indicates the status of the process in addition to the **Status** field, which it displays as STARTED. Also, the duration for which the process is running is displayed.

The time, till which the process is not completed, the auto-refresh will update the individual process status and duration of the process run in this category.

Once the process is over, the screen will be refreshed and will be displayed as follows:

### EOD Client Screen

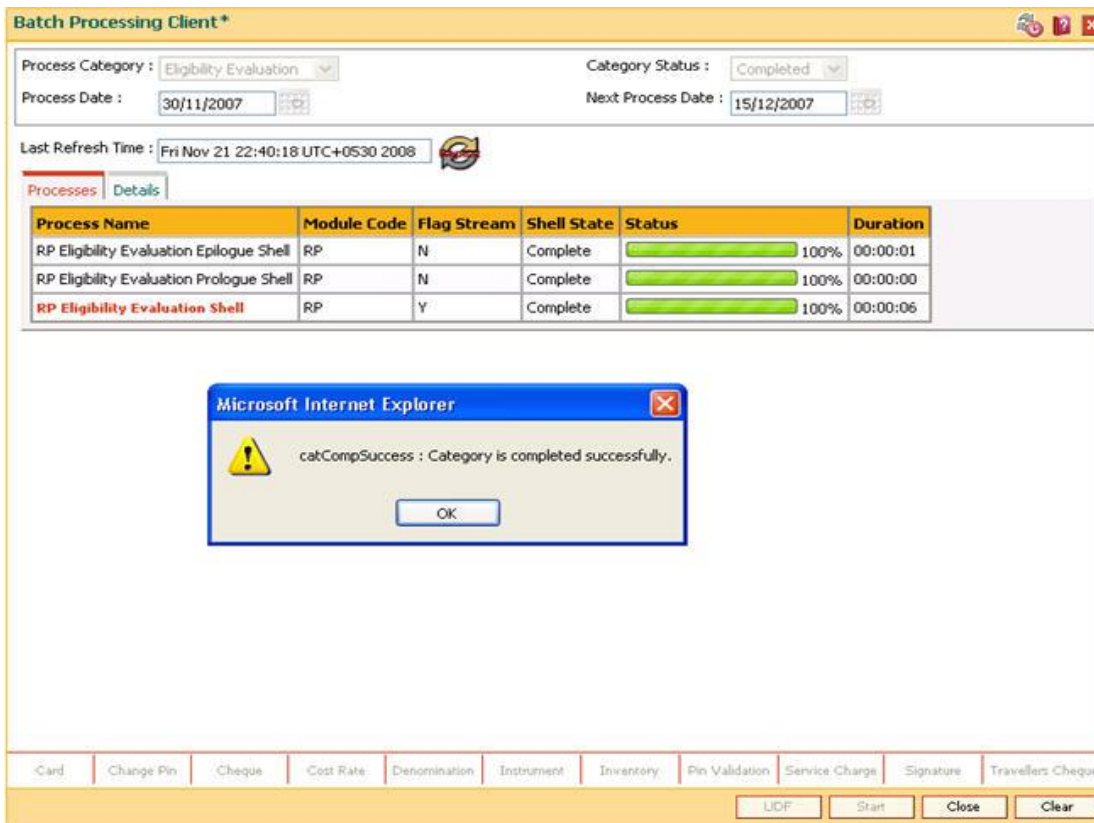


Fig 29 - EOD Client Screen

Once the individual process is over, the status bar for that process will be like the one above.

**Note:** The color bar indicating the status has now become grayed and the **Status** field shows COMPLETE, which indicates that the process has run for that day under this process category.

Once the entire process category is over, the window indicating the status of the category appears as follows:



## EOD Client Screen

The screenshot shows the 'Batch Processing Client' window. At the top, there are fields for 'Process Category' (Cutoff), 'Process Date' (30/11/2007), 'Category Status' (Completed), and 'Next Process Date' (15/12/2007). Below this is a 'Last Refresh Time' field showing 'Fri Nov 21 22:28:45 UTC+0530 2008'. The main area is a table with columns: Process Name, Module Code, Flag Stream, Shell State, Status, and Duration. A dialog box titled 'Microsoft Internet Explorer' is overlaid on the table, displaying a warning icon and the message 'catCompSuccess : Category is completed successfully.' with an 'OK' button. At the bottom of the window, there are tabs for various transaction types (Card, Change Pin, Cheque, etc.) and buttons for 'UDF', 'Start', 'Close', and 'Clear'.

| Process Name            | Module Code | Flag Stream | Shell State | Status | Duration |
|-------------------------|-------------|-------------|-------------|--------|----------|
| Cutoff Combine Logs     | CO          | N           | Complete    | 100%   | 00:01:21 |
| Cutoff Epilogue         | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move ATM Txns    | CO          | N           | Complete    | 100%   | 00:00:01 |
| Cutoff Move BROP Txns   | CO          | N           | Complete    | 100%   | 00:00:11 |
| Cutoff Move Event Txns  | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move IB Txns     | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move POS Txns    | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move Prologue Sh | CO          | N           | Complete    | 100%   | 00:01:00 |
| Cutoff Move REQST Log   | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move SC Txns     | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move TB Txns     | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Move ZENGIN Txns | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Proc ATM Txns    | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Proc BROP Txns   | CO          | N           | Complete    | 100%   | 00:00:02 |
| Cutoff Proc Event Txns  | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Proc IB Txns     | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Proc POS Txns    | CO          | N           | Complete    | 100%   | 00:00:00 |
| Cutoff Proc REQST Txns  | CO          | N           | Complete    | 100%   | 00:00:00 |

Fig 30 - EOD Client Screen

The operator can clear this window by either clicking the **Ok** button or pressing the **Space Bar**. After this, click the **Close** button on the EOD Console which should take the user back to his Access menu.

If a particular process does not complete successfully, the status is indicated as ABORTED.

The colour bar indicating the process status is marked Red and the field for Status shows ABORTED which means that the process has stopped running for this processing date.

After this, if there are dependent processes on this process, they will be marked on the EOD Console as PREREQ\_ABORTED. Once the category reaches a stage where the aborted process has to be restarted without which the category will not be completed, a messages box will appear as follows:

## EOD Client Screen

Batch Processing Client\*

Process Category : End of Day      Category Status : Aborted  
 Process Date : 30/11/2007      Next Process Date : 15/12/2007

Last Refresh Time : Fri Nov 21 23:59:35 UTC+0530 2008

| Process Name                          | Module Code | Flag Stream | Shell State          | Status | Duration  |
|---------------------------------------|-------------|-------------|----------------------|--------|-----------|
| AC EOD Reports                        | AC          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Classification Prologue               | AC          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Account Xfer Epilogue                 | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Account Xfer Prologue                 | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Account Xfer Shell                    | BA          | Y           | Prerequisite Aborted | 0%     | 11:12:30  |
| BA Reports                            | BA          | N           | Complete             | 100%   | 00:00:00  |
| Branch Account Xfer                   | BA          | Y           | Prerequisite Aborted | 0%     | 11:12:30  |
| Branch Acct Xfer Epilogue             | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Branch Acct Xfer Prologue             | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Branch Transfer                       | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Collateral Revaluation                | BA          | N           | Prerequisite Aborted | 0%     | 369:07:23 |
| Floating Collateral Propagation       | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Provision Shell                       | BA          | Y           | Prerequisite Aborted | 0%     | 11:12:30  |
| Provision Shell Prologue              | BA          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| End of Day process for Bills          | BI          | N           | Complete             | 100%   | 00:00:00  |
| CASA EOD Reports                      | CH          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| CH OD Penalty Hold Removal Shell      | CH          | N           | Complete             | 100%   | 00:00:00  |
| CRR Determination Shell               | CH          | Y           | Prerequisite Aborted | 0%     | 11:12:30  |
| Classification Shell                  | CH          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| End of Day process                    |             |             | Complete             | 100%   | 00:00:00  |
| Interest Rate Chang                   |             |             | Complete             | 100%   | 00:00:09  |
| Pay Recieve Account                   |             |             | Prerequisite Aborted | 0%     | 01:07:15  |
| Pay Recieve Prolog                    |             |             | Prerequisite Aborted | 0%     | 01:07:15  |
| RD DrawDown Shell                     |             |             | Complete             | 100%   | 00:00:00  |
| Recurring Deposit Int                 |             |             | Prerequisite Aborted | 0%     | 01:07:15  |
| Recurring Deposit Transaction Posting | CH          | Y           | Prerequisite Aborted | 0%     | 11:12:30  |
| Reverse Sweep Out Shell               | CH          | N           | Complete             | 100%   | 00:00:00  |
| Sav Transaction Posting Epilogue      | CH          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Sav Transaction Posting Epilogue 2    | CH          | N           | Prerequisite Aborted | 0%     | 01:07:15  |
| Savings Daily Accrual Handoff         | CH          | N           | Prerequisite Aborted | 0%     | 01:07:15  |

Card    Change Pin    Cheque    Cost Rate    Denomination    Instrument    Inventory    Pin Validation    Service Charge    Signature    Travellers Cheque

UDF    Restart    Close    Clear

Microsoft Internet Explorer

catCompAbort : Category is aborted.

OK

Fig 31 - EOD Client Screen

This indicates that the process that has been aborted has to be corrected or looked into by the support personnel and the category has to be restarted after the problem has been resolved.

Once the category is completely run and all the processes have run, the message "Category successfully completed" is displayed.

## Exception Processing

Once an EOD category is started, it will continue till one of the following conditions occurs:

- All the processes of that category are completed successfully
- Some of the processes are aborted

In case some process is aborted and if all the remaining processes depend on this process, the EOD will stop. Sometimes this will not lead to the stopping of the entire EOD. Processes which are independent of the aborted process will continue. The operator will have to look in the status log to check for the error that has occurred. Some of the reasons for which a process may abort are:

- Setup error
- System error
- The operating system resources such as shared resources and memory or disk space are exhausted.
- Database error
- Application error
- Incorrect or Inconsistent Data

To view the log file, please refer to the **Troubleshooting** section.

Based on the error reported in the status log, corrective action will have to be taken. Once the action has been taken, it is possible to restart the aborted process (es) by pressing the **F2** key, without waiting for the remaining processes to finish.

All processes have restart logic built into them. For example, the CASA EOD has aborted in the middle of the processing it will restart from the point where it stopped and not from the beginning.

If all the processes are in the completed state or stopped, the operator will have to restart the EOD. In such a case the system will start only those processes which were not completed in the previous run. Also, the system will display the message "This is not a Fresh Start." on the screen.

BOD as a process category depends on EOD. This means, that if the EOD is not completed for a day, system will not allow the BOD for the next day to start.

A successful completion of the EOD sets the processing date to the next working day.



## **1.14. Normal Processing Day**

Normal processing day includes the following:

- Cut-off processing
- End of day (EOD) processing
- Beginning of day (BOD) processing
- Adhoc processing

## Cut-off processing

**A. Take pre cutoff backup for that process date**

## **B. Checking whether the service is running**

- Check whether the service 'Batch' shows status as 'Started'.
- If the service shows the status 'Started', just stop the service and start it again.
- If the service is not running, then simply start it.



### **C. Starting with the category**

- Login into the application using a valid user id and password
- Select 'EOD Processing' from the Menu
- When the EOD Console comes up, Select the process category 'CUTOFF' from the drop-down list
- Check the current process date and next process date and ensure that they are correct
- Click on the 'Start' button

The processes that should be run will be displayed and the processes will start running automatically. The 'Refresh' button can be used to refresh the process status.

Even if this is not done, it has an auto-refresh mechanism which will update the status after the refresh poll time-interval.

- Once the process is over the message box, 'Category successfully completed' will appear. Clear this box using the space bar or by clicking on the Ok button. After this, press the Close button.
- After the Cutoff process is over, exit out of the menu and before starting End of Day, login afresh into the system.
- During OLTP CUT-OFF
- Change of business day
- Close current logs and
- Initiate a new log file
- System not available. Typically less than few minutes.

During ATM CUT-OFF

- Change of business day for ATM network
- ATM available only in off-line mode

EOD can start after last cut-off (ATM and OLTP) is done

**End of day (EOD) processing**

### **A. Checking whether the batch service is running**

- Check whether the service 'Batch' shows status as started.
- If the service shows the status 'Started', Stop it and Start it again.
- If the service is not running, then Start it again.

## B. Start EOD category

- Login into the application using a valid user id and password
- Select 'EOD Processing' from the Menu
- When the EOD Console comes up, Select the process category 'End of Day' from the drop-down list

---

**Note:** Check the current process date and next process date and ensure that they are correct

---

- Click on the 'Start' button

The processes that should be run will be displayed and the processes will start running automatically. The 'Refresh' button can be used to refresh the process status.

Even if this is not done, it has an auto-refresh mechanism which will update the status after the refresh poll time-interval.

- Once the process is over the message box, 'Category successfully completed' will appear.
- Clear this box using the space bar or by clicking on the Ok button. After this, press the Close button.

---

**Note:** Once this is done, the operator logout completely out of the system and login again. After the EOD Console is brought up again, the operator must check the process date displayed at the bottom right hand corner of the status bar below. The date should have moved to the next process date.

---

### **C. Take POSTEOD backup for that process date**

---

**FCC Note:** Please ensure that the post eofi backup for Flexcube and post EOD backup for Flexcube retail are taken at the same time. So, even if one process is over, do not start the backup unless the other system has reached the stage for backup

---

#### End of Day Activities

- Transactions Posting
- Interest Processing
- Service Charges change of cycle depending on the
- Capitalisation frequency
- Interest Rate Changes
- Sweep Out transactions
- Account and customer Dormancy
- Account classification
- Reports Generation
- GL-Handoff to Flexcube
- Account status change
- Account provisioning

## Beginning of day (BOD) processing

---

**Note:** The BOD Category Should Be Run As Soon As The Post EOD Backup Has Been Completed.

---

### **A. Check whether service is running**

- Ensure that the status of on-line services is started

If one of them or a few are not running then start the services.

---

Note: If during any of these stages, the operator faces a problem, then I-flex Support should be contacted immediately.

---

## **B. Start BOD category**

- Login into the application using a valid user id and password
- Select 'EOD Processing' from the Menu
- When the EOD Console comes up, Select the process category 'Beginning of Day' from the drop-down list

---

Note: This date should be the process date for which BOD has to be run. If it is the "correct process date", then the operator can proceed and run BOD by selecting from the drop-down list.

---

If the category runs smoothly and gets completed, the message box 'Category completed successfully' is displayed.

After this, the user has to clear this box and close the EOD Console.

Then log out of the application.

Go to the Application Server and the Services under Control Panel. Check whether all the services mentioned below Show status as 'Started' in the Panel. If not, then start the services



### **C. Take POSTBOD backup for that process date**

#### Beginning of Day Activities

- Time Deposits Interest Processing
- Time Deposits Maturity Processing
- Time Deposits Unclaimed Deposits Processing
- Standing Instructions Execution
- Value Date Processing of cheques
- Expiry of Overdraft Limits
- Maturity processing for Recurring Deposit (RD) accounts
- Release of hold funds which have expired the previous day
- Resetting of the average daily balance statistics on the
- BOD of the New Year.
- Updating the Unclaimed Status for the instruments
- SC package change

## **Adhoc processing**

GENERATE CIFS HANDOFF

---

Note: THE Generate CIFS Handoff CATEGORY SHOULD BE RUN AS SOON AS THE POSTBOD BACKUP HAS BEEN COMPLETED.










---

## A: Check Whether Service Is Running

- Go to the Web sphere application server

Ensure that the status of the following services is started on the Web sphere application server

### Adhoc Processing screen

| <input type="checkbox"/>            | Name  | Status   |
|-------------------------------------|--|--|
| <input checked="" type="checkbox"/> | <a href="#">FCBST1Batch</a>  |   |
| <input type="checkbox"/>            | <a href="#">FCBST1FileTransfer</a>   |   |
| <input type="checkbox"/>            | <a href="#">FCBST1Gefu</a>   |   |
| <input type="checkbox"/>            | <a href="#">FCBST1Mnt</a>  |   |
| <input type="checkbox"/>            | <a href="#">FCBST1Oltg</a>   |   |
| <input type="checkbox"/>            | <a href="#">FCBST1Reports</a>  |   |

If all of these services are not running, follow the procedure mentioned under the section Start Services below.

---

If one of them or a few are not running then follow the procedure mentioned under the Section 'Startup of On-Line Services'.

---

If during any of these stages, the operator faces a problem, then I-flex Support should be contacted immediately.

APPLY CIFS HANDOFF

**Note:** the apply cifs handoff category should be run after generate cifs handoff process has been completed.

## **1.15. Other Activities Done During EOD Processing**

When the EOD is in progress, the branches can continue doing the online transaction. But the users will not be able to do any maintenance as it is not allowed when EOD is in progress. If the user tries doing it, the system will give an error indicating that the EOD/BOD is in progress.

The ATM, POS, and Tele banking transactions can be done during the EOD processing.

## 1.16. Pre-requisites Required for EOD Processing

## FLEXCUBE Retail Services

The services that are in use for the **FLEXCUBE Retail** application, running on the Application Server are listed below. These services start at the same time.

| <b>Service Name</b>         | <b>Description</b>  |
|-----------------------------|---|
| <b>Batch</b>                | Controller of all the EOD shells running within the system.   |
| <b>File transfer</b>        | Server for the TCP/IP communication of files from branch communication server to the host application server. |
| <b>Gefu</b>                 | Service for handling transactions coming through the <b>GEFU</b> <sup>11</sup> route                          |
| <b>Mnt</b>                  | Supports the various back office maintenances   |
| <b>Oltip</b>                | Server for servicing all monetary branch transactions   |
| <b>Reports</b>              | Server for servicing all the advice/report requests from the branch.  |
| <b>FCR ATMS SERVER 1</b>    | Server for servicing the ATM related transactions   |
| <b>FCR FepiSCS Server 1</b> | Communication service for Front end processing  |
| <b>FCR POS Server 1</b>     | Server for servicing the POS related transactions   |
| <b>FCR FEPI Server 1</b>    | Front end processing service for ATM/POS transactions.  |

---

<sup>11</sup>(Generic External File Upload)

## Data Area

When the EOD or BOD is in progress, the reports are generated in the area called as Reports in the data area in the **FLEXCUBE** folder. It has to be ensured that there is enough space for the reports to be generated. In addition, the user can also do the routine space check on the Oracle database.

## Branch Batch Close

All the branches should close their respective branch batch for the day. In case there are branches which work 24 X 7 they should also close the branch batch for that day and open the branch batch for the next working day depending on the bank's policy, rules, and regulations.

The EOD operator can view the list of branches which have not yet closed the branch batch for the day by using the **Branch Batch Status-Inquiry** (Fast Path: BAM95) option.

## Branch Batch Status-Inquiry Screen

Branch Batch Status-Inquiry\*

Branch Code:  Branch Status:

First:  Previous:  Next: Last:

| Branch Code | Branch Name | Txn Date   | Txn Time | Date Post  | Batch Status |
|-------------|-------------|------------|----------|------------|--------------|
| 9999        | HO          | 20/05/2008 | 12:08:12 | 31/12/2007 | BATCH OPEN   |
| 9999        | HO          | 20/05/2008 | 14:28:40 | 15/12/2007 | BATCH CLOSE  |
| 9999        | HO          | 14/05/2008 | 15:17:52 | 15/12/2007 | BATCH OPEN   |

OK Close Clear

Fig 32 - Branch Batch Status-Inquiry Screen

From the drop-down of the **Branch Status** field on the screen, depending on the selected status, the details will be listed. The latest date will be displayed on the top.



## 1.17. Steps for EOD on a Normal Processing Day

A complete list of the execution steps that the operator has to perform for the End of Day operations is:

**Note:** In case any sub-processes in the categories mentioned below abort, then please follow the instructions in the section Process abort procedures mentioned at the end of the document

## Eligibility Shell

### Overview

The eligibility shell is related with **RVT**<sup>12</sup>.

Eligibility criteria can be defined under the tag of an Eligibility Plan in the Relationship Pricing Project. This plan determines the set of customers who will get benefits defined under a scheme, and thus helps identify the target customers for a scheme. The benefits available under a scheme can be reduction in service charges or positive variance in credit interest rates.

In addition, customers who will be excluded from getting the benefits defined under the scheme can also be set up as an Exclusion Plan. Once the Eligibility plans are defined, they can be linked to various schemes for the eligible customers as per the eligibility plans.

To link the schemes to customers, eligibility needs to be evaluated first. Eligibility plans are stand alone entities, and can be evaluated at any time of the day.

The following will be executed in the eligibility shell:

- List out all plans from `rp_elig_plan_mast`, which need to be evaluated, and pick up eligibility plans based on the active flag, the maintenance status, and eligibility frequency.
- Pull out the exclusion plans of all these eligibility plans, their revision frequency is the same as the eligibility plans to which they are attached. Select all customers from `ci_custmast`.

For each customer, check eligibility plan and exclusion plan

- If eligibility is true and exclusions is also true, the customer will not be marked as eligible for the benefits.
- If eligibility is true and exclusions is false, the customer will be marked as eligible for the benefits.

Steps for running the category:

### Steps for

---

<sup>12</sup>(Relationship Value Tagging)

### **A. Checking whether the service is running**

- Check whether the service Batch shows status as Started.
- If the service shows the status Started, restart the service.
- If the service is not running, then start it.

## B. Starting with the category

- Login into the application using a valid user id and password.
- Select **EOD Processing** from the Menu.
- When the EOD Console is displayed, select the process category **Elig** from the drop-down list.
- Check the current process date and next process date and ensure that they are correct.
- Click on the **Start** button.

The processes that should be run will be displayed and the processes will start running automatically. The **Refresh** button can be used to refresh the process status.

Even if this is not done, it has an auto-refresh mechanism which will update the status after the refresh poll time-interval.

- Once the process is over the message box, 'Category successfully completed' is displayed. Clear this box using the space bar or by clicking on the **Ok** button. After this, click the **Close** button.
- After the Elig process is over, exit out of the menu and before starting Cutoff, login afresh into the system.

## **Cut-off Processing**

### **Overview**

Cut-off is the process that operator must run at the end of every day before starting the EOD for that day, to ensure that all transactions done through the on-line delivery channels (including branch, ATMS, POS and Tele banking) are handed over to a log for batch processing. A fresh log is created for the next day's transactions. Here it is important to note that while the processing date from the point of view of EOD processing is still today, the on-line processing date has moved to the next processing date and the online transactions done after cut-off will be processed in the next day's EOD.

OLTP CUT-OFF - The following transactions are carried out during OLTP cut-off:

- Change of business day
- Close current logs
- Initiate a new log file while the cutoff process is running
- System is not available for external transactions like ATM, Internet Banking, etc.

ATM CUT-OFF - The following transactions are carried out during ATM cut-off:

- Change of business day for ATM network
- ATM available only in off-line mode

The ATM CUT-OFF is automatically done by the system as soon as the normal cut-off is complete.

EOD can start after last cut-off (ATM and OLTP) is done.

### **Steps for**

**A. Take Pre Cutoff Backup for that Process Date**

## **B. Checking Whether the Service is Running**

- Check whether the service Batch shows status as Started.
- If the service shows the status Started, restart the service.
- If the service is not running, start it.

### C. Starting with the Category

- Login into the application using a valid user ID and password.
- Select **EOD Processing** from the menu.
- When the EOD Console is displayed, select the process category **CUTOFF** from the drop-down list.
- Check the current process date and next process date and ensure that they are correct.
- Click on the **Start** button.

The processes that should be run will be displayed and the processes will start running automatically. The **Refresh** button can be used to refresh the process status.

Even if this is not done, it has an auto-refresh mechanism which will update the status after the refresh poll time-interval.

- Once the process is over the message box, "Category successfully completed" is displayed. Clear this box by using the space bar or by clicking the **Ok** button. After this, click the **Close** button.
- After the Cutoff process is over, exit out of the menu and before starting End of Day, login again into the system.



## End of day (EOD) Processing

### Overview

EOD refers to the processing required to be done for each functional module of **FLEXCUBE Retail** as well as some files that are generated for updating data in other **LO**<sup>13</sup>s. While the processing is specific to each module, the typical activities that are performed are:

- Transactions Posting
- Interest Processing
- Reports Generation
- GL-Handoff
- Generating files for Inter-LO updates
- Loans Account opening in batch

### Steps for

---

<sup>13</sup>(Local Office)

### **A. Checking Whether the Batch Service is Running**

- Check whether the service Batch shows status as started.
- If the service shows the status Started, restart the service.
- If the service is not running, start it.

## B. Start EOD Category

- Login into the application using a valid user ID and password.
- Select **EOD Processing** from the menu.
- When the EOD Console is displayed, select the process category **End of Day** from the drop-down list.
- Click the **Start** button.

**Note:** Check the current process date and next process date and ensure that they are correct.

The processes that should be run will be displayed and the processes will start running automatically. The **Refresh** button can be used to refresh the process status.

Even if this is not done, it has an auto-refresh mechanism which will update the status after the refresh poll time-interval.

- Once the process is over the message box, 'Category successfully completed' is displayed.
- Clear this box using the space bar or by clicking the **Ok** button. After this, click the **Close** button.

**Note:** Once this is done, the operator should logout completely out of the system and login again. After the EOD Console is brought up again, the operator must check the process date displayed at the bottom right hand corner of the status bar below. The date should have moved to the next process date.

### C. Take POSTEOD Backup for that Process Date

**FCC Note:** Please ensure that the post EOFI backup for **Flexcube** and post EOD backup for **FLEXCUBE Retail** are taken at the same time. So, even if one process is over, do not start the backup unless the other system has reached the stage for backup.

#### End of Day / End of Month Activities

There is no separate process or category for End of Day or End of Month. Depending upon the process date for which the End of Day category is run, the system runs certain special categories which fall under the End of Month domain.

The broad set of activities which are undertaken by the system during the End of Day or End of Month are:

- Transactions Posting
- Interest Processing
- Service Charges change of cycle
- Capitalization frequency
- Interest Rate Changes
- Sweep Out transactions
- Account and customer Dormancy
- Account classification
- Reports Generation
- GL-Handoff to **Flexcube**
- Account status change
- Account provisioning

## Beginning of day (BOD) Processing

### Overview

Beginning of the Day process opens a new transaction day for the Bank. BOD as a process depends on EOD process for the previous working day. This means, if the EOD is not completed for a day, system will not allow the BOD for the next day to start. The days are always business days as specified in Branch Calendars. So, even if one branch is functioning on a particular day, BOD will have to be run for that day.

- Apart from starting a new day, BOD does some processing that typically includes
- Time Deposit processing related to interest and maturity
- Standing instructions execution
- Value date processing of cheques (Based on the set up)
- Salary Processing
- Expiry of Overdraft Limits

**Note:** The BOD Category should be run as soon as the post EOD backup has been completed.

### Steps for

### **A. Check Whether Service is Running**

- Ensure that the status of on-line services is started

If one of them or a few are not running then start the services.

**Note:** If during any of these stages, the operator faces a problem, then support should be contacted immediately.

## B. Start BOD Category

- Login into the application using a valid user ID and password.
- Select **EOD Processing** from the menu.
- When the EOD Console is displayed, select the process category **Beginning of Day** from the drop-down list.

**Note:** This date should be the process date for which BOD has to be run. If it is the Correct Process Date, then the operator can proceed and run BOD by selecting from the drop-down list.

If the category runs smoothly and gets completed, the message box 'Category completed successfully' is displayed.

After this, the user has to clear this box and close the EOD Console.

Then log out of the application.

Go to the Application Server and the Services under Control Panel. Check whether all the services mentioned below show status as Started in the Panel. If not, start the services.

### **C. Take POSTBOD Backup for that Process Date**

#### Beginning of Day Activities

The broad set of activities which are undertaken by the system during the Start of Day / Beginning of Day are:

- Time Deposits Interest Processing
- Time Deposits Maturity Processing
- Time Deposits Unclaimed Deposits Processing
- Standing Instructions Execution
- Value Date Processing of cheques
- Expiry of Overdraft Limits
- Maturity processing for Recurring Deposit (RD) accounts
- Release of hold funds which have expired the previous day
- Resetting of the average daily balance statistics
- BOD of the New Year
- Updating the Unclaimed Status for the instruments
- SC package change



## **1.18. System Maintenance**

System Maintenance allows the user to up keep different activities. It also allows the smooth functioning of various activities.

## **Release Area Maintenance**

The Release area is the main section where **FLEXCUBE** is installed. This area contains all the executable and supporting files. All the reports are also generated here. This makes the area very critical and should have strict controlling and restraining access.

The access to this area should be controlled. It should not be available to everyone. It should be monitored as users can go in that area and modify data, which could lead to disastrous effects.

## **Host Maintenance**

Following are the options which can enhance the productivity at the host server.

### **General Checks:**

- Routine check on date and time synchronization on database, Application server, and branch server
- Monitoring the link utilization between Data Center and branches and Data Center and DR site (only if applicable)

### **Memory Checks:**

- Monitoring memory utilization on the Application server

### **Database Checks:**

- Daily check on invalid objects in the database (disabled triggers)
- Regular check on database, like analyze table/index, rebuild indexes, monitoring tables with rapid growth
- Setting up the adhoc purging processes to make sure that it does not affect the database performance

### **Server Maintenance:**

- Anti virus schedule set up. It helps the user to ensure that scanning does not coincide with the EOD process.
- Routine space check on the apps server
- Checking the disk space on the report server (if reports are getting spooled on independent server instead of apps server)

### **System Software Updates:**

- **FLEXCUBE** installation area maintenance, like updating new releases regularly and registry updates for new branch additions

## 1.19. Troubleshooting

## Path for Logging the Trace File

To locate the path where the trace file will be logged, log into the **Web Sphere Application** server. Under Services, click the application server to view it. The application server will be displayed as shown below in the screen.

### Application Servers Screen

The screenshot shows the 'Application Servers' screen. On the left is a navigation sidebar with the following items: User ID, fcrdb1Network, Servers (expanded), Application Servers (selected), JMS Servers, Clusters, Cluster Topology, Applications, Resources, Security, Environment, System Administration, and Troubleshooting. The main content area is titled 'Application Servers' and includes a description: 'An application server is a server which provides services required to run enterprise applications.' Below this, it shows 'Total: 4, Filtered total: 1' and options for 'Filter' and 'Preferences'. There are four buttons: 'New', 'Delete', 'Start', and 'Stop'. A table below lists the application servers:

| <input type="checkbox"/> | Name ^                 | Node ^ | Status ^ |
|--------------------------|------------------------|--------|----------|
| <input type="checkbox"/> | <a href="#">FCBST1</a> | fcrdb1 |          |

Fig 33 - Application Servers Screen

After double-clicking the service name under the **Name** column, the **Configuration** screen will appear as shown below.

## Configuration Tab Screen

User ID:

fordb1Network

- Servers
  - [Application Servers](#)
  - [JMS Servers](#)
  - [Clusters](#)
  - [Cluster Topology](#)
- Applications
- Resources
- Security
- Environment
- System Administration
- Troubleshooting

An application server is a server which provides services required to run enterprise applications. [?]

**Runtime** **Configuration**

**General Properties**

|                                |                |
|--------------------------------|----------------|
| Name                           | FCBST1         |
| Application classloader policy | Multiple ▾     |
| Application class loading mode | Parent first ▾ |

Apply OK Reset Cancel

**Additional Properties**

|  |   |
|--|---|
| <a href="#">Transaction Service</a>      | Specify settings for the Transaction Service, as well as manage active transaction locks.   |
| <a href="#">Web Container</a>            | Specify thread pool and dynamic cache settings for the container. Also, specify session manager settings such as persistence and tuning parameters, and HTTP transport settings.  |
| <a href="#">EJB Container</a>            | Specify cache and datasource information for the container.   |
| <a href="#">Dynamic Cache Service</a>    | Specify settings for the Dynamic Cache service of this server.  |
| <a href="#">Logging and Tracing</a>      | Specify Logging and Trace settings for this server.   |
| <a href="#">Message Listener Service</a> | Configuration for the Message Listener Service. This service provides the Message Driven Bean (MDB) listening process, whereby MDBs are deployed against ListenerPorts that define the JMS destination to listen upon. These Listener Ports are defined in the MessageListenerPort class. |

Fig 34 - Configuration Tab Screen

Then double-click the logging and tracking under **Additional Properties** as shown below in the screen.

## Additional Properties Screen

| Additional Properties                    |   |
|--|---|
| <a href="#">Transaction Service</a>      | Specify settings for the Transaction Service, as well as manage active transaction locks.   |
| <a href="#">Web Container</a>            | Specify thread pool and dynamic cache settings for the container . Also, specify session manager settings such as persistence and tuning parameters, and HTTP transport settings.   |
| <a href="#">EJB Container</a>            | Specify cache and datasource information for the container.   |
| <a href="#">Dynamic Cache Service</a>    | Specify settings for the Dynamic Cache service of this server.  |
| <a href="#">Logging and Tracing</a>      | Specify Logging and Trace settings for this server.   |
| <a href="#">Message Listener Service</a> | Configuration for the Message Listener Service.This service provides the Message Driven Bean (MDB) listening process, whereby MDBs are deployed against ListenerPorts that define the JMS destination to listen upon. These Listener Ports are defined within this service along with settings for its Thread Pool. |

Fig 35 - Additional Properties Screen

The trace file name and its associated path will be displayed when the user selects the **Logging and Tracing** link.

## Diagnostic Trace Service Screen

[Application Servers](#) > [FCBST1](#) > [Logging and Tracing](#) >

### Diagnostic Trace Service

Use this page to view and modify the properties of the diagnostic trace service. [i](#)

**Configuration** **Runtime**

| General Properties  |   |   |
|---------------------|---|---|
| Enable Trace        | <input checked="" type="checkbox"/> Enable trace with the following specification   | <a href="#">i</a> Check this box to enable the selected trace service.                    |
| Trace Specification | <input type="text" value="com.iflex.*=all=enabled"/><br><a href="#">Modify...</a>   | <a href="#">i</a> Use these options to specify tracing details.                           |
| Trace Output        | <input type="radio"/> Memory Buffer<br>Maximum Buffer Size * <input type="text" value="8"/> thousand entries<br><input checked="" type="radio"/> File<br>Maximum File Size * <input type="text" value="25"/> MB<br>Maximum Number of Historical Files * <input type="text" value="1"/><br>File Name * <input type="text" value="/home/wasadmin/fcbst/flexcube/install/log/Ser\"/> | <a href="#">i</a> Use these options to specify the type of output generated by the trace. |

Fig 36 - Diagnostic Trace Service Screen



## **Process Abort Procedures**

If any of the process in the Category Cutoff, End of Day, or Beginning of Day shows aborted and the process cannot move ahead, the operator has to follow the instructions mentioned below:

- Note down the sub process name of the category that has aborted.
- Contact support and follow the instructions given by the support staff. Also, by the time contact is established, the operator can ensure that the trace file has been generated in the location mentioned in the diagnostic trace file path.

## Common Script to Update Non-Operator Login Status

When the operator starts End of Day category in **FLEXCUBE Retail** and he clicks **Start**, then sometimes the error message 'Non-operators logged in, Cannot start Category' is displayed.

This may happen when there are other users still logged into the system or when the client side at the workstation has a problem and the login state has not been reset.

When this problem is encountered, the operator has to follow the following steps:

- Double-click the Folder 'sqlplus' at the Desktop of the EOD workstation.
- Double-click the **Retail Live** icon which will take the user to the retail database.
- Type @D:\flexsup\db\upd and press **Enter** at the prompt.
- The output should say n rows updated where n can be any number greater than 0.
- If the output is zero, then support should be contacted immediately, else, the operator has to type **exit** followed by a **semi-colon (;)** and press **Enter**.
- This will take the user back to the Desktop.
- Once this is done, the operator can proceed with the EOD processing in **FLEXCUBE Retail**.

## Database Access Problem or Space Problem

- Sometimes due to network problem, the access to the Oracle database is lost. There is a message which is logged into the trace file, indicating that the system is not able to access the Oracle database. Try to ping using the **ping IP address** command in the command prompt to the Oracle server and if it is not able to access, contact the system administrator immediately.
- When there is a space problem in the database, the cut off / EOD / BOD process gets aborted. A error message is logged in the trace file indicating that there is a table space problem or that the redo log is full. Contact the database administrator for the same or call support for help.

## 4. Host and Branch Report

## 1.20. Reports

The reports get generated as part of EOD and BOD processing. They are generated depending on the frequency defined for them.

The reports are first generated in the Reports folder in the **FLEXCUBE** folder and then finally are moved to the rjsout folder. The data is stored with respect to the month with a sub-folder for each working day under the month folder.

The branch reports are generated in **<FLEXCUBE INSTALLATION PATH>\branch\brn\reports\**

The host reports are generated in **<FLEXCUBE Installation Path>\rjsout\<mm>\<dd>**, where mm is the month of the posting date and dd is the day of posting.

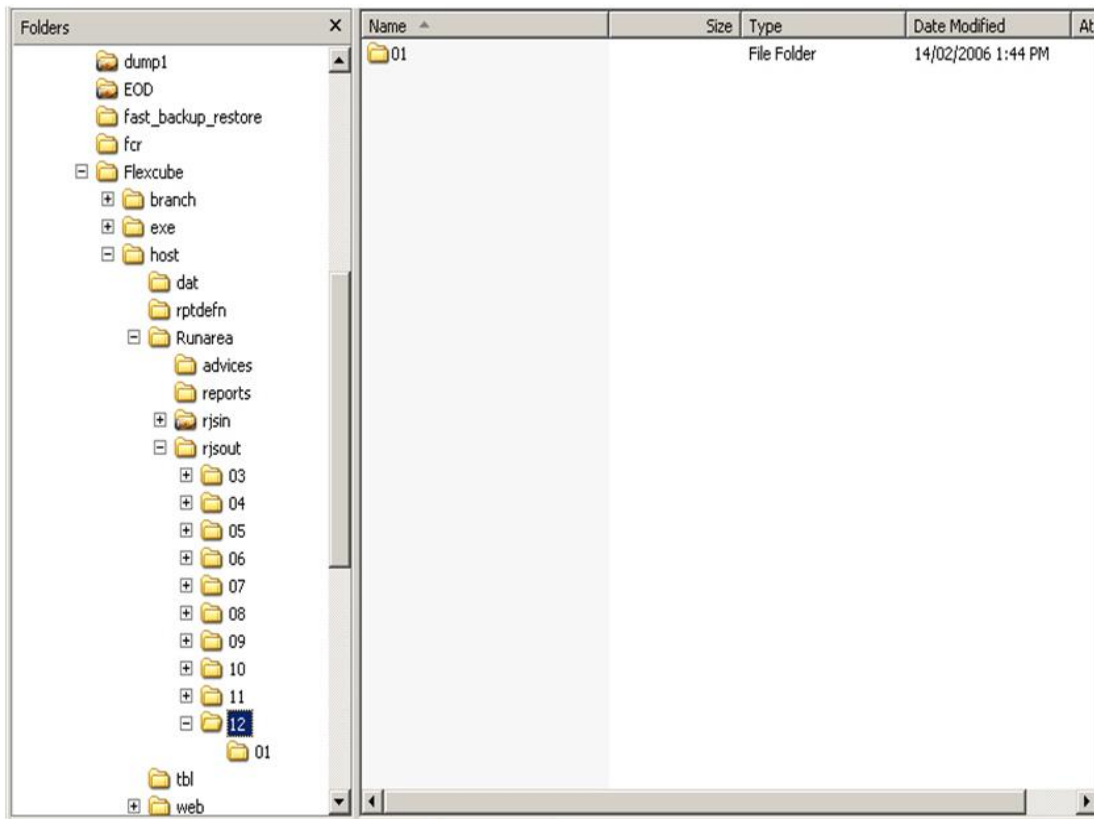


Fig 39 - Report Request Screen

The reports can be generated at different frequencies. The frequencies are:

## **Daily**

The reports which are of daily frequency are generated daily. They can also be viewed from the application and are generated for the respective branches. The operator can view reports for any branch, by selecting it, from the head office, whereas only individual reports can be viewed from the respective branches.

## **Monthly**

The reports which are of monthly frequency are generated on the month end. These are the additional reports which are generated along with the daily reports. The reports can also be viewed from the application. The reports are generated for the respective branches. The operator can view reports for any branch, by selecting it, from the head office, whereas only individual reports can be viewed from the respective branches.

## Half Yearly and Yearly

The reports which are of half yearly and yearly frequency are generated on half yearly month end and financial year end respectively. These are additional reports which are generated along with the daily reports. The reports can also be viewed from the application. The reports are generated for the respective branches. The operator can view reports for any branch, by selecting it, from the head office, whereas only individual reports can be viewed from the respective branches.

### The procedure to generate a EOD report:

1. Open the **Report Request** (Fast Path: 7775) option.
2. In the **Report Request** screen, click the **Batch Reports** button.
3. Select the group from the **Report Group** section.
4. Type the date in the **Process Date (DD/MM/YYYY)** field.
5. Click the **View** button.
6. The reports are generated

As mentioned above, the reports are available branch-wise and are generated in the folders with respect to the working dates. The report is saved as <Report ID>.out. For e.g., in the screen below, the generated report will be saved as **CH118.out**.

Find below the screen on how to view an EOD report.

Change the process date to view a backdated report.

Report Request

Adhoc Reports  Batch Reports

|       |         |              |                      |                     |            |             |        |                      |                  |         |                |        |                  |
|-------|---------|--------------|----------------------|---------------------|------------|-------------|--------|----------------------|------------------|---------|----------------|--------|------------------|
| Loans | Billing | Term Deposit | Customer Information | Security Management | Settlement | Origination | Branch | Relationship Pricing | Limit Management | Savings | General Ledger | Others | Safe Deposit Box |
|-------|---------|--------------|----------------------|---------------------|------------|-------------|--------|----------------------|------------------|---------|----------------|--------|------------------|

**Report Group**

- Loan EOD Reports
- Loans deviations Report
- Loans Interest and Arrears Report
- Loans Daily Exception Reports
- Loans Advices and Statements
- Loans NPA Report
- Loans Daily Transaction Reports

Ok Cancel

The other option is the required EOD reports are transferred to respective branches by using FTP. In such cases, the branches generate the reports and take the printouts at the respective branches.



## **Adhoc Reports**

If there are some important reports which have to be generated before EOD, the operator can generate the required report by using the **Adhoc** option of the report generation and save the report.

### **The procedure to generate a adhoc report is**

1. Open the **Report Request** (Fast Path: 7775) option.
2. In the **Report Request** screen, click the **Adhoc Reports** button.
3. Select the group from the **Report Group** section.
4. Type the date in the **Process Date(DD/MM/YYYY)** field.
5. Click the **View** button.

## Monthly Statements

The monthly statement is generated in the backup database. The post EOD data is loaded in the backup database. The date of the last statement generated is updated and then the monthly statements are generated.

**EOD Client**

Process Category:  Category Status:

Process Date:  Next Process Date:

| State | Process Name              | Module Code | Status   | Duration |
|-------|---------------------------|-------------|----------|----------|
|       | POST STATMENTS STREAM 1   | MS          | COMPLETE | 00:00:01 |
|       | POST STATMENTS STREAM 10  | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 2   | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 3   | MS          | COMPLETE | 00:00:01 |
|       | POST STATMENTS STREAM 4   | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 5   | MS          | COMPLETE | 00:00:01 |
|       | POST STATMENTS STREAM 6   | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 7   | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 8   | MS          | COMPLETE | 00:00:00 |
|       | POST STATMENTS STREAM 9   | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 1  | MS          | COMPLETE | 00:00:01 |
|       | STATEMENT SHELL STREAM 10 | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 2  | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 3  | MS          | COMPLETE | 00:00:01 |
|       | STATEMENT SHELL STREAM 4  | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 5  | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 6  | MS          | COMPLETE | 00:00:01 |
|       | STATEMENT SHELL STREAM 7  | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 8  | MS          | COMPLETE | 00:00:00 |
|       | STATEMENT SHELL STREAM 9  | MS          | COMPLETE | 00:00:01 |

Fig 41 - EOD Client Screen