Thru.

Managed File Transfer for the Extended Enterprise

Enhancing ESBs and iPaaS with Content Collaboration and Managed File Transfer

VERSION 1.2 | WHITE PAPER

Managed File Transfer for the Extended Enterprise



Contents

Synopsis	. 3
The Evolution of Managed File Transfer	. 3
A New Era for File Exchange	. 5
Summary	



Synopsis

Modern technology leaders (e.g. Amazon, Netflix, Salesforce, Tesla Motors) have set a new standard for companies of all verticals to become platform-centric in order to serve both customers and partners with greater agility and scalability. To adapt to this change and keep up with competition, companies are now looking to improve and modernize their business via integration platforms and cloud services. The ability of enterprises to *quickly* get partners on board, share information and roll out new business capabilities are key factors for competing successfully in the ever-changing marketplace.

This white paper describes how a managed file transfer (MFT) and content collaboration platform integrates with iPaaS/ESB using a *post office model* that dramatically simplifies file exchange and workflow implementation with virtually any number of external partners and internal lines of business.

The Evolution of Managed File Transfer

Managed file transfer (MFT) has existed for decades and FTP has been around since the late 1970s. FTP servers deployed by IT enabled the exchange of files with external entities, each with unique credentials. The number of connections grew over time creating a management nightmare and serious security concerns. Sadly, many companies still use these point-to-point solutions to exchange files and it has crippled business agility and growth because business has become more digital and automated while aging MFT and FTP infrastructure lags behind. Companies are now looking for new ways to more effectively onboard partners as part of their digital business transformation projects that include service APIs, event notifications, electronic data interchange (EDI) protocols and modernized managed file transfer (MFT).





Figure 1: The Evolution of File Exchange

MFT vendors started surfacing to help with this problem and evolved to include a range of integrations for internal A2A exchange and external B2B exchange. Although FTP servers will become a thing of the past, the File Transfer Protocol itself will survive as a protocol and be used in automated file exchange. Moving from FTP servers to an MFT service was only a first step to the modernization of file exchange.

At the core of all these technologies is file movement, and MFT solutions are still prevalent in the industry, especially when automation and integration are involved. CCP provides collaboration of content for individuals and teams, and an MFT platform expands that by adding system endpoints, transformations, event notifications and workflows. The need for a single platform that provides both CCP and MFT capabilities is becoming more apparent as companies embark on their digital business transformation using a Hybrid Integration Platform (HIP) framework. "HIP is a capability framework that combines on-premises and cloud-based integration and governance capabilities to support a wide range of integration use cases." ¹ Using such a framework includes up to eight product categories, of which MFT and iPaaS are included. Let's look at how MFT and CCP can be included into HIP with seamless integration into the application ecosystem.



A New Era for File Exchange

File exchange is now being called upon to go through another maturing phase. This new MFT is much more than traditional MFT! We might not even be able to call it MFT anymore. It is a unified file exchange platform for the enterprise to exchange files with external partners with a partner portal for self-managed endpoints: on-premises systems, cloud services, analytics, mobile apps, things.

Figure 3. Critical Integration Scenarios for 2018 Q08. Which of the following integration scenarios will be most critical to your business in 2 years' time? n = 300Business to business 22 38 (B2B) integration Applications to application 20 (A2A) integration Cloud service integration 15 Bulk and/or batch data extraction and delivery Mobile application enablement 33 IT automation Internet of Things (IoT) enablement 25 Granular, low-latency data capture and propagation API-centric service delivery Composition of abstracted and/or federated views of data in memory Message-oriented data movement 2 2 10 20 30 40 50 Percentage of Respondents ■1st choice ■2nd choice ■3rd choice © 2017 Gartner, Inc.

Figure 2: Critical Integration Scenarios for 2018¹

Source: Gartner (September 2017)



The new MFT platform needs to be ready for the integration scenarios that will be critical to business in the coming years. The MFT manages the security, tracking and reliability of file deliveries while the integration platform-as-a-service and service APIs orchestrate the business processes in the application ecosystem. Gartner defines an integration platform as a service (iPaaS) as a solution that "provides capabilities to enable subscribers (aka "tenants") to implement data, application, API and process integration projects involving any combination of cloud-resident and on-premises endpoints. This is achieved by developing, deploying, executing, managing and monitoring integration processes/flows that connect multiple endpoints so that they can work together" (Gartner Magic Quadrant for Enterprise Integration Platform as a Service²).

The Thru Managed File Transfer as a Service (MFTaaS) does the same for MFT and complements iPaaS in the process. It provides file exchange capabilities that enable subscribers (aka "tenants") to implement process integration projects involving any combination of cloud-resident and on-premises endpoints. It does this using a new approach that resembles the post office model and works much the same way people use a courier to send and receive packages. At the same time, it is completely aware of the process flows in the integration platform with exception handling and outcome reporting so that flows can be viewed from a central dashboard.



How this approach works:

- 1. Thru MFTaaS is the post office where partners and the enterprise set up their endpoints to send and receive files for each process. The same endpoints can be used in multiple processes and hence referred to as "reusable" endpoints.
- The post office places files of a specific process in a single "Pick up box". This sounds straight forward but it means that the process (the flow) does not know about sources and does not change when they are changing.
- 3. The process uses Thru's iPaaS connectors (for MuleSoft or Dell Boomi) to pick up files and possibly drop off files with delivery instructions.
- 4. The platform takes the files from the "Drop off box" and delivers them to the targets via the organization endpoints.

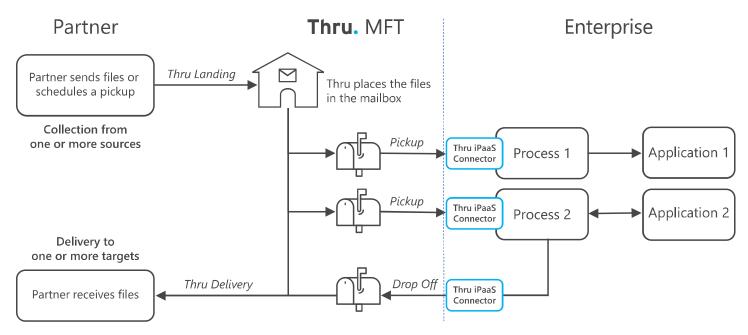


Figure 3: Thru MFTaaS: Postal Service Model



Consider the positive implications:

- An organization that is added to Thru MFTaaS can immediately participate in all transports with no development, testing or deployment. It can send files (push) or ask the platform to come and get them from servers (pull). Organizations can self-manage their endpoints.
- When a new process is added, organizations can join (subscribe) instantly and use their existing endpoints.
- When a new system is connecting to the platform, it only needs to construct a simple flow which
 handles file processing. Flow connection to the MFT platform is trivial always a single pickup
 and drop off point.
- Lastly, all configuration, organizations, systems, flows and exceptions are managed in one place.

Figure 4: Thru MFTaaS File Flow

The following diagram illustrates the process.

Enterprise Thru, MFT **Endpoints Organizations Transports** API: Alerts **Reusable Endpoints** Subscriptions across the Organization Many- to-Many Mapping M:M relationships between Organizations and Transports SFTP client Organization enable self-managed, process stakeholder agility SFTP server Direct File Application Transport Organization Delivery Exchange Client Organization Amazon S3 **Process to Transport** One-to-One Mapping Application iPaaS Process SFTP client SFTP server Organization API calls to exchange files and exceptions Amazon S3 FTP server Application Thru MFT is responsible for error handling, guaranteed delivery, automatic recovery

PAGE 8



Summary

With this post office model, the file exchange platform is an extension of the enterprise, decoupling all point-to-point integrations and unifying the way data is collected, processed and distributed. Injecting the power of MFT into integration platforms will be critical in completing digital transformations using the HIP framework for building a modern application ecosystem. Thru MFTaaS is the only solution that enables companies to combine both Managed File Transfer and Content Collaboration on a single platform and integrate with iPaaS/ESB systems. Use of the model will cut development time, testing, deployment and production support.

Trying to connect legacy MFT platforms that have poor or non-existent APIs and rigid architectures that require fat on-premises infrastructure is destined to fail. Choosing a cloud-native MFT platform that also includes CCP capabilities, APIs and iPaaS-ready connectors will prove to be the most cost-effective and adaptable strategy. The ability to pull in any type of endpoint into the business process flow, including individuals and digital systems, will provide the best flexibility and interoperability needed to do business with any type of partner in the extended enterprise globally. Simplifying MFT to a postal model like with Thru MFTaaS ensures optimum deployment, engagement and adoption by internal and external users, minimizing the need for specialists and enabling citizen integrators.

References:

Disclaimer: Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

¹ Mark O'Neill, Elizabeth Golluscio. Gartner. *Master B2B Ecosystem Integration With a Blended EDI and API Approach*. 14 September 2017.

² Keith Guttridge, Massimo Pezzini, Eric Thoo, Bindi Bhullar, Betty J. Zakheim. Gartner. *Gartner Magic Quadrant for Enterprise Integration Platform as a Service*. 18 April 2018.

Thru's File Exchange and Collaboration Platform, with its expansive integration capability and global presence, is the file exchange cornerstone for some of the world's largest corporations. Thru's enterprise class 360-degree cloud-native architecture continually delivers tangible, escalating returns on investment by uniquely addressing the most challenging Managed File Transfer, Software Delivery and Content Collaboration requirements on a single platform.

For more information about Thru, visit thruinc.com or contact sales@thruinc.com.

Thru.

909 Lake Carolyn Parkway, Irving, TX 75039 USA
US +1 800 871 9316 | International +1 214 496 0100

thruinc.com