

# Boardless Fax Servers in VoIP Environments

Strategies for Integrating Fax over IP



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## Executive Summary

Companies today are seeing great value in converting to Voice over IP (VoIP) networks to significantly reduce telephony and fax infrastructure costs. As organizations decide to swap out old PBX systems for IP-enabled ones — like Cisco, 3Com, Alcatel and Nortel IP systems — demand for fax over IP (FoIP) is ever increasing.

Fax continues to be a communications bedrock that hundreds of thousands of companies around the world depend on daily for exchanging information. While email has become widely adopted for day-to-day business communications, faxing is still the preferred method for transmitting sensitive business-critical documents with legal standing. Every day, users fax mission-critical business information, such as contracts, legal documents, sales quotes, purchase orders, order confirmations, event announcements, membership applications and much more.

In fact, it is no surprise that fax has long been the leading telephony application behind voice itself. As such, companies are now seeking ways to replace mature fax technology including fax machines or outdated fax servers, improve workflow efficiencies by automating faxing from applications, and now — to leverage their IP infrastructure investment by integrating fax into their VoIP network.

This whitepaper reviews the technical aspects of the NET SatisFAXtion™ IP fax software, and how it fits into VoIP environments. It will also explain how to take advantage of the built-in fax capabilities of most VoIP systems today, allowing companies to bypass purchasing expensive fax hardware. And finally, it will give an in-depth look at the gains companies receive by implementing IP fax software in an organization.



## About FaxBack

For nearly 25 years, FaxBack has been at the forefront of shaping fax technology. As the maker of NET SatisFAXtion software and a pioneer in the fax software market, FaxBack has a solid history of developing reliable fax solutions. Thousands of customers have deployed their fax products including the IRS, Boeing, Coca-Cola, Sysco, BMW, WebMD, Adobe, City of Hope and the United States Department of Defense. Many technology vendors, including AT&T, Intel and Symantec have OEM'd and distributed FaxBack products. Exceptional support and training are just a few reasons why companies such as these continue to use their products and look to them for market-leading guidance on deploying reliable FoIP solutions.

## Fax Technology Overview

Much like when the first television hit the market years and years ago, and the radio was presumed to become obsolete, fax too has long been predicted to be replaced with other forms of electronic communication. And much like radio, it not only still remains, but the technology behind fax has continued to evolve and grow. In fact, analysts are still bewildered that the fax market has grown year consistently year-over-year since 2001.

To many companies this does not come as a surprise. Fax is a dependable and universal method of communication technology, and an embedded factor in many workflow processes. Initiatives such as regulatory compliance, business process improvement, application integration and device consolidation are just a few of the factors that have led businesses to replace fax machines and make toner purchases a thing of the past. The cost savings associated with upgrading to automated fax software has driven many organizations to continue to stay apprised of the latest fax software developments.

### From Fax Machines to Fax Software

Surprisingly, many companies still use and deploy fax machines in their organization. For companies that have very low fax volume, this option may seem viable. However, as was realized in the late 1980's, a lot of time is wasted by having to print out a document and walk to a fax machine for every fax that is sent or received. And, these faxes aren't easily tracked. Fax machines also add to overburdened administrator's workload and expenses by taxing them with maintaining and servicing more office devices and phone lines.

The early versions of fax software involved installing fax modems in computers allowing individuals to fax directly from their computers. In fact, this is still a method widely used and appropriate for home computers. But greater demands have caused fax software to evolve. Now "network faxing" is a key component of most organization's messaging infrastructure. End-users no longer are required to print a document and walk to a fax machine. Faxes are sent directly to and from any application. Fax status can be easily monitored, while tracking and notification is securely logged. Confidential faxes are viewed only by the intended recipients. Inbound faxes are quickly logged and routed to the appropriate recipient's email inbox, where they can easily be viewed, annotated and forwarded appropriately. All faxes are archived and stored for easy retrieval.

Larger enterprises pushed the evolution even farther. Not only has network faxing software become a corporate initiative, so has application faxing, also known as production fax. Application faxing allows faxes to be sent in large batches directly from back-end applications such as mainframes, ERP and CRM systems. This has saved organizations tens of thousands of dollars every month by replacing costly processes such as the printing and mailing of business critical documents like purchase orders or invoices. Great advances have been made with integrations between the critical business applications that produce these documents and fax software.



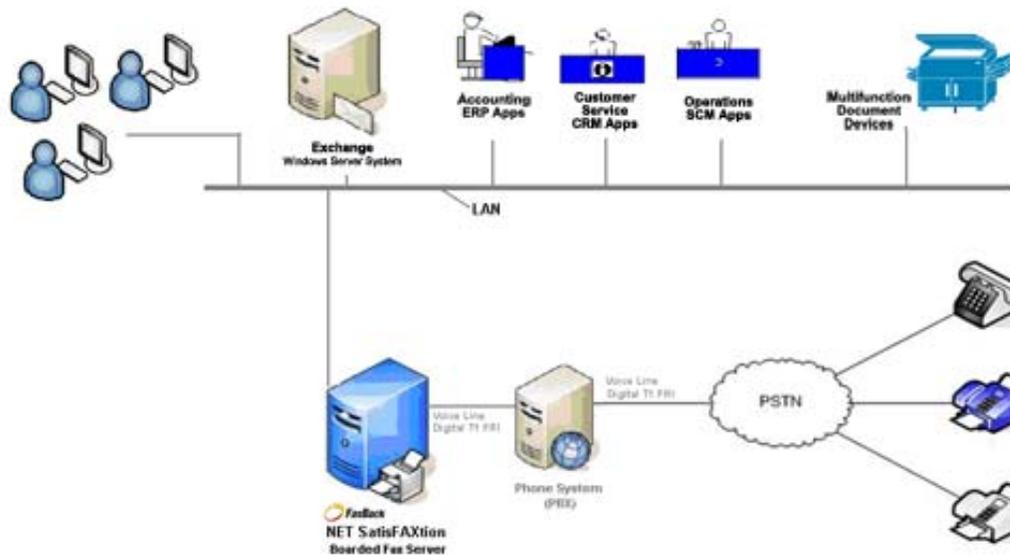
Some of the most recent evolutions also include adding fax capability to multifunction peripherals such as Xerox, HP, Canon and others. This allows users to not only scan or print from a network printer, but now to also fax, as well using the same fax software.

What has this added up to over the years? Scalability. Over the years, only the leading fax software companies have been able to meet the growing demands of the market. Not only to integrate fax with all of an organization's applications, but also to ensure that the back-end technology can manage the increased volume. Only

organizations using robust fax software have been able to manage higher fax volume from more end-users, added applications that an organization typically will acquire and, the addition of multiple locations. Networking fax software across multiple locations has become a critical factor and allows organizations to extend cost savings even further with features such as load balancing and least cost routing.

## How it Works

A robust enterprise fax solution requires a dedicated network fax server. Fax server software, such as NET SatisFAXtion is installed on the server. Traditional fax servers also require fax hardware, called fax boards, to be installed in the same fax server. The fax software then uses the fax hardware to send and receive fax data. The board connects to the POTS network via dedicated phone lines or connections to a corporate PBX system.



**Traditional Fax Server Configuration:** A fax server functions in a manner similar to a network printer. It sits downstream from applications on the network and then connects to the PBX system via fax board hardware installed in the fax server.

Fax servers can be configured in many ways, depending on the following factors:

- What is the daily fax volume? How many pages are sent and received each day?
- How many end users will use the software?
- Will the fax server be used for both inbound and outbound faxing?
- What applications will the software integrate with?
- How many locations will be using the fax server(s)?
- What is the anticipated growth of the organization?

The answers to these questions will determine the need for both the type of fax server software and additional add-on modules, as well as the type of fax board hardware required. The table below outlines possible configurations based on the size of an organization, anticipated volume and scalability.

Fax Server Implementation	Small	Medium	Large
	<ul style="list-style-type: none"> <li>• 100 Employees</li> <li>• Approximately 500 faxes sent and received per day</li> <li>• Faxing from desktop and small applications</li> <li>• 1 location</li> <li>• Limited expected growth</li> </ul>	<ul style="list-style-type: none"> <li>• 1,000 Employees</li> <li>• Approximately 500 faxes sent and received per day</li> <li>• Faxing from desktop, email and small ERP applications</li> <li>• 2 location</li> <li>• Moderate expected growth</li> </ul>	<ul style="list-style-type: none"> <li>• 10,000 Employees</li> <li>• Approximately 5,000 faxes sent and received per day</li> <li>• Faxing from desktop, email, Mainframe, ERP and CRM locations</li> <li>• Multiple locations</li> <li>• Expected mergers</li> </ul>
<b>Fax Software</b>	NET SatisFAXtion for Small Business	NET SatisFAXtion Enterprise	NET SatisFAXtion Enterprise
<b>Fax Hardware</b>	4 Port/Channel Fax Board	8 Port/Channel Fax Board	Multiple T1 Boards per server

Unfortunately, installing, maintaining and supporting a fax server typically require working with two separate vendors – the fax software provider and the fax hardware provider. Troubleshooting problem areas can often be difficult as there are two separate points of contact. This can especially be a problem if either vendor releases product upgrades that are incompatible with the other.

### The Next Evolution: Fax over IP

VoIP, regarded by most as a breakthrough communications technology, is already reaching critical mass. The cost savings associated with VoIP have driven many organizations to converge their voice and data networks. As enterprise networking equipment enters a new upgrade cycle, companies are choosing to migrate to IP-based networks. As more and more organizations deploy VoIP, the drive toward adopting applications, such as fax, that integrate and leverage their IP-enabled environment is growing.

Whether organizations are still using fax machines or traditional fax servers connected to the PBX system, upgrading to a fax over IP solution has never been easier and extends the cost savings even further. Fax has become such an integral component of organizations' messaging and communication infrastructure that nearly all leading IP gateways, like Cisco, 3Com and Alcatel, have built in support for fax.

## The Realities of Fax over IP

If you are thinking that you can just plug your fax machine into your VoIP telephony system, you will likely be disappointed with the result. Despite claims you might have heard about all telephony devices working over a VoIP connection, voice codecs used for VoIP generally aren't fast enough for use with fax machines. VoIP voice codecs supporting data transmission rates of up to 9.6 kbps are typically available in high-end VoIP hardware, but even those rates would support only low-end fax machines. Current fax technology, including the V.34bis (sometimes called SuperG3 faxing) requires support for bandwidth of 33.6 kbps. So the basic math makes it clear that you won't be plugging your old fax machines into your VoIP network and getting acceptable performance.

This, however, is where fax over IP comes into play. Two FoIP ITU standards exist: T.38 real-time faxing and T.37 store and forward faxing. To maintain compatibility with existing fax machines that might be receiving faxed transmissions from a FoIP network, both T.37 and T.38 use the current standard T.30 fax definition to identify the data being transmitted by either method. The T.37 or T.38 fax transmissions carry the T.30 data, much as the V.34bis standard does in a traditional fax environment.



Services such as eFax make use of the store-and-forward capabilities of the T.37 standard, enabling users to send faxes as emails but not in real-time, nor with the expected legal standing that is associated with fax. The fax is sent as email to an email server, which then transmits the fax as an email attachment to a fax device where it is physically faxed. This method can also cut IT support requirements for fax servers, but can potentially introduce limitations, including higher costs. Other service providers use their VoIP networks to support fax, but these require an Analog Terminal Adaptor (ATA) hardware device into which users must plug a traditional fax machine. These services do not typically provide users the ability to fax straight to a recipient's desktop. Because of these limitations, many companies don't use their existing VoIP networks for faxing and when they think of the VoIP capabilities they have added to their infrastructure, they don't realize that in almost every case they have added FoIP capabilities, at no additional effort or expense. Alternatively, the fax could be routed to a fax machine at the recipient's location. While this sounds simple enough, it does have a few drawbacks. For example, sending a fax via the T.37 standard means that you don't know the exact capabilities of the receiving device, because no negotiation occurs between the sending and receiving devices. The T.37 standard offers no additional capabilities than exist with manual fax transmission.

Because of this lack of negotiation between devices, the fax gets sent at the lowest-quality setting and is unable to take advantage of advanced features that the receiving device may have, such as high resolution or color printing. This limits the type of document that you can transmit using this method. Faxes sent over a T.37 connection also do not receive the legal protections that courts have awarded real-time faxes sent via traditional fax machines and T.38-capable network fax devices.

A connection via T.38 provides a user with an experience much more like a traditional fax machine. With a real-time fax over IP network, the originating fax device negotiates with the receiving device to determine what parameters to use, transmit the fax, and receive a confirmation. Using this real-time connection, the sender can transmit a fax to any type of fax compatible device.

## Boardless Faxing

Because leading IP gateways now support fax (T.38), the single greatest benefit of integrating fax into a VoIP environment is the ability to eliminate expensive and unneeded fax board hardware. Over the past fifteen years, businesses that have implemented fax technology – whether standalone fax clients or multiple T1 enterprise fax systems, were forced to invest in dedicated fax boards. For enterprise organizations with high volume faxing, the fax hardware costs can often surpass the costs for the fax software.

## Cost Savings with a Boardless Solution

Prior to purchasing a fax server, organizations of all sizes should review the deployment options and costs associated with adopting a FoIP fax solution that is fax hardware-free, such as FaxBack's NET SatisFAXtion IP, versus one that requires dedicated fax hardware. Given the demand for VoIP, many organizations looking to implement FoIP solutions are taking advantage of boardless fax server solutions and are reaping significant cost savings.

The following tables compare initial deployment costs and considerations of two of FaxBack's fax software offerings: NET SatisFAXtion and NET SatisFAXtion IP.

### SOHO/SMB Fax Deployment Costs in a VoIP Environment

SOHO/SMB Organizations	Traditional Fax Server	NET SatisFAXtion IP
	NET SatisFAXtion with fax hardware	Boardless FoIP Solution
Fax Board Hardware	\$500 – \$4,000* per board	\$0
Telephony Installation Expenses <i>(associated costs to set-up additional lines as well as moves existing phone lines)</i>	\$50 - \$100**	\$0
PBX Hardware Line Cards	\$250 - \$300** per line	\$0

\* Typically in an enterprise environment a T1/E1 or fractionalized T1 is required

\*\* Costs vary depending upon provider: can be many thousands of dollars

## Enterprise Fax Deployment Costs in a VoIP Environment

Enterprise Organizations	Traditional Fax Server NET SatisFAXtion with fax hardware	NET SatisFAXtion IP Boardless FoIP Solution
Fax Board Hardware	\$10,000 – \$17,000* per board (Brooktrout, Eicon)	\$0
Telephony Installation Expenses <i>(associated costs to set-up additional lines as well as moves existing phone lines)</i>	\$2,000**	\$0
PBX Hardware Line Cards	\$250 - \$300** per line	\$0

\* Typically in an enterprise environment a T1/E1 or fractionalized T1 is required

\*\* Costs vary depending upon provider: can be many thousands of dollars

As shown in the charts above, by taking advantage of the T.38 functionality in a VoIP router, organizations are no longer forced to purchase additional telephony/PBX equipment or to absorb the recurring expenses necessary with upgrading fax hardware, PBX hardware or telephony equipment. For smaller implementations, fax hardware can cost between \$500 and \$1,000, depending on the brand and the number of fax ports, while for larger enterprises intelligent fax boards can cost as much as \$17,000 per board. Prior to the emergence of VoIP, this legacy fax hardware was mandated with the acquisition of a fax server. In fact, many fax server vendors who claim to support T.38 faxing cannot do so through their fax software and will still require organizations to purchase dedicated fax hardware.

*Bottom Line: For the cost of a fax board, you could potentially be paying for entire VoIP rollout.*

### The Benefits of the NET SatisFAXtion IP Boardless FoIP Solution

Listed below are just a few of the many benefits of implementing the NET SatisFAXtion IP solution:

#### Leveraged IP Networks

With NET SatisFAXtion's real-time, secure, boardless fax server, documents remain digital over VoIP-enabled networks — including WANs and VPNs — until they reach the PSTN endpoint gateway closest to the destination. This brings the same feeling as if the sender were standing at a fax machine watching the real-time progress of a fax being delivered to the recipient's location, yet from the convenience of their desktop.

## **Application Integration**

Business processes can be streamlined by easily integrating with existing applications and groupware tools. NET SatisFAXtion IP works directly with existing phonebooks and alongside VoIP and IP voicemail systems as well as multi-function devices (MFPs). In addition, NET SatisFAXtion IP comes bundled with the market-leading print automation technology, connecting the fax server to all key business applications.

## **Significant Cost Savings and Quick ROI**

FaxBack can demonstrate a very rapid ROI that shows immediate payback within a matter of months, if not days or weeks depending on faxing volumes. By fax-enabling users, it saves time, money and hardcopy costs associated with manual processes.

## **Unnecessary Equipment Eliminated**

Not only are fax machines eliminated, but so is the need for fax server specific telephony such as additional phone lines or added infrastructure requirements. Dedicated PBX line cards are no longer necessary. And most significantly, utilizing VoIP-enabled routers allows organizations to considerably reduce their fax server investment by eradicating "old fashioned" fax hardware.

## **Lower Total Cost of Ownership (TCO)**

With NET SatisFAXtion IP analog phone lines, fax boards, toner, paper and hardware maintenance are not required. There is no need for expensive fax boards and complex hardware configurations. The result is low initial investment and significantly lower annual maintenance.

## **Easy Migration from Legacy Deployments**

NET SatisFAXtion IP enables organizations that have already made investments in VoIP networks to break free from specialized legacy PBX telephony hardware and leased lines that traditional fax servers still require.

## **Increased Productivity**

It is estimated that 90% of documents and forms are created on a computer. In order to send these documents via a standalone fax machine, employees must:

1. print a document to a network printer
2. leave their desks
3. walk to a fax machine station somewhere in the building,
4. fill-out a cover page
5. stand in line, if needed, and finally.....
6. wait for confirmation that the document was delivered

Studies show that it takes approximately nine minutes to send a fax. Receiving faxes – which often involves walking back and forth to the fax machine, finding one's fax and collating it, and the occasional wasted trips when faxes haven't yet arrived, takes approximately 5.3 minutes.



*Traditional faxing via fax machines and/or multi-function devices in uses considerable employee time.*

### **Scalability**

NET SatisFAXtion IP scales with your VoIP system to ensure easy upgrade paths that adjust to changing business needs.

### **Centralized Archiving**

Faxes are automatically stored in a central location for easy file management, tracking, forwarding and retrieval.

### **Regulatory Compliance and Privacy**

HIPAA, Sarbanes-Oxley, Gramm-Leach-Bliley and other regulatory laws emphasize a need more than ever for greater privacy protection, document transmission security and accountability. NET SatisFAXtion IP can be combined with VoIP encryption to ensure secure, virus-free transmission across VoIP networks with centralized, auditable records of all transmitted documents.

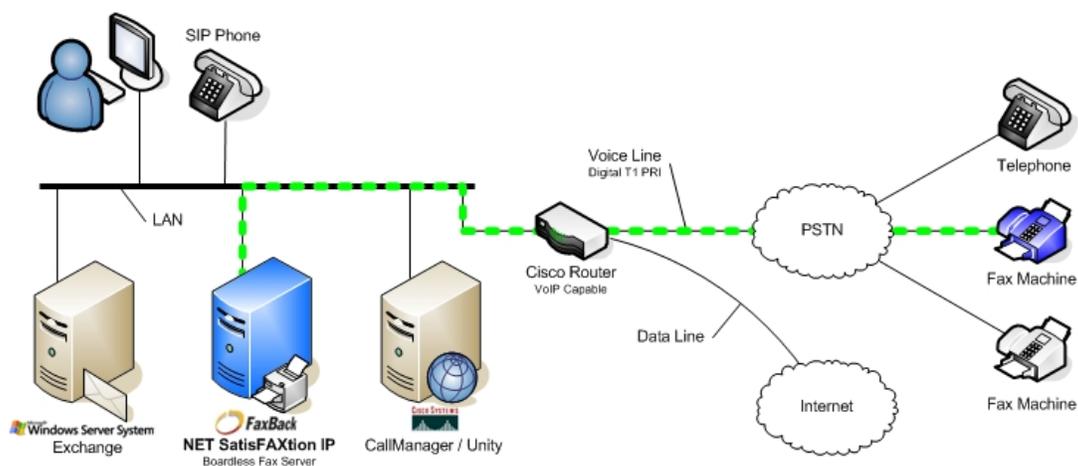
### **Increased Uptime**

With a traditional fax server, administrators are required to shut down the server to install fax hardware. Much greater flexibility exists with a boardless fax solution as reboots and subsequent down-time are eliminated. And by eliminating fax hardware, there is now only one point of contact.

## Implementing NET SatisFAXtion IP: The Technical Aspects

As demonstrated thus far, there are two primary ways to implement a FoIP solution: with and without fax board hardware. NET SatisFAXtion IP software can be implemented with an existing Cisco router or in a legacy PBX environment with dedicated fax hardware, making for a smooth, successful transition to a VoIP environment at any time. However, NET SatisFAXtion IP installations typically follow the boardless method, shown in the diagram below.

### NET SatisFAXtion IP Boardless Fax Solution



With a boardless system the fax software works off the digital signal processors (DSPs) located in IP gateways, like Cisco, 3Com, Alcatel, and many others. The DSP then does all the hard work of managing a transmission and then converting the T.38 to T.30. Scalable from two ports up to several full DS3's (1344 ports/56 T1's), organizations are given the ability to grow and change without requiring expensive replacements or modifications of the fax server.

### Pre-requisites to Installing NET SatisFAXtion IP

One of the key differentiators of the NET SatisFAXtion IP solution is the ease of installation. In comparison to other FoIP solutions, the NET SatisFAXtion IP software installation typically takes less than one hour. Other solutions require extensive and challenging fax board installations.

To ensure smooth installation, FaxBack recommends the following steps prior to implementing NET SatisFAXtion IP:

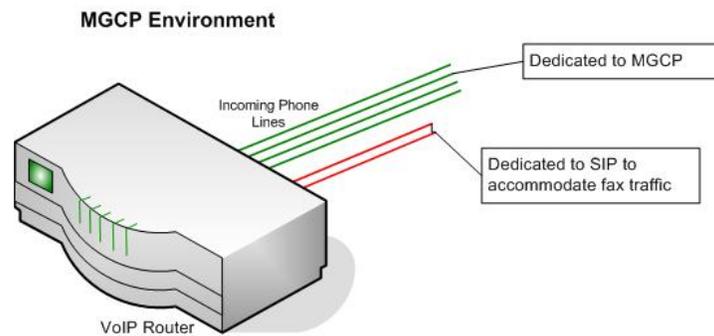
## 1. Complete your VoIP installation

Adding NET SatisFAXtion IP to an existing and established VoIP environment is ideal. If your organization has yet to migrate to a VoIP infrastructure, be sure to include FoIP in your project plan.

## 2. Determine your Network Protocol

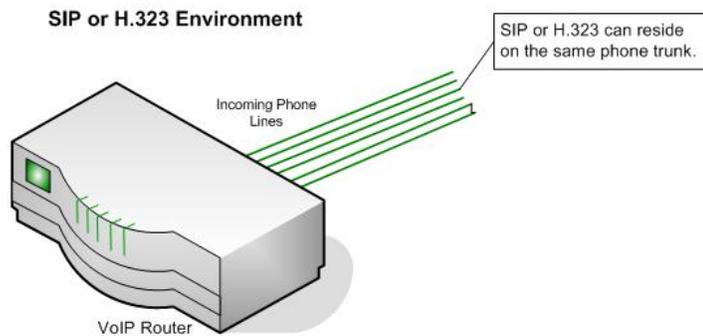
Prior to installing NET SatisFAXtion IP, it is necessary to determine what VoIP protocol you are using on your IP network. Using a SIP gateway, NET SatisFAXtion can work with any of the following three protocols: MGCP, SIP and H.323. Configuration varies depending upon which protocol your router currently uses.

Media Gateway Control Protocol (MGCP) is used for controlling telephony gateways from external call control elements called media gateway controllers or call agents.



In an MGCP environment, the appropriate number of incoming phone lines are dedicated to SIP to accommodate anticipated fax volume

Session Initiation Protocol (SIP) is an Internet Engineering Task Force (IETF) protocol for initiating an interactive user session that involves multimedia elements such as video, voice, chat, gaming, and virtual reality. SIP makes it possible for users to initiate and receive communications and services from any location, and for networks to identify the users wherever they are.



In a SIP environment, H.323 can easily be added to the same phone trunk in order to communicate with Call Manager to route fax traffic

H.323 is a standard that provides a foundation for audio, video, and data communications across IP-based networks, including the Internet.

With the next release of Call Manager, SIP will be supported. Until then, it is necessary to configure a SIP Gateway with H.323 in order to communicate with Call Manager. Because H.323 can be added to the same trunks dedicated to SIP, this can easily be configured.

### 3. Determine your fax volume

Take into account how many end users will be using the fax server, how many applications will integrate with it, will the server be used for both inbound and outbound faxing, and how much volume you expect to add over time. Be sure to contact a FaxBack sales representative to help you if you are unsure. These factors will ensure that the right software is implemented to accommodate your organization's needs, and to configure routers appropriately.

### 4. Configure the fax server

Listed below are the recommended system specifications and router requirements for a NET SatisFAXtion IP Server: FaxBack protects your investment in your network infrastructure by ensuring that NET SatisFAXtion IP can run on systems with the following recommended specifications:

- 1.6GHz or higher Intel compatible processor
- 512MB RAM
- 20GB Hard Drive
- Microsoft Windows OS: Windows 2000, XP, Windows 2003 Server
- Microsoft Internet Explorer 6.0+

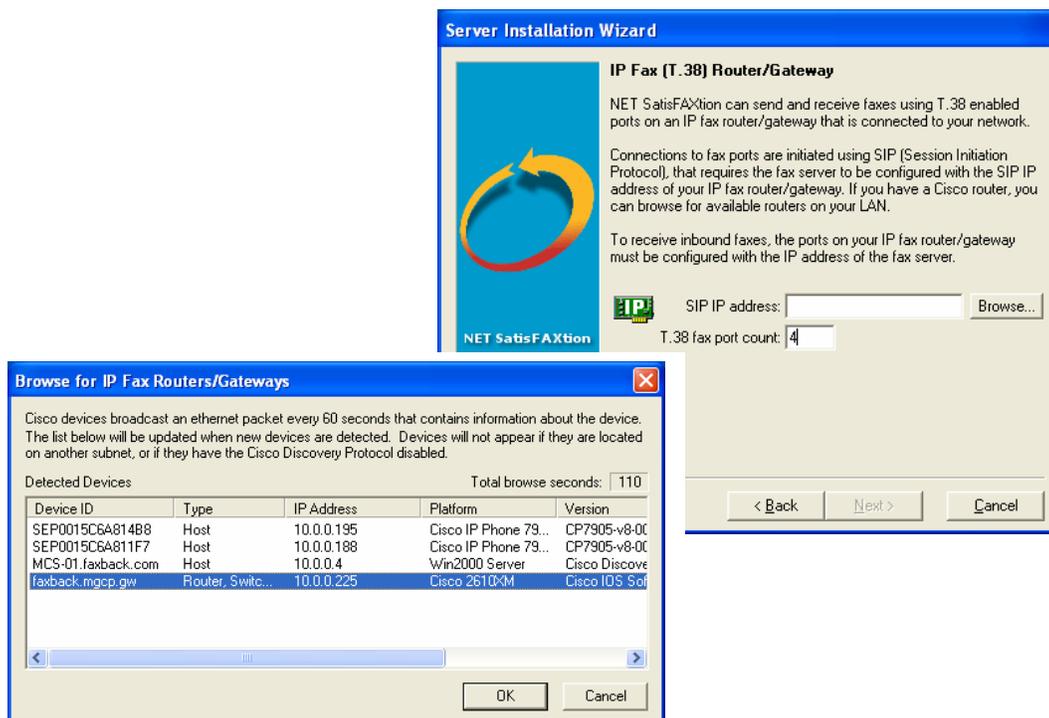
Router Requirements:

- A Cisco Router (1700, 1800, 2600, 2800, 3600, 3700 and 3800 series as well as the AS5300, AS5400 and AS5800 series)
- The router must have voice DSP card(s) installed and be configured as a Voice Gateway using SIP or H.323
- The T.38 protocol must be activated under the voice service and added to each dial-peer that will be used for faxing

## Simple Installation

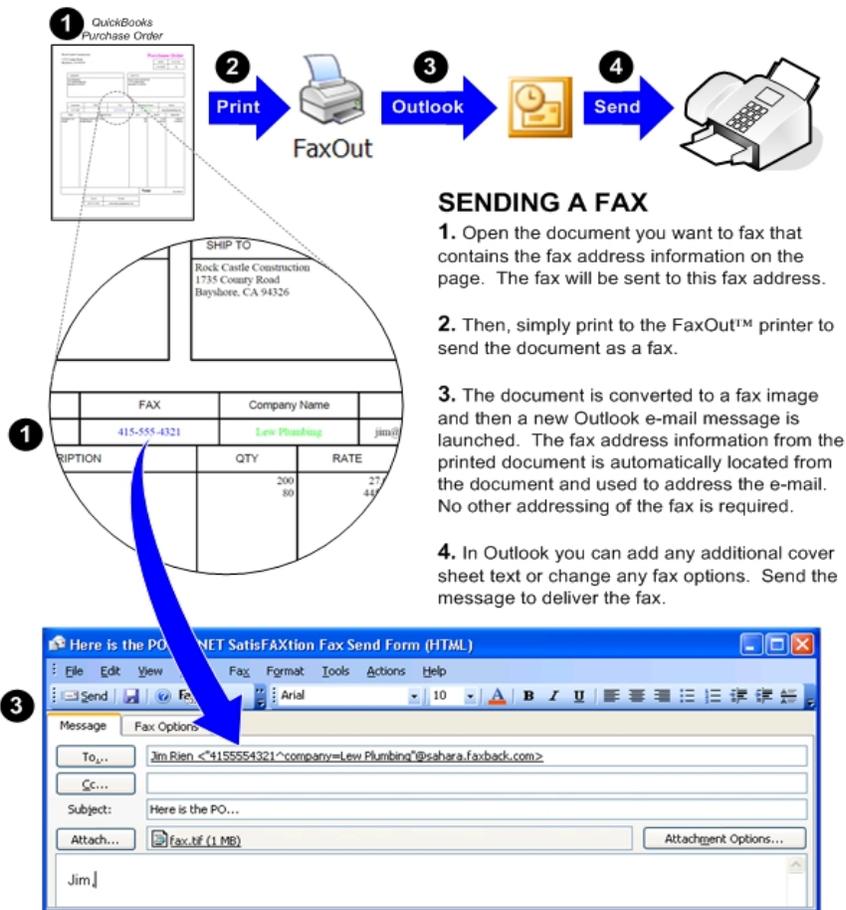
Implementing the FoIP solution involves the following simple steps:

- Installing the NET SatisFAXtion IP software on the configured server
- Linking to the IP router
- Configuring the fax server
- Installing the email gateway
- Setting up notifications



## An End-User Perspective

NET SatisFAXtion IP integrates seamlessly with most corporate email systems — like Microsoft Exchange — so that incoming faxes are received directly and securely to a users' inbox. Faxes are received as PDF or TIFF attachments, which can easily be clicked and viewed online. This eliminates the need for hard-copy printouts, as well as ensures no sensitive information is left in the open for anyone to see. By integrating fax with a familiar email interface, employees benefit from increased efficiency (faxing directly from user applications at their desktop) and productivity. This enables users to respond to customer needs and competitive dynamics more quickly, with improved responsiveness and lower costs.



**NET SatisFAXtion™ IP** allows desktop users to simply “File > Print to Fax” from within whatever application they are working with.

In addition, users can receive the real-time notification at their desktop – providing the same level of confidence as if standing at the fax machine watching a fax progress to the receiving device. This provides the security of knowing that a fax document was delivered.

## An Administrative Perspective

For companies that have yet to deploy VoIP within their environments, FaxBack recommends that you conduct a full network inventory. In the long run, conducting this type of full system and network inventory could ultimately save you time and money. Moreover, for larger enterprises or multi-site locations, FaxBack recommends that pilot projects and trials should also be a part of your FoIP roll-out process.

Historically, adding new applications, such as fax servers, has meant adding more devices – fax hardware, additional servers – which in turn has meant increased costs and complexity to the network. But as companies seek to deploy IP telephony solutions across their entire enterprise, converging voice, video, data, and fax, they require solutions that offer simple administration, virtually unlimited scalability, and high availability. NET SatisFAXtion IP works in concert with your IP systems, like Cisco, and can be deployed and centrally managed, greatly reducing your administrative burden and lowering the total cost of ownership of your network.

In summary, the primary benefits of deploying boardless fax technology for the IT administrator are:

- Centralized administration and management
- Single point configuration for an IP telephony network
- Helps eliminate the paper intensive portion of your company's workflow processes—increasing staff productivity, improving customer service and eliminating the unnecessary costs of filing documents
- Reduces IT capital investments and operational costs by eliminating the need to deploy and manage new equipment (fax hardware)
- Bottom line = cost savings!



*IT Professionals will appreciate the centralized administration and lower TCO of boardless fax technology.*

## Summary

The lure of the converged network and the multiple benefits associated with convergence has driven many enterprises to embrace VoIP technology and merge their voice and data networks. VoIP is the first step in a sweeping transformation of the communications industry. It is undeniable that the world is already moving toward a future of ubiquitous multimedia communications, in which voice, data, video – and FAX - are deeply integrated and information sharing is immediate and seamless under almost any circumstance.

For organizations wanting to add fax as a component to their existing VoIP infrastructure, NET SatisFAXtio IP is a proven and reliable fax over IP software solution that integrates seamlessly with VoIP environments and automates faxing from any application using an existing VoIP infrastructure. Unlike other costly IP fax solutions, NET SatisFAXtion IP requires no fax board hardware, is easy to install and eliminates the frustration of working with multiple vendors.

FaxBack is playing a key role in enabling this vision, by producing a completely boardless fax software solution that is interoperable with most VoIP-enabled environments. Converging fax with voice and data has the potential to change the way a company messages, extending well beyond simple cost savings. Whether you're an SMB (small-to-mid-sized company), enterprise organization or service provider, FaxBack can help you achieve the next level of efficiency with our integrated boardless fax server solution.

FaxBack, a market leader in fax software solutions has developed NET SatisFAXtion IP to meet the needs of a new era of IP-enabled telephony installations. By facilitating cost-effective, secure and efficient fax transmissions, FaxBack is helping drive the convergence of fax communications and messaging around the world and fueling the next generation of innovation and market growth.

For nearly 25 years FaxBack has been a leading fax messaging company with solutions that radically simplify the way organizations communicate. We provide award-winning network fax servers, fax-on-demand, broadcasting, web-to-fax applications and most recently, a real-time, point-to-point fax over IP solution that streamlines information processes and gets time-sensitive information into the hands of your audience faster than ever before while reducing the cost of doing business. Designed for organizations that need to control and simplify their fax communications, FaxBack's line of software applications are enjoyed by thousands of global organizations including AT&T, ARCO, Bank of America, Compaq, Kaiser Permanente, Kodak, NEC, Sherwin-Williams and Wells Fargo. Countless other organizations in nearly every industry from real estate and manufacturing to travel, education and healthcare, trust our solutions for their fax communications needs.

Give your organization an edge in the rapid migration to fax over IP technology. To learn more, visit our website at <http://www.faxback.com> or call us today at 1-800-511-2587.