

DIPS

Deposit Insurance Payout System



Deposit Insurance Payout System (DIPS) is developed to support all business functions in a Payout Process under a deposit insurance scheme. It is designed with an objective to tackle two Key Challenges of a Payout Process:

- **Many unknowns before the system is activated including:**
 - * Transaction volume
 - * Processing logic e.g. interest calculation, input format etc
 - * Data quality
- **Once activated the Payout operation is in a crisis mode**

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Salient Features of DIPS

● Flexible

- * Data input format
- * Data conversion
- * Interest calculation
- * Valuation calculation
- * Exclusion/hold-back on product or depositor from payout

● Pro-active

- * Workflow system to guide and control the sequence of events in a payout process
- * Simulation on interest/valuation calculation
- * Reconciliation of data with the financial institution's ledger

● Secure

- * Built in user authentication and authorisation with dual control
- * Audit Trail on all changes to data in the system

● Vertically and horizontally scalable

● Resilient to human error

- * Data rollback
- * Maker and checker

Functions and Features Highlights

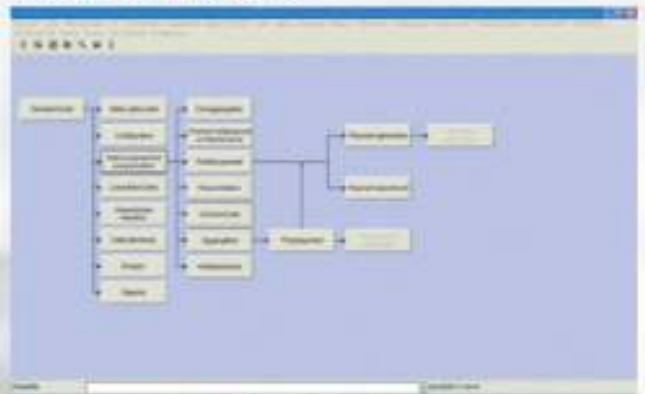
● A Payout Process typically involves a sequence of events as below:

- * Source data loading
- * Data reconciliation
- * Adjustment

- * Aggregation and De-aggregation
- * Hold/exclude products or depositors
- * Interim payment
- * Final payment
- * Post-payment adjustment

DIPS provides functions to support all the events. DIPS has also a built-in workflow engine to regulate the flow of events. Once logged into DIPS, user can see the progress of a payout process from the workflow diagram. Possible events are highlighted based on user authorisation.

Workflow Engine



Source Data Loading

Format of the source data provided by scheme members for a payout process can be different from one another. To cater for this requirement, DIPS provides flexible definition of input data file and data conversion rules to migrate the data into the DIPS database. Moreover, code mapping tables are available to convert codes used in the source systems to the codes defined in DIPS.

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During data upload, input codes not defined in the mapping tables will automatically be inserted for user to update and confirm. After validation, user has the option to reprocess or delete the batch of data before the actual loading into the system. User can still request to roll back data even after the data is loaded into the system.

Adjustment

DIPS supports different needs on data adjustment. User can add or deduct the amount from the account balances and update the accrued interest of the accounts. User can also overwrite the information of a depositor or an account. Adjustment can be done in bulk via data upload or online record by record. Batch loading adjustment uses the same approach as data loading.

Data Reconciliation

The grouping of information obtained from a scheme member data processing system could be different from that of DIPS. In order to facilitate efficient reconciliation between the scheme member's system and DIPS, DIPS allows user to define balancing items (i.e. what to reconcile) and also the corresponding expected value. User can pick and choose the balancing items from the pool to compose the content of a reconciliation report. Facility is also provided to list the supporting details for each balancing item.

Rule Setting for Interest and Valuation Calculation

DIPS has a powerful rule engine to allow users to set up interest and valuation calculation rules for different types of accounts. Such rules are to be used in evaluating the final balance of accounts for netting. Apart from the basic operators and functions, DIPS also provides a number of friendly tools for user to pick and choose during rule construction. These useful tools include:

- * Listing of DIPS data fields
- * Custom functions, e.g. table lookup functions
- * Standard interest calculation formula

User can also define lookup tables for external data that can be used in constructing calculation rules.

To verify a newly constructed rule, the user can perform syntax checking as well as conducting a simulation run on the rule with a set of accounts either selected by the user or randomly by the system.

Aggregation

DIPS provides two levels of aggregation, namely, automatic linking and potential linking. User can specify aggregation rule for both. Aggregation process matches up depositors and links them together for subsequent payout processes. Facility is provided for user to follow up on those depositors identified as a potential match. User can either confirm to link up the depositors or to de-link the depositors such that they will not be matched again with the same rule. This aggregation process can be repeated with new depositors or rerun with a set of new rules.

Hold/exclusion

In a payout process, there may be different needs to hold or exclude certain products from netting of a payment. The need will be different for different payouts. DIPS allow users to define rules for hold and/or exclusion. Apart from this, DIPS also provides other options for users to selectively hold/exclude accounts as well as depositors. Such hold/exclusion can be reversed anytime.

Technical Information

DIPS is a multiple-tier application. All server systems are written in Java. Client application is written in Delphi.

The recommended minimum configuration for DIPS is:

An UNIX Server

Hardware

- 2 x 1.65 GHz CPU
- 6 GB RAM
- 73 GB x 2 (for OS + Application + Oracle + Oracle data)
- 146 GB x 2 (for Oracle and Application data)

Software

- Database server (Oracle 10g)
- Web Server (Apache httpd)
- Servlet Engine (Tomcat)
- CORBA Server (Jacorb)

Client PC as user workstation

Hardware

- Intel base PC
- Any Pentium IV 2.0 GHz processor
- 512 MB memory
- 20 GB of disk storage

Software

- Operating System
- MS Windows 2000 Professional or
- MS Windows XP Professional