



## Overview

Treasure-Grow is built on more than 20 years of experience in the treasury environment of banks, corporates, discount houses and other financial institutions. We understand the risk in setting up a treasury operation and implementing operational solutions.

The operational aspect of the system enables administration to be done in a controlled environment with tight security and audit trails. The system is user-friendly resulting in a short learning curve to understand the application. With Value-Grow's knowledge of the industry and its instruments, we talk directly to you, the system's users. This is our way of sharing our experience in the industry.

The system is based on cash flow events in institutions. It caters for multiple bank accounts in different currencies and looks at inflows and outflows in and from various accounts. It also looks at budgeted cash flows which are originated outside the system and can be updated from other sources.

A cash surplus can be invested in various assets in the market where the system calculates the position in each instrument as well as the risk inherent to the investments. Mark-to-market revaluations to reflect potential profit and losses can be done.

The system caters for many funding instruments in the market in the event of a cash shortfall and also allows the monitoring of exact positions on a real-time basis.

Treasure-Grow caters for the financial behavior of the various instrument types and also verifies returns or costs of the different financial instruments. It also keeps track of coupons or payments receivable and commitments of payments payable.

Every transaction creates a corresponding accounting entry that can be exported to a financial or general ledger system. These journals are set up during the implementation of a product or financial instrument.

The flexibility of the application provides for the quick deployment of products, administration and management processes. The solution is parameter driven rather than development driven, which ensures versatility and caters for a wide range of business requirements.

Treasure-Grow covers the full treasury business process from segregated front middle and back office operations to the initiation of accounting entries and the management of operational, market and counterparty risk.



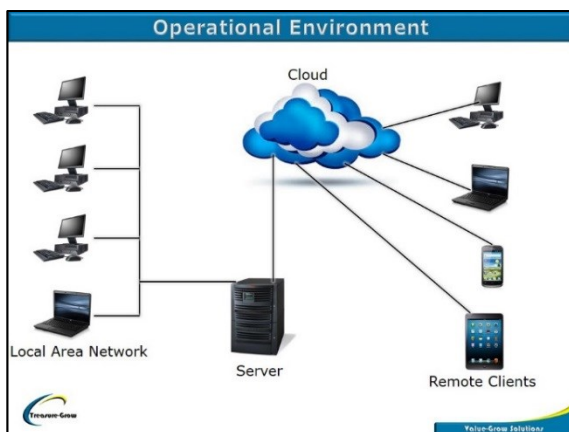
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## Key Features

### Environment

From a business perspective, different geographical entities can be set up combined with operational verticals and portfolios to group operational requirements and reporting structure.

From an operational perspective, different structures can be deployed to fulfill individual requirements. A central database can be hosted inside your organisation or it can be hosted with an external party who takes the responsibility of disaster recovery and backup operations.



The system can be parameterised to cater for a corporate treasury environment as well as a financial institution depending on where the emphasis falls, making use of the following available functions:

- Cash management
- Maximisation of return on investments
- Institutional Risk (Credit Risk)
- Liquidity Structure of investments and funding
- Forex Requirements
- Deposit Taking
- Customer Care
- Regulatory Requirements
- Maximisation of margins
- Risk Management
- Liquid Asset Management

Environment setup such as portfolios, branches, dealers, users etc. are kept in master files. Additional

files keep external information such as market rates, yield curves, Bond specifications, counterparty information, public holidays etc.

These files are important to standardise inputs and to minimise data capturing which leads to increased productivity. Changes on these files are monitored by a comprehensive audit trail which keep a before image and an after image of each change in the system.

Access to view, change, create or deletion of this information is maintained by a security matrix which gives users the privilege to execute these changes.

Financial instruments are created from a series of instrument templates that represent the behavior of most financial instruments in the market. When a new instrument type is created in the market, a new template can either be derived from existing templates or a new template created.

Each instrument is derived from an existing instrument type and then parameterised to cater for individual requirements.

### Instrument Types

The system caters for the following instrument types and can be in any currency:

- **Demand Asset / Liability**
  - **Term Asset / Liability**
  - **Discount Primary Market / Secondary Market**
  - **Floating Rate Notes**
  - **Bonds**
  - **Installment Loans**
  - **Debentures**
  - **YTM Primary Market / Secondary Market**
  - **FX Spot / Forward**
  - **Repo**
  - **Reverse Repo**
  - **Secured Loans**
  - **Guarantees**
  - **Unit Trust**
  - **Commodities**
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## Deal Flow

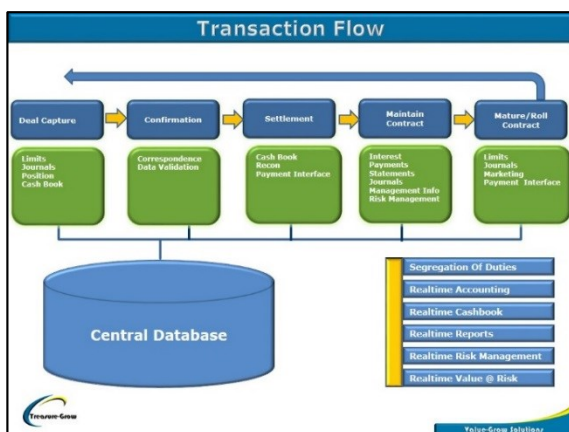
Treasure-Grow minimise transactional inputs and there is no duplication of inputs in the system. The original deal capture is carried through to:

- Limit Management
- Accounting Journals
- Cash Book Administration
- Correspondence
- Reporting

After confirmation of a transaction where the system segregate between the originator of the transaction and the person that do the confirmation, customised correspondence will generate.

All interest payments, statements, accounting, revaluations and reporting are catered for during the life of a contract.

On maturity of a contract the system allows for either the maturity of the contract or the roll over as a new contract with the appropriate cash flows.



## Accounting

The system keeps a sub set of the General Ledger accounts that are applicable to the treasury operation. It keeps the GL account number, the description and whether it is a balance sheet or income statement item. This information together with the journal setup is used to create accounting entries that can be exported the institution's GL or accounting system.

Journals are set up for each transaction type of a specific instrument in a specific portfolio. This allows for different accounting methods or GL accounts for

different portfolios. When a user captures a specific transaction, the parameters that were used to set up the journals will create the corresponding accounting entries.

## Controls

There are different points in the system that underlines the controlled environment. Starting from a secure access to system where users are controlled by a password that needs to satisfy requirements in the complexity of the password and frequency of change.

There are different roles to which a user belongs that can be defined to satisfy requirements. A role can be a dealer or front office users, a back office person or a middle office risk manager. This allows the segregation between different duties in your treasury.

There are also individual instrument limits for each instrument such as rate deviations and dealer limits.

## Security

A user needs a unique ID and password to log into the system. Not only will each activity be linked to a specific user, but also be date and time stamped.

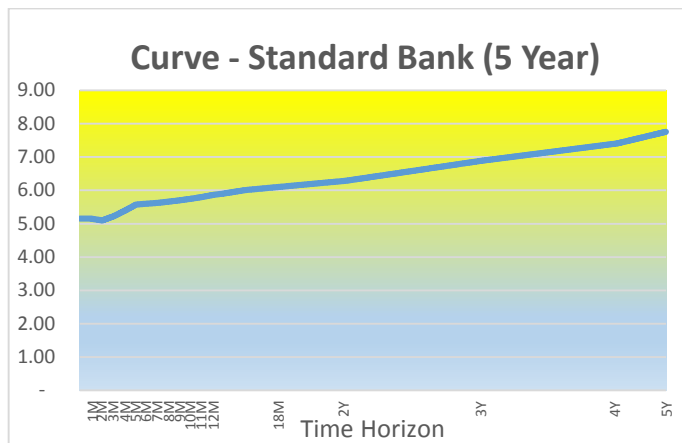
## Audit Trail

There is a comprehensive audit trail that keeps track of all exceptions in the system. This is not only a list of activities but it also keeps track from bridging certain parameters or when a user change information that can create a risk. The audit trail keeps a before-image as well as an after-image of the changed information. For example when a user change an account number and change it back afterwards the system will keep two entries in the audit trail reflecting the exceptional activities.

## Dashboards

The system provides an operational dashboard where all outstanding transactions and activities can be monitored at a glance. It also gives a view of activities done by various users of the system.

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## Reporting

There are various standard reports in the system such as maturity profiles, activity reports, position reports and various statements. All interest rates are converted to a NACM rate so that different instruments and different tenors performance can be compared. Each standard report contains the company logo as well as the user that created the report and the date/time stamp of the report.

Reports and spreadsheets can be customised to be unique and to give a competitive edge over other institutions.

Counterparty correspondence can be generated from existing templates or be customised. The system also creates graphs by using Microsoft Excel.

## Benchmarking

The system has a benchmark facility where the performance of a portfolio can be evaluated against some market indicators. The performance of specific instrument in a specific portfolio can be compared with some market indicators. This is convenient to compare the performance of your treasury operation against certain market standards.

## Productivity

Treasure-Grow is a productivity tool; not only does it improve the productivity of operations, it is also simple and effective to use. There are various utilities that make the capture of amounts easier eg. 1M to capture 1 million or 1K to capture 1 thousand. There is a calendar where transaction dates captured warns of future dates that fall on non-working dates such as weekends and holidays. A value date and a maturity date captured will calculate the tenor of the instrument or a value date and the tenor captured will calculate the maturity date.

Handy financial calculators include an interest rate comparison calculator, a bond calculator to calculate the specific bond's clean price, all-in price and accrued interest for a specific date. It will also show duration, modified duration, delta and rand per point for a specific yield and date. Also available is a cross rate calculator, Installment Calculator and Discount Rate calculators.

## Underlying Software

Treasure-Grow is built on an OpenEdge database with the OpenEdge Advances Business Language development tools. This is a proven robust environment that is used as an underlying architecture in many applications around the world.

## Operational Setup and Implementation

Software implementation is a collaborative effort between the software vendor and the customer. Both are partners in the endeavor and must bring knowledge and skill to the table, together with commitment to spend the necessary time and human resources to ensure a successful implementation.

Treasure-Grow realise that a successful implementation of a treasury operational system involves not only application software and hardware installation, but more importantly in managing changes and risks to the user's working environment.

It is through thorough planning, realising risks, and management of change that we believe an application can optimise our customer's business processes, to increase productivity and efficiency.

## Contact



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