INTEGRAL P&C ADMIN

OVERVIEW

CSC Technology Singapore Pte Ltd

20 Anson Road,
#11-01 Twenty Anson,
Singapore 079912

Telephone +65-6221-9095
Facsimile +65-6436-7114

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1. Introduction

Integral Property and Casualty (P&C) Admin is a fully integrated general insurance administration system developed in Java. It enables the company to exercise full control over its day-to-day business activities from underwriting to claims, receipts and payments to debtor control as well as the financial postings into the general ledger.

It allows for the most efficient use of staff resources by eliminating multi-handling of data input due to integration of the various business functions within one system. Security and data integrity are maintained with ability to create individual user authority profile for authorized activities.

System has been designed so that it is client-based, table-/menu driven and caters for both batch and online data updates.

Integral P&C supports multi-company, multi-Branch, multi-currency and multiple languages. These features helps insurance companies to go global without boundaries since these easily address the needs of multi-national companies to use/have the same system.

Security of the corporate data is a prime consideration particularly, with real time systems. Integral P&C has a comprehensive sanction and password system which restricts access to the various functions to those users having the appropriate level of authorisation or job responsibilities. Additional security is involved for access to bank codes, claim approval limits, underwriting limits for control purpose.

2. Products Supported

Integral P&C supports all typical general insurance products; both personal and commercial lines of insurance. Products included but not limited to the following:

Fire: Fire, Business Interruption, Industrial All Risk, Houseowner, Householders.

Motor: Compulsory, Comprehensive, Third Party, Third Party Fire & Theft.

Engineering: CAR, EAR, Machinery, Breaker, EEI

Person: Personal Accident, Travel PA

Marine: Cargo, Inland transit, Hull, Pleasure Craft

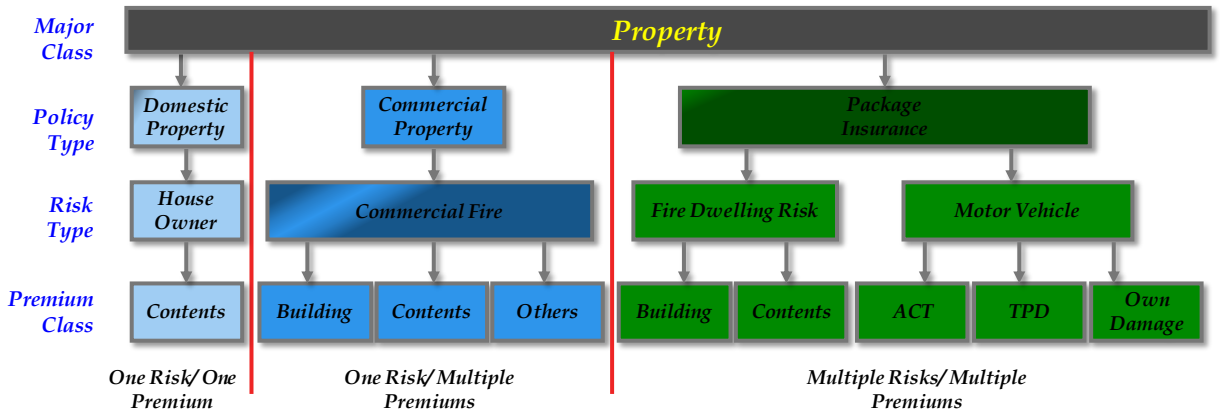
Property: All Risk, Burglary, Money, Plate Glass.

Liability: Public, Workmen Compensation, Employers Liability, Product

It is possible for users to define new products within Integral P&C without having to develop new programs. The user needs to structure the new product along with the Policy Type, Risk Type and Premium Class codes.

3. Contract Structure

Policy structure of P&C comprises of Policy Type, Risk Type and Premium Class.



At the top of this structure is the policy header. It stores standard information which is common to all policies such as:

- Policy type and number
- Policy period – inception and expiry dates
- Servicing agent
- Policy owner – client number and name
- Billing currency, billing type
- Renewal information

Optional information may be attached at header level as in despatch address, payor, pre-debit details, coinsurance.

The next level down is the risk details. User-defined details are maintained to reflect the information requirements for each type of risk insurance to be priced. There may be one or many separate risks forming the policy. These can be of the same risk type of different types and their valid attachment to the relevant policy types are defined in the table. Example of risk information includes:

- Sum Insured currency and amount
- Risk premiums
- Interest codes and classifications
- Risk locality or accumulation details
- Reinsurance method and details
- Clauses

Optional information may include interested parties such as hire purchase/finance company or mortgagors; general page narrative text.

The lowest level is the tracking of premiums in the system. It is usually associated with perils or breakdown of risk premium for risk analysis or

statutory reporting purposes. Premium class record has a standard format containing information such as:

- Full annual and posting premiums per premium class
- Commissions and overriding commissions, if any
- Extra charges amounts
- Short term loadings

Additional premium records are created for reinsurance.

Within this three level structure, there are a number of elementary policy constructions possible. These are:

- One Risk - One Premium
- One Risk - Multiple Premium
- Multiple Risks - One Premium

Similarly, policies may be assembled using any number and or combination of these constructions to support the company's requirements.

4. Product Configuration

Integral P&C uses tables as a reference for various purposes such as premium ratings, valid codes set up, financial period set up, automatic number allocation, program and screen switching. A table may hold valid codes with additional information, or may have extra data screen containing further information for each of the code entries.

Some extra data screen tables are dated tables, that is, a "from" and a "to" date can be entered and the information contained on that particular table is valid for that date range. Dated tables cater for alterations to contract rules that apply to specific date range such as legally imposed changes or changes to premium or commission rates.

Some common functions require processing that is specific to a particular component/ benefit type. In such circumstances, tables are used to point to processing subroutines, for example, earning method and value-added-tax. These subroutines in turn may also reference other tables during processing. The subroutines delivered with the base system are method based and can be customised and created according to the product's requirements, for example earning calculation methods, premium calculation methods or rounding routines, etc. Since programs access tables to obtain the required subroutines, there is no need for hard coding of these subroutines and subsequent compilation of programs. This approach provides flexibility, since table entries and subroutines can be tailored to individual requirements.

Some table fields exist because an area of processing has been recognised, but little or no functionality has been added to the base system. This is due to the fact that there are so many differing insurance processes and practices that CSC provide the minimum and will customise these areas in different client site.

The following features help to achieve fast product launch for the company:

- Table driven and tables are controlled by date range
- Policy Types, Risk Types and Premium Classes are set up and linked together by means of tables to form different types of products
- Business users maintain table parameters to suit business needs
- Product features can be switched on/off easily
- Existing products may be cloned, mixed and matched
- Help text and windowing

5. Standard Features

5.1 Client Management

The Client module identifies the most important asset that the Insurance Company possesses – the Client database. A Client in this context is defined as *"A person, company or party that has any kind of relationship with the insurance company."* Any entry having a relationship with the Company is recorded on the Client database, qualified by the role or roles through which such involvement arises.

Client may be created as Personal or Corporate as relevant. A record is created at the time the Client initiates the first contact with the company and is completed with the various details required. As the client widens the scope of contact, various roles are automatically noted on the client record. If updated, on-line enquiry is available to determine the client's relationship to the Company, whether as Policyholder, Claimant, Agent or even Reinsurer.

The system allows user to have a consolidated view of the client and all the roles that this client plays in the system. The design of the system is such that user is able to drill down to the relevant details applicable to each entity of that role. This facility provided through the integrated Client Module allows users to take advantage of the many search criteria options in the system.

The client module in itself provides facilities to maintain and enquire on personal and corporate client details, merge duplicate clients created in the system, inquire on the roles played by a client, link and unlink clients to form relationships between various clients.

Full window facilities are available from within on-line transactions to search for, view and retrieve client information. These windows' facilities can also be used to add new details, set up alternate addresses or aliases and so on assuming that the individual completing these transactions has the authority to do so.

Access to a Client record is available by number, alpha search, and progressive name scroll and by specific filter search keys within name. Search icon is available in Client Number field to search through the list of existing clients.

Bank and Branch details are maintained under the Client module and used to validate the entries for the client's bank details. The maintenance of client's bank account(s) is allowed for billing purpose. Direct Debit mandates can also be created.

Cross-reference of clients' relationship can be maintained for information. This may include a corporate client who has associated employee client or in household relationship, e.g. between husband, wife and children or siblings.

Enquiries are available so that all these client details can be viewed. A Client Portfolio Enquiry is also available to view the list of contracts, claims, payments, receipts for a client.

5.2 Agent Administration

The Agent module provides the facilities for agent registration, modification, and storing of commission details. A client record holding name and address details needs to be created if it has not already been captured by the system. Once the agent is created, the client record will automatically register an agent role when the agent is registered.

Agent numbers are usually allocated and include the following:

- Account type such as broker, agent, reinsurance inwards, etc.
- Commission terms (standard/non-standard)
- Overriding commissions
- Reconciliation type as in open items or brought forward
- Hierarchical reporting levels

Access to these information may be made using either the agent number or by selective name from the client search scroll.

Standard commission rates are held in tables at premium class level, allowing the allocation of a specific range of rates and products to the agent. Provision is also given for non-standard individual rates in light of portfolio experience or volume of business. These are entered by premium class as part of the agent's details.

Overriding commission information can also be stored within the agent's record. This is for commission to be earned by an overriding agent besides the agent that sold the policy. This commission is not necessarily paid for all premium classes. It can be set up for selected premium classes with rates entered for each.

The agent module is also used to maintain details for facultative reinsurers and treaty participants. It is similarly set up as in direct producers except the account type will denote that it is a reinsurer outwards.

Enquiries are available so all these agent details can be viewed. An Agent Portfolio Enquiry is also available to view the list of contracts for a nominated agent or experience of each policy.

5.3 Underwriting

Integral P&C's Underwriting module provides a complete environment for administration of policies and allows for full control over a policy at all stage of its existence. It is fully integrated with other related modules in Integral P&C such as Claims, General Ledger and Debtors, ensuring data integrity throughout the system

All underwriting transactions; movements and RI transactions are kept to give a full history of the activities associated with the particular policy.

Enquiry in the Underwriting module menu allows access into Policy Inquiry, Premium Posted Inquiry, Premium Posted Inquiry (with RI), Policy Experience and Endorsement Note inquiries. Access to these details may be done by policy number, if known or through client scroll search on policy owner's name.

New Business enables the creation of a new policy or the conversion of a quotation or cover note into a policy. As you complete the data entry of each screen, the screen flow will provide guidance to the information required. The basic flow will navigate through the policy header, risk creation, premium posting and reinsurance cessions. The new business can either be issued at the end of the data entry or left pending for further review or additional data input. Upon issuance, policy schedule, reinsurance application and/or coinsurance slip can be separately requested for immediate output or batch print.

Policy number series are stored in a table and the policy number can be automatically allocated by the system based on the policy type.

The **Endorsement** function is used when a change in the policy details is required during the term of cover. An endorsement can be financial or nonfinancial and it is always processed with an effective date. A financial endorsement like a change in coverage details or risk termination may result in additional premium or return premium depending on the nature of change in conjunction with the premium already billed. Sometimes, a statistical change in, say, a typing error in the text or omission may not affect the premium calculation. Back-dated endorsement or out of sequence endorsement can be processed if needed.

The online **Renewal** function is used to renew the policy details for a new period of insurance. No effective date is required as the system assumes renewal is always effective from expiry. It automatically calculates the new expiry date based on the renewal information on the policy header but can be amended by the user. During renewal, the system does not create a totally new policy. Rather the renewal number is incremented but with the same policy number. The ‘old’ details can then be amended according to the policy owner’s renewal instructions. No re-keying of data is necessary.

Manual Review is an integral part of Integral P&C’s Batch Renewals System. Its main purpose is to allow the underwriter the opportunity to revise the policy details before the production of the renewal notice. This action is performed by the user on a policy which has entered the renewal cycle and assigned a ‘review’ status sometimes due to losses. Once the online manual review is completed, the batch renewal cycle will continue processing the policy based on the amended details.

If after a certain period, which may vary from company to company or class of business, no renewal instructions have been received, then the policy can be **lapsed** online. No effective date is required as the system assumed all lapses occur from the expiry date of the latest in force version of the policy. Auto lapse is also possible during the batch renewal cycle.

The **Cancellation** function is used when the whole policy needs to be cancelled. This can occur at any point during the policy term. A cancellation effective date is mandatory. A cancellation reason code is required on the policy header. Certain policy/risk information are protected and not allowed to change during cancellation. During the process, the system requires the user to visit every live risk attached to the policy at the time of cancellation to ensure that return premium is computed correctly. Upon completion, a cancellation note is produced. Note that if the policy has multiple risks and only one risk is to be terminated, then use the endorsement action and not a cancellation.

The **Reinstatement** function is reactivating a cancelled policy from the effective date of cancellation. It creates a financial transaction re-billing the 'cancelled' premiums.

The **Take Up** function is almost identical to the new business function. It is used during the conversion process to bring policy information from the old system onto P&C. However, it does not generate premium transactions because it is strictly designed to capture underwriting details and not the capturing of accounting information.

The **Clean Up** function is used to amend policy details that have been converted from the old system onto P&C. This is required if there have been errors or further data update required during the manual (Take Up) or automatic data conversion procedure. It is identical to an Endorsement function. The only difference is that Clean Up does not generate premium transactions for account postings.

The system has **other on-line servicing functions** available like:

- Premium Journal
- Schedule Reprint
- RI and Coinsurance Reference Follow-up
- Agent Portfolio Transfer
- Client Portfolio Transfer
- No Claim Discount (NCD) Request and Confirmation
- Fire Accumulation
- Marine (Voyage and Vessel) Accumulation
- Bond Accumulation
- Personal Accident (PA) Accumulation

Each underwriting transaction incorporates the **coinsurance** and reinsurance outwards as specified by the users or from pre-determined set up. **Facultative reinsurance** involved may be entered during the transaction (e.g. new business) and almost all instances, the ceded premiums, commissions and any extra charge applicable are automatically calculated by the system.

Cessions to treaties are usually set up in the Reinsurance module for the system to apply them to the appropriate class of business. (See next section on Reinsurance.)

5.4 Quotations & Cover Notes

When an insurance company solicits for new business, it is sometimes necessary to print a 'sample' quotation for the client. Integral P&C provides a Quotation module for this purpose. In most aspects, the Quotation module operates in the same way as the New Business. This lessens the familiarisation required from users, and ensures a consistency of data entry formats and requirements

In some instances and products, it is more appropriate and convenient to issue a **Cover Note** than a policy. Unlike new contract (New Business), cover note administration module enables minimal data to be entered to establish cover while still reflecting the risk in appropriate reports. Details entered in New Cover Note are automatically retrieved at the time of conversion to a policy, thereby preventing double entry of data.

5.5 Package Policy Shell

This is a facility to enable users to create and maintain policy in a form of "generic template" especially for packaged product where risk and/or interest insured, ratings, sum insured, etc. may be uniform throughout the product or policy type. The screens used to construct the Package Policy Shell of any policy is very similar to the usual risk screens as the information captured here shall be used as defaults onto the appropriate fields in the usual risk screens during the new business transaction. The risk types to be attached may be defined as a mandatory or optional coverage within the policy.

The Package Policy Shell includes defining Package Policy Shell for a particular agent with some variations e.g. premium rate or sum insured of a particular interest cover. If an intermediary user registers the policy, the risk information defaulted from the package Policy Shell facility is protected and intermediary users are not allowed to overwrite the data.

The Package Policy Shell facility covers the following package risk screens: -

- Workmen Compensation
- General Risk
- Bond
- Professional Indemnity
- Hospital & Surgical
- Money
- Liability
- Electronic Equipment
- Private and Commercial Motor (South East Asia version)
- Fire
- Personal Accident
- All Risk

5.6 Cover Note Book Control

The Cover Note book control module provides three levels of cover note book inventory and issuance control - company, branch and then agent. The stock

inventory control at each level will be provided for and issuance of cover note books will be subjected to each branch and agent 'float' or limit restriction.

The New Business, Endorsement and online Renewals modules are integrated to the Cover Note Book module where the policy details are updated automatically for each cover note issued. Online inquiries and new reports are provided to facilitate in the control and tracking of each book and individual cover notes.

5.7 Reinsurance

Facultative reinsurance on a case by case basis is simply entered during the online input of the underwriting transaction (e.g. new business, endorsement). Treaty reinsurance requires the set up of treaties and accompanying details for processing. This facility is provided by the Reinsurance module which is outlined as follows.

The reinsurance module has an option to enable processing of treaty transactions at 100% treaty level or provide treaty accounting processing at reinsurer level for outward treaties. The latter is known as Treaty Participant Accounting or TPA, and is discussed in a separate section.

The Reinsurance module enables the maintenance of Treaty Details together with the participant details. On the Treaty Details, provision is made to create, modify or inquire into information relating to a reinsurance treaty. Treaty number is manually allocated. Treaty participants/brokers and the share percentages are identified and detailed information captured.

Both proportional treaties like the surplus, quota share and the non-proportional such as excess of loss (XOL) treaties are catered for. Depending on the types of treaty to be set up, the system will automatically require certain information to be entered on the details screen.

Examples:
Proportional treaties like surplus and quota share can only have treaty calculation basis of "PA" to denote Policies Attached.
For excess of loss treaty, it is mandatory to enter "Deductible" and "Up To" limits and treaty calculation basis can only have "LO (Losses Occurring)" or "LR (Losses Reported)".

Individual treaties are then amalgamated into a Treaty Arrangement. This is a collection of treaties that is equally applicable to a certain class of business.

Example:
In the fire classes, the company may have a mandatory government cession, 2 surpluses and an XOL treaty.
For marine, it may be the government cessions plus 1 surplus.

The Treaty Arrangement allows for any combination of:

- Quota Share
- Government
- Surplus treaty, up to 6 layers

- Excess of Loss, up to 8 layers
- Catastrophe, up to 8 layers
- Stop Loss, up to 8 layers

Using a table, each Treaty Arrangement is then attached to a risk or several risks. This reinsurance information set up is then accessed during the underwriting transaction processing.

Example: During New Business, when creating a risk, an RI Method needs to be entered to denote the reinsurance cessions associated to the risk to be created. The RI Methods available in the base system are:

- RI Method 0 means fully automatic reinsurance processing. That is any outward treaties applying to the whole of class business will have RI cessions automatically allocated by the system. The RI screen will not be displayed for data entry.

- RI Method 1 is used to indicate partially automatic reinsurance. The display of the RI screens will enable some cessions to be entered for surplus treaty and/or facultative reinsurance.

- RI Method 9 is for completely manual reinsurance input. RI premium journals are used to cede premiums to all the required reinsurers.

During claim registration, the RI Method and the reinsurers defined in the policy will be defaulted by the system. Loss recoveries are calculated automatically.

Other main online processing functions found on the Reinsurance master menus besides Treaty Details, Treaty Arrangement are:
- Treaty Result
- Treaty Claim Cash Call
- Treaty Journal
- Treaty Debtors Inquiry
- Treaty Debtors Reconcile

5.8 Claims

The Claims module allows for full control over a claim at all stage of its existence. It is integrated with other related systems in Integral P&C such as underwriting and accounting. Claim is set up with initial estimate of outstanding claim reserves using claim registration. Modification action is used for processing of any subsequent claim activities to the claim except for payments and receipts. Provision is made for take-up of historical data and conversion of outstanding claims.

Policy reinsurance details in force at the time of loss is determined by the system and carried through to the claim record. Payment and recovery proportions are automatically posted to the reinsurer accounts.

The claim header contains information such as loss and reported dates, claimant and third party information, description of loss, solicitor and assessor

information. Upon completion of the header data, the next screen allows various "screen switching" for data entry. This includes action to set up reserves, reinsurance and any statistics information. Logical business functions usually proceed to the "Reserve Analysis" to establish gross outstanding reserves by premium class(es) and reserve code if necessary.

For reinsurance recoveries, reinsurer accounts, RI types and proportion or Deductible/Up To Limits are defaulted by the system. Review for accuracy and manual override is allowed in the event that the policy information on the underwriting module is not up-to-date.

Supplementary claim statistics may also be entered depending on the type of claim.

Claim registration can be approved after all mandatory details are completed. Financial transactions are created for general ledger postings by batch. Acknowledgement letter and preliminary loss advice for the facultative reinsurers may be produced through a batch job. The registered claim can also be held for later approval or awaiting details not yet known. For this status, no financial transaction is created.

Claim modification provides the ability to amend claim header and statistical details. Reserves may be revised by increasing or reducing the outstanding amounts or adding new premium class.

All claim transactions, movements and RI transactions are stored to give a full history of the activities associated with the particular claim.

Claims RI Journal is a facility within the Claims module for recording RI recoveries and estimates for those claims which have a non-automatic reinsurance method.

Inquiries available include Claim Enquiry, Transaction Enquiry, Claim RI Transaction Enquiry, Requisition Enquiry and Claims on Policy Enquiry.

Claim payments, full or partial, can be made through the Claims module interfacing with the Requisition/Payment module. A claim payment may be made with a revision to the outstanding reserves at the same time. Reinsurance recoveries transactions are automatically generated for batch general ledger and debtor postings. A final payment will close the entire claim file. Refer to write-up on Requisitions for more details on payments.

Cash Recoveries on the Claims module provides the facility to record the recovery of some of the costs incurred for the claim. This may include salvage recovery, third party recovery and Excess payment by claimant. This facility is interfaced with the Receipt module. Refer to Receipts for further details.

Claims on Registers is an inquiry feature into the claims incurred for each fire or marine accumulation register.

The online print of the Claim Facing Sheet shows the essential claim information that serves as a summary on the front page of the Claim file. This

document can be printed during claim registration, claim modification, claim take-up/revival, claim inquiry, claim payment and during claim receipting.

The Claims Recovery function is provided to facilitate tracking of direct claim recoveries in order to prevent leakage. Details of claims with potential recovery will be recorded and checked against during claim modification, payment and receipting transactions. Claims cannot be closed if an outstanding recovery record exists.

5.9 Receipts

Receipt processing offers the facility to administer the banked or non-banked cash received by the company. The receipting process is accessed via the bank code and the receipt number is automatically generated during creation. Each type of receipt may be defined as cash, cheque received, journal or others.

Enquiries on individual receipt or the bank account balance is available.

The receipt screen is made up of two sections. The upper 'header' section captures records the details of the individual or company the monies was received from and in what form. If a cheque is received, additional data captured includes bank details and cheque number. The second half is usually known as the 'dissection' screen. It comprises of entry lines, each of which is entered the codes designating what the received monies represents. These can be premium receipts for specific policy(ies), cash recoveries for claim, on agent/reinsurer account or miscellaneous cash receipts on general ledger accounts. For claim-related payments, a pop-up screen allows the capture of loss description of the receipt and the partial/payment flag for updates of claim files.

The system checks the validity of all input fields. It also ensures that the total dissection amount equals the amount in the receipt header. Any imbalance needs to be corrected to ensure that the receipt is 'balanced'.

The batch schedule produces the Bank Deposit List, Cash Book List and the official receipts for those submitted to batch print.

5.10 Payments/Requisitions

An insurance company will have a variety of payments to make. These may include but not limited to refund/return premium payments, payment on account balance of reinsurer/agent, commissions, claim payments or general expenses such as rent, utilities, stationery/supplies.

The primary function of the requisition/payment module is to provide an easy method of creating requisitions and payment processing while ensuring sufficient safeguards in the system against misuse.

This module allows requisitions to be created, maintained, authorised and enquired upon. The basic payment cycle undergoes these phases – requisition, authorisation, payment processed and printing. A table in the system allows a

variation to this cycle by payment method; the 'Pre-authorised' and the 'Immediate Post' indicators for a particular payment method may alter the timing of each phase in the basic payment cycle.

The initial stage is to create a requisition. A payment method and a payee client number are required. Payment method may take the form of cash, automatic cheque, manual cheque, payment reversal or journal. Requisition number is automatically allocated by the system.

Similar to receipt, the payment screen is also made up of 2 sections. The upper 'header' sections default the payee name and display the allocated requisition number. The 'disbursing' bank code is entered and subject to validation with the bank code sanction. For manual cheque, usually a cheque number is required for audit trail purpose.

The second half is the 'dissection' screen. It comprises of entry lines, each of which is entered the codes designating what the payment is for. For claim related receipts, a pop-up screen allows the capture of loss description of the payment and the partial/payment flag for updates of claim files.

The system checks the validity of all input fields. It also ensures that the total dissection amount equals the amount on the header. Any imbalance needs to be corrected to ensure that the requisition is 'balance' before it is accepted by the system upon clicking Continue. At this stage, the status of the requisition can be Payment Requested or Payment Authorised.

Modification or cancellation is possible if the requisition is not yet authorised.

Cheque approval and authorisation can be activated from the Payment module. It can be done on an individual or a block of payment requisitions. There is a two-level payment approval/authorisation process - the first level (approval) is meant for the head of the originating department who raised the requisition to approve the payment request. The second level (authorisation) is meant for finance/treasury department to indicate it's authorisation for the cheque(s) to be processed and issued. The person performing the approval or authorisation is duly authorised personnel who have pre-defined limits of authority in respect of cheque amounts. Authorisation can only be performed for payments that have been approved. This process is usually performed only by duly authorised personnel who have pre-defined limits of authority in respect of cheque amounts. At this stage, the status of the payment can be Payment Authorised or Payment Processed. The latter is dependent upon the 'Immediate Post' flag defined in the system's table.

Authorised requisitions are processed by bank code in a batch job. This job also produces the automatic cheques for printing and each is assigned an internal serial number. Auto cheques are usually printed on pre-printed, pre-numbered (cheque number) stationery, format of which may sometime be stipulated by the bank.

5.1.1. Express Automatic Cheque

The automatic (auto) or machine cheque will be printed when the Auto Cheque batch job is submitted. The need to print auto cheque immediately

rather than via the auto cheque batch job (normally executed later in the day) is possible through the "Print Express Cheque" function. The payment cycle of the express cheque is to create payment request or requisition, approve payment, print express cheque and then follow by payment authorisation with cheque number. Note that during the stage of approval, the cheque number is not known until the express cheque is printed. Once the cheque is printed, the cheque number is then input during payment authorisation. Thus the setting for "Print Express Cheque" should be Immediate Post = 'Yes' and Pre-approved/Pre-authorised = 'No'.

5.1.2. Cheque Printing Facility by Third Party (E-Banking)

Banks and financial institutions do provide value-added services such as cheque printing and despatching on behalf of the General Insurance company to its customers for a fee. This facility known as "E-Banking" is also supported in Integral P&C. The process involves setting up a Payment Method specifically for this purpose and a batch job to download the payment information into an external file to be sent to the bank for processing. The bank will process the cheque printing and despatch it. Upon completion, two sets of database files are expected to be returned to the insurance company. One contains the successful cheque printing records and the other contains the records rejected. This information is then updated back to the system via batch jobs. With anticipation of a low volume of rejects, these rejects are to be manually reversed by creating reversal payments ("reversal" payment type). This type of payment requires the original requisition number to be specified.

5.2. Debtors

The Debtor module (aka Accounts Receivables/Payables) module is also an integrated part of the P&C Admin system. This provides control over the monies due to/from the clients, agents, brokers and reinsurers from the general insurance transactions. It is a subsidiary ledger facility maintained by individual debtor accounts which may be identified as with open-item or balance forward type of reconciliation.

Each account is updated with financial transactions originating from policy administration (new business, renewal, endorsement, cancellation, etc), claims (payment, receipts), reinsurance cessions and recoveries.

The transactions and balances are maintained up-to-date via a debtor posting in batch mode. At month-end, the debtor balances are roll-over to the next month after the production of statement of accounts for agent and/or client, commission statement, reinsurance statement as well as ageing balances reports.

Account balance enquiries (outstanding items, balances) are available online.

For open-item basis, both automatic and manual reconciliations are available for offset of outstanding items.

Automatic reconciliation are built into the debtor posting process where the system shall attempts to offset transactions with equivalent gross or net amount or amount within tolerance limit pre-defined in parameterized table. Any such residual amount which be automatically written off and hence, posted into the appropriate GL accounts. For matching purpose, various methods are available, such as item by item with same policy number, item by item within an agent account, item by item by cover note number, whole of policy, whole of agent account, etc.

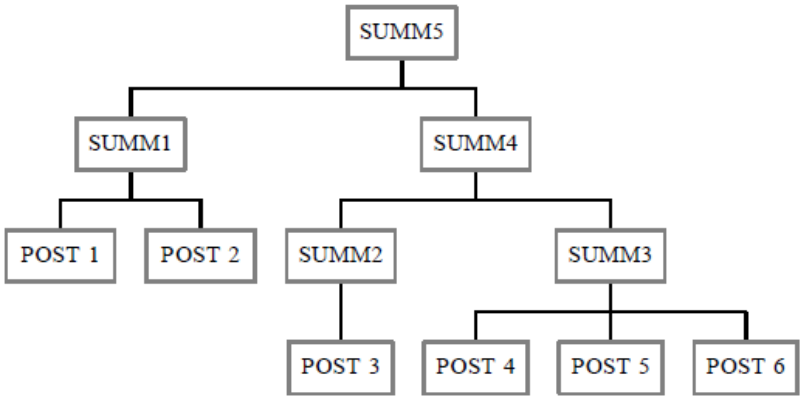
For transaction amounts which unsuccessful with the automatic reconciliation attempts, each shall be posted into the relevant producer account as unmatched items. These can then be maintained using the manual reconciliation action to assist in the credit control and account analysis. The user is able to select and flagged the transactions to be reconciled, e.g. a cash item for one or several statement transactions. Any residual amount can be handled either as a written off tolerance amount, exchange gain/loss if foreign currency is involved or where needed, may be set up as a statement item for the variance.

A company may opt for ageing of outstanding balances by effective date of the transaction, accounting month or transaction date.

5.3. General Ledger (GL)

Integral has a comprehensive built-in General Ledger (GL) module. It provides a highly flexible table driven, hierarchical, multi-currency general ledger. It is constructed of individual accounts established by the insurance company covering such main categories as Assets, Liabilities, Expenses and Income (Revenue). These accounts are used to record and control the finances of the company and every financial transaction undertaken by the company and processed by P&C must be reflected within the general ledger structure. The module provides facility for the creation and maintenance of the GL accounts by the users. An account is identified by company, currency and its GL account code. Each account is characteristically identified as Asset, Liability, Income or Expense. This allows the system to identify the year-end account balances for profit & loss appropriation calculation and the rollover of balance sheet balances to the new year.

The GL posting of the financial transactions are performed with a double accounting entry concept and the integrity is maintained with a balanced Trial Balance. Within the general framework of the system, the insurance company has freedom to create his own series of accounts. These accounts are grouped together to enable meaningful reporting of the company's financial situation or more precise evaluation on impact of certain defined financial areas. Theses groupings may require the maintenance of more than 1 chart of accounts. Chart of Accounts can be constructed using Posting and/or Summary Accounts in a hierarchical manner. (Refer diagram below). Posting accounts of the lowest level and forms the primary account depository of accounting entries. Summary accounts on the other hand, shall contain "roll-up" account balances from one or more posting and/or summary accounts which belongs to that hierarchy pyramid chart structure. This approach allows flexibility for financial balances to be viewed as many such chart pyramids may be created.



The bulk of the general ledger postings are automatically generated for policies (e.g. new business, endorsement, cancellation, etc) and claim transactions (e.g claim reserves, claim payments, reinsurance recoveries, etc) as well as the receipts and payments. The financial transactions are batched for control purpose. During the general ledger postings, the posting to the relevant general ledger account for each amount element in an extracted transaction is determined by an account structure parameterized in tables. General ledger account code may be structured to identify branch, fund, source of business, line of business.

Transactions may be processed in a foreign currency other than the local or ledger currency. The multi-currency feature provides for this transaction to be posted to the general ledger of the transaction currency. Concurrently, the system will also perform a "mirror posting" of this transaction in the local currency equivalent into the local general ledger.

The GL module also allows the creation of Direct Journals for corrections and non-cash related transactions to be processed into system. This may include provision of depreciation for fixed assets, IBNR provisions, etc. Additionally, there are creation and processing of accrual journals as well as entering budget figures to an account for comparative review purpose. An automatic allocation function allows a simple mean of transferring amounts from one account to a number of other accounts. Example, HO expenses or certain general operating expenses may be allocated to various business classes or profit centres within the organization for a equitable assessment of the results.

Within the GL module, there is another significant computation feature, That is, the computation of premium earnings of general insurance policy transactions. The earning concept primarily allows the premium (and commissions, if required) to identify the earned and unearned portions. Various industries used earning methods are available, such as pro-rated, $1/12^{th}$, $1/24^{th}$, no earning, earnings over 3 months, % ratio basis, earning after 30 days.

These amounts shall be automatically posted by the system into provision/reserves for unearned premiums. Hence, the system shall also performed the release of the "monthly earned" portions out of the unearned reserve accounts.

5.4. Statistical Dissection System (SDS)

The SDS is designed to allow data to be extracted from the application database files and accumulated in various ways. The accumulated data can then be used to further produce statistical reports. Statistical registers are defined to differentiate between the various categories of data.

Currently, the base system provides registers to produce statistical reports for Agent Performance, Client Performance and the Monetary Authority of Singapore (MAS) reports.

5.5. Treaty Participant Accounting (TPA)

From the reinsurance perspective, the outward treaty participant accounting functions is fundamental to reinsurance processing within an insurance system. The TPA module has been developed as an extension cum amplification of the basic *Treaty Reinsurance* facility.

The main characteristic of the TPA module is to provide treaty accounting processing and documentation functions at reinsurer level for outward treaties applicable to policies from the direct insurance and inward facultative reinsurance businesses of the company. This is achieved by capturing the treaty information including details for direct participants and treaty brokers cum underlying participants.

The module comprises largely of batch processing and several online maintenance and enquiry features. Together in summary, it enables and/or provides the business users with:

- Creation and maintenance of treaty with participant details.
- Treaty arrangement.
- Inquiry into treaty participant's result of each treaty.
- Take up of treaty results.
- Receipt & Payment with dissections on treaty participant related.
- Treaty journal for adjustment purposes.
- Setting up of treaty relationship.
- Revision with effective date on interest percentage and/or withholding tax rate.
- Printing of treaty claim cash call letter.
- Follow up on Treaty statement.
- Debtor balance inquiry at participant level.
- Debtor outstanding balance reconciliation at participant level.
- Schedule Control
- Provision & release of premium reserves and related interest/withholding tax calculations
- Premium & claim portfolio transfers.
- Computation of profit commissions.
- Technical and financial statements of accounts.
- Participant accounting report.

The bulk of TPA processing is based on batch jobs. The TPA batch jobs are grouped into monthly, quarterly and yearly run. Users are required to follow the batch job sequence for the respective run strictly as there is a job dependency exists amongst these batch jobs.

The treaty Transactions originate from the front-end modules such as underwriting, receipt, payment, claims, etc would be extracted and processed by the TPA batch job such into the TPA databases. Premium reserve release process would handle the premium release accordingly as per treaty terms.

The TPA debtor batch jobs provide facility to process the financial transactions and post these transactions to a subsidiary ledger for each broker and participant, as specified in the treaty. As a result, Participant Accounting Report, Financial Statement of Account and Ageing reports can be produced.

The TPA GL batch job provides facility to extract and summarise transactions from underwriting, claims, receipt, payment and treaty journal at treaty participant level for posting to general ledger account.