

Why choose babyTEL over the mainstream carrier for your fax service?

babyTEL has a 20-year track record of developing innovative and successful Fax solutions and was the first company to ever deploy Fax over IP (FoIP) solution platforms in large-scale networks spanning multiple International locations.

Deploying reliable real-time Fax services in the early days was a technological challenge to understand the idiosyncrasies of different Fax machines, the impact of different network conditions and then to develop techniques to adapt to them. Our team worked with technology and channel partners as well as key customers that over time helped us achieve incredible delivery success rates for real-time Fax over the public Internet.

babyTEL was also the first company to develop, patent and deploy a real-time Fax traffic encryption solution that offers protection of data while maintaining the high level of delivery success rate.

Some customers might assume that big brand mainstream carriers' Fax service must be as good as their other services. The reality however, is that most carriers have treated Fax as an afterthought as they migrated their telephony connectivity from legacy circuits to fiber carrying Voice over IP (VoIP). It used to be that when you ordered a PRI, you got a circuit connecting the Public Switched Telephone Network (PSTN) that carried analog data but now you get VoIP. Many have yet to develop plans for addressing the important difference that IP traffic is digital and not analog, a difference that while transparent for Voice calls, is critical to the success of Fax calls.

While VoIP is suitable for analog traffic, Fax is a digital medium. When carriers switch to VoIP, they use Voice codecs to digitize and compress call traffic, treating Voice and Fax calls the same, so Fax has to be converted from digital to analog and back a few times, sent over IP links with packet loss, delays and jitter and using the T.30 Fax protocol on a digital transport through it was designed for an analog one thus undermining the various techniques T.30 incorporates for dealing with circuit problems. As a result these carriers are only able to deliver sub-optimal Fax delivery success rates that get even worse as traffic volumes increase or when encryption is required.

Most of these carriers lack the desire or expertise to make Fax work over IP. Their experience is rooted in treating Fax as just another telephone call, yielding unacceptable completion rates. Carriers, like AT&T or Verizon, are not startups that can pivot quickly to solve difficult problems.

A key technology for successful FoIP is the T.38 protocol, which is designed for IP networks. T.38 leverages T.30 techniques for dealing with poor circuit quality and builds upon them with an understanding that the underlying transport is digital not analog thus incorporates additional techniques for dealing with poor IP network conditions while ensuring standard Fax transmission where real-time end-to-end communication is established between Fax machines or servers.

Some carriers have recognized the importance of treating Fax over IP differently than Voice over IP and have adopted the T.38 protocol, yet even among these carriers, we often find that their implementation and support are lacking. For example, babyTEL recently wanted to test T.38 SIP trunks from one such major carrier. We know that to do Fax right, certain requirements have to be met so we asked a few questions. Some of the answers we got clearly demonstrate how this renowned carrier was off the mark when it comes to Fax. Here are a few questions and responses given to us by this major US carrier.

babyTEL: Do you provide engineering support for troubleshooting T.38 issues – i.e. subject matter expert technical staff as opposed to front end support or customer care?

Carrier: As for T.38, our support is our normal customer service which troubleshoots Network, Availability and Delivery issues. This is our standard offer. There are escalation paths within customer service, but this is our standard network customer support.

babyTEL: Will it be possible to get support from your network routing team in case we find problems with certain routes? We work closely with our Carrier partners on fixing International routing issues so we are looking for the same from you.

Carrier: Our Enterprise Business Market group does not offer this and I do not know if Wholesale does.

babyTEL: Do you support T.38 re-invites?

Carrier: If the customer attempts to re-INVITE using T.38, the Re-INVITE will not be accepted.

babyTEL: Do you use Fax tone detection to switch to T.38 if the end devices don't re-invite to T.38?

Carrier: Not always. The call is handled as follows:

- Customer initiates a Fax call and sends the call through our VoIP Service. Upon call completion, the Service detects a Fax Answer Tone from the receiving end.
- If the Customer initiated the Fax call using G.711 the call progresses as is. The Service will not Re-INVITE to T.38 and will not accept a Re-INVITE to T.38 from the customer.
- If the Customer initiated the Fax call using a compressed codec (G.729a, G.729ab, G.726), the Service will re-INVITE with T.38 as the first choice and G.711 as the second choice.

These responses demonstrate that this carrier doesn't understand how to achieve the kind of Fax delivery success rates that babyTEL can.

Beyond its proven FoIP deployments, exceptional customer care, service quality, reliability and security capabilities, babyTEL offers a monthly contract option and provides self-service provisioning so you can be up and running in a matter of minutes. This removes the long contractual obligations and lead times you often get with big carriers!

babyTEL is the go-to subject matter expert when it comes to FoIP and is the carrier that Fax customers go to after they've been unable to get acceptable Fax delivery results with the likes of AT&T, Verizon and Comcast as well as most smaller service providers. That is why you'll find statements like "babyTEL made the transition from our previous provider really smooth and painless" and "babyTEL T.38 SIP Trunks have given us much higher success rates than our previous provider" on our [Testimonials](#) page.

To speak to a babyTEL Fax specialist, call us at 1-866-400-7760.