

**The New Age Reconciliation System**  
**MIRROR**

# The New Age Reconciliation System

## MIRROR

MIRROR is an account reconciliation and management system that can be effectively deployed on any of the following tasks:

- Nostro account reconciliation
- Confirmation matching
- Inter-branch reconciliation
- Account reconciliation's of any other type based on set-up parameters, e.g., ATM reconciliation, Central Bank account reconciliation etc.

MIRROR's modular architecture is based on a 3-tier framework. It supports a browser frontend and is developed using server-side Java components in the middle layer. This web application server based architecture empowers the Bank to implement and deploy MIRROR centrally yet allow authorised users to securely access it from geographically dispersed locations such as branches.

### HIGHLIGHTS OF MIRROR

- Internet browser-based, thin client architecture allows for reconciliation to be carried out from multiple workstations locations accessing application on a central server.
- Operating System independent
- Supports Oracle RDBMS
- Robust Matching Engine with versatility to define matching options
- Supports SWIFT message format for Data Download and Upload
- Easy, Flexible interface for Data Download and Data Upload to handle external data
- Add-on Module to manage Exceptions
- Add-on Module to manage Communications

### MODULAR ARCHITECTURE

MIRROR's architecture is modular in approach. This has advantages in its scalability and adaptability to future changes in specific modules alone, without disturbing the whole application.

### Data Management and Administration

Enables the user to define and maintain all the Reference Data required for the Reconciliation System - both master and parameter data. Also supports all operational and administration functions. The users can define the following parameters.

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S.No	System Parameters
1	Definition of Business Parameters consisting of: Bank name and address
2	Definition of Accounts and its details
3	Definition of Transaction Types
4	Definition of Branches/Location codes
5	Definition of Regions and Zones
6	Definition of Currencies
7	Definition of Special Characters and the associated replacement characters.
8	Definition of Match Criterion for each correspondent For each correspondent, the user can define up to three criterion for matching each transaction type Match criterion can be set up for both nostro and mirror accounts

### External Data Interface

Handles the data conversion from external systems to the Nostro Reconciliation Application. This module converts SWIFT data into data that is readable by MIRROR. By summoning certain inbuilt data standards, virtually any type of data can be converted to MIRROR readable data by specifying the source and target locations. This module supports the following functionalities.

S.No	External Data Interface
1	Definition of SWIFT code mapping for Transaction Types and Correspondents
2	System supports both SWIFT format and Flat file format for both the Nostro and ledger side.
3	Upload of flat files into the system as Nostro and Mirror transactions with a facility to print checklist of transactions before upload.

## Matching Engine

This module is the core of the application. The user can do the following types of matching processes:

S.No	Matching Engine
1	Manual Transactions Entry for input of Nostro and Mirror transactions from printed statements
2	A facility to assign a branch code to a transaction which does not have a branch code
3	Automatic Matching Facility to match 1-1 matching for reconciling 1 nostro transaction with 1 mirror transaction 1-M matching for reconciling 1 nostro transactions with multiple mirror transactions M-1 matching for reconciling many nostro transactions with 1 mirror transaction M-M matching for reconciling many nostro transaction with many mirror transactions Matching of 2 or more transactions within nostro account (to match reversals) Matching of 2 or more transactions within mirror account (to match reversals) 1-1, 1-M, M-1 or Many-Many matching of Nostro and Mirror transactions above but with difference in amount within a tolerance limit specified for each correspondent
4	Manual Matching Facility as follows: One-to-one matching Multiple Matching (1-1, 1-M, M-1 and M-M) Nostro transactions with Mirror Transactions Multiple Matching within Nostro or Mirror Accounts
5	Intelligent Matching Facility: Offers system matched entries in various queues for confirmation and Suspension. Suspended entries can be matched at later point of time. Offers the entries based on predefined rules. Displays the no of entries confirmed for the business date.

## Queries & Reports Module

This comprehensive module responds to queries and generates reports including graphical and statistical reports apart from standard operational reports and queries. The queries available in the system are given below.

S.No	Queries & Reports
1	Inquiry facility to inquire on open or closed (reconciled) entries in nostro or mirror accounts by specifying range of following parameters. <ul style="list-style-type: none"> <li>▪ Account Range</li> <li>▪ Amount Range</li> <li>▪ Location code</li> <li>▪ Transaction Type</li> <li>▪ Posting Date Range</li> <li>▪ Value Date Range</li> <li>▪ Reference 1</li> <li>▪ Reference 2</li> <li>▪ Reference 3</li> </ul>
2	List of Duplicate transactions
3	List of Matched transactions
4	Reconciliation statement
5	Outstanding Statement
6	Review Report
7	Ageing Analysis Report Currency Wise Ageing Analysis Amount Wise Ageing Analysis
8	Reconciliation Proof
9	Confirmed Match Report
10	Suspended Match Report
11	Unmatch Report