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White Paper

Moving to Internet Fax and Credit Card Processing

One of the most frequently asked questions about switching to Voice over IP (VoIP) is "Can I use my fax machine with my VoIP telephone service". This white paper addresses the question of analog modem based communications in general and provides specific guidance about fax.

Analog Modems

Data communication devices that we used to use every day with plain old telephone service (POTS) used a communications component known as an Analog Modem. These devices communicated with each other based upon sending tones across a copper wire. When these tones are digitized by a VoIP gateway box, modems can no longer communicate. But, the devices and functions which once depended upon these modems have evolved and alternative forms of the devices and functions now exist that work with VoIP and broadband networks. One of the most important remaining analog modem devices is the old credit card machine.

New credit card machines are available that have an Ethernet jack instead of a Phone line jack. Plug the new machine into your office LAN and you can run credit/debit cards in 1 second without phone lines. Software also exists for your windows PC (Virtual Terminal) which when combined with a card swiper (attached to your keyboard) lets you run credit/debit cards in 1 second without a machine. Contact your card processor to discuss these options.

AireBeam ePhone Service

AireBeam's ePhone service now supports legacy analog fax machines. Plug one into the phone1 port on our ePhone Adapter and send your fax! You can also add a second phone number just for receiving Faxes for a very modest price. Call AireBeam for pricing and information.

But, Fax technology has advanced in the last few years and now it's possible to receive your faxes as PDF's in your email inbox, thus freeing you from having to go to your home or office to "read your faxes"..

Powering Community Broadband

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Introducing Broadband Fax

The advent of high speed Internet service has made communicating by email more effective than communicating by fax. Larger and color documents can easily be sent using email. However, many business services still rely on paper forms for documentation and the simplest way to move a paper document between two locations is fax.

A fax machine is actually three devices in one package:

1) A scanner which is used to digitize documents so they can be sent
2) A printer used to create hard copy from incoming digitized documents and
3) An analog modem used to send the document digital image from one machine to another.

There are two forms of fax machines:

1) The original standalone fax machine and
2) The so-called multifunction machine which connects to a Personal Computer

When connected to a computer, a multifunction machine can:

1) Scan a document into the PC and store it on the computer's hard drive and
2) Print a hard copy from a file stored on a PC.

So, broadband fax was created to:

1) Enable fax machines to send documents to people who have broadband and no fax machine and
2) Enable people who have broadband to send documents to fax machines.

There are several broadband fax services that stand out, Fax87.com, Efax (www.efax.com). Both are economical services which provide each customer with a fax number, either standard or toll free (for the entity sending the fax). When the customer creates his broadband fax account, he provides an email address to which the received fax image is then sent, arriving in the INBOX of the recipient. If that address is a distribution group address, the incoming faxes can be automatically distributed to multiple recipients. Both services are capable of delivering the fax as a PDF with which the recipient can easily view, or save them (on the hard drive) and print them on any available printer.

Sending faxes is equally easy:

1) Prepare an email with a subject such as "Please deliver to Mary Jones"
2) Type some relevant information in the email body including your fax number, phone number etc.
3) Attach Word, Excel, Adobe PDF, text files and most other forms of stored documents including PDFs generated by your scanner.
4) Make the address of the fax [faxnumber@ the fax service's address](#).
5) Send the email which sends fax.

The result is that the service creates a cover-page, including your Subject Line, adds your email body as the next page and all of your attachments become additional pages. The quality of the

received fax is almost always better than a traditional scanned fax because the document is sent at a higher resolution and is not degraded by the fax scanning (low resolution) process.

Example follows in Exhibit A.

Confirmation

When you send a fax, you receive a confirmation email. Example is shown below:

From: send@mail.efax.com [mailto:send@mail.efax.com]
Sent: Thursday, July 14, 2011 2:21 PM
To: Gregory A. Friedman
Subject: Successful transmission to 1520466xxxx. Re: Customer Name - Fax test

eFax® Easy faxing anywhere.™

Dear Sender's name,

Re: Customer Name - Fax test

The 3 page fax you sent through eFax.com to 1520466xxxx was successfully transmitted at 2011-07-14 20:20:23 (GMT).

The length of transmission was 95 seconds.

The receiving machine's fax ID: 520 466 1358.

Best Regards,

If you need additional assistance, please visit our online help center at http://www.efax.com/help/. Thank you for using the eFax service.

eFax.com

Summary

Well, that's "the truth, the whole truth and nothin' but the truth" about fax. Time marches on and so does technology. Don't be afraid to go along for the ride. Sure, "change causes chaos"…so says an old saying. But, eventually, most changes work out and things stabilize.

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