InterBank/400

Functional Overview

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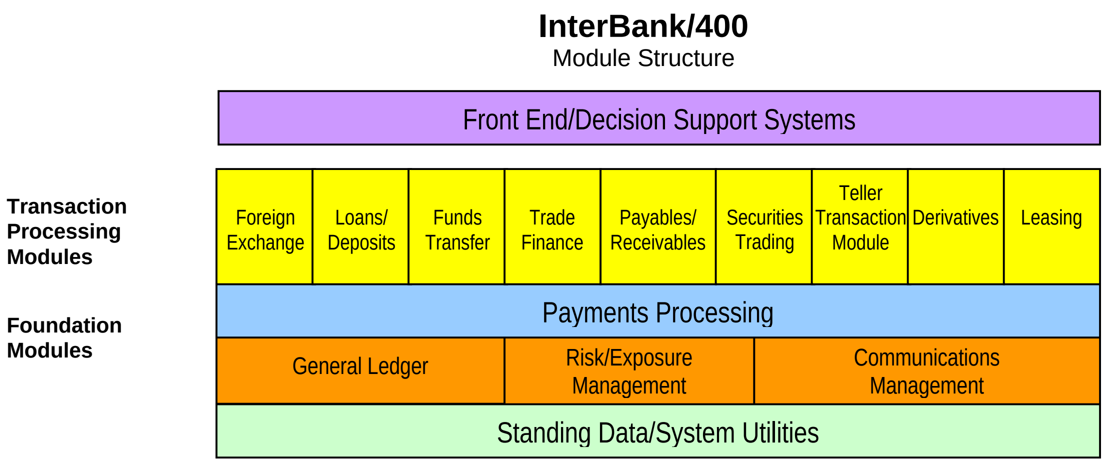
1. INTRODUCTION

The following document provides a brief introduction to each of the modules of InterBank/400. It is intended as a short introduction to the functions and capabilities of each module

InterBank/400 features a consistent and modern database design, allowing information to be extracted easily into external systems. It takes full advantage of all of the enhancements offered by the latest releases of the OS/400 Operating system to achieve high performance.

The system is designed in a modular format, but full system integration is achieved by building all required internal linkages between modules.

The diagram below shows the relationship of the system modules. Please note that the highlighted module boxes are part of the second phase of system development.



Many features set this system apart from its competitors.

- The system is designed to fully satisfy the operational needs of financial institutions of any size. Additionally, it provides an integrated and 'top-down' view for other areas of the bank, including Treasury, Credit Management and Financial Control.
- The system was designed by practicing bankers with many years' experience in the operation and management of banks of all types. This experience translates into flexibility and practicality.
- All cash flows generated by transactions are managed in the payments module, allowing for easy netting or splitting of payments as well as centralized or distributed management of the payments function

- Risk and Exposure management is designed to cater for a top-down view of the risks inherent in all products processed in the system rather than being limited to one product at a time. This support modern definitions of risk and exposure

- The system is fully multilingual, including full support for double byte languages

- The system is designed with Internet Access in mind and with some functions built into the system supporting Internet access.

- The system supports any number of companies and branches within the same database. Each company has its own characteristics for presentation of dates and amounts, its own base, local, dealing and head office currency definitions. The system design caters for a variety of operating modes, allowing for distributed or centralized processing in any combination

- The system is licensed per CPU at a standard price. Operation on a predetermined backup, machine is allowed. One price caters for any number of users in any location, as long as they are using the same hardware

2. FOREIGN EXCHANGE

The Foreign Exchange module provides a functional solution to trading small or large volumes of Foreign Exchange transactions. Simple cash exchange input is also provided to allow for retail exchanges by cash or travelers cheques.

- Two level input of transactions, input and authorization. Any details can be changed until a transaction is authorized
- Fast Foreign Exchange Input allowing trader input with defaults taken from the Business Type
- Capture of broker and brokerage information and periodic reporting
- Cash Exchange Transactions with fee accounting
- Spot and Forward Transactions with automatic differentiated accounting, if required
- Support for Swap and Customer Option Transactions, with Option Takedowns
- Forward Revaluation and Amortization of Swap points on a daily basis with or without accounting. The accounting rules provide full support for International and FASB accounting standards.
- Hard copy confirmation using templates and SWIFT format confirmations for electronic transmission
- Automated Interface to Payments, General Ledger, Risk Management

3. LOANS AND DEPOSITS

The Loans and Deposits module allows for the processing of simple or complex loans and deposits and is suitable for ***Interbank*** loan and deposit transactions, ***Commercial Lending*** and ***Retail*** loans and deposits in any currency. The system can also be used to record and accrue internal funding deals that have no cashflows, facilitating the funding activities in large trading rooms.

- Two level input of transactions, input and authorization. Any details can be changed until a transaction is authorized

- Fast Loan and Deposit Input allowing trader input with defaults taken from the Business Type

- Open Call or fixed maturity transactions

- Fixed or floating rate transactions

- Interest Settlement automation options can be set to any or all of

  On Maturity
  According to a schedule
  On Rollover
  On Movement of Principal

- Loan and Deposit Amendments enabled by Business Type according to your own requirements and allowing for:

  Repayments and Repayment Schedules
  Maturity Amendments
  Rollovers
  Interest Settlement
  Interest Rate and Other Detail amendments

- Internal Transactions between dealing desks without the generation of cash flows and credit exposure.

- Capture of broker and brokerage information and periodic reporting

- Automated Accounting for all events during the life of a loan or deposit

- Automated Interest Accruals and posting

- Accrual and Accounting for Withholding Taxes

- Hard copy and SWIFT format confirmations

- Automated Interface to Payments, General Ledger, Risk Management

4. FUNDS TRANSFER

The Funds Transfer Module of InterBank/400 provides a convenient way of processing a variety of transactions including

Local Currency Transfers
Foreign Currency Transfers
Inward Transfers in any Currency
Internal Transfers between Accounts
Outward Collections
Collateral Processing

- Links from Teller to allow initiation of outgoing transfers directly from a Teller.
- Two Level input and authorization of all other transactions.
- Automatic calculation of fees for all types of transactions.
- Confirmation of Collection or rejection of Collections.
- Automated interface to accounting, payments and advice production for all types of transactions and fees charged.
- Inward Transfers can also be generated directly from incoming MT100 or MT103 message received through SWIFT.
- The module can also be used to support 'Cash' deals where a bank buys or sells cash from another party and pays or receives fees on the transaction, transfers between Nostro accounts of the bank and provides for the generation of the required MT100 or MT2xx series of SWIFT message.
- All transfer can be set to mature automatically or can be flagged to require a separate payment or rejection after authorization.
- Fees can be collected based on flat, tiered, or banded fee calculation rules. Fee Payment, for cash deals, is also possible at authorization time.

As this module needs to interact with local clearing systems, it often needs customization to include certain local requirements.

Extensive reporting is available, and custom reports have been developed for certain countries to facilitate the local clearing process.

5. TRADE FINANCE

The Trade Finance module, in conjunction with the Loans and Deposits and Foreign Exchange processing modules, provides a full function solution for L/C departments of any size.

Credit Instruments related to Trade Finance and any resulting Foreign Exchange transactions are processed within the respective module by a direct link from the Trade Finance transactions. This provides for consistent treatment and capabilities of these transactions, and for the integrated view of Credit and Foreign Exchange Risks arising from Trade Finance operations/

The following basic business transactions are supported:

L/C Issuance
L/C Advising
Document Processing
Payment
Acceptance
Negotiations
Discrepancy Recording and Tracing
Guarantees

- Two level input for transactions, input and authorization
- Standard Clauses Table can be maintained for easy issuance
- Hard Copy Document production via user defined templates
- Full support for production of MT7xx series SWIFT Messages
- Automated input based on received SWIFT MT7xx messages
- Automated Accounting for all Events
- Automated calculation and accounting for Fees
- Automated interfaces to Payment, General Ledger, Risk Management and Communications Management

6. PAYABLES/RECEIVABLES

The system includes a module to allow for the processing of payable and receivables invoices to allow for tracking of amounts due from customers or due to suppliers.

The system provides for the management of payables and receivables transaction from the issuance or receipt of an invoice through to the recording of receipt of funds or the release of invoices for payment. Payments can be made against multiple invoices and netting of payables and receivables transactions is provided.

Full support is provided to allow for amortization of prepaid expenses or unearned income over the effective life of the transaction, using the features of the General Ledger Module.

Module Features Include

- Fully Automated Accounting, including automated processing of unearned and prepaid income requiring amortization.
- Aging and Balances Reports
- Invoice Printing through template formats
- Cheque Printing through the payments module
- Extensive displays of historic and current transactions
- Activity Reporting to allow tracking of supplier business

7. SECURITIES TRADING

The Securities Trading Module provides a rich set of functions related to buying securities of all types, either for own account or for customers. It is suitable for in-house securities operations, the private banking business, or where the financial institution acts as a broker.

It supports the trading of equities, warrants, bonds, floating rate notes, Treasury Bills and Bonds and similar type of instrument, whether traded on exchanges or over the counter. The following functions and features are provided:

- Entry of Customer Orders for processing. Bulk order distribution to different portfolios
- Trade Matching for trades done through brokers. This is automatic if trades are matched on a one to one basis or semi-automated for block matching.
- Support for 'Contra Trading' allowing net settlement within the settlement period
- Automated support for Cross-exchange settlement for fungible securities
- On-Line inventory by customer, security and custodian
- Processing of scrip registration, movements between custodians and other deliveries in and out of customer portfolios
- Automatic calculation of brokerage and other charges based on the requirements of each exchange
- Automatic calculation and deduction of rebates offered to customers and rebates offered by brokers
- Separate input by traders, trade completion, and authorization
- Automated interest accruals for interest bearing securities. Amortization of discount for zero coupon instruments. Automated posting of accruals for proprietary positions
- Automated accounting for all events
- Production of message formats for SWIFT and OASYS processing
- Automated interfaces to Payments, General Ledger, Risk Management, communications management

- Corporate Events, such as bonus or rights issues, dividend payments, coupon payments can be captured and processed automatically by the system.

- An optional module to allow automated interfacing to the Stock Exchange of Singapore is also available.

8. TELLER TRANSACTION MODULE

The Teller Transaction module is intended to support the retail operations of banks by providing specific functions to manage the transactions processed by tellers. The system provides for on-line checking of cash availability and the value dating of cheques deposited to control access to funds.

Teller positions are maintained on line in any currency defined in the system, allowing the system to be used for local and foreign currency transactions.

Direct links are provided to various system inquiries so that all customer transactions can be reviewed on-line from a single point.

Deposits and withdrawals can be made from any available account for the customer and processed against other accounts held for the customer, allowing its use for Loan repayments, placing of deposits, etc.

Module Functions Include:

Deposits
- Cash
- Cheque
- By Conversion from Travelers Cheque
- By Conversion from Foreign Currency
- By Transfer

Withdrawals
- Cash
- By Cashiers Cheque
- Sale of Foreign Currency
- Sale of Travelers Cheque
- By Transfer

Administrative Functions
- Open Teller Terminal
- Close Teller Terminal

Inquiry Functions
- Outstanding Loans/Deposits
- Outstanding Foreign Exchange Positions
- Outstanding Customer Invoices
- Customer Account Balances

9. PAYMENTS PROCESSING

The payments processing module provides direct control over all cash flows of the organization. Our system design allows for either centralized or distributed control over all cash flows generated by business transactions.

- Standard and Default Settlement Instructions for each customer, currency, module
- Authorization of the payment generates the required financial messages in SWIFT format.
- Proceeds of a payment or receipt can be converted into another currency via a spot exchange
- Supports settlement via SWIFT, Telex, GIRO, Internal Settlement or Cheque
- Supports printing of Cheques on continuous pre-printed stationery

10. GENERAL LEDGER

The General Ledger module provides a flexible, multi currency General ledger specially tailored for use in Financial Institutions of all types. The major features of the General Ledger module can be summarized as follows:

- Full Multi - Currency Accounting compliant with international Standards
- Alphabetic or numeric Account Codes and Account Types
- Account codes can be up to 20 characters long and can be masked to suit user requirements
- All Account Postings are processed on-line. There is no shadow posting.
- Full Inquiry capabilities from general to detailed level
- Comprehensive Rule Based Accounting for all instrument types. Rules are specified according to user requirements and have been designed to cater for internationally recognized accounting standards and/or FASB rules
- Forward and back value dating on all accounts
- 256 character (128 double byte) narrative for all postings
- All postings carry information about their GST classification, originating department, account officer, profit center
- Transfer of Foreign Currency Income and expense to Base Currency at any frequency desired.
- Transfer of Base Currency Income and Expense to Retained Earnings
- Balance Sheet Revaluation of Positions and postings
- Comprehensive trial balance, balance sheet, profit and loss statement reporting in original or any valid system currency
- Batched Journal Entry for manual Account Postings
- Batches may be input in advance and held until their effective date
- Automated Accrual or Amortization of amounts over a specific period
- Comprehensive management accounting with 24 historic accounting periods, including turnover and average balances information.

- Interest Accruals on account balances

- Full support for capture of Goods and Services Tax information at source and reporting

11. RISK AND EXPOSURE MANAGEMENT

The Risk and Exposure management module collects a wide variety of informations about transactions of all types known to the system and is aimed at providing for active risk management using the system. It facilitates the analysis of those risks by commercial and proprietary Value at Risk models

All updates are done on-line and all outstanding reflect the underlying status of the transaction - separate totals are maintained for authorized and pending transactions. This allows the changes in risk positions to be assessed instantly.

The Risk Management module provides support for the active management of Credit Risk, Settlement Risk, Market and Trading related risks as well as providing for management of liquidity positions.

The details maintained by the Payments processing module allow for easy application of modern views of risk management and revaluation.

- Limit Types table defined within the system by the user
- Customer Limits with user defined limit and sub-limit structure which may be different for each customer
- Settlement Limits for Customer, Broker, Security and Instrument
- Risk Management Positions for all types of transactions, by currency, customer, instrument, date
- Full Asset and Liability Management System for managing money market positions and interest rate risk.
- Positions by Currency, Date, Customer, Dealer

12. COMMUNICATIONS MANAGEMENT

No banking system can be cut off from the outside world. The function of the communications management module is to take messages generated by the various system modules and to allow them to be sent to their intended recipient. This can be via SWIFT, Telex, Fax, or can be routed internally over your own network.

The general message formats follow SWIFT standards where messages are generated by the system. The system can also support non-SWIFT message formats, including the output of report results for transmission to an outside destination.

- SWIFT Device Support for sending and receiving messages. Interfaces are currently available to

  ST200
  ST400
  Alliance
  Merva

- Internal Routing of message to another InterBank/400 System over your own network, allowing InterBank/400 to be used as a message routing system.

- Sending of telexes and faxes with appropriate hardware installed. Specific interfaces are also provided for the G & S Telex system.

- Conversion of Single MT202, MT210 messages to multiple formats

13. STANDING DATA

The system provides a comprehensive set of standing data that is referenced throughout the system and forms the base of the Foundation Modules. This data provides the general information framework for the entire system. Data is logically organized into three categories:

- System Wide Data applies to the system as a whole and are generally tables whose definition is made outside of the InterBank/400 application.
- Company Specific Tables are shared by all branches of a specific company
- Branch Specific Tables apply to one branch only
- Multi Level Tables reflect that data which can not be easily classified into a company and branch hierarchy.

The following tables are included in this release of the system. Every table has an associated maintenance screen allowing creation, amendment or deletion of data from the table.

System Wide Tables	***Company Specific Tables***
System Installation Details	Branches
ISO Currency Codes	Brokers/Suppliers
ISO Country Codes	Customer Information
System Users	Customer Groups
System Functions	Fee / Charges Codes
Exchanges	Currency Details
Instrument Types	Currency Rates
Companies	Business Types
Universal Customer References	Base Rate Codes
File Details	Fee/Charges Calculation &Accounting Rules
Country Holidays	***Multi Level Tables***
Tax Rate Codes	User Function Authorization
Language Codes	User Branch/Company Authorizations
	Responsibility Centers
	Industry Codes
	Document Templates
	Profit Centers

The Standing Data module provides a solid foundation for both existing and new system functions to be developed over time.

Foreign Exchange rates can be updated directly from Reuters Services.

14. SYSTEM UTILITIES

The System Utilities module provides a range of functions aimed at helping users as well as Vanda manage your system. These utilities include the following:

- Standard Audit Trail Reporting, which ensures that all changes made to the database during the working day are, reported showing before and after images of all changes. This is derived from the AS/400 Journals and can also track the use of file update utilities such as DFU.
- Print Management Utilities that allow the active control over the destination of reports to AS/400 output queues or to other AS/400 machines in the network.
- Flexible Menuing and System Security Utilities which ensure that users can only use those branches and companies to which they are specifically authorized and only those system functions that are relevant to their jobs. Users can restructure their menus in any way they like to create their own sub-menus.
- End of Day Run Controller which allows the sequential, simultaneous, or timed execution of all End of Day jobs, such as updates and reports without the need for operator intervention.
- A set of software management utilities allowing the electronic reporting of problems, the automated implementation of new software releases through a testing and transfer lifecycle.
- Journal Management of the AS/400 journals is fully integrated into the system and requires no user effort to manage.
- Save, Restore and Recovery has been fully designed to cater for multi-company or single company operation. Recovery can be run for selected files or for an entire company database.
- The system manages database deletion requests using the latest capabilities of the AS/400 to ensure that referential integrity is not compromised by deletion of data that is still referenced in the system.
- A Financial Report Writer is included allowing the design of user defined report formats and content.
- The system provides a general purpose templates processing capability which allows any kind of transaction to generate free form advices or messages which can be printed or sent to the recipient via telex, or fax.