

RETARUS WHITE PAPER

Key Business and IT Drivers to Eliminate Internal Fax Infrastructure

Maximizing Efficiencies by Moving Internal Enterprise Fax Services to a Cloud-Based Solution

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The Big Picture

IT Infrastructure Upgrades are Prompting Companies to Evaluate Enterprise Fax Services Solutions

For most IT infrastructures, maintaining an internal enterprise fax server represents a major investment in the software, hardware, and administrative resources required to guarantee 24/7 operations. For companies with a global presence, there are more regional and local costs that further add to the complexity of their IT landscape. Regularly scheduled communication infrastructure upgrades are costly and force many organizations to migrate their services to outsourced fax service providers, which eliminates the challenges of maintaining costly hardware, software, and telco infrastructure.

This white paper will provide key information for decision makers, both business and technology executives, about the challenges associated with maintaining an internal fax infrastructure vs. the numerous benefits associated with utilizing an cloud-based service strategy for their mission critical fax communications.

The Challenge

High Costs Maintaining Internal Fax Servers and Support

Recessive economies are forcing global enterprises to reconsider the ROI of their internal fax infrastructures. Recent studies conducted by several analyst firms show that companies using fax as a critical business messaging tool spend hundreds of thousands of dollars of annual IT budgets in

managing system functionality, capacity planning and uptime to run their fax infrastructure.

According to IT analysts and industry experts, many companies are running business critical fax applications on outdated equipment. In troubled economies, expenditures should be directed to drive new business and increase revenue, moving towards the trend of outsourcing networks, data services, enterprise applications, provisioning, help desk/support and other tasks. This is why considering a migration of internal fax operations to an cloud-based service is crucial, as it impacts budgets and streamlines operational efficiencies.

The Solution

Migrating to a Cloud-Based Fax Service Results in Total Control and Lower Costs

A cloud-based fax service provides at a minimum, the same level of quality and control traditionally associated with an internally managed global fax infrastructure, but eliminates the higher costs associated with acquisition, implementation, deployment and management of fax servers and regional telecom providers. Because the cloud fax business model is traditionally based on a “pay-per page” transaction, costs are significantly reduced as the pricing structure is strictly based on paying for fax transmissions that are utilized. This structure eliminates high up front investments and capital expenditures (CAPEX) which are required for an enterprise solution, and removes costly ongoing maintenance and operational costs, since all infrastructure is hosted with a cloud-based service like Retarus. Such a hosted solutions enables costs to be spread over millions of transactions, and

represents a significant cost reduction to clients. These economies of scale could never be achieved by a single company and the savings significantly benefit the client's bottom line.

The Benefits

Increased Cost Saving, Scalability and Redistribution of Resources

A key benefit of a cloud-based fax service, is the unique detailed cross media transmission and tracking reporting, that allow IT organizations to move from a cost center model to one where resource distribution is based on fax usage. This enables an activity-based chargeback system, which provides greater levels of transparency inside organizations and for individual business units, allowing IT departments to optimize budgets and direct valuable resources to growth and revenue generating initiatives.

The Big Picture

Cloud-Based Services and the Emerging Enterprise Fax Technology

The use of a cloud-based service continues to grow significantly, and this growth will increase to become the bulk of new IT spend. Looking back over the last few decades, the introduction of a wide variety of proprietary technology platforms required that IT organizations enforce strict internal controls in an effort to maximize productivity, reduce issues, and downtime. Controlled deployment of fax communications fell under this policy.

The recent economy has led many companies to re-evaluate their existing costly approaches of maintaining internal fax services, migrating to a less costly outsourced solution, namely **cloud-based fax services**. This is a growing trend across the board, as cloud-based solutions provide global fax services at a lower TCO and reside in a more scalable and secure environment.

Today, maintaining an internal fax infrastructure requires considerable capital expenditure (CAPEX) for implementation, maintenance, administration, support/help desk personnel, regional telecom and 24/7 redundant data systems. For global enterprises, there are additional costs for local telecom providers and other expenses that directly impact the overall cost of a worldwide fax service operation. These high costs associated with maintaining an internal enterprise fax infrastructure have been key to companies reconsidering their fax investment. According to detailed evaluations of our recent customer projects, the cost to maintain an internal fax infrastructure equated to approximately \$ 0.37 per fax transmitted for one client. Due to their volume,

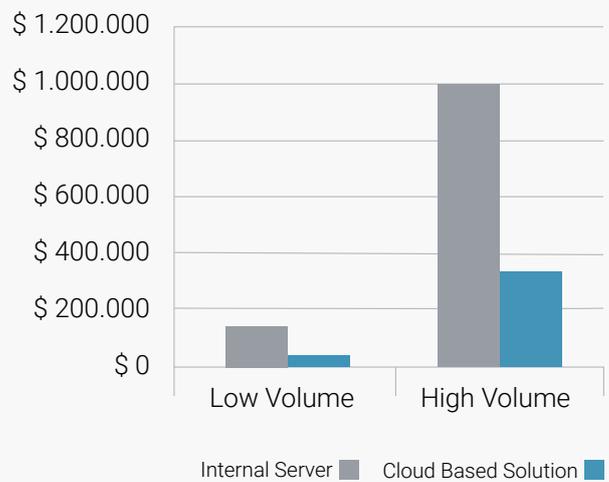
the cost for transmitting hundreds of thousands of pages per month totaled millions of dollars per year.

Cloud fax providers, like Retarus, provide consultative ROI assessments that demonstrate higher costs associated with on-premise services in a majority of cases. These assessments consider costs associated with telecommunications (PRIs, T1s, per minute costs, per line costs, taxes), capital costs (outlay, server and fax cards for primary and disaster recovery sites), support and maintenance costs (internal personnel, third party maintenance and support contracts), compliance costs (internal and external audits, local and international fines and penalties), and downtime costs (busy and lost fax costs, service unavailability impact, lost productivity costs, reporting and troubleshooting) which altogether give a detailed perspective on current spend compared to an enterprise cloud provider.

Typical Overall Cost Comparison

Internal Fax Servers vs. Cloud-Based Solution.

Up to 70 % Cost Reduction



The Challenge

Maintaining a Global Enterprise Fax Infrastructure

For the past several decades, it has been cost effective for companies to install internal centralized fax servers rather than deploying numerous fax machines for each branch, office or department. Experience has shown that the cost per page was **around \$ 3.00**, mainly distributed in labor costs associated with sending a fax manually. While maintaining an internal centralized fax service lowered the average cost per-page, companies also incurred into additional costs:

- Investments in fax servers and redundant backup systems
- Telecom costs and fees
- Scheduled capacity assessments
- Hidden costs such as shadow IT support and development
- Administration, help desk/support tasks
- Hardware and software upgrades
- Maintenance and service contracts

This IT infrastructure lowered the **cost of sending one single fax page up to 93 % – from \$ 3.00 to around \$ 0.20** per page on average. Based on our experience from numerous customer conversations, many executives and managers underestimate the cost per fax and assume only a few cents per page. But this is not accurate, as in general, they have not factored in all operational costs mentioned above. Even though this represented a significant cost savings over manual fax, companies with high fax volume could still easily reach millions of dollars in spend to support their global fax infrastructure. In addition, for global companies with offices in different continents, maintaining an internal fax

infrastructure represents the following additional and costly challenges:

Managing a Global Infrastructure

Each region has their own hardware, software, telecom, organizational infrastructures in addition to replacement policies, data center management, local telephony, contractual service requirements, and business continuity planning for redundancy. All of these tasks not only add considerable cost to an IT budget, but also increase the level of management complexity. One of the most critical tasks is to keep operations running seamlessly at all times, especially during server upgrades, and any other planned or unplanned downtime.

Implementing Robust Security and Compliance Processes and Guidelines

In the fax space, numerous service companies must comply with a series of regulations such as HIPAA and HITECH in the healthcare sector, Sarbanes-Oxley for publicly traded businesses, SSAE 16 (Type II)/ISAE 3402 (Type II), the General Data Privacy Regulation (GDPR) and PCI DSS for credit card processing. Under these regulations, companies that manage sensitive corporate personnel and financial data must adhere to strict security guidelines to protect it. For example, in healthcare, hard-copy documents sitting unsecured on a fax machine, on a desk, or even digitally on the screen of a computer can be a violation as personal information could be exposed. Furthermore, documents stored on an unsecured server or in an unencrypted e-mail may also constitute significant regulatory risk. Any of these can result in a breach of confidentiality and unauthorized access to personal information potential leading to costly penalties, litigation, business relationship issues and corporate image.

Implementing a Solid Business Continuity Plan

For global companies, especially those in the service space, it is critical to have a Business Continuity Plan in place that will provide guidelines for the ongoing continuity of mission-critical business functions across each business region in the event of a disaster. Companies must make a significant investment in regional data centers and geographically dispersed backup systems to ensure service uptime. These backup systems must provide instantaneous cutover with similar scalable performance levels equivalent to the primary systems to handle traffic volume spikes. All backup systems must be upgraded along with primary systems to ensure peak performance and compliance.

Recovering and Allocating Operating Costs

Most companies manage fax service infrastructures as a cost center. Consequently, IT departments absorb the entire expense associated with managing it. This in turn provides a challenge when reallocating fax service costs based on fax usage. Determining the cost of fax services on a department basis is more difficult for budget planning.

Implementing Environmental Friendly Initiatives

The nature of the fax business relies heavily in paper usage. However, today environmentally responsible energy-related resources are now critical business directives. As a result, companies are more conscious of paper usage, implemented recycling programs, but even more so, there is a trend to explore new ways to reduce overall electricity and power consumption. With a hosted service provider, organizations will reduce paper usage by digitizing inbound fax documents and reducing the need to print when sending a fax, eliminate the need for

manual insertion of information received from paper faxes by assisting with workflow processes to automate manual processes via OCR technology, eliminate the need for physical storage of paper documents with document management routing of inbound faxes, and reduce electricity usage by removing necessary power supply to fax machines or servers in data centers. the need to print when sending a fax, eliminate the need for manual insertion of information received from paper faxes by assisting with workflow processes to automate manual processes via OCR technology, eliminate the need for physical storage of paper documents with document management routing of inbound faxes, and reduce electricity usage by removing necessary power supply to fax machines or servers in data centers.

Reporting Transparency

Cloud-based fax services provide live reporting at a variety of levels; for each user, business unit or organization. This allows companies to monitor fax usage and allocate costs based on usage history. With this model costs can be distributed by departments providing effective cost recovery and control. In addition, having a centralized and robust reporting tool aids and simplifies troubleshooting. This centralized approach streamlines legal discovery, regulatory review and audit processes, as there is no longer reliance on personal filing systems. Such a service is always available, searchable down to smallest detail, and can provide an archive of the metadata for transmission and documents, ensuring simplified compliance with regulators, joint commissions, audits, and more.

The Solution

Cloud-Based Fax Services

Cloud-based strategies leverage shared network resources which enable on-demand information services that can be rapidly provisioned with a high degree of flexibility and scalability. Additionally, utilizing shared resources and strategically placed data centers allows enterprise cloud services to provide the equivalent of an internal fax infrastructure without the associated CAPEX. As a result, there is a significant increase in companies revisiting IT internal fax strategies and migrating to a cloud-based service. Some of the major benefits associated with a cloud-based infrastructure include:

Simplified Infrastructure

Implementing a cloud-based fax strategy centralizes all contact for management, administrative, help desk/support, and reporting functions. A key benefit of this model is the availability of a robust reporting tool that allows monitoring of all global and individual communication at any time, eliminating the need for operational staff and freeing resources towards growing other mission critical areas.

Reduces Complexity of IT Landscapes

With a cloud-based strategy, IT organizations are no longer responsible for managing, maintaining, or upgrading existing platform and application standards. Its flexibility allows that any client utilizing SMTP or MFD's can easily integrate to a cloud-based fax service model allowing each department to choose the best solution to meet its needs.

Adherence to Local Compliance Laws and Robust Security

Cloud-based fax service provide complete security auditing and reporting to ensure full compliance

with all industry-specific regulatory requirements and models adhere to strict security policies.

As a global organization, Retarus has the knowledge and capability to provide services to organizations both domestically and internationally. Without the need to invest in additional infrastructure to support international compliance, companies can leverage Retarus to comply with local regulations around the globe. To do so, Retarus meets or exceeds the requirements for security, backup, audit, access control and using state of the industry encryption and multilayered audit trails for compliance. Distributed across the globe, the data centers fulfill the most stringent requirements for data protection and data security. Retarus consciously refrains from the effort of carrying out every possible certification. Instead Retarus relies on a strict system of internal controls, which is subject to ongoing audits carried out by a renowned auditing company. If required, Retarus would be glad to allow your auditors access to the data centers in person and give them the necessary insight into relevant processes.

Business Continuity Plan Provides Uptime For All Processes

Retarus' cloud-based fax service model utilizes multiple data centers located around the globe to provide service uptime, failover and redundancy. This eliminates the need to maintain costly data centers and redundant systems, while ensuring that there is limited impact of services during acts of nature. Service availability and uptime is governed by strict and custom service level agreements for each organization, designed to give the customer the utmost protection and highest level of quality.

Progression of Enterprise Fax Technology and Costs 1980's – Present

	Old Legacy Model	Transitional Model	Current/Future Model
Years	1980's – 2000	2000 – 2010	2010 – Present
Technology	Manual Fax Machines	Managed Fax Servers	Cloud-Based Enterprise Fax Services
Average Cost per Page	\$ 3.00	\$ 0.20	< \$ 0.10
Average Savings from previous Technologies	N/A	93 %	55 – 75 %

The Benefits

Increased Cost Saving Scalability and Redistribution of Resources

Implementing a cloud-based fax service eliminates investing, deployment and maintenance of a costly in-house fax infrastructure. When migrating to a cloud-based service, companies immediately eliminate all costs associated with acquiring, implementing, deploying, and managing fax servers, telecom lines, and administration/support personnel.

Using a competitive pricing model based on the number of fax messages transmitted, a cloud-based fax solution further reduces the total cost of transmitting a fax page compared to an in-house managed fax strategy. On average, all costs for

transmitting an **enterprise-managed fax page range from \$0.20 – \$0.25, in comparison to less than \$0.10** per page for those businesses that utilize an cloud-based solution. Cloud-based services operate on a “pay per page” model; where a company will only pay for the fax services that are utilized.

Analyzing the Total Cost of Ownership

Cost reduction has been a key driver in moving fax operations to the cloud. Organizations utilizing an cloud-based fax service versus an enterprise managed fax system not only reduce their total cost of ownership (TCO), but simplify the total lifecycle of the faxing process.

How Retarus Can Help

Enterprise Fax Services

IT professionals know that maintaining a fax infrastructure is expensive – and they are being pushed to do more with less every day. As development, integration, operational and personnel costs continue to rise, outdated equipment and legacy systems are becoming a growing burden to many organizations. For companies looking to dramatically reduce total cost of ownership, technology analysts recommend consolidating IT

infrastructures by replacing fax servers with a cloud-based fax services. Advantages include high reliability, no capacity constraints and greater flexibility when migrating to voice over IP services.

With **Retarus Cloud Fax Services** you obtain unlimited fax capacity without additional investment in hardware, software, maintenance, licenses or fax lines.

Internal Fax Servers vs. Cloud-Based Solutions

	Internal Fax Servers	Cloud-Based Solutions
Administration	Administration performed from fax server or client workstation	Web-based administration
Capital Investment	Server hardware, software, telecom services	None
Data Security	Level of security dependent on several key areas throughout organization	Comprehensive information security with technical and administrative controls to protect customer data and maintain regulatory compliance
Disaster Recovery	Often, no disaster recovery capability	Dispersed and redundant data centers for business continuity
Green Technology	No	Yes
IT Knowledge/Support	Resources required 24/7	Little to no internal resources required
Ongoing IT Investment	Hardware, client/ server software upgrades; monthly hardware/software maintenance fees	None
Ongoing Telecom Investment	Monthly T1/E1 line fees, DID numbers, taxes, and surcharges	Low monthly fee for DIDs only
Physical Security	Dependent on physical security controls deployed throughout the enterprise	Hardened data centers with advanced security and access controls
Planning and Implementation	Weeks to months	A few hours
Reliability	Often, no redundancy or effective monitoring. Adding redundancy and monitoring can more than double the initial capital investment	High availability, geographic redundancy, and 24/7 worldwide network operations center monitoring
Reporting	Capabilities vary	Web based portal with live monitoring, detailed historic, and searchable reporting capabilities
Scalability	Restricted based on existing hardware and telecom configuration	On-demand scalability for capacity peaks or corporate growth
Total Cost of Ownership	High – CAPEX, maintenance, telecom, personnel, compliance, administration, certifications, etc.	Low – normally less than half the cost of a fax server infrastructure