



Whitepaper

Managed File Transfer for Secure and Efficient Data Exchange – SEEBURGER MFT

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Managed File Transfer for Secure and Efficient Data Exchange

The German statistics platform Statista predicts that we will produce and consume an unbelievable 181 zettabytes of data in 2025.¹ Traditional methods of data transfer can no longer keep up with this exponential growth or the speed and the demands of the post-pandemic world for security and scalability.



2025



181



20??

¹ <https://de.statista.com/statistik/daten/studie/267974/umfrage/prognose-zum-weltweit-generierten-datenvolumen>

Data is the new currency – and must be transported securely

Data is the currency of the modern world. Every day, people produce a constant stream of data, which is almost invisibly tracked, saved and processed behind the scenes. However, as the value of this data increases, so does the risk of it being stolen. This makes it all the more important to ensure that it is being transmitted securely. However, many companies are still sharing their valuable information by email, FTP transfer, or even memory sticks – even though the risk of it falling into the wrong hands is very high as a result. The regulatory bodies have also recognized this. In many countries, the importance which companies are expected to accord to securing their customers' data is already set in law under threat of severe penalties. This is a trend which will continue to intensify over the next few years.

Organizations using outdated standards and legacy systems are therefore at a significant disadvantage. They cannot keep up with the fast pace of technical change, and they can no longer meet the ever-increasing demands for security and compliance. Companies need a digitalization strategy that not only meets the requirements of today, but also prepares them for the challenges of tomorrow.

This white paper looks at how modern MFT technology can help companies use cloud technology to bring their business securely into the digital age.

Managed File Transfer – What is it?

Managed File Transfer (MFT) is a technology which enables secure, efficient data exchange. At the same time, it meets contemporary requirements for traceability and compliance. This makes Managed File Transfer a secure alternative to data transmission over non-secure protocols such as FTP or e-mail. MFT is essentially the postman in the business of electronic data interchange. However, if you think a step ahead and consider B2B integration, MFT can also assess content – and add further instructions to the address.

A large number of processes in everyday business require data exchange. This may be internally or externally, between people or systems, ad hoc, or planned and automated. The number of daily data transactions can quickly run into the thousands – a quantity that e-mail or FTP servers simply cannot manage. Then, there are large image files – maybe used for marketing – which most e-mail systems simply cannot send. Communication via

MFT can occur from machine to human, fully automated from machine to machine, or from machine to an external partner (whether human or machine).

In many sectors, data interchange is always in a pre-defined format, a standard. This structured data is easy for algorithms to automatically process. The automotive industry as well as the consumer and retail sectors have been largely using industry-specific EDI standards for quite some time now. However, in the financial sector, too, the great mass of data used for transfers and other transactions is also available in structured form – and nowhere is the absolute security of this data more important than here. Since bank data tends to be in a variety of file formats, it is particularly important for FSIs to find a transmission technology that can compatibly transfer all these formats end-to-end, error-free, in real time and in full. This need has become even more urgent with migration to the standardized ISO 20022 format.



This representative study by SEEBURGER and Celent illustrates the importance of ISO 20022 for global banks and companies:

But what about transferring unstructured data? We speak of unstructured data if there is data in a variety of non-uniform formats. This often means raw data in its native formats, such as a Microsoft Word document, a PDF, image and video data, or even e-mails. This diversity makes unstructured data more difficult for automated processes to read and process, and is unsuitable for transmission through defined protocols such as OFTP, X.400, AS2, etc.

According to a study
by Fintechfutures,

80%

of unstructured data generated
in banks remains unused.

This data, which has often
been collected over years of
**customer
relationships**
and would contain valuable
insights into customer behaviour
and enable proactive
risk avoidance,
is an almost untapped source
of rich value creation for banks.²

However, you could use MFT to deliver this rich data to a data lake, from where it could be made available to various departments as a valuable resource.

As it's difficult to automate the processing of unstructured data, if wanting to send this data somewhere, people often turn to mass transfer mechanisms that are freely available on the Internet, such as e-mail or the File Transfer Protocol (FTP). Both of these come with issues. Systems such as e-mail and File Transfer Protocol (FTP) are popular because of their ease of use. However, they are insecure and don't offer the ability to monitor and trace transmission, or to record access attempts.

So how is Managed File Transfer different from other common data transfer systems? MFT lets you securely share valuable, large or high-volume business data between companies, people and applications with full control over the data flows. Transfer can be fully automated or on an ad-hoc basis. The MFT solution does the legwork for you, freeing up capacity that can be invested elsewhere in the business.

² <https://www.fintechfutures.com/2020/10/unlocking-the-benefits-of-unstructured-data-in-banking>

Why are legacy systems an issue?

For many, many years, the way we exchanged business information remained broadly the same. Information was exchanged from person to person, using a hand-made medium. It was only during the twentieth century that we started using electronic transport media such as fax, e-mail or Electronic Data Interchange (EDI). These increasingly enabled communication with machines, but the type and amount of data exchanged remained relatively constant. For a long time, speed was of secondary importance.

This all radically changed once the internet conquered society. These days, if information arrives late, is incomplete, or maybe doesn't arrive at all, there are unprecedented consequences. Global supply chains can only be as strong as their weakest link.

However, many companies are still using **legacy systems** in their data exchange. Many of these have grown alongside the company, as has the IT department which is responsible for keeping these clearly overburdened and vulnerable systems going.

Such outdated structures not only tie up manpower and resources, but also represent a real business and security risk.

The more systems communicating with each other, the more potential security breaches there are.

Often, legacy systems are unable to seamlessly communicate with newer **(cloud) technologies**, and therefore unable to guarantee end-to-end **security** for any data they transmit.

However, transmitting data via alternatives such as email or FTP no longer meets today's security requirements for data, whether in transit or in file location. In an era in which data is being referred to as 'the new oil', companies simply cannot afford to treat data security so nonchalantly. At stake is everything from reputational

damage when personal customer data is leaked, to massive business losses when competitors abroad – who are difficult to prosecute – gain access to sensitive data, such as prototype plans.

These days, it is absolutely crucial to be able to trace data end to end to be able to comply with the numerous regulatory requirements. What data is stored where, and who has access to what?

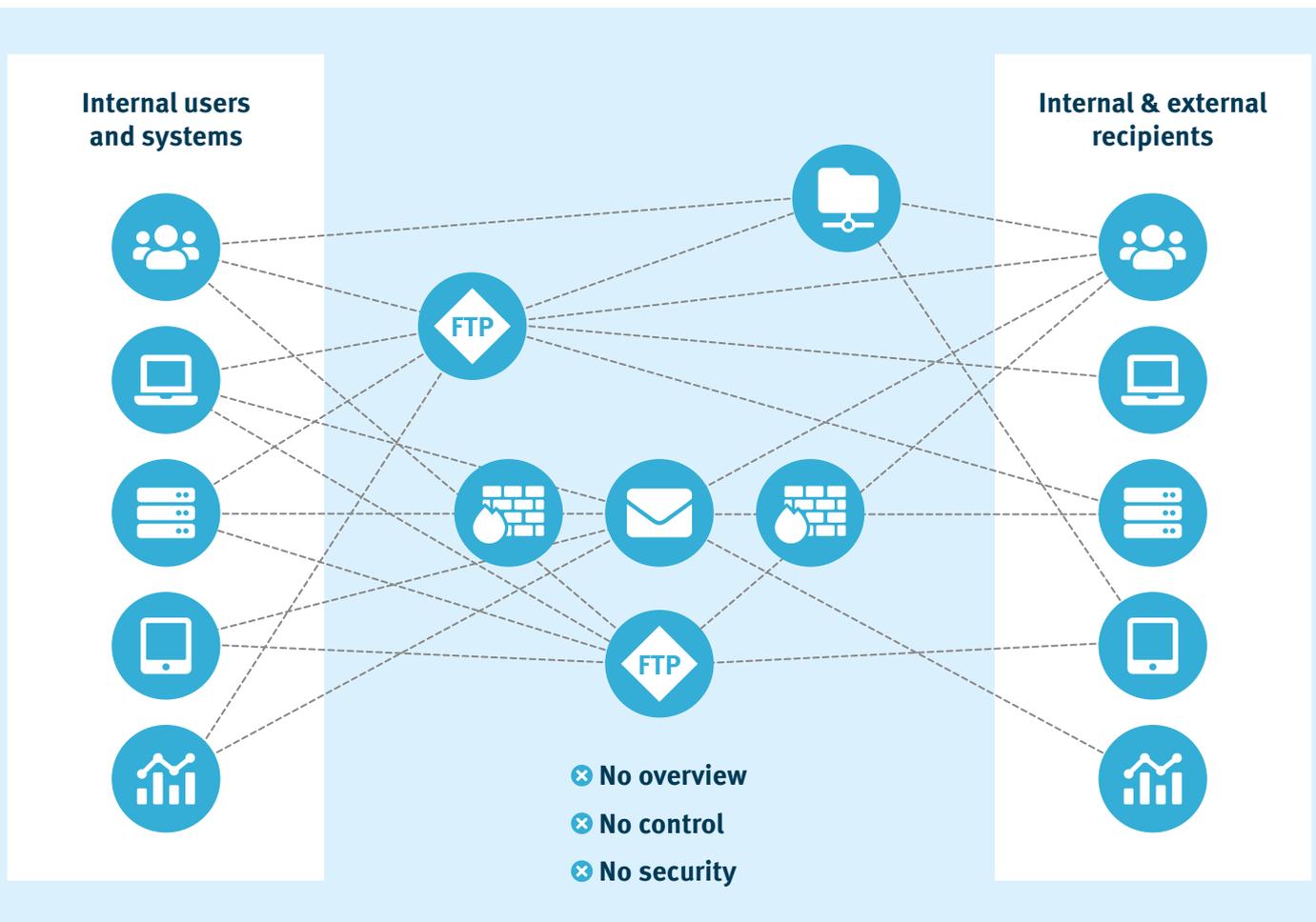
In an unwieldy, multi-linked **legacy landscape**, this can quickly become difficult – and in the case of access-restricted **sensitive data**, a significant **risk**.

This no longer only applies to globally active companies. In the interwoven data landscape of the globalized world, **no company can be sure that its data will not leave the country at some point.** This could even happen through such an innocuous link as a partner in the same country using a server in a less secure region. The line between unsound business behaviour and criminal activity is often thin, and difficult to recognize. It is therefore critical to fully document exactly who has sent what data to whom and when. This needs to be logged in compliance with all relevant regulations to avoid the risk of severe penalties and loss of reputation. In a worst case scenario, this could even result in a trading ban.

Scalability and agility have – rightly – become two of the most popular buzzwords of our time. Whether fluctuating data volumes, system upgrades, new business partners or the general fragility of global supply chains, the ability to immediately respond to challenges is no longer something special, but something fundamental. Whether adjusting capacities, linking micro services, integrating applications that run on-premises with those deployed from a cloud.

In companies that work with legacy systems, IT teams have to start from scratch each time they need to incorporate such changes. This is a weak point which not only swallows up valuable time, but also leaves the system vulnerable to new and stronger security issues.

An overburdened system is prone to errors, and error-prone systems are expensive. A system with weak points, holes, and unnecessarily slow data transfer doesn't let you harness the full potential of your data. In the worst case, it impacts the company's profits. However, they also tie up skilled labour to locate and fix errors – skilled labour that would be so useful and valuable elsewhere, especially considering how difficult it currently is to find well qualified, skilled workers.



Relying on legacy systems in data transfer

In short, legacy systems are expensive, messy, insufficiently agile and scalable, and don't offer centralized monitoring tools or access management. On the other hand, an MFT solution on a central integration platform would let you link a plethora of old systems and get data flowing, using just one platform. This not only conserves operating costs and resources, it also gives you the end-

to-end monitoring and transparency which is necessary to comply with the many regulations in today's modern business world. MFT can be deployed on-premises, in the cloud or in a hybrid versions, as your business requires, such as if logistics data needs to be available in the cloud but critical production data should remain on-premises.

Step confidently into the future with Managed File Transfer

The COVID pandemic has ignited the already rapid increase in data use. Essentially overnight, employees started working from home, and their companies had to – speedily yet securely – get them linked up. This state of affairs is here to stay and the explosion of data, information, devices, endpoints and channels will continue as more and more information needs to be transported.

Employees and systems, companies and partners have become meshed together in a completely new way. This has often led to an impenetrable labyrinth of different scripts and manually managed certificates, user administration and access rights. The resulting security risks are by no means trivial. At the same time, the need for real-time global data exchange is pushing the trend towards format standardization. Systems need to be able to fluently translate between the different formats without compromising quality or integrity. How can Managed File Transfer help you achieve all this?

Security

MFT is a secure way of transferring data from one computer to another over a network. In the process, the data is broken down into packets for transmission and sent over appropriate transmission routes. Data arrives significantly faster than over FTP. These data packets are automatically encrypted at transport level (Transport Layer Security (TLS)). Data transmitted with TLS cannot be read by third parties. It is also possible to encrypt or sign the message content itself.

Unlike with e-mail, the data is transmitted directly to the recipient – with no intermediate stations where third parties could access it (end-to-end instead of store-and-forward). These security features are default, without the user having to deal with the security settings

Scalability

Modern companies need technical solutions that are as agile as they are. MFT is always as large or small as you need, without having to book or manually connect costly extensions. Seasonally fluctuating data streams are as easy to master for MFT as healthy growth. Once connected, the MFT system automatically adapts to all needs.

Compliance

Reporting and recall functions, one hundred percent traceability and customizable internal transparency for all activities ensure that data movements can be fully traced and managed at any time. Furthermore, the non-repudiation features inherent in MFT mean that parties cannot deny the authenticity of a signature or the transmission of a message. In managed file transfer, you can encrypt and anonymize data. You can be assured of the confidentiality and integrity of the messages, and even fully restore all data should there be a blip in the system. To this end, MFT enables company-wide implementation of security and data protection guidelines, as well as compliance with industry-specific regulations such as Basel II, Sarbanes-Oxley Act (SOX), the Health Insurance Portability and Accountability Act (HIIIPA), the Payment Card Industry Data Security Standards (PCI DSS) etc. MFT ensures that data complies with regulatory requirements so that companies can focus on their core business.

Monitoring

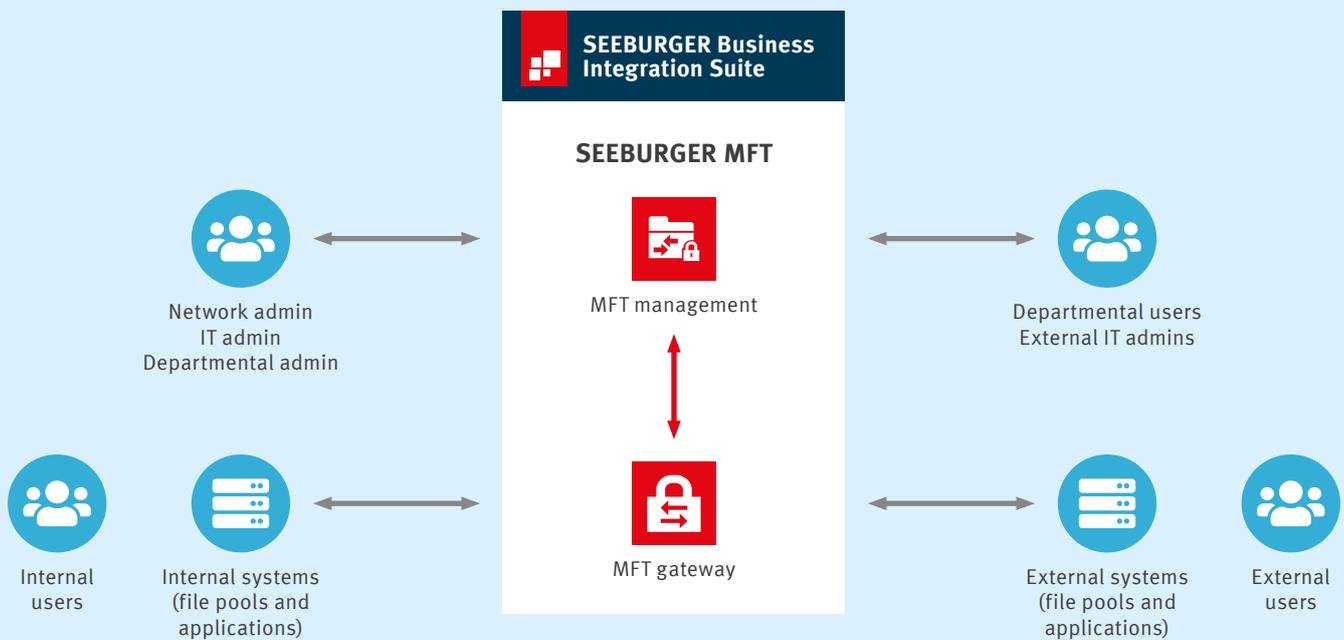
With the strict compliance regulations common today, companies often need to be able to fully trace and prove who had access to what data and when. Conversely, this also means that companies that cannot do this are not really aware of what is happening with their data.

The central administrative options for MFT allow tight monitoring and control of all data being transferred. If desired, you can even automate the management and monitoring of access rights. Strong user authentication and role assignment prevent unauthorised access. Data movements can be transparently traced at all times, which minimizes risk by allowing you to identify an issue at an early stage. Furthermore, by using performance metrics to measure the parameters of choice, it is easy to see whether the processes using MFT can be optimized in any way.

Efficiency

It is said that the biggest enemy of security is convenience. However, Managed File Transfer is just as simple to use as e-mail, and fits neatly into an existing work environment without employees having to be trained first. Data can be transferred automatically on an ad hoc, scheduled or event basis, which presents enormous time-saving potential in day-to-day business. Last but not least, it's easy to connect partners and customers with automated onboarding tools and self-services.

A cloud-based MFT solution helps companies overcome obstacles and to comply with legal stipulations while giving them the necessary agility to remain competitive – at all levels



Data transfer using Managed File Transfer

What's next?

01

The trend is clearly moving away from on-premises systems towards XaaS (as a Service) offerings, e.g. managed file transfer in the cloud. Flexible and scalable, such systems not only keep pace with market developments, but are easy to dynamically adapt to fluctuating company needs. This makes it all the more important to have data transfer systems which can communicate in all directions. A hybrid approach lets you win the balancing act between on-premises legacy systems and cloud-based services, getting the most out of your existing systems.

02

Instead of buying a product and using it indefinitely, the trend in many areas is increasingly towards pay-per-use. Here, the buyer does not pay for the software, but for how much he actually uses it. Such models are quickly and easily available from a cloud.

03

For a long time, MFT was a tool for specialists, and companies needed an IT team to operate it. Modern MFT solutions offer convenient self-services and are no more complicated to use than e-mail. This means it is easy to use, doesn't require training, and can even be used by employees and partners with no technical background.

04

Increasingly hot summers and extreme weather means we are noticing the effects of climate change, even in milder latitudes. As a result, customers are paying more attention to the sustainability credentials of the companies they choose to do business with. MFT would be an ideal way to collate data on the CO2 emissions of all company touchpoints, and transfer it to be prepared for Net Zero reporting.

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MFT in the cloud

Cloud services are growing in popularity, and managed file transfer is also no longer limited to on-premises offerings. Modern MFT solutions from the cloud offer optimal scalability with minimal effort for the IT team. MFT in the cloud is typically connected via third-party providers; depending on the operating model, there may be no work involved at all for the in-house IT team. Instead, there are MFT operators who also handle any necessary updates and maintenance on your behalf. Companies can therefore benefit from secure data transfer with no major set up or operating costs. Since MFT in the cloud does not require on-site servers, or even regular updates and maintenance by the company, it is also quicker to set up and cheaper to maintain than classic on-premises models.

MFT in the cloud can be deployed in several different ways. It could run from a private cloud, from a public cloud, be operated in hybrid with on-premises elements, or even subscribed to as a Fully Managed Software as a Service (SaaS). A company chooses the best model for its particular needs, deciding how much influence it wants to have on management and maintenance, or whether to free up resources by fully outsourcing these aspects to the provider.

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MFT in a private cloud

Deploying MFT from a private cloud combines the control inherent in an on-premises solution with the flexibility of the cloud, providing the highest level of security and confidentiality. This makes MFT in a private cloud particularly attractive for government agencies and financial institutions that process particularly sensitive data. However, deploying MFT from a private cloud requires greater support from your in-house IT team, and will not have the scalability range of public clouds. This makes this one of the more complex and cost-intensive options for an organisation.

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MFT in a public cloud

If you deploy MFT from a public cloud, you outsource hardware, software and support to a third-party provider who hosts these services in a public cloud. This may involve just one public cloud, or a combination of several public clouds. This approach not only means that your MFT solution would be infinitely scalable. It also doesn't require any in-house resources for IT support. However, public clouds are designed to be used by several users at once, meaning that their infrastructure is often less flexible than that of a private cloud.

05c

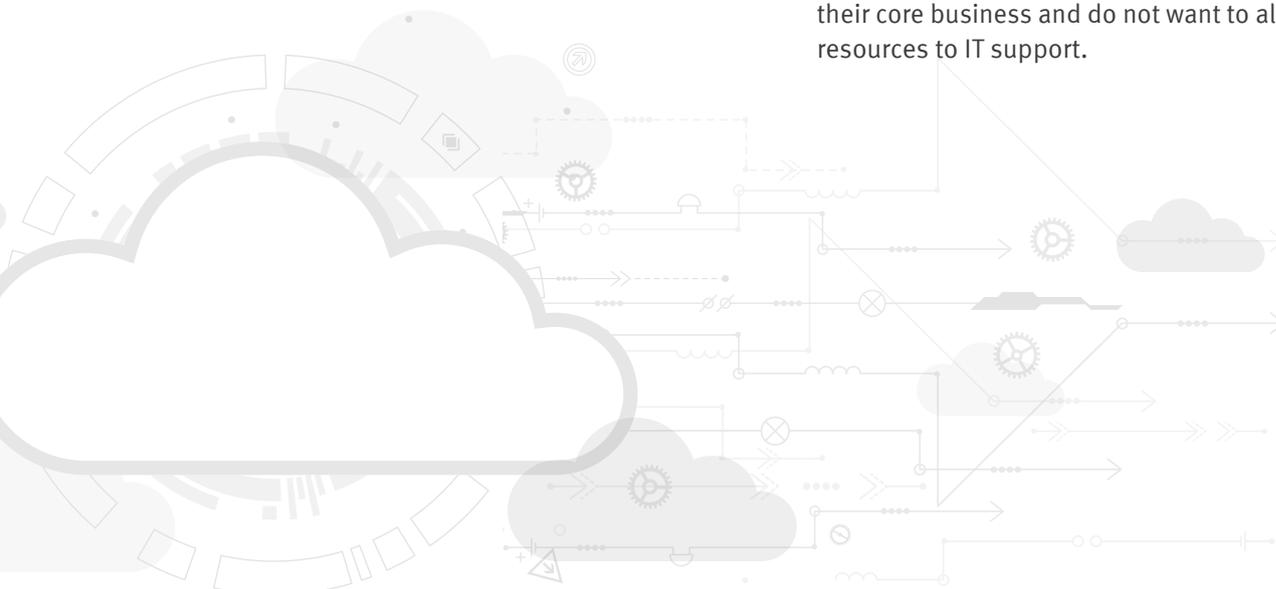
MFT in a hybrid deployment model

Depending on the type of business, it may be appropriate to serve different needs in different ways. You may, for example, want to keep particularly sensitive data secure in a private cloud or even on-premises, but still take advantage of the unlimited scalability and simple partner onboarding in the public cloud. Hybrid models let a company tailor an MFT solution exactly to its needs of the company. Data exchange between the various components is seamless, meaning that all data can be easily and securely used wherever and whenever it is needed.

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MFT as a Fully Managed Service (SaaS)

MFT as a fully managed service is ideal for companies that want to focus on their own business, and offload hosting and maintaining the MFT solution in the public cloud as well as other support aspects. Managed service providers take care of everything, meaning that the customer does not need its own IT support resources to run and use the MFT solution. To do this, the providers either rent cloud space from one of the established large providers, or set up their services on top of the cloud space already used by their customer. In this way, the customer retains full control over the storage location for their data, which for sensitive data can be business-critical. MFT as a fully managed service is usually the preferred choice of companies that want to focus fully on their core business and do not want to allocate additional resources to IT support.



The data transfer of tomorrow

An MFT solution helps to reduce complexity and respond agilely to the challenges of everyday business through improved, faster file transfers. Both now and in the future.

- ✔ Instead of setting up and maintaining single-role protocols, you could use an MFT solution for all your transmission needs. As you know, reduced complexity always means reduced costs. Nevertheless, MFT remains one hundred percent flexible at all times, and it is simple to add new processing steps or protocols, such as the ISO 20022 standard in the financial services sector.
- ✔ Fully automated strong encryption provides a high level of cyber security and governance. Additional functions such as auditing and reporting, full automation and secure e-mail capabilities help to automatically meet compliance requirements and without an added workload.
- ✔ MFT supports all standard internet-based protocols including HTTP/S, SWIFT, AS2/3/4, SFTP, FTPS etc. Third-party services, such as antivirus programmes, can be natively integrated.
- ✔ Centralized administration tools give you full visibility and control of access rights at all times. Transfer history is transparent and traceable at every level. Employees benefit from simplified, automated workflows and transparent self-services. Last but not least, the technology is online and in use 24/7, regardless of whether employees are present or not.

Any company who seriously wants to become more efficient, increase revenues and reduce time-to-market needs a successful communications system.

Underpinned by the right MFT solution, digital communication becomes fast, reliable and secure.

This lets companies launch new products and services quicker, giving them the agility required to remain competitive.



SEEBURGER helps your business get ahead – globally

Increasing transaction speed, the harmonization and standardization of global message standards such as in ISO 20022, and higher customer expectations are confronting the financial services industry with unprecedented challenges. This means that financial institutions are not only up against traditional competitors, but also the technical prowess and agility of global tech titans such as Google. The following presents just some of the cases in which financial institutions have risen up against the crowd by harnessing the advantages of the modern, secure and scalable MFT capabilities on the SEEBURGER Business Integration Suite.

A US financial company

based in Dallas was working with a complex legacy architecture that made the system unstable and created significant operational risk due to expiring software support.

With the help of SEEBURGER, the company was able to significantly streamline its system landscape, eliminating a total of nine different licences and thus reducing the total cost of ownership. The simplified structure also made it possible to reduce personnel costs by fifty percent, as the new system requires fewer human resources.

A large Austrian banking group

needed a technically robust and highly scalable solution that met the extremely stringent security requirements of the banking sector. At the same time, it should be customizable to global variables, user-friendly, and reliably accessible around the clock.

With SEEBURGER MFT, the company now benefits from fully-integrated access to files in all channels, in several formats and on various operating systems. All in all, SEEBURGER MFT supports the security and compliance requirements of an internationally active financial house.

A leading financial group

which is particularly active in Northern Europe and the Baltic States, was looking for a solution that would give their system landscape a more efficient structure. The aim was to reduce costs and risk by enabling global knowledge exchange for both the business and IT sides. At the same time, the solution needed to be highly customizable to meet individual customer and partner requirements.

With the help of SEEBURGER MFT, the group was able to consolidate its global communications infrastructure and prepare for the rapid increase in the amount of data to be transmitted. This improved the offering to customers, reduced operational risk and time-to-market.

A globally active banking company

from Belgium was looking to replace its previous systems with a solution that could keep up with business growth and not struggle with integrating future business areas. Two vital criteria were the desire for easier, convenient partner onboarding and compliance with stringent regulatory requirements. The company also wanted to future-proof through flexible deployment options and ease in adding and removing services as needs change.

SEEBURGER MFT has helped the company to improve customer experience through smooth, obstacle-free onboarding, to comply with stringent regulations and to be prepared for tomorrow's needs today.

Discover Managed File Transfer on the SEEBURGER Business Integration Suite

SEEBURGER simplifies complex connections between clouds, applications and people so you can focus on what matters most. Namely, meeting the needs of your partners and customers and innovating and growing your business. Numerous customers have been relying on our integration experience since 1986.

Let our experts manage your MFT processes on centralised file transfer technology. Our SEEBURGER MFT solution supports over 70 different protocols, so you can easily and securely replace your patchwork landscape of FTP servers, legacy systems and standalone solutions – on-premises, in the cloud or hybrid. Benefit from the security, speed and scalability of the Business Integration Suite to be ready for the challenges of the modern business world as and when they arise.



Why not download our white paper looking at MFT from a technical perspective? Perfect for senior architects and others who want to know how SEEBURGER MFT ensures integrity, your deployment options, endpoint integration and more.



