



## Princeton Financial Systems Collecting Dividends by Investing in Citrix

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**CHARLIE MORRIS**

Chief Technology Officer,  
Princeton Financial Systems

Princeton Financial Systems, a wholly-owned subsidiary of State Street Corporation, provides a prestigious list of global institutional investors with portfolio management, accounting solutions and ASP services. The company's PAM® family of investment solutions is used to manage approximately US \$3 trillion in assets worldwide, and is ranked the number one portfolio management system in the mutual fund, insurance, and pension fund industries.

### THE CHALLENGE: SECURE, RELIABLE ACCESS TO INSTITUTIONAL PORTFOLIO INFORMATION

Since 1987, Princeton Financial has offered its investment and portfolio management software as a hosted solution for clients. However, the software was delivered via a cumbersome, dial-up environment that was labor-intensive and high maintenance. According to Charlie Morris, Chief Technology Officer for Princeton Financial Systems, “Our clients wanted us to provide a hosted portfolio management solution so they could focus on the entire investment process. They wanted to rely on us to provide a secure, cost-effective, and fully supported technological environment. However, we needed to do so in a way that would scale with our business and significantly lower our maintenance costs.”

### IMPLEMENTING A CITRIX SOLUTION FOR APPLICATION DEPLOYMENT

In 1999, Princeton Financial developed an access strategy for both its clients and employees based on Citrix® access infrastructure software. Using Citrix MetaFrame® Presentation Server as the application deployment platform, the company offers ePAM, a hosted, web-based investment and portfolio management solution, to its clients. The Citrix solution provides a far more manageable environment for the IT group and gives clients a secure, seamless, and trouble-free desktop experience.

In recent years, Princeton Financial has expanded its client base and the Citrix infrastructure has scaled with it. Today, more than 1,000 institutional asset and portfolio manager users access the hosted ePAM application bundled with Cognos Impromptu and PowerPlay software via Citrix MetaFrame Presentation Server

### Key Benefits

- Security and identity management for trillions of dollars of asset data
- Enables application hosting and support worldwide, around the clock
- Keep pace with expansion while controlling costs
- Simplify, protect, and secure offshore development

### Applications Deployed

- PAM® and ePAM Investment and Portfolio Management solutions, bundled with Cognos Impromptu and PowerPlay (OLAP) software
- Onyx Enterprise CRM
- Microsoft® Office Suite: Microsoft Visio, Query, Access, Project, and FrontPage

running on Microsoft® Windows Server™ 2003 and Microsoft Windows® 2000 Servers.

The company also uses its Citrix solution to provide 160 employees, located at its New Jersey headquarters and in satellite offices in the U.K., Toronto, Sydney, and Singapore, with tools for supporting clients, as well as a wide range of business management and product testing software. Applications delivered via the Citrix infrastructure include Onyx Enterprise CRM Financial Tools and Support Center, Crystal Reports, and the Microsoft Office Suite.

#### THOUSANDS OF INVESTORS AND TRILLIONS OF DOLLARS LATER

As Princeton Financial has evolved and grown, its Citrix-based solution has become core to the business. “Citrix is a strategic, enabling technology for us,” noted Morris. “We couldn’t run our business efficiently without it. Institutional investors worldwide use our ePAM software, running on a Citrix infrastructure, to manage more than US \$3 trillion in assets worldwide.”

The Citrix access strategy enables Princeton Financial’s clients—including leading institutional investors—to manage huge and complex fixed income and equity portfolios, view real-time trade date positions, and carry out compliance reconciliation—all with the assurance that financial transactions are protected. Clients log in to a secure Web site and gain a single point of access to investing information. Centralized management of information access, based on identity rights, as well as load balancing capabilities, make the solution both secure and efficient.

“With this solution, our clients aren’t required to install anything special like unique passwords or VPN software on their access devices,” observed Morris. “Citrix provides us with a very low-maintenance approach that enables clients to manage trends, asset values, and risk/return ratios from any Web browser, based on who they are—not where they are located.”

The company has even certified Citrix as a recommended application deployment infrastructure for its PAM investment solution. In fact, many clients who don’t avail themselves of the company’s ePAM hosting services use Citrix for PAM application deployment. “For example,” said Morris, “A Fortune 500 insurance company uses a Citrix solution to host PAM in its New York office and deploys it worldwide to all of its sites.”

#### THE MARKET NEVER CLOSES SO CLIENT SUPPORT NEVER STOPS

As stock markets open and close around the world, Princeton Financial leverages its Citrix infrastructure and its overseas offices to provide continuous client business and technical support. “From the U.S. to the U.K., and on to Sydney and Singapore, we are able to seamlessly support clients by ‘passing the support book’ across time zones,” Morris remarked.

“Instant access is also important for our worldwide sales effort,” he added. “When a prospective client wants to see how our investment software works, we can show them from anywhere in the world—all we need is a computer with a Web browser.”

#### Networking Environment

- Citrix® MetaFrame® Presentation Server running on 28 HP DL360 servers
- Microsoft® Windows Server™ 2003 and Windows® 2000 Servers
- LAN, Frame Relay WAN, Internet connections
- Dell and IBM laptops and workstations

#### MANAGING THE SECURITY RISKS OF OFFSHORE DEVELOPMENT

In addition to application hosting, application deployment, and client support, the company has extended its Citrix solution even further by creating a development portal that acts as a virtual office for offshore software development efforts conducted in Mumbai, India.

“Although offshore development is cost-effective, it poses security issues and questions of international law,” commented Morris. “We needed to control and manage the development environment, but still give programmers access to our source code and the ability to compile programs. The development e-portal, running on Citrix access infrastructure, provides offshore developers with secure access to our source code via the network instead.” This innovative approach lets Princeton Financial protect its source code and resources while, at the same time, saving time and money.

#### FUTURE PLANS

The company is currently enhancing both its client and internal disaster recovery sites by fully integrating them with the Citrix MetaFrame Presentation Server farm, which will keep financial information flowing continuously and without interruption.

**About Citrix MetaFrame Access Suite:** Extending the world’s most widely deployed presentation server, the Citrix MetaFrame Access Suite is access infrastructure for the on-demand enterprise. The suite centralizes access to applications and information and enables IT staffs to deliver, manage, monitor and measure enterprise resources on demand.