

Migrating to All-IP: Error-Free Digital Communication Thanks to Retarus Fax APIs

The challenge

As companies make the change to Voice over IP (VoIP) they are benefiting from completely new opportunities offered by innovative communication. What many of those responsible for transforming their ICT infrastructures are not aware of, however, is that in an All-IP network, the effective bandwidth fluctuates constantly, often leading to insufficient bandwidth during peak times. Frequently, this results in losses of information packets. In the transmission of voice messages, for instance in VoIP telephony, these losses are of little consequence, because a speech packet contains only 20 to 30 milliseconds of spoken data. This corresponds to approximately one syllable. The human brain can easily compensate for these information losses. By contrast, fax transmissions are much more sensitive. Missing packets often bring about connection failure and information loss in the form of missing page sections, causing significant disruption in business-critical communication.

The background

Many businesses are relying on comprehensive unified communication solutions (UC) in the move to All-IP. However, there are problems associated with this strategy. While UC platforms indeed offer numerous features for calling, video conferencing, and collaboration, they often do not include any fax functionality. In many cases a range of business software is also closely integrated into the current fax infrastructure, so that documents can be sent or received automatically from business applications. With the migration to digital networks, companies urgently need to take steps to connect these systems.

The solution

With Retarus Cloud Services, faxes can be received without difficulty, even in digital environments and without the use of conventional PBX systems. Faxes are no longer sent via the telecommunication provider's VoIP infrastructure, but rather directly via Retarus' data centers, which have a redundant connection to multiple carriers and bandwidth which can be scaled to meet demand at all times. This effectively prevents packet losses due to resource bottlenecks, even if the fax volume is high.

Customer benefits

- ✓ Seamless fax communication in IP networks
- ✓ User friendly
- ✓ Continuity of existing processes
- ✓ Easy integration using standard APIs
- ✓ No need for own fax servers and infrastructures

Benefits at a glance



Operated in Retarus data centers in compliance with the strictest data protection regulations



Customized and scalable bandwidth with high availability



Communication channels can be expanded at all times



Usage-based fees



Personal support

Use Case

Retarus Cloud Fax Services can be integrated using all common protocols. Irrespective of the VoIP provider, the services can be employed either on their own or as part of a UC solution. Depending on the configuration, incoming faxes are forwarded, for example, as email attachments. The advantage is that all documents are received by the responsible employee already digitized as PDF file and can be processed or archived immediately. Media disruption and manual digitization of fax documents are things of the past. The same is true of fax transmission, as files are easily sent from a workstation via the email client and converted into fax format.

With Retarus, faxes can also be sent from applications such as SAP, Microsoft Dynamics, or Office 365. To enable continued use of these applications in the All-IP era without making modifications, Retarus provides a direct connection to all services via IP protocols and standard APIs. Companies no longer need to run their own fax infrastructure or fax servers. Retarus Cloud Fax Services can be easily implemented and, in contrast to on-premise systems, can be scaled as required. This guarantees the highest levels of transaction security and availability, even during peak times. A web-based administration platform provides customers with maximum control over their own fax communication, as well as extensive information about all server instances.

Did you know?



Telecommunication providers worldwide are rushing to push through compulsory migration to All-IP. By 2020, conventional analog or ISDN connections will be switched off for good in many places.

Other scenarios

EDI integration

The switch over from the analog network means that electronic data interchange will also need to be migrated in many cases (for example, OFTP1). As part of its Managed File Transfer Services, Retarus takes on both the operation and the overall management of these data connections.

MFD integration

Multi-Function Devices (MFD) with fax functions are connected to the telephone network via an analog connection. By connecting to Retarus Cloud Fax Services, it is still as easy as ever to send faxes via existing machines in All-IP infrastructures.

Automated order processes

Retarus Cloud Services facilitate a high degree of order process automation. Even fax forms filled out by hand pose no problem. Thanks to Retarus Fax2EDI, businesses can efficiently and securely process such orders in their own digital infrastructures.