

Key Requirements for Automating File Transfers

Stop processing and start automating your business-critical file transfers.

Executive Summary

Challenge

Your critical enterprise processes seem to constantly suffer from file transfer issues. Your staff seems to spend most of its time managing file transfers, finding the right files and diagnosing errors. You are frequently concerned about the security and reliability of data as it moves across your geographically dispersed organization, partners, suppliers, and cloud-based applications. Meanwhile, you are worried about upcoming audits, because you have no centralized governance to record actions for compliance purposes.

Time is being wasted answering emails and phone calls, and helping users move large files. SLAs are being missed far too often. Your customers perceive poor quality of service because of recurring errors and delays, which are now impacting your critical processes, such as business intelligence reporting, data warehousing, payment processing, financial period end close, invoicing, and more. The last straw was when purchasing requested approval to renew maintenance contracts for three distinctly different file transfer tools that together just are not meeting your needs.

Opportunity

Lack of cross-vendor integration and limited visibility across numerous tools have forced you to reconsider your overall approach to file transfers as it relates to the bigger picture company-wide.

You should consider an end-to-end solution in order to regain control, dramatically shorten processing times, guarantee data accuracy, safely move critical business data where it needs it to go, reduce overall costs, and work ahead of compliance audit deadlines.

Benefits

So what are the key capabilities you actually need to successfully implement an end-to-end file transfer solution? We have gathered the top requirements from global enterprises over the past 15 years. All of these enterprises have successfully integrated managed file transfer processes as part their larger business workflow.

For these enterprises, data arrives on time, with fewer data integrity errors, with lower maintenance costs, and fewer staff supervising processes. Now you can do this too. This white paper will show you how.

Governance, Visibility and Control

File transfers reach across your company, your business partners, your supply chain, your SaaS offerings and more. It is a complex and diverse IT and business landscape.

Visibility is typically limited to application silos or one-off integrations that are mandated by a partner, which means you are forced into blind handoffs of important business files. This lack of control over the entire enterprise process results in delays and errors that reveal themselves unexpectedly, and all too often, when it is too late.

You need a solution that provides complete visibility across the entire business process, not just the individual file transfers that are being done by small point solutions that you have already deployed. Complete visibility allows both IT and the business to better manage and monitor the enterprise process from one single pane of glass in order to ensure that the desired outcomes are achieved as expected, on time, and every time.

Service levels require real-time monitoring with predictive capabilities to identify potential SLA violations as, and before, they occur. It is also not only necessary to have the ability to identify when service levels are at risk, but it is also just as critical to be able to act on this, notifying recipients and key stakeholders in a timely manner.

Finally, you need a solution that will relieve you of the regulatory headaches you are dealing with today. A few examples of compliance measures that enterprises have to juggle:

- Section 404 of the Sarbanes-Oxley act requires companies to protect data from unauthorized users and to track data as it crosses application and organizational boundaries.
- The Health Insurance Portability and Accountability Act (HIPAA) requires encryption of communicated health information.
- The Gramm-Leach-Bliley Act Safeguards Rule requires financial institutions to prevent unauthorized access to non-public personal information.
- The EU Data Protection Initiative, now the General Data Protection Regulation (GDPR) as of 2014, regulates all handling of personal data across industry segments and geo-trading zones.
- Every country, state, and industry has additional compliance measures that require detailed logs and audit trails of content encryption, access, authorization, and usage.

When you have a single, centralized point of control for secure file transfers and policy management, you can quickly show your methodology and compliance to mitigate risks and avoid auditing headaches.

Coordination Across Your Business and Partners Requires Built-in File Transfer With Business Automation

Every chain is only as strong as its weakest link. This is especially true for processes that span your entire enterprise. In this case, the weak links are the manual handoffs and disparate file transfer solutions which, in many cases, are a by-product of different partner requirements or legacy technical limitations.

Whether it is moving data between remote company locations or external business partners, or simply between internal systems, most enterprise processes will require secure and reliable file transfers. Often, management of file transfers relies on manual coordination or time-based scheduling. This is not only inefficient, but it also introduces inaccurate or incomplete data into the process. A separate non-integrated and uncoordinated file transfer solution is an *unmanaged* file transfer approach, which introduces yet another disjointed tool, or *island of automation*, and another weak link in the chain that makes up the enterprise process.

Integrated data transfer automation ensures zero latency and data processing errors with your most critical business processes.

Additionally, each of your partners mandates a different protocol for file transfer, which results in complexity when deploying new services. Ultimately, this complexity causes ongoing maintenance headaches that could have been avoided. You need a single solution that supports the right set of communication protocols to ensure safe delivery and non-repudiation: a solution that builds on your existing infrastructure and easily integrates with your partners' environments.

Most file transfer solutions use time-based scheduling, which is not only inefficient but also often results in collecting the wrong or outdated files for processing. Assuming the data is the right data, you have to manually estimate how long each step will take and leave buffers as a contingency for when problems occur; but this also creates unpredictable results in cases when the buffer is not long enough.

In order to guarantee the accuracy, security, and consistency of transferred data, you need event-based triggers. This approach determines whether a file has arrived, whether it is the right file, and that the data is accurate and current before you initiate a transfer. On the receiving end, event-based triggers make sure all the files have been collected before you begin processing.

To help reduce total cost of ownership, reduce potential errors, and improve visibility and control of your transfers, it is important that your managed file transfer solution be embedded as part of your automation solution so that it will enhance the flow and the quality of data across enterprise processes. Having a fully automated managed file transfer solution that is centrally orchestrated as part of the larger process provides consistent and reliable straight-through processing for your company that is more predictable and has fewer errors.

Catch File Transfer Errors, Auto-Remediate, and Escalate

Your business runs on data, and often that data is contained in some document format. When the exchange of those documents fails, often there are larger downstream implications. Incomplete or bad data, whether it is financial processes, such as invoicing for financial period end close or accounting processes, such as payroll or ETL processing for warehousing and analytics, can have a significant downstream business impact on productivity, customer satisfaction, and brand reputation.

As with all manual processes, errors will slip through, and the more steps that are involved in the close process, the higher the likelihood of errors. How many times have you sent an email and realized you sent an earlier draft of the document you really meant to send?

Error checking needs to be extended to include file transfers. Having extensive automated error checking capabilities will serve to *error-proof* your enterprise processes, giving you confidence in the accuracy of your results.

To achieve an error-proof system, a tool needs to have these critical capabilities:

- Validates that appropriate parameters are provided, that process tasks are run in the correct sequence, and that all steps are accurately completed.
- Scans files and other outputs for specific error messages and checks database values to verify that they are appropriate.
- Sends notifications to the responsible parties so that they can take action to fix the errors.

On-Demand Without Losing Control

Your solution needs to meet the ever-increasing demands of end users. The consumerization of IT makes it crucial for you to give the right users the right level of on-demand access without losing control over your environment. You need a self-service aspect for requests for on-demand services and role-based dashboards to provide the right information about the status of those requests. This prevents the user from sending distracting *urgent* requests and proactively demonstrates the value you provide to the business.

For example, a line-of-business owner needs access to on-demand file transfer capabilities, visibility into SLAs, reports of past transfer performance, and a forecast of what you have planned for upcoming months. Your Tier 1 or Tier 2 IT operators need a big-picture view of transfer health and access to remediation routines. And your developers may need services exposed through a Java or Web services API.

Many enterprise processes will experience heavy file transfer volumes with time-critical deadlines at peak processing times, be it payroll, invoicing, dunning runs, material resource planning, or financial period end close. Even when processing volumes are not high enough to cause a total failure, they can result in the addition of latency between the completion of one request and the initiation of the next. While adding a couple of seconds between concurrent requests may not sound like it would cause problems, when you multiply those two seconds by 100,000 file transfers or the movement of 10 virtual machines, each 60GB in size, significant delays can occur. If processing deadlines are missed, it can result in a negative business impact and financial repercussions. To address these two issues, you need a managed file transfer solution that:

- Prioritizes processing so that tasks which are assigned to a high-priority queue will execute before lower priority tasks.
- Provides dynamic processing controls to control process initiation and to work with other system performance analysis tools in order to dynamically increase or decrease throughput.
- Identifies performance problems as they arise and provides a resource-weighting capability, so if one job is more resource-intensive than the others, additional resources can be allocated to it.

Multi-Tenancy and Role-Based Access Control Enables IT-as-a-Service

You may not realize it, but every large-scale IT department, whether in-house or outsourced, is now a service provider. Whether you are hosting services for a thousand of banks, or you are providing a Software-as-a-Service offerings for payment reconciliation service for a company, or you are internal IT providing services for different organizations within your company, the business now expects that you act as a service provider.

The CIO expects IT to be able to say how much a service costs and will often charge back those services to the line of business. The application owners within a line of business want to know their investments in IT services are sound and that you are meeting their service level agreements. They want a personalized user experience and to see the value IT is providing them. You need multi-tenancy to ensure that each client has a sand-boxed environment for auditing, control, and to manage each business's service levels and expectations. Finally, aligning to the on-demand needs already discussed within each tenant environment, to ensure an optimized user experience, you need role-based access control with customized dashboards to ensure that the right users have the right information at the right time.

Conclusion

If you are looking for a managed file transfer solution that is built to meet the demanding requirements of a dynamic, modern-day business, it is important to consider the following key capabilities:

- Governance, visibility, and control of all your file transfers.
- Coordination of all file transfers, whether internal or external, with enterprise processes.
- Partner integration without having control over partner systems.
- Intelligent management of errors with auto-remediation and escalations.
- The means to provide end users with a self-service capability.
- Multi-tenancy to manage more than one customer.

While there are many other factors that are also important to consider, only by ensuring that your solution encompasses the above key capabilities as a foundation can you be certain that you will be able to meet the ever-increasing demands of the business.

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