



FINANCIAL SERVICES

White Paper

TOP THREE CHALLENGES FOR FILE TRANSFER AND APPLICATION INTEGRATION IN THE FINANCIAL SERVICES SECTOR

Firms in the Financial Services industry continue to try and improve their efficiency, security and their bottom line – and it can be surprising how big a role both file transfer and application integration services can play in that effort. This paper will examine the three specific and unique challenges faced by today's financial services firms, and provide guidance on the capabilities and techniques that they'll need to acquire or evolve in order to solve those challenges.

Financial Services firms are transferring and translating huge amounts of data every day, and many of them are spending an enormous amount of time and money to manage primitive, manual processes. There's no need to do that, especially since modern techniques can handle those processes more automatically, and with greater security and visibility.

OVERVIEW: MODERN FILE TRANSFER AND APPLICATION INTEGRATION

"File transfer" is a broad term that impacts many layers of an organization. It may involve transferring data internally, between your own systems and processes. It may include transferring data between your systems and those of outside business partners. In some cases, it may involve the ad-hoc transfer of data between individual users or systems. Some file transfer activities may also include integration tasks, such as translating, transforming, or verifying data before loading it into the destination system or process. Whatever the specific use, the general idea is that data is moving from one place to another, and perhaps being manipulated as it is being moved. These file and data transfers have become numerous enough, and complicated enough, that an entire industry has risen around them to provide *managed* file transfer, or MFT, which refers to a set of tools and techniques used to ensure the proper operation of these crucial file and data transfer tasks.

Historically, organizations have often taken a do-it-yourself (DIY) approach to file transfer. Decades-old protocols like FTP are well-understood and often easily scriptable, to a point. However, as organizations have adopted more security requirements, smaller operational time windows and vastly larger data sets, and as compliance requirements become more stringent, these DIY approaches have often proven insufficient or overly difficult. Nowhere is that more true than in the financial services realm, where security is paramount, and where unique business drivers quickly make DIY techniques not only undesirable but completely unacceptable.

THE TOP 3 CHALLENGES FACED BY FINANCIAL SERVICES FIRMS

It's not entirely accurate to say that challenges like security and operational stability are unique to the financial services industry. However, financial services firms certainly do have a heavy focus on certain common business issues, simply because of the nature of the data that these firms must deal with. The unique business environment of the financial services industry also creates unusual technical requirements and concerns that aren't often observed elsewhere.

CHALLENGE ONE: EFFICIENCY. RELIABILITY. PERFORMANCE.

Financial services firms have astonishingly little room for error. They deal in incredible volumes of data, must process that data in extremely short time windows and must be absolutely 100% accurate in every operation they undertake. Financial services customers expect companies to be available 24x7x365, meaning every service simply must be online and working all the time.

Traditional approaches tend to fail every one of these business requirements. Consider custom-scripted solutions, for example, which range from simplistic FTP scripts to elaborate, multi-step scripts written in a variety of programming languages. These tend to be inefficient when dealing with the volume of data that financial services firms must transfer, simply because these scripting languages were never designed for that level of performance. Scripted solutions are difficult to make highly-available, meaning that a failure can prevent data transfers from happening – something that financial services firms can't allow to happen. These solutions are often costly to maintain, usually requiring specialized on-staff expertise and placing firms in the unfortunate position of relying a great deal on just one or two skilled individuals to support critical business processes. An enormous amount of time and money can be required to make custom-scripted solutions even somewhat reliable, as their programmers must be prepared for a variety of failure situations that often can't be anticipated in advance.

Performance is something that almost any business considers important, but the scale of performance in a financial services firm is particularly challenging. Firms are processing more and more data every day, and must meet customer expectations to do so faster and faster. For example, when a customer wants to transfer rewards points from a credit card to a partner airline, they want that transaction to occur as close to instantly as possible. These shrinking processing windows create challenges for low-performance custom-scripted solutions, as well as for low-end off-the-shelf software packages.

CHALLENGE TWO: SECURITY AND COMPLIANCE

"Security" and "Compliance" are probably two of the biggest and most unique business drivers for financial services firms. It's obvious that the data dealt with by these firms is extremely sensitive; government and industry regulations recognize that sensitivity and place an enormous burden of responsibility on financial services firms to protect and monitor the use and disclosure of that data. That responsibility creates a cascade of technological and business requirements.

One of those is a need for the absolute best encryption technologies, including government-certified encryption modules that protect data not only while it is being transmitted, but also while it sits "at rest" on whatever systems or servers that are processing it. Authentication is also crucial, with a need for stronger and more reliable authentication mechanisms than simple user names and passwords – such as strong, multi-factor authentication.

Visibility is another strong requirement. It isn't enough to simply be compliant with the rules and regulations affecting your firm, you must also be able to demonstrate that compliance through detailed audit logs and record keeping. That means generating audit entries each time a piece of data is touched, moved, accessed, or manipulated in any way. Even a fully-compliant firm faces enormous penalties for failing to demonstrate that compliance through acceptable audit logs. A firm that fails to comply – meaning they permit improper access to data – faces not only fines, but also significant public damage, loss of business and more.

Manageability and governance are also key drivers. Firms are continually seeking to improve their bottom line by reducing their overhead, and to manage their IT systems according to industry and regulatory best practices and requirements.

All of these requirements – security, auditing, and manageability – are increasingly difficult, if not impossible, to meet using low-end or custom-scripted solutions. Those solutions were simply never designed with financial services firms' modern needs and requirements in mind; without a foundation designed to meet these needs, it's almost impossible to actually meet them. You can't, for example, simply tack on auditing to an FTP script. You can't run out and buy encryption software that integrates tightly enough with a low-end solution to provide truly end-to-end protection for your data. These requirements can't be met through patches, add-ons, or in a piecemeal fashion: They must be an integral part of a complete solution.

CHALLENGE THREE: THE NEED TO CENTRALIZE AND CONSOLIDATE

Financial services firms are increasingly dealing with complex mergers, acquisitions and other business activities that result in a significant amount of redundancy in the combined organization. In addition, years of past effort by business divisions, projects and other internal elements have also resulted in a great deal of overlap, repeated effort and redundancy. Redundancy of this kind invariably equals increased cost and risk, and firms are justifiably trying to reduce both.

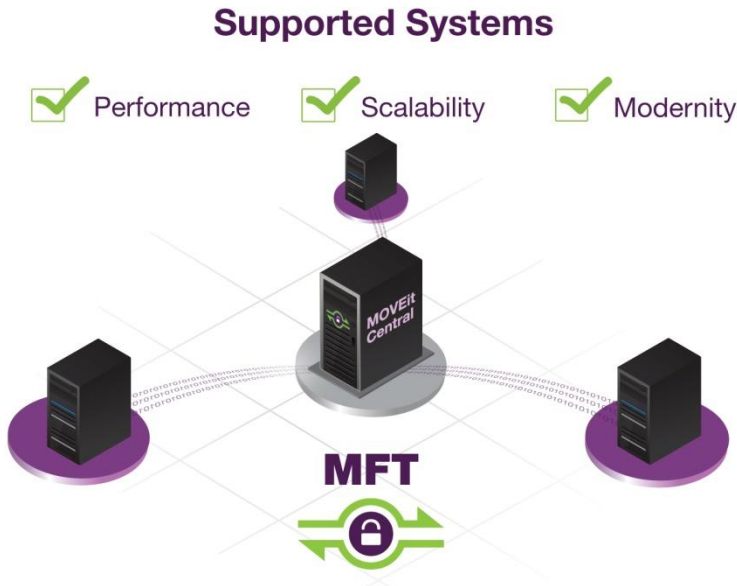
In the case of mergers and acquisitions, firms may be seeking to move data between systems for a period of co-existence, with the goal of eventually eliminating redundant systems and consolidating onto a single system. In the case of varied internal projects and departments, firms are looking to consolidate redundant functionality into a single, easier-to-support, more consistently-manageable solution.

That latter goal is increasingly being pursued by financial services firms of all sizes, and particularly in the area of managed file transfer. Numerous internal departments and divisions may have built or acquired MFT solutions for various projects; these often differ significantly in capabilities, manageability and in their operational configuration. In order to reduce overhead, improve consistency and manageability, and to improve security and compliance, firms want to eliminate all of those point solutions and adopt a single, fully-capable platform that can take over for all of them. Such a system could be maintained by a central IT team and offered as a service to the firm's various divisions, enabling each division to continue managing its own resources, but to do so in a way that is consistent with top-down policies and requirements.

MEETING THE FILE TRANSFER AND APPLICATION INTEGRATION CHALLENGES

A modern breed of Managed File Transfer solutions exists that can meet the specific and unique challenges of financial services firms. The next three sections will review a set of criteria, forming a sort of "shopping list" for the features and capabilities that a financial services firm must consider with regard to its file transfer and application integration services. Each section addresses a specific, related set of desirable functionality or capabilities that helps to meet the combined needs of a modern financial services firm.

COMMERCIAL, SUPPORTED SYSTEMS



The first requirement is to eliminate any reliance on custom-scripted or low-end, unsupported off-the-shelf applications (such as low-end shareware or freeware applications).

Commercial systems can provide the reliability that financial services firms and customers demand. Obviously, not all solutions are created equally in this regard; firms must look for solutions that have explicitly reliability features built into their foundation. For example, look for solutions that incorporate high-availability features such as load balancing and multi-server clusters to help ensure reliability.

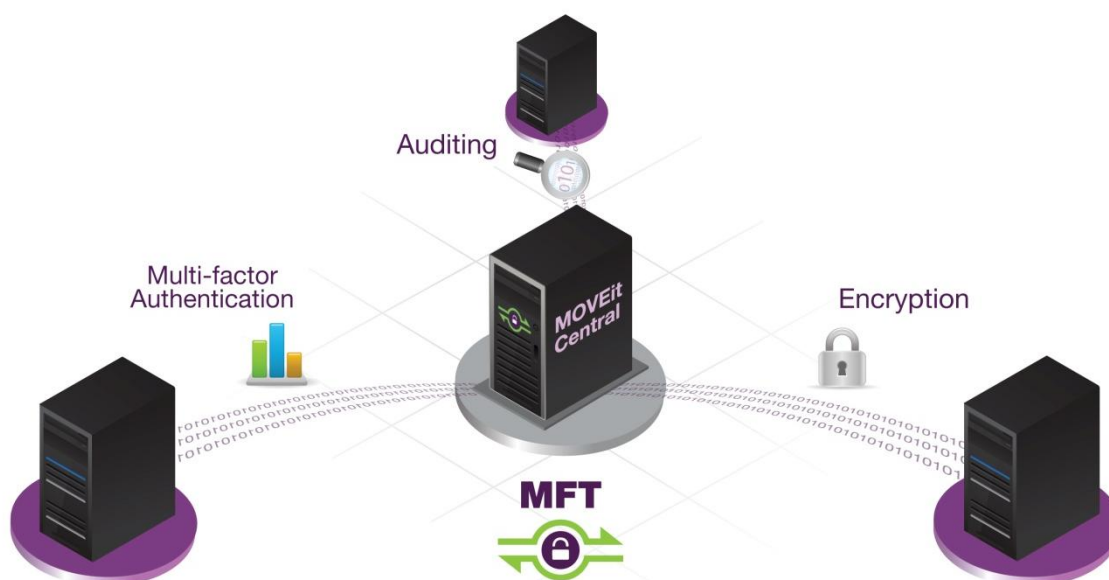
Performance is also a key evaluation attribute. Once again, solutions with explicit support for scalability, such as load-balanced clusters, offer the best go-forward direction for financial services firms. Also look at how solutions are built: Native code, for example, executes much more quickly than interpreted script code, so commercially-built solutions written by professional developers in a native programming language will typically offer the best performance. Pilot testing should absolutely be done to measure a solution's potential throughput for a firm's specific needs and tasks.

Capability is also something to consider, although this can seem difficult to evaluate. Essentially, the idea is to adopt a single solution capable of meeting a wide variety of needs, so that the single solution will be able to serve various

divisions of the firm without requiring those divisions to compromise on needed functionality. Commercial solutions with a broad and extensible feature set offer the best opportunity.

Finally, modernity is an important consideration. Simply because a solution is commercially offered doesn't imply that it is technologically up-to-date. Look for support for the latest file transfer protocols, security protocols and other features, to ensure that you're getting a solution best-gearred for your needs. Vendors who offer specific features and guidance for financial services firms are most likely to offer a feature set that is up-to-date and appropriate for your business needs.

SECURE AND TRUSTWORTHY SYSTEMS



Security and trust will likely comprise a major portion of your evaluation process, and there are several criteria to consider.

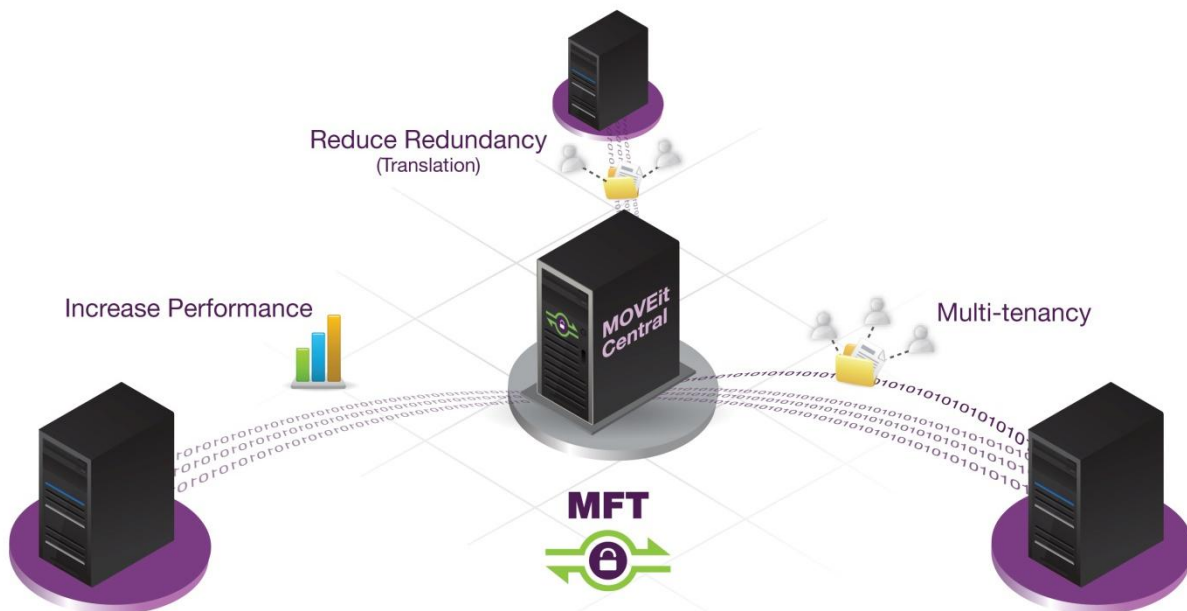
Encryption is first, and is an easy evaluation point. The US government Federal Information Process Standard (FIPS) 140-2 embodies all of the encryption requirements that a financial services firm needs; simply look for MFT solutions that have FIPS 140-2 certified encryption modules. This is an actual certification, complete with a verifiable certificate that the vendor should be able to produce on request. However, also ensure that this encryption is used end-to-end,

not just for data transmission. Encryption must be able to be applied and maintained at each stage of a data's processing lifecycle, even while the data sits "at rest" on a server's hard drive.

Auditing is obviously a must-have feature set, and you'll need to spend time looking at the specifics of a solution's auditing capabilities. Simply having an audit log isn't sufficient; you need to ensure that the solution properly audits all activity. That should include audit entries each time the solution touches or otherwise manipulates a file, as well as audit entries for reconfigurations of the MFT solution itself. That audit log should be securable, so that MFT administrators can't tamper with the log, and it should provide reporting necessary to support the activities of your auditors.

Modern MFT solutions expecting to meet the needs of financial services firms must also support multi-factor authentication for appropriate tasks and processes. Reliance on simple username and password combinations isn't typically considered secure enough anymore.

CENTRAL, ROBUST SYSTEMS



This set of criteria addresses the desires of financial services firms to move to a smaller number of centrally-supported systems and platforms, which can be offered as services to the firm's various divisions and projects.

Performance is obviously a key here. As a system is adopted by more and more divisions, projects and processes, it simply must be able to keep up with the load. Again, specific architectural features such as load-balancing clusters, native code and so forth can help provide a maximal level of performance; pilot testing is also key to ensure that a system is going to be able to meet your needs. Most important, however, is scalability: No matter how a solution performs, you'll always outgrow a given configuration at some point. A solution must therefore be able to grow, or scale, with you, so that it can meet future demand as well as current. Architectural features like clustering are one way that solutions can future-proof their own performance capabilities.

Multi-tenancy is another key thing to look for. This approach allows a firm's central IT department to implement and support the MFT system, while enabling various divisions and projects to consume the system's capabilities. Multi-tenancy typically consists of a few core capabilities:

- Partitioning, which means the ability to "wall off" different users of the system from each other. Each set of users (which may be a single division of the firm, for example) has control over their specific partition, enabling them to manage the system as if they were its only users, and to avoid affecting – or being affected by – other sets of users.
- Usage billing, which means the ability to monitor each user's utilization of the system and to bill them accordingly. This helps ensure that system maintenance, operation and growth is paid for by the users according to their use of the system.

As a centralized system that is meant to reduce redundancy, it's also important for an MFT solution to be able to assist in the migration and translation of data from one business system to another. This helps firms engaged in mergers and acquisitions to get data off of their "sunset" or legacy systems, and onto their go-forward systems, with a minimum of hassle – while maintaining needed security, auditing and other requirements.

IPSWITCH: SOLVING THE CHALLENGES OF FINANCIAL SERVICES

Ipswitch File Transfer offers solutions that help solve the unique challenges of financial services firms.

MOVEit is a complete Managed File Transfer (MFT) solution that incorporates the latest in security and auditing features, offers powerful performance and scalability options and is designed to be used as a centralized system for an entire firm. MOVEit supports government-certified encryption as well as the broadest possible range of file transfer protocols and options.

MessageWay is an enterprise-grade file transfer and application integration solution, offering not only advanced security and performance, but also powerful workflow, data translation and data validation features.

Learn more about these products and their unique capabilities for financial services at www.ipswitchft.com.

ABOUT IPSWITCH FILE TRANSFER

Ipswitch File Transfer high-performance integration and managed file transfer (MFT) solutions manage a broad spectrum of business interactions – from enterprise application integration to mission critical data transfers to simple person-to-person file exchanges. Customers worldwide, including more than 90 percent of Fortune 1000 enterprises, the majority of government agencies and millions of users, rely on proven Ipswitch solutions to transform the way they do business. Our customers implement these solutions to facilitate MFT, A2A and B2B integration, collaboration, workflow automation, data transformation, compliance, modernization, consolidation and governance. Ipswitch solutions are interoperable, making them easy to implement and deploy for the industry's fastest time-to-value and accelerated ROI.

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