

System Overview

TPG Trader® is our “front-to-back” real-time processing solution that integrates all trading and investment activities across multiple asset classes, offering breadth as well as depth of functionality

The latest arrival to our remarkable product line is *TPG Trader®*. Developed through collaboration with our clients, and with the unique challenges and requirements facing the financial industry in mind, the *TPG Trader®* system offers the ability to experience straight through processing with your fixed-income portfolios. *TPG Trader®* is fully integrated with our core portfolio management and accounting system, *Portfolio Genius®*, and easily accommodates the wide array of security instruments and structures available to sophisticated investment professionals.

From sales to the operations desk, to trading and risk management, *TPG Trader®* coordinates all of your firm’s efforts into one easy-to-use solution.

The *TPG Trader®* system:

- Provides positions and exposures in real-time with immediate access to underlying trades
- Processes exotics and structured products as easily as any vanilla items and provides an array of tools for controlling operational risk while meeting stringent GAAP and FAS accounting standards
- Provides for an automated link to *Bloomberg Data License®* for indicative data as well as verification and reconciliation of trades
- Delivers technological advantage with Microsoft's .NET smart client, real-time services and advanced financial engineering

Instrument Coverage

Bonds

- Structured
- Callable
- Step-Up
- CMO
- ABS
- MBS
- CMBS
- Government
- Corporate
- Inflation-linked Securities
- Municipals

Fundings

- Standard Repos
- Reverse Repos
- Open-ended TFN
- Open
- Multiple Collateral
- Fixed/Floating Rate
- Collateral Only
- Cash Only
- Security Lending/Borrowing
- Buy/Sell Backs
- Tri-Party
- Central Bank

System Functionality

Key Features

TPG Trader® has three available modules with each designed to handle a specific group of securities to trade: the **Fixed Income Module** processes trading for fixed income securities; the **Repo Module** processes trading for Repos and Reverse Repos; and the **Funding Module** processes trading for Fed Funds and Money Markets.

Other key features include:

- User-configurable quick trade entry screen accommodates busy and high-trade environments
- Full integration with TPG's core investment and liability accounting system, *Portfolio Genius*®
- Full control of issuance workflow and transaction entry (initial, reopen, repurchase, and call)
- Automatic generation of trade tickets, confirmations, etc.
- Pricing grid management and "what if" analysis
- Flexible and extendible price/yield calculation methods
- Powerful valuation and analytics functionality, including direct or indirect spread-based valuation methods for pricing
- Configurable bond trade and trade desk inventory
- Interfaces in real time for security terms and conditions
- Built-in billing and commission tracking and reporting

Real Time Position Views and Blotters

The real-time position viewer gives your exact position and exposure, including underlying positions, mark-to-market, and profit and loss. The system provides trade drilldown, built-in calculators and customized reporting. Repos are shown, as well as the underlying bond positions. The window contains all necessary repo trade details, including collateral, quantities, repo rates, start and end dates, and more.

Funding

TPG Trader® provides pricing grid management and "what-if" analysis, as well as pricing, management, and full support for repos across any period and coupon dates. The system provides automatic creation of all documentation, including physical and cash transfers. Cash and collateral management related to the repo is handled automatically with full support for haircuts and collateral substitution. Margin reports include trade drilldown or counterparty summary format substitution and adjustment of existing collateral. And the system provides interim interest, full or partial, with an option to force interim cash clean-up prior to a repo's maturity, and complete control of capitalization features.

System Functionality and Technology Platform

Additional Funding Features

- Full trade capture, date and time stamping, and analytics functionality
- TBA processing
- Front-to-back straight through processing to the accounting engine
- FAS 91, 115, and 133 compliant accounting links
- Support for repos and reverse repos, as well as outright trades

Interfaces and Valuation Models

- Ability to capture terms and conditions from *Bloomberg Data License*®
- Interface provides securities' terms and conditions, including projected cash flows of complex structures for proper deal capture
- Integration of any third party's data sources and models (*Interactive Data, Yield Book, etc.*)
- Support for major static prepayment conventions, including PSA and CPR, and all the models supported by *Bloomberg*® products (*Davidson, Manufactured Housing, etc.*)

Technology Platform

TPG's Windows-based systems are developed using the latest software tools and languages. The system's database manager can be maintained in either Microsoft SQL Server 2005 or Microsoft SQL Server 2000 (with the latest service pack) and the user interface was built using Microsoft Visual Basic.NET. The report writer uses both Crystal and Microsoft Reporting Services.

TPG's **Client-Server Architecture** contains a client workstation and a server—the business logic is shared. The business and data tiers are both installed on a shared back-end server. Provided below are TPG's recommended hardware and software specifications to deliver the best performance for a database containing up to 6,000 positions.

Hardware/Software Requirements for Client Workstation

- Processor – 2 GHz Pentium 4 processor (or greater)
- Memory – 1 GB RAM (or greater)
- Free Disk Space – 100 MB (or greater)
- CD-ROM Drive - Required
- Network Connection – LAN connection
- Monitor – High color 16-bit capacity, set to 1024x768 pixel resolution
- Software – Microsoft Windows XP, Microsoft Office 2003 (or higher)
- Software – Microsoft .NET Framework 3.5
- Software – Microsoft Data Access Components (MDAC) 2.8

Technology Platform

Hardware/Software Requirements for Data/Application Server

- Processor – Dual 3 GHz Intel Xeon processors (or greater)
- Memory – 4 GB RAM
- Free Disk Space – 60 GB or greater (15,000 RPM SCSI Drives), extra for Web reports
- CD-ROM Drive - Required
- Network Connection – LAN connection
- Monitor – Access required
- Software – Microsoft Windows Server 2003 (with latest Service Pack)
- Software – Microsoft SQL Server 2005 (with latest Service Pack) which includes the Microsoft Reporting Services (MRS) report writer
- Software – Microsoft IIS 6.0 (for Microsoft SQL 2005)

Please Note: The performance of TPG's systems is enhanced dramatically as the processor speed and RAM of your server(s) are increased.

Recommended Architecture

The diagram displays the recommended architecture for TPG systems:

