voxbone

Fax is Dead — Long Live Fax

Rod Ullens, CEO and co-founder of Voxbone, talks about fax over IP and why fax is unlikely to disappear anytime soon

Rod Ullens, CEO, Voxbone

Rod Ullens is CEO and co-founder of Voxbone, market leader in worldwide geographical, toll-free and iNum® telephone numbers. Voxbone enables Internet communications services providers, wholesale carriers and mobile and fixed national operators to extend their network reach internationally, rapidly and with minimal costs. Voxbone delivers high-quality inbound communications from more than 50 countries and more than 4,000 cities, using its own private global VoIP network — the world's first and largest backbone dedicated to voice-origination services. Before founding Voxbone, Ullens provided advice, training and seminars to European carriers, such as Belgacom mobile, KPN, France Telecom and Orange, as well as several European governments. Ullens holds a B.S. in telecommunication engineering from the University of Louvain in Belgium.

The Internet as we know it today has already been around since the mid-'90s. However, it took another 10 years for Voice over IP (VoIP) to take off, and we are still only seeing the beginning of evolution to an all-IP telecommunication infrastructure.

There are various reasons for the delay in the development of VoIP compared with other IP-based communication tools like email and instant messaging chat, but the main reason was and still is network architecture. It is much more challenging to route telephone calls over a decentralized, packet-based network than the public switched telephone network (PSTN). Delay, jitter and packet loss on the asynchronous Internet make it harder to meet the strict timing expectations set by the synchronous PSTN. This is even more true for Fax over IP (FoIP), for which the timing of signals exchanged between the sender and recipient is crucial for proper transmission.

On the voice front, we have overcome the challenges to the point where IP phone calls based on the SIP protocol exceed the quality of legacy PSTN calls by far. This is not the case for fax transmissions, as the industry is still struggling with the above hurdles. FoIP still cannot match the average success rate of 99 percent from the PSTN although we have come a long way over the last couple of years. Leading FoIP providers and enablers, including Voxbone, have invested a lot of time and resources to bridge the gap between the PSTN and IP for fax transmission and are now reporting success rates of up to 98 percent.

One might argue that fax is an outdated communication form and could be replaced easily by more advanced communication modes such as email. Indeed there are other ways to send text files or images over the Internet, so why do we force fax transmissions on a network architecture not designed for them? Why bother?

Human habits and processes do not always change as quickly as the underlying technologies. Requesting an email instead of a fax can be a lot to ask because emailing is an entirely different process. For Internet telephony, we have not changed the process. We are still using the same identifiers and the same devices to call one another. We added new features like unified communications and video. We also

▶ improved the quality with high-definition (HD) calling, but the user experience has not changed much since the invention of telephony. We can still pick up the phone and dial the number of our calling partner without realizing that the call is routed over the Internet instead of the traditional telephone network. Analogously, people expect to keep the same user experience when sending a fax, whether it is forwarded over a conventional line or an IP fax server. IP can add new dimensions like fax to email, for example, but we still need to make sure that all new standards are fully compatible with conventional fax machines in terms of user experience and quality of service.

Fax is very easy to use and has been around for much longer than email. It also provides a level of security that emails cannot guarantee. Fax transmissions cannot be intercepted and altered that easily because they are transmitted as images. That is why they are still a preferred communication tool in industries with strict privacy regulations, such as healthcare and banking.

Public administration and governmental bodies also use fax as part of communication procedures and structures that do not change as quickly as in the private sector. Fax usage is still widespread, especially in industrialized nations, with Japan and the United States leading the market in terms of volumes and number of fax machines per capita.

Communications providers need to take the continued prevalence of fax machines and fax numbers in the public and corporate worlds into account. It is important for network operators to continue supporting fax if they want to keep their customer base happy and manage a smooth transition from PSTN to IP. As long as we see fax numbers on business cards and in corporate communications, people will continue to use them. Those who predicted the death of fax 10 years ago were wrong, and they will still be wrong 10 years from now.

For more information visit: www.voxbone.com

voxbone
Local numbers, Global network

Voxbone Europe (HQ)

Avenue Louise 489
B-1050 Brussels
BELGIUM

Tel: +32 2 808 00 00
Fax: +32 2 808 00 01
iNum: +883 510 001 000 000
Email: sales@voxbone.com

Voxbone North America

65 West Easy Street
Simi Valley, CA 93065
UNITED STATES

Tel: +1 805 880 9800
Fax: +1 805 210 3819
iNum: +883 510 001 000 002
Email: sales@voxbone.com

Voxbone Asia Pacific

3 Temasek Avenue (Level 21, Centennial Tower)
SINGAPORE 039190

Tel: +65 6549 71 92
Fax: +65 6549 70 01
iNum: +883 510 001 000 004
Email: sales@voxbone.com