



C I S S O F T W A R E



## THE PRODUCT

**CIS-LIFE** is an application software package, developed and marketed by **Advanced Digital Services**, that provides an integrated relational database system for use by life insurance companies in the administration of individual life products.

## OPERATING ENVIRONMENT

The **CIS-LIFE** application is developed for deployment on an ORACLE® RDBMS, usually installed on a Windows NT® server. The application is scalable for installation on a variety of platform sizes, thus preserving a prospective client's investment. Equipment sizing depends on the mix of product types, frequency of premium payment and the number of years of transaction history that the prospective client company retains on-line. Typically, a small company (up to 50,000 policies) can be accommodated on a Pentium-based server with 256Mb RAM and 10Gb Disk (RAID). Volumes in excess of 50,000 and up to 100,000 policies may be accommodated on more generously configured purpose-built servers that are usually available from vendors like IBM, Hewlett Packard, Sun Microsystems, Dell, Compaq, or DEC. Larger volumes can be served by Sequent and other parallel-processor servers.

## ARCHITECTURE

These are fully relational designs, normalized to third normal form. The design consists of about 250 tables, of which approximately 120 are Reference Tables, where rates, rules and validation parameters are set by users. Programs are modular, with approximately 100 Stored Procedures performing the bulk of processing. The Stored Procedures are called by screens or programs, which altogether number approximately 500. All programs and modules are programmed in either SQL\*FORMS® (ORACLE's GUI Language), or SQR® (report writer and query generator). Structured design and programming techniques, utilizing the Yourdon/DeMarco methodology were used throughout. The system essentially updates transactions on-line, though there are a few activities that are better processed in back-office mode, and these are called and triggered by screens that are designed for execution in off hours.



Screens are all written to the same standard, with extensive lookup windowing to provide reference table values; for alphabetic name search on policy number fields; and to provide drill-down capability to transactions and related data. A number of 'power' screens, used for tasks such as New Business Entry, Underwriting, Policy Changes, and Claims utilize drop down menus that allow the user to call multiple processes to be performed on a policy that has been retrieved for processing. Each process in the system provides program logic to complete all the tasks called for in that process, and no part of a process is committed until the entire set of tasks is completed successfully. An example of this is where an Age of an Insured is changed, where the screen will allow the user to retrieve the Policy to be changed, to select the overlay screen to enter the new date of birth, and will use that new data to:

- Call a Stored Procedure to calculate the new premium
- Modify the Date of Birth
- Roll back all premiums paid to the Effective Date of the Coverage
- Optionally rollback all commissions and overrides
- Using the new premium, pay the Due Date as far as it will go from premiums reversed
- Optionally recalculate any Cost Of Insurance Charges and Interest on Universal Life
- Print an endorsement for the age change
- Determine any premium deficiency or overage required to bring the Due Date to the previous point
- Produce a letter to the owner, enclosing the endorsement, advising of deficiency or overage of premium
- Modify billing to accept the new premium, changing PAC where needed
- Create audit trails
- Do all accounting, including commission and override adjustment

All of these tasks must be successful before the change is accepted and committed.

Context-sensitive help is provided.

The Menu system provides security for job roles, and a user assigned a role can only see and use screens assigned to users with that role designation.



## SCOPE

### Plans Supported.

The following product types are supported :

- Traditional Ordinary Life, Term Life, Limited Pay Life, Endowment
- Universal Life, Variable Life (Unit Linked Universal Life)
- Simple Personal Disability and Accident
- Riders and Options including Other Insureds, Term Additions, Double Indemnity, Premium Waiver, Guaranteed Insurability Options
- Variable or Fixed Annuities
- Joint-Life Coverages
- Graded Death Benefits
- Non-Forfeiture options including Automatic Premium Loans (APL) and Reduced Paid Up

### New Business consists of :

- Interactive entry of Application For Insurance data
- Screens to request additional requirements, missing data, questions
- Accept Cash With Application and store it as a liability
- Underwriting support facilities - Height/Weight; Underwriting Rules; Look up Prior Coverages and History; Underwriter Notes; request Reinsurer Underwriting
- Ability to Issue, Decline, Rate, Offer modified terms, Not Taken
- Print Policy Schedule pages, Endorsements
- Calculate Stamp Duties, Pay Stamp Duties
- Pay for Professional Services using Standard Scale Of Fees
- Maintain and view performance of professionals
- Underwriter statistical reports - Cases in pipeline, Aging of pending cases, Agent error rate by type



## Billing and Payments

- Family or individual Premium Notices
- Pre Authorized Checks/ Direct Debit
- Pre Authorized Check Reversals tracked and when number of tries passes State mandated maximum for a year, payment method changed to Premium Notice
- List Bill, with reconciliation processing on return to reduce data entry
- Batch acceptance of payments from drop-box, bank or employer on magnetic media/electronic transfer
- Non-premium payments may be billed (Loan Repayment, Mortgage Installment)
- Cashier facility provided, allowing multi currency and receipting
- Cashier can accept non-insurance payments, accept no-match, direct payment to a specific fund
- Cashier payments applied on-line
- Entry of check or other source document to aid later inquiry
- Cashier end of day lock up and balancing
- Batch entry mode for large batches, and multiple data entry clerks can be used on a single batch
- Batch cannot be updated until balanced
- Batches can be released for update at slow times
- Policy Due Dates, Policy Funds and Agents' Commissions calculated on acceptance of payment
- Front end loads deducted on unbundled plans and the net premium credited to fund accounts as set in each policy's Investment Split Rules
- User entered Premium Tolerance margins allowed
- Automatic Premium Suspense clearing
- Accounting transactions and audit trails produced immediately

**Accounting transactions** are generated in the system, and a summary of the day's activity is provided to interface to most third party General Ledger applications. Transactions can arise from external entries, such as premium payment, or from automatic activity such as interest on fund and loan accounts. All transactions of this type create Debit/Credit balanced transactions, by Profit or Cost center, by date. Because premiums are applied on a cash basis, there is a quarter end accrual run where premiums in advance and arrears are determined, then the arrears are weighted according to a user defined collection percentage, and accrual entries are created for the General Ledger.



**Universal Life and Variable Life** Fund processing allows :

- Unlimited number of Money or Unit holding splits of investment premium
- Front end Charges flexible
- Investment split can be changed at any time, and previous splits retained
- Fund Transfers allowed at any time
- Surrenders, Partial Surrenders may carry back-end loads
- Type A and B supported
- Corridor may be a fixed amount or a percentage, and it may or may not vary by age
- Lump sum accounts allowed, with provision to track history of each payment so that Government withholding tax can be calculated as appropriate
- Government surrender taxes supported
- For Unit Linked products, stock splits, cash or share dividends can be applied at a past date
- Bonus Interest supported
- Automatic calculation and application of Cost of Insurance and fund-based expense charges; interest compounding is user specified
- Historical Charge and Interest rates retained
- Multi-currency support for unitized investments
- Historical Unit prices retained
- Annual Statement may be in State mandated format, optionally a full transaction list may be produced rather than monthly totals
- TAMRA/TEFRA processing supported
- Full USA tax compliance (TEFRA/DEFRA, TAMRA, IRA, SEP, 1099 extracts)



## **Policy Changes**

Changes to a number of attributes of Policy and related tables are allowed :

- Plan Changes
- Age changes
- Sex correction
- Redate policy
- Smoker/non-smoker changes
- Type A to B, and reverse, at any time
- Method of payment
- Frequency of payment
- Par to non-par, or the reverse
- Changes to Beneficiaries, Owner, Assignee, Payor, Selling or servicing Agents
- Drop premium loads
- Mailing and other addresses
- Increase or decrease amount of insurance
- Increase or decrease Elected premium
- Add or drop Riders

## **Automatic processing**

- Autolapse
- Automature
- Auto Paid up
- Terminate at expiry
- Take up automatic Options
- Trigger date driven requests logged into system
- Automatic Premium Loan
- Anniversary processing including payment of reinsurance premiums
- Payments to pensioners and other periodic payments
- Calculate and apply Interest and expense charges on Policy Accounts (Loans, Funds, etc.)
- Trigger follow up correspondence where no response received within follow up period



## Agency Commissions and Overrides

- Unlimited number of layers in agency structure
- Layers may be added or removed at any time
- Agent may report to any management layer in agency
- System tracks production for individuals as well as structure, thus allowing mid-year staff movements
- Agents licensing for state/product type
- Licence renewals tracked
- Managers can be licensed as agent and may earn Sales Commissions
- Unlimited number of Sales Commissions splits
- Sales Commission may extend for many years
- Sales Commissions may be modal or advanced for up to one year
- Full, partial or pro-rated recovery supported on lapse of policy with advanced commission
- Sales Commission calculated on each Coverage, allowing for commission on additions, possibly to agent different to original selling agent
- Servicing Commissions supported
- Production Bonuses supported for agents and managers
- Persistency Bonuses supported, Universal and Variable pseudo lapses used
- Sales Staff maintain Commission Accounts and can draw on funds within user defined limits
- Commissions Statements produced on demand and will list all commissionable items not previously reported
- Agents financing supported
- Automatic installment payment from Commission Account to Agent's Loan supported
- History of agents awards, internal and external, maintained
- Agents, managers and agency's production history retained
- Agent screen allows on-line access to their pending cases, commissions details from previous months, All policies serviced, sales and persistency statistics



## Policy Values

- Multiple policy loans possible per policy
- Variable or fixed rate loans
- Loan to Value ratios supported
- Interest rules set by user
- Full or partial surrenders
- Single or multiple partial Maturities
- Death and Disability claim processing
- Surrender based on tables, or in the case of Universal Life and Variable Life, based on value of Funds less Surrender charges
- Surrender taxes supported
- Proceeds of Loans, Surrenders, Maturities, Claims may be paid as a check or may be placed in Person Accounts in the name of final payee

## Inquiries and Reports

The system provides a large number of inquiry facilities and reports, and in many instances reports that are not needed for long term files can be printed to the screen. The following are those currently provided in the system.

- Policy inquiry, with 15 different options to view different sets of data, including :
  - Policy options available
  - Payment instructions
  - Date triggered transactions
  - Owner, Payor, Assignee and Servicing Agent details
  - Insured, Beneficiary and Sales Agent details
  - History of transactions, with a drill down to see the Debits and Credits for any transaction
  - History of Status changes (Lapses, reinstatements, etc.)
  - All Policy Accounts (Loans, Funds, Suspense, etc.), with a drill down to transactions on any of the accounts
  - Full details of a selected Coverage
  - All endorsements on a policy
  - All policy notes attached to a policy
  - All address details on a policy



- Billing details
- Claims
- All correspondence to and from a policyowner
- Surrender quote, with option to print a detailed letter
- Alphabetic name search for a person, optionally identifying all policies where the person has a relationship. This screen can be called in most places where a policy number is requested
- Agents commissions details
- Agents licensing details
- All policies for an Agent - alphabetic of policy number order
- Dividend declarations
- Policy Statement showing all transactions between stated dates
- Details of all policy accounts of a particular type(e.g. APL loans, Suspense, etc.)
- Standing of Agents, ranked by:
  - Sales -API
  - Sales - Amount of Insurance
  - Sales - number of policies
  - Increase in API
  - Lapses - API
  - Persistency - 13 month LIMRA, including Pseudolapses
  - Persistency - Company method
- Standing of Agencies, as for Agents
- Standing of Agency Managers, as for Agents



## Claims Processing

- Death and Disability claims
- Reported But Not Settled claims accrued
- Documentation requirements automatically established for claim types
- Limits for all claim types checked
- Messaging available to order documentation and investigation
- Reinsurance recoveries requested and Receivables set up for recovery
- Death Claims can adjust automatically to reflect change of age of claimant
- Service providers can be paid
- Optional settlement methods supported
- Processing allows full or partial payment, declination with refund of premiums
- Settlement may be to multiple payees, with option to delay payment for juveniles

## Correspondence And Messaging

A full correspondence handling system overlays the system.

- User-defined standard messages/letters
- Available as a windowed facility in Underwriting screens for ordering missing/additional information
- Automatically produces correspondence of particular types to policyowner/assignee/agent upon the occurrence of named events, such as lapse
- All incoming requests may be recorded and assigned to service representatives for action
- Management access to outstanding service requests and statistics on response and types
- Automatic follow-up to company-originated requests
- Response to incoming service requests includes values extracted from the database
- Errors encountered in batch runs trigger messages to named users for correction
- Errors in on-line processing trigger standard message response to user