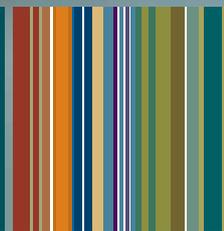
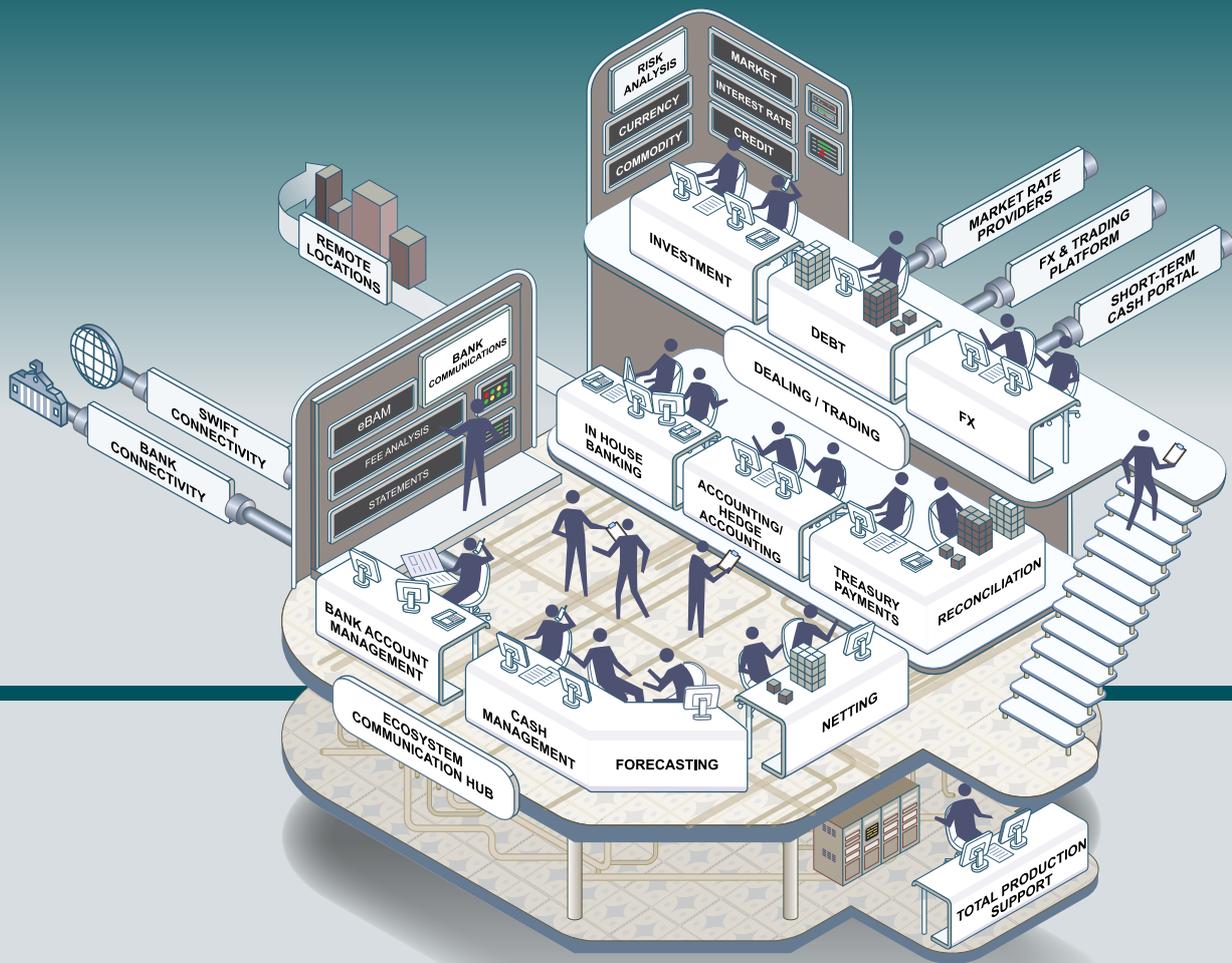


**SUNGARD®**

**AVANTGARD**

Treasury, liquidity risk, and cash management






 AvantGard treasury, risk, and cash management solutions help meet the emerging challenges of today's treasurer by driving automation, visibility, and collaboration.

# AVANTGARD TREASURY

## INCREASED VISIBILITY TO CASH AND RISK

No longer limited to basic cash, funding, investing, and compliance duties, treasurers today must ensure their organizations have access to sufficient cash balances and credit facilities while complying with the rules of all the regulatory jurisdictions in which they do business.

Navigating these challenges, along with ever-increasing market, liquidity, currency, and counterparty risks, requires advanced solutions that leverage new technologies and connectivity platforms.



AvantGard offers a full range of solutions from basic cash management to sophisticated risk analysis

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### Overcome the challenges

Along with modeling and analysis tools, treasury, risk, and cash management solutions deliver integration, automation, visibility, and collaboration capabilities that help treasurers manage risk, maximize liquidity, and drive growth.

Whether your organization has a small domestic treasury team or a complex multi-national treasury department, SunGard offers award-winning solutions designed to address your critical requirements. SunGard's AvantGard Treasury suite includes a full range of solutions, from basic cash management to sophisticated risk analysis, which can provide better visibility and management of cash and risk across your enterprise.

# CASH AND LIQUIDITY MANAGEMENT

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## Cash visibility - "Where is my cash?"

Real-time views of cash positions are fundamental to the strength of every organization, as they enable corporations to improve decision-making around working capital.

### SunGard's AvantGard Treasury:

- › Retrieves, monitors, and manages data inputs from all counterparties on a scheduled basis
- › Automates cash reconciliation by validating balance and transaction imports based on user defined rules
- › Prepares multi-currency cash positions based on user defined categories that enable toggling between base currency and transaction currency
- › Provides real-time awareness of key exposures
- › Improves financial risk management by identifying cash at risk
- › Strengthens controls and SOX compliance

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## Cash forecasting - "What are my expected cash flows?"

Too significant and costly to be left unattended, liquidity must be monitored at a global level.

### SunGard's AvantGard Treasury:

- › Creates projected financial cash flows
- › Collects operational cash forecasts from remote subsidiaries via the web
- › Imports cash flows from other systems
- › Generates cash forecasts of expected cash flows
- › Predicts future cash flows based upon historical cash flows
- › Provides an early warning system of cash surpluses and deficits
- › Permits regular variance analysis to track forecasting performance
- › Determines appropriate levels of forecasting precision by defining acceptable variances

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## Cash mobility - "Can I move cash?"

A secure and transparent framework to manage cash movements is an essential component of any corporate treasury department.

### SunGard's AvantGard Treasury:

- › Helps deploy cash when and where it is needed
- › Centralizes and standardizes treasury payment processing
- › Secures treasury payment management
- › Distributes and controls treasury payment information flows
- › Controls treasury payments processes and ensures segregation of duties
- › Enables fund movements to meet funding and investing decisions
- › Initiates bank-to-bank target balance transfers
- › Helps reduce transaction costs

# RISK MANAGEMENT AND COMPLIANCE

AvantGard Treasury accommodates the needs of a treasury organization that manages multiple currencies, interest rate positions, and commodity risks. These can all be consolidated within AvantGard Treasury and managed across the organization as a whole via an overall risk position or viewed and measured at a portfolio or individual trade level.

**AvantGard Treasury has a rich variety of risk management and compliance tools including:**

- › Liquidity management
- › Mark to market revaluation and credit adjustments
- › Interest rate sensitivity analysis
- › Currency sensitivity analysis
- › Multiple Value at Risk (VaR) methodologies
- › User limits for dealing, authorization, and settlements
- › Counterparty and credit risk
- › Bank facility exposure management
- › Full accounting capability including FAS 133 and IAS 39

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## Interest rate risk management

Manage fluctuating interest rates using a wide range of interest rate derivatives and risk management tools, including Value at Risk (VaR), interest rate modeling, and limits management.

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## Currency risk management

Manage foreign exchange risk using a wide variety of currency derivatives and risk management tools, including Value at Risk (VaR), scenario analysis for both FX and volatility rates, and limits management.

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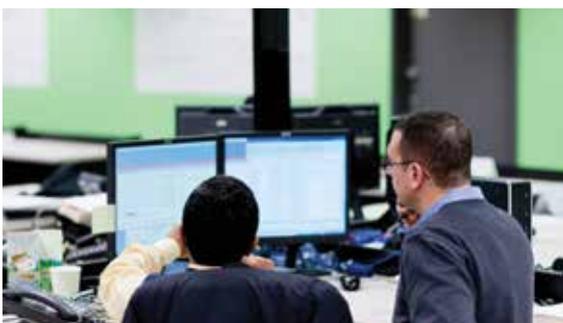
## Commodity risk management

Commodity functionality covers exchanges, volumes, basis swaps, commodity swaps and strips, forwards, options, and more for all globally traded contracts and derivatives.

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## Counterparty risk

In today's economic environment, corporations must closely monitor banking and trading partner relationships. With a comprehensive view of exposure, including ratings, liquidity, equity price, and CDS spreads, companies can better manage the risks associated with their counterparties.



# DEBT AND INVESTMENT MANAGEMENT

Debt and investment management covers a wide range of asset classes, including borrowing facilities and credit lines, short-term cash and money market funds, certificates of deposit (CDs) and other discounted securities, equities, and tradeable debt instruments. Functionality includes the ability to import data from custodial accounts. The management of fees on debt facilities and issuance is integrated into the solution and revaluations are based on current market rates.

## ADVANCEMENTS DEFINING THE NEXT GENERATION OF TREASURY TECHNOLOGY

Michael Bosacco, vp of treasury solutions at SunGard's AvantGard - [gtnews.com](http://gtnews.com)

Treasury's increasing ability to impact the bottom line has resulted in a renewed focus on cash forecasting and global cash management, interest rate and foreign currency risk management, and overall working capital management. Through such measures as fostering automation and connectivity, as well as offering improved control and visibility over data, a Treasury Management System (TMS) helps treasurers meet the demands of their role while drastically improving the quality of operations. Treasury technology is becoming a priority for many corporations because it is flexible enough to support basic cash management, as well as complex debt and investments. In fact, many of today's best-in-class treasury systems are truly global in nature and able to support everything from Brazilian tax calculations through to double-byte characters.

The functionality provided by a TMS can help treasurers meet the demands of today by empowering them to easily consolidate and aggregate disparate sources of data and pinpoint global cash positions for better decision making. Automation provided by a TMS expedites data collection of bank balances and transactions (domestic and international) enabling information to easily be exchanged and made actionable. This supports the treasury in accurately forecasting cash and liquidity requirements and making better investment and borrowing decisions. Furthermore, the ability to pinpoint a global cash position facilitates corporations in identifying surplus cash, which may then be used to pay down debt or even reallocated to provide inexpensive finance for new initiatives.

# ACCOUNTING

All treasury activity must comply with the many financial jurisdictions in which a multinational corporation has a presence.

**Accounting for treasury activities includes:**

1. **Standard accounting** for cash flows and bank account data
2. **Accounting for complex financial instruments**
3. **Compliance with hedge accounting standards for effectiveness testing**

## Standard accounting

Treasurers must produce timely and accurate accounting information for all cash movements and activity across bank accounts.

**SunGard's AvantGard Treasury:**

- › Provides a treasury sub-ledger which maintains a standard chart of accounts for each business entity for which accounting information is required
- › Prepares accounting for bank account activity based on user defined categories and transaction mappings
- › Enables the treasury department to automate accounting entries for a significant proportion of cash flows reported

## Accounting for complex financial instruments

Treasury transactions can vary in complexity from simple loans and deposits through to structured derivative instruments with optionality and variability.

**SunGard's AvantGard Treasury:**

- › Provides flexible setup options to accommodate multiple methods for valuation and accounting treatment
- › Calculates accruals and revaluations for all supported financial instruments
- › Calculates accounting treatments, including reversals and realized and unrealized statuses of all accounting entries by transaction

## Hedge accounting

A good and thorough understanding of hedge accounting requirements and practices is necessary to develop an effective hedging strategy that will not inadvertently affect the profit and loss of the business.

**SunGard's AvantGard Treasury:**

- › Provides the ability to match hedging to underlying exposures for effectiveness testing
- › Supports prospective and retrospective regression testing
- › Provides full disclosure of P&L/OCI postings per accounting period
- › Provides comprehensive testing methodologies to support global hedge accounting disclosure requirements
- › Provides a full suite of reports detailing all hedge accounting relationships, along with full drilldown to revaluation for audit purposes
- › Enables treasurers to test hedge accounting relationships using scenario analysis to ensure effectiveness and likely P&L impact



# TREASURY OPERATIONS

AvantGard Treasury solutions can help minimize repetitive processes that can introduce errors. Efficient use of automated tools and interfaces minimizes operational risk.

**Four key areas within a treasury department are enhanced by the use of AvantGard Treasury:**

## 1. Reconciliation

## 2. Treasury Dealing (investing, borrowing, and FX)

## 3. Confirmations

## 4. Settlements

### Reconciliation

A fully reconciled view of treasury accounts is a critical starting point for determining daily cash positions.

#### SunGard's AvantGard Treasury:

- › Automates cash reconciliation by validating balance and transaction imports based on user defined rules
- › Provides exception based reporting on account balances and rogue payments and receipts
- › Provides intra-day reconciled positions as and when available by bank

### Treasury dealing and confirmations

Manually entering deals generated from electronic trading platforms can introduce data entry errors that negatively impact downstream processes and reports.

#### SunGard's AvantGard Treasury:

- › Provides connectivity to different dealing platforms for automated deal entry
- › Supports integration to foreign exchange, investment, and derivative portals providing real-time position updates
- › Enables workflow controls based on dealing and confirmation status
- › Provides quote management for competitive analysis on dealing platforms

### Settlements

Secure, guaranteed, and efficient movement of cash is a critical element of a treasury management solution.

#### SunGard's AvantGard Treasury:

- › Generates cash flows relating to all transactions for the life of the transaction
- › Provides customizable entry screens and web based options for remote input of treasury wires/payments and urgent settlements
- › Enables the configuration of a comprehensive workflow for authorization, segregation of duties, and tiered approval requirements
- › Provides straight through processing and straight through reconciliation to and from multiple payment channels
- › Provides mobile platforms for phone and tablet payment initiation based on definable templates



# OTHER FEATURES AND CAPABILITIES

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## In-house banking

An in-house bank provides the information flow and control of the treasury operations required by the treasury center. It also provides advantages for subsidiary companies in the form of a centralized service center. The treasury center acts as the bank for the subsidiaries, with the subsidiaries essentially becoming customers of the corporation center. In particular, companies seeking to centralize and control corporate treasury operations across a multinational organization can benefit from in-house banking.

### Functions of the in-house bank

- › Manage inter-company accounts
- › Provide statements with detailed balance and transaction information for account holders (subsidiaries)
- › Allocate interest on account balances
- › Receive advices for incoming flows
- › Confirm and allocate external cash inflows and outflows to the appropriate subsidiaries
- › Centralize payment services so that the subsidiaries prepare payment details and then transfer that information to the center, which acts as the paying agent
- › Transfer funds on behalf of the subsidiaries
- › Simplify the settlement of inter-company payments and receipts via multilateral netting

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## Netting

The AvantGard Treasury netting solution is a comprehensive multilateral netting product that allows a global organization to efficiently manage inter-company transactions.

It allows organizations to efficiently manage and reduce inter-company payables/receivables into single net settlement flows for each participating entity. This module is designed to meet all the needs of netting administrator/center and its netting participant.

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## Remote access

Transparency and a single view of cash and risk across an organization is often a daunting task, as many companies operate with disparate business units and subsidiaries. A remote access portal gives external locations the ability to submit financial transactions, funding requests, and forecast information to the central treasury. The portal also allows subsidiaries to download self-service reports as required.

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## Bank fee analysis

The AvantGard Treasury bank fee analysis solution permits organizations to evaluate, manage and report information pertinent to bank account charges.

This module receives and parses electronic data in multiple formats; it automates bank compensation analysis to produce timely reports on bank services, fees, and compensation practices, and efficiently tracks trends and differences in bank service charges.



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## Money market portal

SunGard provides solutions for multi-national corporations looking to diversify short-term investments, enhance returns, mitigate currency risk, and better manage cash holdings across the organization. The SunGard Global Network (SGN) Short-Term Cash Management portal enables corporate treasurers to research, analyze, trade, settle and report on money market funds through a single connection. With its provider-neutral, multi-fund trading platform, SunGard's Short-Term Cash Management portal allows accounting and audit teams to monitor trades, track and report on outstanding holding. Through a fully disclosed trading model, the SGN portal helps ensure that customers are able to retain their relationships with the fund providers.

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## Money market portal - investment risk analysis solution

The SunGard Global Network (SGN) investment risk analysis solution provides readily actionable data to corporate treasury departments to help reduce inefficiency in the fact-gathering process. Consolidating and analyzing risk and return information today can be both time consuming and challenging. This investment risk analysis solution helps you research relevant and valuable investment information crucial to short-term cash management, while giving you the visibility needed to help guide critical investment decisions.

When performing any type of risk analysis, SunGard understands that having accessible and accurate information is vital. The SGN Short-Term Cash Management Portal's investment risk analysis solution was designed specifically to help meet that information need. Through its intuitive interface, the investment risk analysis solution helps aggregate and organize your credit data on demand to create reports that can be viewed either onscreen or printed out.

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## Reporting and dashboards

AvantGard Treasury offers several methods of extracting and reporting data to address key reporting requirements:

- › **KPIs (Key Performance Indicators):** A KPI dashboard provides an overview of key metrics such as cash position, bank balances, exposure management, payments falling due, and facilities headroom.
  - › **Ad Hoc Reports:** Beyond standard reports, treasury practitioners often need to quickly create custom reports. The ability to quickly build reports and present data graphically or in a tabular format with drill down capability can be a necessity. Mobile access can also be helpful for viewing results outside the office.
  - › **Concise and Accurate Reporting:** For audit and control purposes, treasurers need a set of "statement of record" reports showing investment, debt, and currency positions along with exposures, accounting results, and other key metrics
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# A FULLY MANAGED BANK CONNECTIVITY PLATFORM WITH SWIFT SERVICES

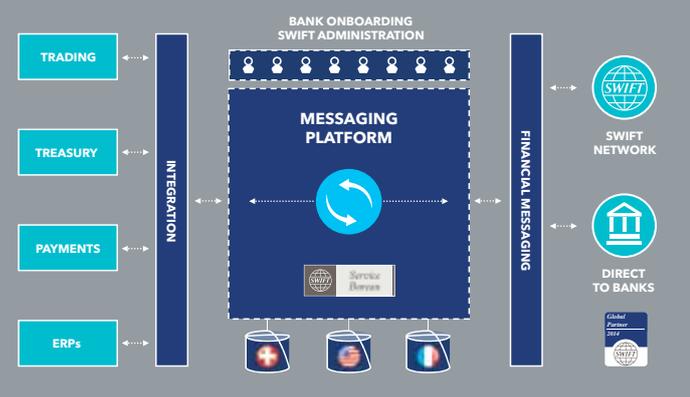
Treasury and payments solutions require secure and reliable connections to banking partners. SunGard offers a fully managed and comprehensive bank communications channel to securely connect treasury and payments solutions to banking partners through either direct or indirect connectivity (SWIFT or other exchange / network).

SunGard offers a single platform approach where the bank connectivity solution is embedded within the treasury and payments offering - with ongoing managed bank connectivity services.

If the client opts to leverage SWIFT connectivity, SunGard can manage the entire relationship from administration to onboarding for any SWIFT member bank. The connectivity can be facilitated via any of SunGard's three SWIFT Service Bureaus (SSBs) which are located in France, Switzerland and the United States.

Working in close collaboration with SWIFT, SunGard offers a unique perspective in that SWIFT and SunGard share the same underlying financial messaging platform. Further, SunGard is well positioned as a top tier partner with SWIFT as one of only five companies to attain Key Relations status.

## MANAGED BANK CONNECTIVITY



 A messaging hub run by treasury and payments experts: Corporations benefit from a single connection that sends and receives communications across worldwide treasury and payments operations.

# FLEXIBLE DEPLOYMENT OPTIONS

AvantGard offers a holistic approach to solution delivery including application delivery, infrastructure and domain expertise. Customers can opt to deploy the SunGard solutions in-house with a license-based model, in a hosted environment, or as an on demand service.

**On-Premises:** SunGard provides a full range of consulting and training services to support on-premises implementations, including:

- **System Integration:** Most organizations require some level of integration between various unconnected systems located both within (e.g. ERP or order entry systems) and outside the organization. AvantGard aims to provide market neutral / vendor neutral connectivity through system integration services between back-office systems and external partners such as banks, FX platforms, credit data providers and more.
- **Business Workflow:** At each point in the ecosystem there exists transfer of information and workflow. Certain areas require that workflow is configured to match in-depth business processes beyond the workflow inherent in the AvantGard solutions, for this we offer enterprise workflow solutions configured to meet your specific requirements.

**Hosting Services:** Hosting licensed software with a third party is an approach that can help lower total cost of ownership (TCO) and ensure that the business has access to the technology that it needs without impacting the local IT department and infrastructure. SunGard AvantGard takes this to the next level by offering hosting via a domain expert.

**Software-as-a-Service (SaaS):** The on demand delivery of treasury solutions allows customers to access the solution via a subscription based web application. By entrusting SunGard's domain experts to take responsibility for all of the technical tasks surrounding the support and upkeep of their software solutions, customers have more time to concentrate on utilizing their systems to meet their business goals.



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 visit: [www.sungard.com/avantgard](http://www.sungard.com/avantgard)

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## ABOUT SUNGARD'S AVANTGARD

SunGard's AvantGard is a leading liquidity and risk management solution for corporations, insurance companies and the public sector. The AvantGard solution suite includes credit risk modeling, collections management, treasury risk analysis, cash management, payments system integration, and payments execution delivered directly to corporations or via banking partners. AvantGard solutions help consolidate data from multiple in-house systems, drive workflow and provide connectivity to a broad range of trading partners including banks, SWIFT, credit data providers, FX platforms, money markets, and market data. The technology is supported by a full range of services delivered by domain experts, including managed cloud services, treasury operations management, SWIFT administration, managed bank connectivity, bank on-boarding, and vendor enrollment.

For more information, visit [www.sungard.com/avantgard](http://www.sungard.com/avantgard)

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## ABOUT SUNGARD

SunGard is one of the world's leading software and technology services companies, with annual revenue of about \$2.8 billion. SunGard provides software and processing solutions for financial services, education and the public sector. SunGard serves approximately 16,000 customers in more than 70 countries and has more than 13,000 employees.



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