

# The Urgency of Cloud Fax

Innovation Report: Retarus

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## Introduction

Some say that operating an in-house fax system is impractical, expensive, and drains competing resources. Many will say that it makes little sense to continue using a dated fax infrastructure when the advantages of cloud faxing are well within reach. Productivity, automation, faster business cycles, and better quality service all contribute to improving the bottom line. The demand for fax systems has not diminished, business needs are growing, and almost 100% of fax services growth will utilize cloud computing platforms.<sup>1</sup>

Migrations to cloud platforms are accelerating and conventional fax server providers are not able to catch up, as a new class of cloud providers have credibility and the technological equivalence to match their soon-to-be predecessors.

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Cyber threats are viciously disrupting businesses and jeopardizing the security of personal information, while regulations have been implemented to thwart such attacks at the expense of the companies and the vendors who serve them.

Healthcare is a battleground, as federal rulings have been passed that mandate interoperability and faxing systems’ long-standing technology neutrality comes into question when it is “cloudified.”

This report is about urgency and innovation; pressures placed upon fax-reliant companies to cut costs and sustain a compliant business drives innovation in the industry. The spotlight shines on Retarus and the innovation they bring to the market. Customer interviews and survey data contributed to this report.

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<sup>1</sup> The “Fax2020 Market Analysis and Strategic Report”; M. Malone, E. Snow

## Market Highlights

Billions of pages are transmitted every day and individually, many companies send millions of pages per month. The business is tangible; the demand is there so let the data speak for itself.

The largest growth segment by revenue and customer base reported year over year is coming from enterprise cloud fax providers. Survey data provided by various fax vendors concluded strong double-digit growth, YOY. Cloud providers servicing large scale fax operations reveal YOY growth numbers well over 50%. On-premise fax server sales are declining but niche, smaller business, and technology vendors are reporting positive double-digit growth.<sup>2</sup>

Regulated industries, such as healthcare and the financial sector, generate the most demand and brisk growth remains in traditional segments such as manufacturing, insurance, legal, government, transportation, utilities, food delivery, and real estate.

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## Influencers

The largest drivers for continued growth in the fax systems market have to do with meeting demands from various perspectives.

- Interoperability will continue to positively impact market growth. API offerings are growing and make integrations fast and cost-efficient.
- Office productivity is changing, as fax usage is relocating to devices and mobile apps.
- Process automation is a key driver influencing the market. Automated capture workflows are getting better as data extraction methods improve.
- Once known as Production Faxing, a.k.a. back-office faxing (LOB, ERP, mainframes) remains in demand because it works, and the hard and soft ROI justifies it.

## Urgency

Fax-dependent companies should not be in the business of running a large-scale fax operation, as it distracts from the core business and consumes IT resources that are better spent elsewhere. While they are compelled to operate under looming regulations to protect sensitive information, C-level decision makers want to get the most out of their IT investments while driving costs down. This

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<sup>2</sup> Fax2020 Fax Vendor Survey

pressure, both external and internal, motivates companies to change their IT strategies and look upwards toward the clouds.

### Roadblocks

Migrations to cloud platforms are accelerating and conventional fax server providers are not able to catch up with cloud options of their own. Why are companies waiting to migrate? Boiled down, the answer is risk. Relinquishing control, quality of service, security threats, data breaches, transparency – apprehension is rational.

Vendors were surveyed to describe some of the obstacles they face when customers consider enterprise fax cloud platforms.<sup>3</sup>

- **Migrating.** A reluctance to change, a lack of trust in the technology, skeptical of privacy, and dismantling challenges.
- **Control.** Losing administrative control over the enterprise and monitoring communications in real-time are the biggest concerns – the fate of the fax operation is now in the hands of the provider.
- **Security and Compliance.** Needed throughout the fax life cycle; data in transit, at rest, sovereignty, encryption, real-time connections, and auditable confirmations must be in place. Compliance gaps must be filled.
- **Interoperability.** It must work with everything seamlessly. How can a cloud enterprise do that? How does it fulfill the needs required in the healthcare industry? One answer is the use of application programming interfaces (APIs).

### The Compliance of Fax

Financial companies, healthcare organizations, or any merchant processing credit card payments must adhere to rigid rules and regulations to keep information protected. The definition of compliance has a blemished history, however. In the early days, ambiguity abounded, which prompted vendors to self-declare they have compliant products and services based on loose interpretations of the rules. Today the rules and regulations are clearer and better enforced, but the pieces and parts of a compliant solution are many.

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<sup>3</sup> Fax2020 Fax Vendor Survey

The Compliance Landscape				
Regulatory		Standards/Protocols		Security
HIPAA	FERPA	ISO/IEC 27001	TLS/SSL	AES-256
FFIEC	PIPEDA (CA)	SSAE16/SOC	HTTPS	PDF/A
GDPR (E.U.)	PHIPA (CA)	NIST/FIPS	VPN	Elliptical Curve
GLB Privacy Rule	FISMA	HITRUST	SRTP/SFTP	PGP
CMS Rules	ONC Cares Act	TISAX	PDF/A	Blockchain
SOX	NHS (U.K.)	Patient Access API	S/MIME	Public/Private Key
		HIEs	T.30/T.37/T.38	
			PCI-DSS	
			USCDI	

Often called “hack-proof” traditional fax systems using private phone circuits are inherently secure and most would claim that compliance was built-in by default. The paradigm changes when functioning control of the operations shifts to a cloud provider, who now is a key part of the compliance equation.

### The Healthcare Battleground – Relevant?

Talk about an industry in turmoil; healthcare companies are tangled in a cobweb of laws, rules, and regulations. Fax service providers are part of the mix but how does the technology of exchanging faxes relate to these directives? Where is it specifically written in any legislation or policy that governs the sending and receiving of faxes? There are none but that does not mean fax-reliant companies and their vendors are off the hook. Interoperability policies, datacenter compliance, and keeping ePHI secure are all vital.

### Interoperability Rulings

Recent U.S. regulations and rules mandate that data be shared across disparate medical systems and be easily accessible by patients via Health Information Exchanges (HIE).<sup>4</sup> Patient portals are becoming the norm and APIs allow disparate systems to connect. Some of the more relevant rulings include:

- **ONC Cures Act Final Rule.** Implements interoperability requirements outlined in the Cures Act and calls for partnerships among health information exchange networks, and health information technology certification requirements that encourage interoperability.<sup>5</sup> It calls on the healthcare industry to adopt standardized application programming interfaces (APIs).

<sup>4</sup> Health Information Exchange allows health care professionals and patients to appropriately access and securely share a patient’s medical information electronically. Source: The Office of the National Coordinator for Health Information Technology (ONC).

<sup>5</sup> National Institutes of Health (NIH), National Library of Medicine, PubMed.gov

- **CMS Interoperability and Patient Access Final Rule.** Focused on driving interoperability and patient access to health information.<sup>6</sup> New policies expand access to health information and improve the seamless exchange of data in healthcare.
- **Fast Healthcare Interoperability Resources (FHIR).** A next-generation interoperability standard designed to enable health data, including clinical and administrative data, to be quickly and efficiently exchanged.

### The API Conditions and Maintenance of Certification

As a key element in the Cures Act Final Rule, API technology is to be certified after meeting transparency conditions, permitted fees conditions, and open-competitive conditions. Gaining certification is dependent on meeting criteria specified in two categories of certification: Privacy and Security and Design and Performance.<sup>7</sup>

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### Health Information Exchanges

The Centers for Medicare & Medicaid Services (CMS) description says it best: “Health Information Exchange allows health care professionals and patients to appropriately access and securely share a patient’s medical information electronically.” It continues, “There are many health care delivery scenarios driving the technology behind the different forms of health information exchange available today.”<sup>8</sup>

Whether used for coordinated planned care, or for unplanned care, or for patient access, fax is a critical component indeed, but does the technology used to exchange faxes need governance with respect to Health Information Exchanges?

### HIPAA Security Rule v. HITRUST

HIPAA is a U.S. legislation that authorizes U.S. Department of Health and Humans Services (HHS) to define rules and regulations to protect PHI, among other things. HITRUST is an expensive certification process exploiting the ambiguity associated with the overabundance of standards and regulations in the healthcare industry.

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<sup>6</sup> U.S. HHS: Centers for Medicare & Medicaid Services (CMS) passed “The Interoperability and Patient Access final rule (CMS-9115-F)”

<sup>7</sup> <https://www.healthit.gov/test-method/standardized-api-patient-and-population-services>

<sup>8</sup> The Office of the National Coordinator for Health Information Technology (ONC). Reference: §170.315(g)(10) “Standardized API for patient and population services.”

### HIPAA Security Rule

“The HIPAA Security Rule establishes standards to protect individuals’ electronic protected health information (ePHI) that is created, received, used, or maintained by a covered entity.”<sup>9</sup> It comes with a well-defined set of administrative, technical, and physical safeguards, some of which are required or addressable. Cloud fax suppliers can use these guidelines to ensure compliance.

This rule is flexible in nature and allows covered entities to implement policies, procedures, and technologies based on their size, structure, and risks. As a Business Associate, Retarus can clearly demonstrate how they address HIPAA Security Rules with a wide range of capabilities.

### Trusting HITRUST?

The Health Information Trust Alliance Common Security Framework (HITRUST CSF) is a self-proclaimed standard developed by a private, not-for-profit company. They claim that their HITRUST CSF has a set of prescriptive controls that harmonize the alphabet soup of standards and regulations in the healthcare industry, and even go so far as to say that their framework makes companies audit resilient, including audits from other industries.

For fax service providers, this certification is a time, resource, and money hog, and worse, not relevant in lieu of HIPAA Security Rules, ONC Interoperability Rules, and datacenter compliance.

### Health Information Technology

Protected patient information is everywhere: office applications, tablets, emails, Electronic Health Records (EHR) systems, e-prescribing software, Medical Practice Management Systems, patient portals, and medical billing. Based on a recent fax vendor survey, vendors were invited to identify the applications they do business with the most:<sup>10</sup>

EPIC	Nextgen	McKesson	All Scripts
Merge Healthcare	AtlasMD	Cerner	eClinicalWorks
GE Centricity	DocuTrack	Siemens	PharmMD

Fax-enabling any of these systems can be straightforward, or more complex, depending on the required functionality; a print driver, a web client, an email-to-fax service, or a more complex solution using APIs.

<sup>9</sup> U.S. Department of Health and Human Services - Office of the Secretary

<sup>10</sup> Fax 2020 Fax Vendor Survey

**EPIC App Orchard.** Retarus is part of the EPIC App Orchard and supports seven EPIC versions and is integrated via the Epic Print Service (EPS) outbound fax API.

## Retarus Innovation

One of the best characteristics Retarus has about their innovation is its cloud platform itself; specifically designed from the ground up and purposely built for enterprise faxing. They have no fax server baggage in their portfolios, and no server mentality in their business models. They maintain a network of tightly controlled datacenters that are SOC2 compliant, SSAE 16, and use encryption. They offer never-lost, never-busy, never-compromised, transaction security.

### Answering Risk

**Migrating to Cloud Fax.** Retarus gets their customers up and running quickly, some in as little as a few hours. Local number portability and provisioning, assigning DIDs, accessible web tools, easy-to-use clients, and mobile apps. For more complex integrations, their technical staff and support are highly praised in getting the job done.

**Control.** It is all about transparency. Server customers are used to administering complete control of their fax operation. Retarus' answer is the Enterprise Administration Services (EAS) portal, which is an easy-to-use, intuitive dashboard for all types of administrative functions at various levels within an organization. Live monitoring, reporting, inbound/outbound setups, and user administration, just to name a few.

**Interoperability.** There are different types of interoperability and Retarus offers a variety of tools. A simple email-to-fax setup, a local fax driver, a more comprehensive process automation, or a full-scale cross-platform integration using a variety of standards-based Application Programming Interfaces (APIs) is what they do.

**Security and Compliance.** In their own words, Retarus provides security auditing and reporting to ensure full compliance with all industry-specific regulatory requirements. Retarus willfully abstains from carrying out every possible certification. There are too many and most are expensive and irrelevant. Their answer to this is that they adhere to internal controls that are constantly audited from an external auditing firm.

## Innovation Profile: Retarus

**In their own words.** *“With its enterprise-level solutions and services, intelligent infrastructure, and patented technology, Retarus manages communication for companies worldwide. Retarus’ state-of-the-art technologies, highly available data centers, and innovative cloud messaging platform offer maximum security, maximum performance, and business continuity.”*

Branded as the Retarus Communications Platform, it is purposely designed and built for large-scale fax operations from the ground up, a key differentiator from a hosted fax server network. Retarus customers send and receive millions of pages per day and represent 25% of the S&P 100 companies.

### Capabilities

Migrations	Complete in a few days to a week, customers get up and running quickly. Retarus technicians use APIs and other tools to fax-enable business systems.
Interoperability	Web Services REST and SOAP, FTP(s), XML, Email, SMTP; SAP: BC-RFC, BC-SMTP, BC-CON; MFPs, Web, Browser, Mobile Apps, EPIC Print Services (EPS).
Compliance	HIPAA Business Associate, HITRUST in Progress, PCI-DSS, GDPR, BDSG compliant.
Security	AES 256, PGP, X.509, SSL, TLS, VPN, SNC, document encryption.
Brands	Retarus Communications Platform, Retarus Cloud Fax Services, Retarus Enterprise Administration Services, Faxolution, Retarus Enterprise Cloud for Healthcare.
Transparency	EAS Portal, web access, real-time metrics, reporting, administration, monitoring, cost center, archive.
Never Busy	No busy lines or capacity bottlenecks; Fax Resume feature.
Integrations	EPIC®, SAP, Microsoft Windows, Mobile Apps, PaperCut MF, ActFax, Kodak Alaris Connectors for various MFDs (Lexmark, Konica Minolta and other).
Inbound Routing	Barcode Capture, OCR, IDR, ICR, fax to EDI, Process Automation.
Datacenters	Worldwide footprint, redundancy and high availability, SSAE, SOC 1 and 2, owning the complete technology stack, local processing.
Service & Support	Based on customer feedback: Excellent, Retarus is hailed as a company who can get things done. Worldwide 24/7 support.
SLAs	Customized.
Broadcast Fax	Used by many of their customers.
Other Services	The Communications Platform includes Transactional Email, Enterprise SMS, and Enterprise Broadcast.

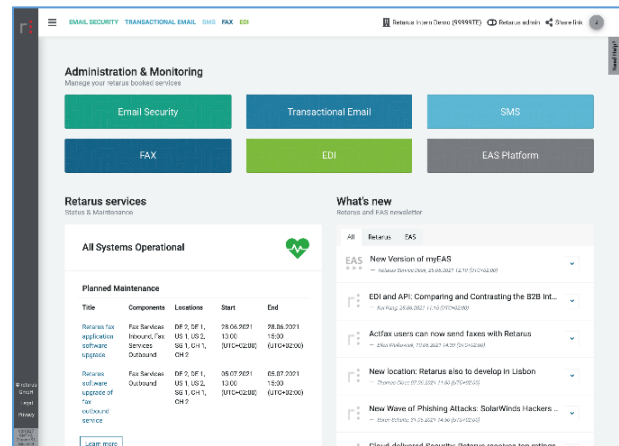


### Transparency: The EAS Portal

Administratively, a faxing system is complex and many crucial functions are needed. Real-time monitoring, alerts, and reports are vital. Admins must setup user profiles, access rights, routing rules, and the system must be accessible 24/7.

Retarus' answer is the Enterprise Administration Services (EAS) portal, a cool dashboard that their customers can use anytime and from anywhere.

Broken down into administration, monitoring, reporting, and support, widgets call up different configurable features. Media statistics, live monitoring, job processing, inbound and outbound reporting, and archiving are just a few of its many uses. Administrators can create and manage user accounts, access the portal 24/7 from anywhere, and even open and track their support tickets. The user interface is intuitive and easy to understand.



### Innovation Proof Points: Customers and Partners

This report includes personal interviews with Retarus customers and partners. Summaries of those conversations are portrayed below. Their feedback speaks for itself.

#### Industry: Health Insurance Provider

<b>Region:</b> U.S.	<b>Fax Volume:</b> Average of 100,000 pages per month.
<b>Employees:</b> 1,600+	<b>Fax Profile:</b> Dismantling a 32-channel, 2-server system; 100% Retarus by end of 2021.
<b>Ownership:</b> Private	<b>Fax Uses:</b> 50/50 Inbound/Outbound traffic; 60/40 Users/Automation; Broadcast fax seasonally.

This company is a healthcare insurance payer covering a 3-state region of the U.S., consisting of two main offices, and 4 to 5 regional sales offices. All faxes go to and from the main offices. Individual faxes can be a single page or up to 50 pages. In total, they average 100,000 pages per month, with seasonal volumes.

Most of the faxes are pharmacy authorizations, with seasonal broadcast spikes coming from their marketing department. Automated reports are sent to provider hospitals 2-3 times per day.

They started using Retarus in January 2021, after choosing them over their long-time fax server provider. Their current 32-channel fax server deployment was, in their own words, “a mess”, a convolution of PRI and ISDN dedicated trunks and some SIP trunks. Their outdated server system was draining resources, costly, and often unreliable.

They awarded their business to Retarus for several reasons, confidence and cost among them. In their words, Retarus “knows what they are doing,” and they recognize their cloud expertise, technology, security, and favorable pricing. Retarus is “clearly experts in this business.” In contrast, their long-standing fax server provider was providing less and less support and imparting a strong lack of confidence. In their opinion, their server vendor’s proposal for cloud service was “smoke and mirrors.” So, by the end of 2021, they will be 100% served by the Retarus Communications Platform.

**Industry: Behavioral Health Services**

<b>Region:</b> U.S.	<b>Fax Volume:</b> Average of 19,000 pages per month.
<b>Employees:</b> 5,000+	<b>Fax Profile:</b> 100% Cloud-based; 100% Retarus.
<b>Ownership:</b> Private	<b>Fax Uses:</b> 50/50 Inbound/Outbound traffic.

This company is a Behavioral Health Services provider with 200+ offices nationally and they are growing. Most of their faxing goes back and forth with public agencies across the country, averaging 19,000 pages per month. They send roughly the same number of pages as they receive.

Inbound pages are captured in an automated fashion. They use MoveIT® Automation to transport them as PDFs to a folder system.<sup>11</sup> Outbound faxes come from staff using Retarus Faxolution® clients, which can be installed on any computer. In the event of a service interruption, faxes will reside on the Retarus network while temporarily at rest and will be encrypted. For years, this customer relied on POTS lines but are now quickly moving away from this sunseting technology.<sup>12</sup>

They trust Retarus’ encryption and security and depend on their “never busy” commitment. This company made the decision to use Retarus for 100% of their cloud fax business.

**Industry: Reseller, Associated Sales Group of America, Inc. (ASG)**

<b>Region:</b> U.S.	<b>Number of years with Retarus:</b> 6+
<b>Ownership:</b> Private	<b>Business:</b> Revenue 40% fax; and Retarus customer base approximately 15%.
<b>Founded:</b> 2002	<b>Smallest/Largest Customer by Pages:</b> 15,000 to 3,000,000 per month.

<sup>11</sup> MoveIT by Progress Software Corporation

<sup>12</sup> POTS is Plain Old Telephone Service: Analog signals via copper wire.

Retarus is “a big company operating like a small company,” raves Davin Roos, Managing Partner and co-founder of ASG. Their commitment to getting their customers up and running is unparalleled, including any customizations or integration work. ASG highlighted the unparalleled response to their needs, as well as what they describe as attractive and fair pricing.

Engineers flying out to customer sites, CEO Martin Hager flying across the pond to meet with customers, exceptional support - sounds like a small company indeed. Impressive to Mr. Roos is the fact that in Germany and Europe, Retarus is a powerhouse, then they came to the U.S. over 7 years ago and have made a great impression with that small company feel. Excellent service, state-of-the-art technology, great SLAs, and aggressive pricing unlike they have ever seen. It keeps getting better, Roos says: ASG’s customers can take advantage of other Retarus services too, namely secure SMS and transactional e-mail.

## Commentary

When computer fax technology arrived on the scene, it changed everything; the technology went into places like the back office, the front office, business systems, email, phone systems, and machines. It brought value everywhere it went, whether powering a massive thousand channel Fortune 500 company, or helping a non-profit organization connect to a fax machine in a remote part of the world.

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*“Getting out of the fax server business must be the aim of any company still dependent on servers, especially those in highly regulated industries where security is vital.”*

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The timeline moves forward, the evolution continues, and cloud technology is now the platform of choice for large enterprises. Same value, same cost benefits, same integrations, and most say better security, scalability, and reliability. The technology paradigm is different in the cloud: hosting a cluster of fax servers doesn’t make the cut. Instead, platforms designed from the ground up specifically for enterprise faxing are best, and Retarus has that.

They are a definitive proof point that getting out of the fax server business must be the aim of any company still dependent on servers, especially those in highly regulated industries where security is vital. Retarus stands on solid ground to make this happen for enterprises of all sizes and industries; their customers and partners say so, and they’re proud to say so, too.

Their distinction to “do what it takes” resounded heavily in the research for this report; they understand that vendor and customer relationships are as important as the technology. Their

datacenter technology is solid, their data security is robust and compliant, their integration capabilities are top of the line, and their service and support, based on feedback, is impressive.

## Retarus Profile

<p><b>Name:</b> Retarus</p> <p><b>Ownership:</b> Privately held</p> <p><b>Founded:</b> 1992</p> <p>retarus GmbH in Munich, Germany (HQ); retarus (North America) based in New Jersey, USA</p> <p><b>Employees:</b> 430+</p>	<p><b>Customer Footprint:</b> North America; U.K.; Europe; APAC, ANZ.</p> <p><b>Largest vertical industry served (US):</b> Healthcare.</p> <p><b>Largest vertical industry served (Global):</b> Manufacturing.</p> <p><b>Largest customer segment:</b> Enterprise.</p> <p><b>Global data centers:</b> New Jersey, U.S.; Ashburn, U.S.; Munich, Germany; Frankfurt, Germany; Zurich, Switzerland; Singapore, APAC, Sydney, AUS.</p> <p><b>Self-stated, distinctive competency:</b> A secure enterprise-level cloud platform and service.</p>
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## About

### Mark D Malone

Mark has been a long-time participant and contributor in the Fax industry. 32+ years in technology, he began his fax journey in the year 2000. In 2013, he created Fax Over Cloud™, a fax industry news site and repository for his various papers, articles, and fax product spotlights. In 2018, Mark created and published the first comprehensive market report of its kind, the “Fax2020 Market Analysis & Strategic Report.” Mark is a graduate with distinction from the State University of New York at Albany.

### Retarus

With its outstanding solutions and services, intelligent infrastructure, and patented technology, Retarus manages communication for companies worldwide. Retarus’ state-of-the-art technologies, highly available data centers, and innovative cloud messaging platform offer maximum security, maximum performance, and business continuity. With experience in steering information flows at the enterprise level, Retarus ensures that information is transferred securely and reliably to the right place, at the right time, in the right format. Longstanding customers of Retarus include Adidas, Amer Sports, Bayer, BNP Paribas, Bosch, Continental, Cubic Corporation, DHL, Fujitsu, Geico, Goldman Sachs, John Deere, J.P. Morgan, LabCorp, Merck, Petronas, PSA, Sony, and Zeiss.