

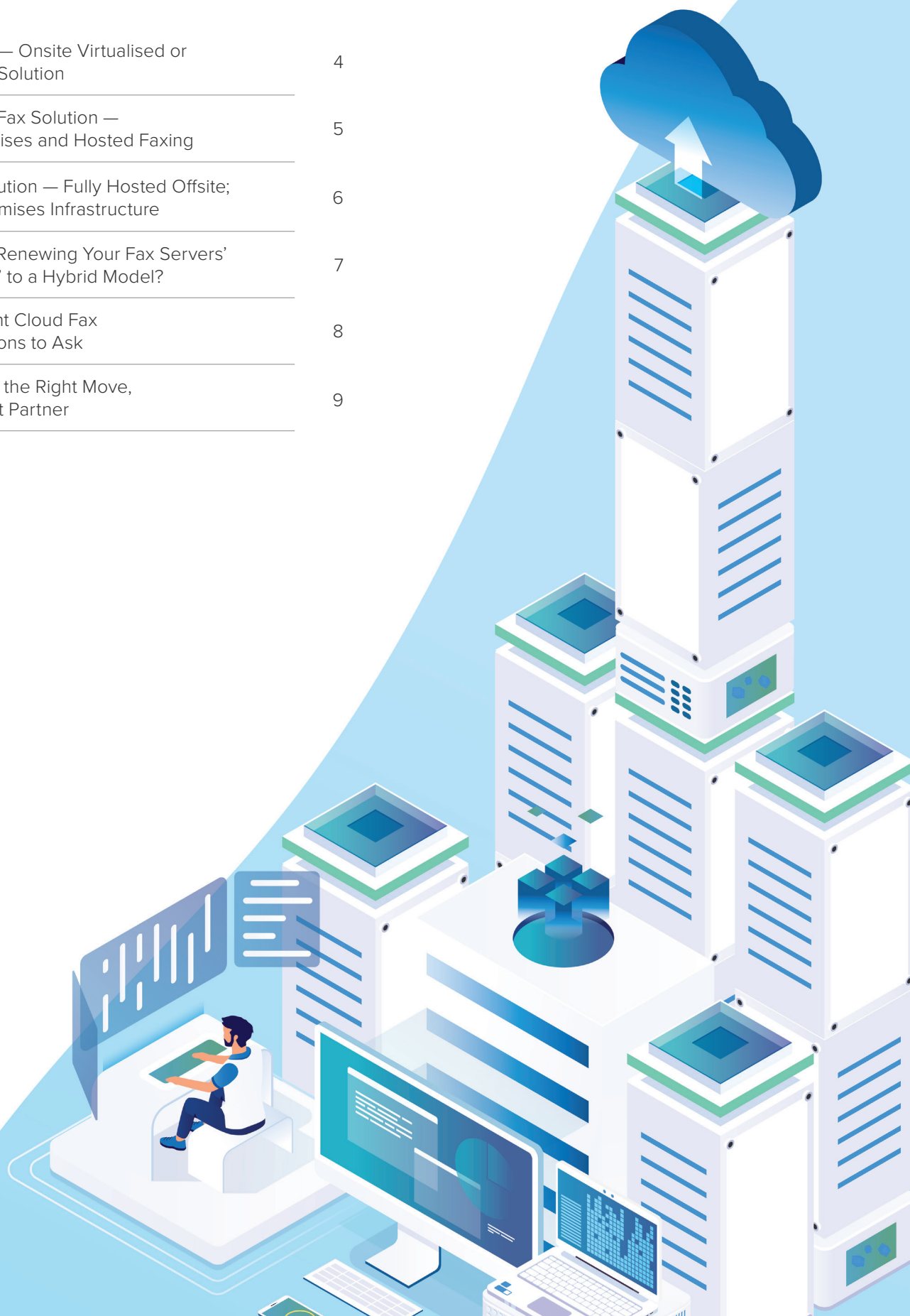
# Outsource Your Fax Infrastructure to the Cloud

## The IT Manager's Survival Guide



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Relative to the many demands on today's IT teams, spending capital, time and resources to maintain physical fax servers and infrastructure is not a high priority. But fax capability remains a business need because many established industries — such as legal, healthcare, financial services and manufacturing — are dependent on the security, reliability and process integration of their fax infrastructure. With this in mind, evaluating new fax technologies, which can help to balance business needs against the demands on IT — and to meet the service-level requirements for internal and external consumers of electronically transmitted fax documents — is a wise investment of your time.

If your organisation is spending more time than you wish handling employees' fax complaints, performing fax-server maintenance, upgrades, or other infrastructure work, now might be the time to evaluate taking your fax infrastructure to the cloud — leveraging all of the benefits of a fully hosted cloud fax solution — with key considerations that include cost savings, freed-up IT resources, enhanced security and regulatory compliance, and even increased employee productivity.

This how-to guide will give you an overview (advantages and drawbacks) of today's prevailing enterprise fax technologies, to help you determine — based on your needs, existing cost structure and IT overhead — whether a cloud fax solution is right for you, versus continuing to maintain and support onsite or "hybrid" fax infrastructure. After your analysis, if you decide that cloud faxing is the way to go, this guide will help you select the right cloud fax service provider.

## A Critical Look at the Three Types of Enterprise Fax Solutions

It might surprise you to learn that millions of businesses still rely on faxing to transmit their most important documents — even many in the high-tech industry. And many are facing the same critical questions you might be considering today:

- Even if you've moved to a more sophisticated on-premises fax infrastructure, with internally managed fax servers, are you realising maximum efficiency and cost-effectiveness from this solution?
- If your servers are at end of life, does it make sense to re-invest in building out a replacement?
- Are there better, more cost-effective options available today?

To assist, allow us to offer a brief overview of the three common enterprise fax models in use today — and the benefits and drawbacks of each.

*Even if you've moved to a more sophisticated on-premises fax infrastructure, with internally managed fax servers, are you realising maximum efficiency and cost-effectiveness from this solution?*



## The “Private Cloud” — Onsite Virtualised or Physical Fax Server Solution

In the case of “Private Cloud” faxing, a company’s fax infrastructure is maintained entirely within its firewall. In this model, whether the business maintains a fax server in-house or a fax server running on a virtual machine, the IT group owns primary responsibility for maintaining, licensing, troubleshooting and upgrading this business’s fax infrastructure.

### Benefits:

1. This method gives IT direct, centralised control over the fax infrastructure company-wide, a huge improvement over the de-centralised and harder-to-manage infrastructure built solely on desktop fax machines. Companies with significant IT resources may also have the benefit of custom-coding specialised faxing applications for deep integrations that may not be available through a cloud only solution.
2. IT departments might feel more comfortable, from a security standpoint, when their faxes all run through a centralised, internally controlled platform within the network. Again, this represents an improvement over the unsecure desktop fax machine — where documents can be lost, viewed or picked up by an employee not authorised to read them, and where there is often no mechanism to track and securely store every fax for audit and legal purposes.
3. A hardware-based, onsite fax or software-based private cloud infrastructure requires significant up-front capital cost that can be amortised over many years.

### Drawbacks:

1. Compared to other technologies, the on-premises server model can be cost-prohibitive for many firms. In addition to thousands of pounds upfront for every fax server, the infrastructure demands many less obvious costs — such as the fax cards to PSTN interface, and recurring costs such as software licensing, analogue fax lines, and even electricity costs to maintain the servers themselves. For true security compliance, these servers may also need to be housed within secure (and air-conditioned) spaces, and require encryption, adding more costs and IT overhead.
2. To prevent unnecessary spend while not jeopardising critical needs, IT must accurately predict long-term volume and capacity needs at the outset and on an ongoing basis — such as monitoring usage trends and knowing when to scale up with more servers or upgrading to the latest server software versions, neither of which can be implemented quickly. This means IT may have to devote resources to fax issues that would be better spent on forward-looking initiatives. And this capacity planning and infrastructure maintenance does not scale granularly — IT simply needs to buy new servers or risk capacity or other service issues.
3. Although keeping fax documents “in-house” might seem like a security enhancement, many fax servers’ inability to effectively encrypt data, coupled with other drawbacks, mean this model can run into conflict with regulations like HSCIC, governing protected customer data. Also, because of the explosive growth of hosted cloud solutions, many cloud providers have stronger security measures and infrastructure in place.

*Although keeping fax documents “in-house” might seem like a security enhancement, many fax servers’ inability to effectively encrypt data, coupled with other drawbacks, mean this model can run into conflict with regulations like HSCIC...*



## The “Hybrid Cloud” Fax Solution — Combining On-Premises and Hosted Faxing


In theory, the Hybrid Cloud model for enterprise faxing combines the best of both worlds — allowing IT to maintain control through on-premises fax servers, but also using a cloud-based “backfill” component, for example, for fail-over, should your onsite fax infrastructure fail or have peak volume spikes, resulting in outages or busy signals. This is, by definition, a compromise from an economic and productivity perspective.

### Benefits:

1. Hybrid Cloud faxing provides IT onsite control and visibility over its faxes company-wide, with on-premises fax servers, while also allowing them to realise some of the advantages of a fax cloud service — like greater redundancy and higher system availability than their in-house fax servers alone might provide.
2. Like the Private Cloud (on-premises-only) model, the Hybrid Cloud infrastructure also leverages an enterprise’s existing, paid-for hardware.

### Drawbacks:

1. The major weakness of the Hybrid model is that it might put an organisation in a position of double-paying for a single solution — the cloud component— that the business could outsource completely (with a true Cloud Fax model). That is, the business must continue to support its onsite fax server (remember all of those not-so-obvious costs, like maintenance agreements, dedicated fax lines, fax cards, and server farm electricity?) for a service it could fully outsource to the cloud for far less money.
2. The onsite server component of this model may increase risks of non-compliance or undermine the business’s fax security — because the fax servers may house protected information, potentially exposing vulnerabilities in security and fax “chain of custody”, if not properly secured.
3. Finally, from a performance perspective, could your enterprise reap the same high availability, redundancy, scalability and fail-over features from a completely hosted solution vs. the ‘Hybrid’ approach? If so, could outsourcing also relieve your business or IT organisation of its existing fax infrastructure and maintenance burden so that they can focus on revenue-generating IT projects?



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## The “Cloud Fax” Solution — Fully Hosted Offsite; Requires No On-Premises Infrastructure

A Cloud Fax model is, technologically speaking, the most advanced enterprise fax solution — fully hosted offsite and requiring only an email address and Internet connection to send and receive faxes. The Cloud Fax model can provide many of the control and customisation features of both “Hybrid” and “Private” fax solutions — such as integration into Multifunction Printers and workflow integration — such as SAP or Electronic Patient Records systems with flexible APIs and enhanced Transport Layer Security (TLS) to protect sensitive data. Additionally, with the right vendor, the Cloud Fax model can provide rapid scaling ability — essentially a pay-as-you-go model.

### Benefits:

1. Cloud Faxing represents a significant cost savings over the onsite-server model. It frees up IT resources to focus on higher-ROI projects, and enables your organisation to retire onsite fax hardware (e.g., server, software, fax machines, fax boards) and eliminate licensing, telco lines and the related costs outlined earlier.
2. Because the service is cloud-based, a business can increase fax capacity quickly, cost-effectively, and at any time — it is essentially a “pay-as-you-go” model, as opposed to a server-based system where the choices are the binary “buy another fax server now,” or “don’t buy it now, and risk capacity — and business impacting — issues.”
3. A Cloud Fax solution can also increase fax security. The best-in-class online fax companies protect faxes using the most sophisticated methodologies — such as TLS encryption for transmitting faxes over the Internet, and they may also have “Heavy” Tier III and IV secure data centres, the best of which maintain SOC 2 or SSAE 16 Certifications to ensure customer data is protected 24/7/365 when in storage. The right Cloud Fax provider can also enable compliant faxing solutions, and solutions that keep your business on the right side of HSCIC regulatory mandates and adhering to best practices such as ITIL standards.

### Drawbacks:

1. There are many options out there for Cloud Fax providers, and choosing the wrong partner can undermine the ability to realise all of the benefits of a Cloud Fax solution that drove the outsourcing decision in the first place. For example, a company that cannot support the needed fax capacity, or offer 24/7 support, or provide highly secure data centres and full infrastructure redundancy, or does not fully understand how to keep a business’s faxes secure and on the right side of federal regulators.
2. Fundamentally, a business should expect to receive equal or better value when outsourcing a core service to a third-party vendor. This is especially true when one considers Service Level Agreements (SLAs), reliability, security, scalability and integration. Skimping here exposes one to serious risk in the long term. The best providers of Cloud Fax solutions — like eFax — will have solid SLAs (99.5% uptime and minimum delivery times) as well as disaster recovery and business continuity technology. Strong due diligence upfront — choosing the right partner — is essential to ensure that one’s business- critical needs are met now and going forward.

*Fundamentally, a business should expect to receive equal or better value when outsourcing a core service to a third-party vendor*

## Still Thinking About Renewing Your Fax Servers' Lives or "Upgrading" to a Hybrid Model?

Now that we've reviewed the pros and cons of the available enterprise fax models, it's time to have a look at some of the costs that your business may incur by continuing to maintain your fax infrastructure on-site or as a hybrid solution. There are also some other considerations that your business may or may not have built into your analysis of potentially outsourcing faxing that should be included as well.

For example, how much time during the year does a full time equivalent (FTE) on your IT staff spend re-booting fax servers, trouble-shooting fax quality issues, managing software patches, updates or upgrades to your fax infrastructure? If a good mid-level tech spends 25% of their time, this could almost double the annual costs below. Could your organisation benefit from freeing up this resource by outsourcing to Cloud Faxing? And consider the following hidden costs as well:

### Hidden Costs of Fax Servers:

Operating each fax server requires a fax software package, which can add significantly to your fax infrastructure costs. If your team were to store your fax server(s) at an offsite data centre, there would also be a monthly cost for maintaining each server. If on the other hand you were to maintain your fax server(s) in-house, your organisation would incur additional costs for the physical footprint, including server-room rack space, heating and cooling, etc.

Additionally, consider the ongoing costs of your IT and support teams for management, maintenance and troubleshooting. Fax servers are notorious for crashing, requiring IT personnel to reboot the down server and assess the level of damage. Furthermore, IT resources will need to be deployed for training new employees on how to use the fax servers, how to follow company protocols to ensure fax security and regulatory compliance, etc. And you will likely also need to dedicate certain internal support resources, such as your help desk, for fielding employee questions and issues with your fax servers.

Finally, and perhaps most surprisingly, is the hidden cost of fax server electricity. As expensive as the upfront capital costs of fax servers can be, organisations will typically spend even more on the electricity to power a server over its life than the cost of the server itself!

When factoring in these additional, less-obvious costs, it becomes clear that the full cost of one fax server can be significant. Moreover, this does not include failover, redundancy, high availability or IT overhead, to name just a few key components your solution would demand — driving the costs even higher.

Many in IT Management have found that after careful due diligence as outlined in this Guide, that outsourcing their existing fax infrastructure to the cloud is the best course of action. In doing so, with the right provider, they also have selected a low-risk, low-downtime IT infrastructure upgrade that can free up IT resources and make them come out looking like an IT Hero!

The key to your success, if outsourcing is the right call for your enterprise, is to ask the right questions and select the right cloud fax provider. Following are eight key questions to ask potential cloud fax providers we offer for



your consideration.

## How to Find the Right Cloud Fax Provider — 8 Questions to Ask

Following are several key questions you should ask any Cloud Fax provider.

### 1. Who are your customers?

As pointed out earlier there are many “cloud providers” out there. How do you determine who the real experts are; the companies that have been serving a large and delighted customer base for years? Ask them to tell you. Ask providers how many customers they serve, what sizes, in what industries — and if you can have the names of some of those businesses. You’ll learn pretty quickly who the real Cloud Fax leaders are.

### 2. Will your solution help us with audit capability and regulatory compliance?

Ask any would-be Cloud Fax provider if their solution will enhance your data-security compliance and meet best-practice standards. Again, the best Cloud Fax leaders can demonstrate how their services help you achieve these standards — bringing you into compliance with regulations that affect your business, such as HSCIC in healthcare.

### 3. Tell me about your network architecture and infrastructure?

The most proven and successful Cloud Fax company, eFax, part of J2 Global<sup>®</sup>, Inc. continues to make millions in investments in infrastructure — such that the company now supports Cloud Fax service to thousands of cities across 50 countries worldwide, delivering millions of faxes per day. The eFax data centres are dedicated “Heavy Sites” or colocations — including many such sites across the UK— each supporting tens of thousands of individual fax numbers and each having Tier III or IV security, redundancy and fault tolerance.

### 4. Can you offer unlimited scalability?

Here’s another question that’s crucial to your ability to find the right Cloud Fax provider: will they be able to continue supporting your online faxing needs no matter how large you grow or how much volume of fax traffic you need in the future? Another reason the right Cloud Fax solution is ideal is because the cloud allows for a “pay-as-you-go” model, meaning your provider should be able not only to support you as you scale up, but

also help you scale down as needed.

### 5. What is your plan for redundancy and disaster recovery?

The right Cloud Fax service will offer not only the ability to send and receive faxes electronically, online and by email, but also secure online storage of all of your faxes for the life of your account. But even that service isn’t as attractive if the provider doesn’t protect your faxes at multiple redundant data centres. Demand redundancy, failover and disaster recovery — all key traits an enterprise fax provider should have.

### 6. What type of security will you use for our faxes?

Here you are looking for nothing less than the highest security protocols available — and today that is Transport Layer Security (TLS) version 1.2 — for your faxes while in transit over the Internet. Once your faxes are received and in storage you should continue to demand protection with the best available security — and that is AES 256-bit encryption for your faxes at rest in the provider’s data centres.

### 7. Does your service apply the technical and legal resources to thoroughly understand and address the requirements of HSCIC and other regulations?

These are complex regulations, and you don’t want to go with a vendor that hasn’t mastered these issues. The easy answer, unfortunately, for some vendors is simply posting “Yes” to the compliance question on their websites. Ultimately, as the end user, their decisions will affect you. Vendors that purport to be HSCIC compliant but are not, or do not have proper procedures and controls in place, are a risk to your organisation.

### 8. Can this solution integrate with our existing systems?

Here is where many Cloud Fax providers fall short. Migrating to the cloud for faxing should be a smooth and easy transition with minimal downtime. But if your new Cloud Fax infrastructure doesn’t offer APIs or connect with your existing data platforms (SAP, for example), linking the systems together can create a new set of hassles for your IT team.

With eFax, the entire migration process is quick, seamless and requires minimal effort of your IT staff — eFax handles everything and offers your team technical and logistical support and training at every step.



## Why Cloud Faxing is the Right Move, and eFax is the Right Partner



Millions of Customers  
Worldwide



Disaster  
Recovery



Business  
Continuity



24/7/365  
Monitoring



24/7/365  
Tech Support

eFax, part of J2 Global<sup>®</sup>, Inc., is a hosted Cloud Fax service used by millions of corporate customers worldwide — including thousands of UK companies and nearly half of the FTSE 100. The company's worldwide presence includes numerous offices in the U.S. and Canada as well as a European headquarters in Dublin, Ireland. A company with a nearly 20-year track record of significantly improving the fax infrastructure of organisations like yours, eFax:

- Eliminates fax infrastructure and associated IT burden and capital expenditures
- Frees up IT resources for other tasks or forward-looking projects focusing on ROI and quality of service
- Integrates with your existing workflows with flexible APIs and even your Multifunction Printers
- Enhances document security and data-privacy compliance (e.g., HSCIC)
- Guarantees system reliability, scalability and uptime SLAs
- Makes faxing as easy as using email or visiting a website
- Eliminates interoperability issues common to VoIP or FoIP fax migrations
- Specialises in fax infrastructure so you don't have to — and removes all fax-related headaches

## About eFax

eFax® is the world's leading online fax solution, with more than 11 million customers worldwide. eFax lets users receive, review, edit, sign, send and store faxes by email or through a web interface. eFax offers plans for individual users and provides corporate solutions.

**To learn more about outsourcing to a cloud fax model with eFax, visit us at: [efax.co.uk/corporate](https://efax.co.uk/corporate)**



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