CLABBY ANALYTICS

Research Report

CA XCOM Data Transport- Secure, Reliable File Transfer for Heterogeneous Environments

Introduction

File transfer – sounds simple, right? Sending a file from here to there is not something that information technology (IT) administrator users spend much time thinking about — especially when there are so many other technology trends that need to be evaluated and considered. But, if you think about it, transferring mission critical data involves much more than meets the eye…

Many companies use FTP or home-grown solutions to transfer files. But these solutions, while time tested, simply can't meet the information demands of today's enterprise customers. In a world where files are getting bigger and bigger, comprised of video, audio and other "rich-media", more robust solutions are needed. This increasing complexity, combined with stringent regulatory requirements, mandates more secure methods of data transfer. Legacy FTP-based data transport products simply cannot meet these growing demands. This is where "Managed File Transfer"(MFT) enters the picture.

TechTarget's Whatis.com defines MFT as "a type of software used to provide secure internal, external and ad-hoc data transfers through a network. MFT products are built using the FTP network protocol. However, because federal regulations require that MFT products meet strict regulatory compliance standards, they include mechanisms to ensure a higher level of security and help keep information private".

MFT — How to Transfer Rich Media While Also Reducing Complexity and Risk

To address security and compliance requirements, a new set of products has emerged under the category of managed file transfer:

Accordingly, MFT is a superset of traditional FTP file transfer. It adds additional security and management features to simple FTP — helping to reduce risk while also reducing complexity. Some of the features that can be found in MFT products include:

- Audit trail capability;
- Automated reporting;
- Flexible deployment options;
- Encryption/privacy features;
- Dashboard management; and,
- High performance tuning capabilities.

In this *Research Report*, *Clabby Analytics* takes a closer look at an MFT solution that combines high performance, reliability, and data privacy with automated, secure data transfer: CA XCOM Data Transport (CA XCOM) from CA Technologies. We describe why we believe that customers who are feeling the limitations of FTP or custom batch-style scripts based on FTP should evaluate CA XCOM for simplified, secure file transfer.

FTP Challenges

Many companies use FTP (included as part of the operating system) and FTP-based scripts for data transfer — thinking that these solutions are essentially "free". But, in reality, these solutions contain many hidden costs and often fail to deliver functionality and reliability required by today's enterprise customers to meet industry compliance requirements.

In our opinion, most standard FTP scripts and custom applications weren't designed to support audit trails and security requirements of compliance mandates such as the Health Insurance Portability and Accountability Act (HIPAA), the Payment Card Industry (PCI) Data Security Standard (DSS) or Sarbanes- Oxley (SOX). And homegrown solutions typically don't incorporate features such as centralized browser- based management, notification, transaction logs and encryption. These missing features limit usability and impact productivity of IT administrators, costing businesses more in support and training. Further, FTP script interfaces are rudimentary and may differ from platform to platform, offering no centralized management capability.

Using FTP or custom scripts also presents other challenges. In most cases, scripts have been modified and updated over the years to incorporate new functionality or to integrate a new piece of software. While these scripts may have worked well when they were written, applications and infrastructures are dynamic — and custom software may not necessarily work the same way it did when it was installed. The engineer who designed the original program may have left the company or moved within the organization. If the script needs updating or modification to support new regulatory requirements, for example, or to fix a problem — the expertise and knowledge of the custom application is gone. Accordingly, problems are identified after the fact — and they may be very costly to diagnose and fix.

So, the "cheap" solution actually proves to be quite costly, requiring on-going maintenance and support and potentially re-training of IT personnel.

Today's businesses are transferring more data to more places. Global companies may have hundreds of distributed branches, retail locations, or satellite offices, all with daily data transfer requirements. These transfers are increasingly comprised of large unstructured data files. With increasing demands on IT resources, the window of time available for file transfers has shrunk.

Meeting These Challenges: CA XCOM Data Transport

IT administrators who are struggling to transfer an ever-increasing number of files in a defined, or in some cases shrinking window — with fewer resources—should take a closer look at MFT file transfer and management products. In this report, we provide some guidance regarding what to look for when evaluating MFT products. (We use CA XCOM from CA Technologies as an example of one such product.)

CA XCOM Data Transport is an industry leader in the automated high-performance, secure movement of mission-critical data and files. It is a heterogeneous solution that supports data transfer across a wide variety of platforms, converting data on–the-fly to the format native of the receiving platform.

Using CA XCOM Data Transport Management Center to Improve Productivity

CA XCOM Data Transport Management Center simplifies the process of managing data transfers and improves efficiency and productivity. It is a browser-based, cross-platform interface that enables centralized management of file transfers from a standard browser. All activities across all locations that use CA XCOM can be linked together and managed from the browser.

Transfers at remote locations can be scheduled for a specific day and time enabling unattended, after hours operation. Transfer history at multiple sites can be reviewed through CA XCOM Data Transport Management Center, and unattended back-up for specific computers can be initiated. Data can even be transferred to a system that's not connected to the system originating the transfer using a store and forward feature.

Additionally, CA XCOM Data Transport Transfer Control facility (XTC) allows interdependent transfers to be defined as a single group, enabling transfers to be held, purged, or released depending on the completion status of other transfers in the group.

Commonly used in retail, CA XCOM enables each location to reliably and securely transfer data back and forth with corporate headquarters. XCOM is used between POS retail stores/branches and the back office to update pricing, inventory, and sales orders at the end of each day (in a very compressed timeframe). CA XCOM also provides a secure, reliable way to transfer data with supply chain partners.

Using CA XCOM Data Transport to Increase File Transfer Speed Performance Facilities within CA XCOM exploit network resources and improve bandwidth using record packing techniques as well as a wide range of data compression types (including

run-length encoding and text compaction and Lempel-Ziv compression). This is ideal for a broad range of file types and large file sizes.

At a large retail chain (name withheld) that performs almost 800,000 file transfers per week, these features have yielded up to 30-40 percent performance improvements on z/OS file transfers, resulting in significant reductions in CPU usage and cost saving. This particular customer has been able to delay a hardware upgrade because of this major boost in performance.

Using CA XCOM to Address Security and Compliance Requirements

While FTP and home-grown solutions weren't designed to address today's compliance regulations, CA XCOM has been built and enhanced to comply with evolving compliance and security requirements. The highest level of security – peer to peer over a private protocol – is provided when transferring data from CA XCOM to CA XCOM.

Security features include checkpoint/restart (if an error occurs and is remediated, the transfer will automatically resume from the point where it left off), transmission verification and notification, and audit and transaction logging.

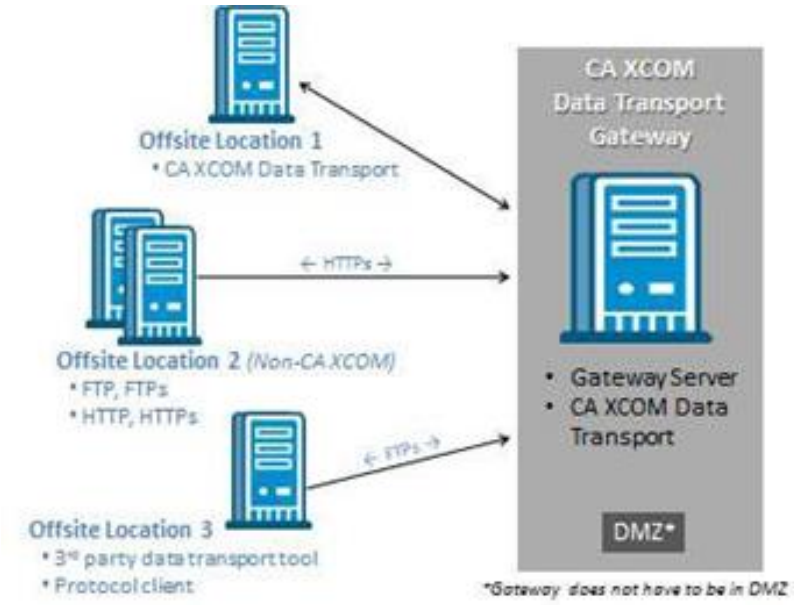
CA XCOM's many encryption capabilities — encrypting data, reports and jobs, as well as the user ID, password and file names — go way beyond what sFTP (Secure File Transfer Protocol) provides. Features include encryption of the entire message, including the header over TCP/IP, and hardware encryption on many of the over two dozen supported platforms. Secure and trusted transfer enables transfers to be executed without including a password (supporting new PCI guidelines). The user can also define an "alias" for full anonymity.

A financial services customer (name withheld) uses CA XCOM to comply with the PCI mandate that states that an organization must ensure and be able to demonstrate that software production and development environments are kept separate. By embedding CA XCOM into CA Endevor Software Change Manager, files can be transferred using a transport layer "packaged ship" function, ensuring that the two environments are kept totally separate and enabling compliance to be easily demonstrated.

CA XCOM Data Transport Gateway

The CA XCOM Data Transport Gateway provides a reliable, secure method of transferring data with non-XCOM locations that employ custom applications or tools using FTP, FTPs, HTTP or HTTPs. Data is secured by both encryption at rest (while files reside on gateway) and encryption at flight (as data is transferred with CA XCOM) and follows compliant encryption methods. Trusted transfer capabilities support compliance guidelines (see Figure 1.)

Figure 1 – The CA XCOM Data Transport Gateway



Source: CA Technologies

The latest addition to the CA XCOM solution is the CA XCOM Data Transport Gateway. While CA XCOM is most secure when transferring data from CA XCOM to CA XCOM (since it is private and peer to peer), many companies may have interfaces outside their network, requiring an "agentless" configuration, or may want to use their own data transfer tool.

The CA XCOM Data Transport Gateway supports transfers from non-CA XCOM locations, allowing users to transfer data into and extract data from a gateway server. This new configuration, based on SOA concepts, offers significant flexibility and is ideal for opening up intra-company data transfers between partners, clients, suppliers and satellite locations.

Customization of file controls (such as authoritative access rules, distribution requirements, and retention periods) enables the user to define attributes associated with each file transfer through policy definition. Web services support enables transfer request to be scheduled via XML to distribute files to other CA XCOM locations. Data can be compressed on the gateway or it can be compressed before it gets to the gateway, improving bandwidth and speed of data transfers.

CA XCOM Is Part of a More Comprehensive Set of Solutions

CA Technologies, founded in 1976 as Computer Associates International, is today a $4.4 billion dollar software company with over 11, 000 employees worldwide. CA Technologies has a strong background in systems management and mainframe computing environments, but the company has evolved to focus on management of complex heterogeneous environments comprised of mainframe, distributed, virtualized and cloud architectures.

CA XCOM Data Transport is part of a rich suite of systems management products that manage the complex, multi-platform, multi-vendor infrastructure of today's global enterprise customers. The product portfolio includes service automation, service assurance, service management, project and portfolio management, backup and recovery management, energy and sustainability management, and security management. CA Technologies shines in its ability to manage heterogeneous architectures with common management capabilities. CA XCOM integrates easily with CA Technologies broad range of products.

By purchasing a comprehensive systems management solution from CA Technologies, customers are able to consolidate vendor purchases and support — resulting in improved ROI and cost savings— while at the same time taking advantage of global support and the years of experience of CA Technologies implementation and support services. As a standard product, CA XCOM comes with detailed technical documentation, a staff of trained support engineers, as well as available training. It is supported by directly by CA Technologies, rather than outsourced, ensuring that it will continue to be maintained, enhanced, and integrated with the rest of the CA Technologies product line.

CA Technologies Cloud Strategy

CA Technologies has traditionally offered software on a license basis but they are aggressively moving toward a cloud-based, software–as–a–service (SaaS) delivery model. And we note that CA Technologies has made several acquisitions in the cloud space this year including Nimsoft (cloud infrastructure monitoring), 3Tera (turnkey cloud computing platform) and Oblicore (cloud service level management) and Cassett (policy-based intelligence). Further, CA Technologies has announced plans for the Cloud-Connected Management Suite, a set of products to manage cloud services: CA Cloud Insight, CA Cloud Compose, CA Cloud Optimize and CA Cloud Orchestrate. CA Technologies describes the Cloud-Connected Management suite as "a new category of software - IT Supply Chain Management".

CA XCOM can be used in heterogeneous virtualized cloud infrastructures, and we suspect that in the future it will also be offered as a cloud service, allowing customers the flexibility of purchasing CA XCOM as a SaaS or as licensed software. CA Technologies focus on cloud, and the cloud delivery model will offer flexible options for customers who want enterprise class management software without making the huge investment in software licenses, installation and maintenance. The pay-as-you-go model is particularly attractive to mid-size businesses that don't have the budget to over provision to address uncertain demand.

Integration With Other Complementary CA Products

CA XCOM's SOA architecture can also be integrated with other related products, extending product capabilities and providing additional features. For instance, CA Easytrieve Report Generator can be linked with CA XCOM to provide automated data and report creation and distribution. CA NetMaster can also be linked with CA XCOM to provide centralized monitoring and management of individual CA XCOM transfers, logging transfer activity, and taking action if transfers don't start or don't complete.

CA Mainframe Software Manager (MSM) provides a set of automated software management services that helps both mainframe experts and novices to more easily and quickly acquire, install, maintain and deploy mainframe software from CA Technologies. In a benchmark study conducted by CA Technologies, CA MSM cut CA XCOM software acquisition, set-up, deployment, and installation time by 80-89%. The benchmark showed that the total time to install and deploy CA XCOM to six systems went from 2 hours, 29 minutes to 22 minutes.

One of the things we liked best about CA XCOM Data Transport is that it is part of a complete systems management portfolio, sold and supported by CA Technologies, providing vendor consolidation and global support. It is important to have access to knowledgeable technical support resources when dealing with matters related to compliance, security, and efficient resource usage.

Summary Observations

CA XCOM Data Transport offers a robust alternative to FTP and FTP-based scripts and home-grown file transfer applications. While businesses are often attracted to the perceived cost benefits of an FTP-based solution, in the long run these solutions will cost more to support and maintain. CA XCOM Data Transport provides the manageability, reliability, speed and security required by enterprise customers when transferring their critical data.

Features such as encryption and trusted transfer, help customers meet compliance guidelines for PCI, HIPAA, SOX and other regulatory requirements. Data transfer reliability is improved with capabilities such as checkpoint/restart, transmission notification and verification, and transaction logs. CA XCOM Management Center provides a centralized management interface that improves efficiency and productivity of IT administrators. Performance and data transfer speeds are maximized using various compression types.

It should also be noted that CA XCOM Data Transport Gateway expands file transfer capabilities to non-XCOM sites, facilitating data transfer with partners, clients, suppliers and remote locations — this is significant for businesses today that rely on easy, efficient communication with supply chain partners to drive down costs.

We also liked that CA XCOM can be integrated with complementary products — products that help simplify and secure the management of file transfer. We believe that someday CA XCOM will be integrated as part of CA's cloud strategy, allowing for flexible software delivery and licensing alternatives for CA XCOM Data Transport — and potentially providing customers with the option of purchasing a license or adopting a pay-as-you-go model.

For enterprise customers who have outgrown FTP-based or homegrown data transfer software, MFT solutions should be evaluated. CA XCOM Data Transport is a fine example of one such MFT solution.

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