

WHITE PAPER

Modern Integration Powers Open Banking

How managed file transfer technology enables
the next great financial services revolution

Cleo[™]

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Open Banking and the Data Liberation

The use of APIs by banks is becoming increasingly common as they help drive new banking models that will enable consumers and small businesses to manage their money in better ways, and such use of innovative applications will provide personalized information and services to serve numerous financial needs in one place.

Collectively known as Open Banking, this technology revolution aims to liberate customer and business data from the systems and infrastructure of various financial services to facilitate these enhanced services.

By leveraging connected networks instead of centralization, Open Banking helps customers securely and more easily share their financial data with other financial institutions. The result will be new marketplaces, new choices, and added transparency. But to do that, financial systems will need to modernize the way they connect to other systems and ultimately, to customers.

In a very simplified world, this will mean customers can log into a website and quickly view their transactions from all of their financial institutions in a real-time manner. In the real world, this will involve architecting and deployment abstractions around legacy systems to create APIs that are interoperable and well-governed.

The governance processes for these initiatives will be critical because on top of the known sensitivities of customer financial transactions, there are numerous ways those transactions and related customer data can be used to create new value, services, and products. Brokerages that previously existed only in niche industries will start to spread their wings to leverage Open Banking. Financial and wealth management organizations like Mint.com and Personal Capital, and budgeting tools like EveryDollar that support personal banking platforms are poised to exploit Open Banking for new and exciting services.

Thus, many of the systems within the value chain of banking will need to be “opened” to the world, but it’s this “openness” that raises security and data privacy concerns. The platforms used to move that data will need to be open because, unlike most APIs, they contain specific insight related to service-level agreements (SLAs), customer expectations, and compliance.

Most of these processes today are powered by B2B integration technologies and managed file transfer (MFT) suites, and these very same solutions will be critically more important in moving Open Banking initiatives forward.

Synopsis

Open Banking is a collaborative model in which financial data is shared through APIs between parties to deliver enhanced services to the consumer marketplace. It's an industry-changing initiative if each system in the banking value chain can be opened and the data can be governed. That's why this digital banking revolution will be driven not necessarily by APIs but by broader B2B technology.

This white paper offers an in-depth look how by leveraging programmable MFT, organizations can deliver on the governance, connectivity, and security required for the success of Open Banking.

The World of MFT

Managed file transfer is designed to connect all your information sources and customers in a way that ensures governance and control of data movement across your organization and into your partners', suppliers', and customer's organizations. But while it's still considered a legacy technology, MFT's fundamental capabilities of controlling and governing critical business data flows are more relevant than ever, especially in today's global digital business ecosystem.

MFT's reputation from its early beginnings, which involved specific point solutions to communicate with other organizations, has affected its marketplace perception today. But the days of manually provisioning FTP connections for every new business partner are quietly sun-setting with the growing use of RESTful API interactions specifically enabled by the enterprise service bus (ESB).

Imagine an ESB, designed to develop and integrate internal applications, powered by MFT to automate your B2B integration, connecting external and cloud-based systems and applications, in a scalable and highly available way. Imagine a world where your developer can embed the most powerful MFT and B2B functionalities by simply orchestrating MFT services into the process to create greater services for your business.

The growing popularity of service centricity (SOA), business process management (BPM), orchestration, and integrated development environments (IDE) led to new integration patterns and tools. In turn, ESBs became the default infrastructure where developers could integrate and compose broader applications and not just services. And when companies using ESBs (or its modern cloud equivalent, iPaaS) had to support 20 protocols to connect with external trading partners to secure and accelerate these file transfers, they turned to MFT.

With MFT solutions programmed into the ESB or iPaaS solution, that's when we all started getting excited about the possibilities:

- Could these technologies support secure SaaS, ad hoc, and big data integration scenarios?
- What about leveraging this technology to expedite partner onboarding?
- How easy is it to reliably transfer massive payloads over long distances while heeding certain time and business partner requirements?

The inevitable next question that organizations began asking was, "How can we continue to leverage this great technology as we grow our business?" The answer lies in the company's ability to use programmatic MFT solutions to scale modern services and applications, including for Open Banking.

Mitigating the Risk

Open Banking can give customers greater control over their money, but it raises serious questions about things like data privacy, security, and financial exclusion. Given the inherent risks in sharing key financial information, it is critical for banking organizations to develop processes and governance driving the connections.

And that's the very reason why MFT technology will power modern Open Banking initiatives. MFT programmatically delivers the guardrails for API integration for Open Banking, ensuring the proper safeguards are in place to protect data access and privacy.

Extending the Power of Cleo

To the right are some sample REST API connections from developer.cleo.com that enable Cleo users to extend their MFT and B2B capabilities for things like Open Banking.

A client can use the REST API /connections resource to:

- List connections
- Create, retrieve, modify, delete, or clone a connection
- List the files in the host's inbox or outbox
- Add a file to the host's inbox
- Delete a file that is in the host's inbox or outbox
- Move a file out of the host's outbox
- List transfers performed using a connection

GET	/connections
POST	/connections (AS2)
POST	/connections (FTP)
POST	/connections (SFTP)
DELETE	/connections/{connectionID}
GET	/connections/{connectionID} (AS2)
PUT	/connections/{connectionID} (AS2)
GET	/connections/{connectionID} (FTP)
PUT	/connections/{connectionID} (FTP)
GET	/connections/{connectionID} (SFTP)
PUT	/connections/{connectionID} (SFTP)
POST	/connections/{connectionID}/clone (AS2)
POST	/connections/{connectionID}/clone (FTP)
POST	/connections/{connectionID}/clone (SFTP)
GET	/connections/{connectionID}/incoming
POST	/connections/{connectionID}/incoming
GET	/connections/{connectionID}/incoming/{fileID}
DELETE	/connections/{connectionID}/incoming/{fileID}
GET	/connections/{connectionID}/outgoing
GET	/connections/{connectionID}/outgoing/{fileID}
DELETE	/connections/{connectionID}/outgoing/{fileID}
POST	/connections/{connectionID}/outgoing/{fileID}/cancel
GET	/connections/{connectionID}/transfers

Tipping the Scale

From an operational standpoint, it's extremely difficult to automate processes with clunky, disjointed solutions reliant on manual interactions from administrators. Automation reduces the time and effort between when an actual business decision is made and when that decision gets implemented. When your IT teams don't have to jump through interoperability hoops or over integration hurdles, they can deploy whatever application or process is required for business strategy in a more agile way.

Thus, the need for consolidation, modernization, and phasing out the unsupported legacy and homegrown solutions for something more stable. Many mid-market solutions have invested heavily in snazzy interfaces for its administrators and users but have not put in the work required to automate, orchestrate, and invoke MFT services that Open Banking requires.

Eliminating multiple redundant technologies onto one RESTful API-enabled platform means organizations can easily support at scale:

- Faster onboarding and time to revenue
- High availability and no single point of failure
- Standardizing operations and automation
- Real-time monitoring and visibility across the ecosystem
- Full auditability for compliance, regulation, and risk management

This modernization movement helps companies embrace inevitable business and IT changes, specifically from the Competition and Markets Authority (CMA) and the Financial Conduct Authority (FCA). They also become a proactive organization to support strategic, data-oriented goals without having to re-establish governance policies and processes every time a new project begins.

Without a modern MFT platform underneath, these complex corporate banking environments – with thousands of connections and millions of files flowing throughout the ecosystem – lack the agility to adapt to change and jeopardize any chance at delivering world-class customer service.

But MFT by its very nature is highly usable, customizable, and controllable. Engineering your IT infrastructure up front means you can deliver a modern, integrated experience to create new value and the best financial services and products for your customers.

Already Powering Global Business

The world's biggest retailers, for example, consume REST APIs to build their entire infrastructure on top of a B2B and MFT framework because it reliably integrates with their ESBs and automates their internal and external data flows. Developers can now invoke APIs for MFT events, such as high-speed transfer, and can then expose those processes to their communities for a broader customer experience.

Open Banking powered by API-enabled MFT unlocks the data from various financial institutions, governs access, and secures that data so financial services companies can offer their customers, their staff, and their business partners new tools and improved services.



Summary

Injecting the power of MFT into Open Banking applications will be critically important, and APIs exposing your internal MFT functions to your external communities will enable applications to share data and deliver enhanced financial services.

Savvy companies will leverage their ESBs – powered by MFT and extended via REST APIs – to deliver everything an organization needs to win as a modern business: better agility, better cloud, better scale, better response time, better governance, and better dependability.

With MFT in the toolbox of developers, they'll be able to create their own interface – integrated into their portals, their security systems, and their dashboards. They can combine functions to create apps and systems to power clouds and MFT-enable their SaaS environments and services, their composite applications, and their mobility apps. They can even build their own sets of onboarding buttons so business users can do it themselves as self-service IT.

Perhaps most importantly, though, these developers can shore up the security risks that data sharing and Open Banking APIs present while enabling real-time data interactions. Banks and other financial organizations can then focus on helping customers to manage their finances instead of just facilitating transactions.

Thus, MFT advances far beyond an operational, security technology. Financial services companies will use it strategically to build better, safer, and more modern banking initiatives that can handle massive file sizes, intense governance, and essential acceleration scenarios. And the best part about programmatic MFT is that once it's set up, you don't need to go into the interface unless you are adding a new partner. It becomes accessible to all.

The future of MFT will be driven by its ability to enable the broader applications produced on top of it, and Open Banking initiatives supported by MFT are fully armed to deliver expanded value and services for consumers.

About the Author



Frank Kenney

A former Gartner MFT analyst and current market evangelist and strategy director, Frank Kenney is widely credited as the creator of the term “MFT” and was the first to write about and discuss its modern architecture, platform, and use cases. Previously, Frank was the vice president of global strategy and product management at Ipswitch, responsible for aligning the company’s vision and strategy with its products, services, and messaging. He also served more than 10 years as a research director at Gartner, where he defined the managed file transfer, B2B gateway, SOA governance, and cloud service brokerage markets. Before joining Cleo, Frank was an independent IT consultant helping technology providers create, validate, and implement a variety of business strategies. He holds a degree in music technology from the Center for the Media Arts, is certified in digital multimedia and instructional technologies and studied English and computer science at the University of Tampa.

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