

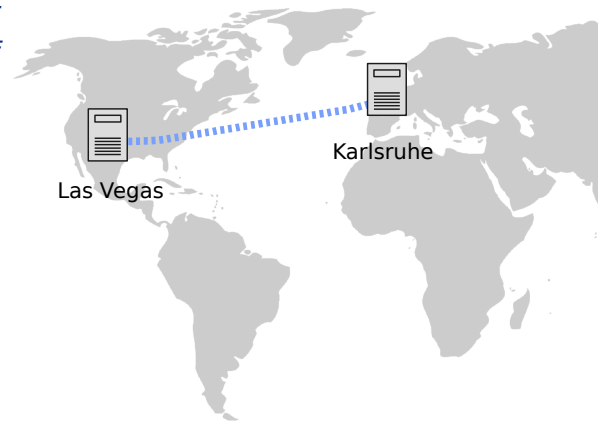
# High-Speed-Transfer for Data Centers



TRANSATLANTIC FTP 28X FASTER

IaaS providers have data centers around the world – optimal for international companies. Often they are faced with the challenge of moving large amounts of data between sites, whether VM or ISO images or content such as large databases and movies.

Using standard methods, transfers between Europe and the US are only 8 Megabits/sec. Easy to setup and use, TIXway acceleration software pushes this up to 220 Megabits/sec – 28 times faster – on the same infrastructure and regardless of the type of data.



## CHALLENGE

Typically for file transfers, the FTP protocol is commonly used. For connections with large bandwidth, high latency, delay variations and/or packet loss, the data rate can collapse.

This can be particularly noticeable in time-critical transfers of large files, such as the deployment of virtual machines, distributing ISO images, backup & restore of large databases, and transfer of broadcast video.

Between data centers in Karlsruhe and Las Vegas, installation images were transferred – first via conventional FTP, as typically offered by IaaS providers. The

transfer of a 1 Gigabyte file took 17 minutes and 26 seconds (1046 seconds).

## SOLUTION

With TIXway software for transparent FTP acceleration, the copy process takes just 37 seconds. The file thus reaches its target about 28 times quicker: on the same infrastructure, the same network, without compression or caching, and regardless of the file content.

Each FTP transfer uses a TCP connection, inefficient for

wide-area or high latency links. TIXway terminates these TCP links locally, and optimizes the critical WAN connection with a more efficient wide area network protocol. Based on regular UDP, this works with any standard IP network, such that no special hardware or network components are required.

Running locally on a Linux, Mac OS or Windows machine, TIXway software comes as either the client- or server-side gateway (CSG and SSG). Instead of connecting with the

destination FTP server, the FTP client talks to the CSG, which is configured to connect to the SSG, which then links with the FTP server. Control and data connections are transparently passed, so no additional actions or access is required, and the file need not be cached unnecessarily.

Due to this gateway concept, TIXway can be used in many ways: the customer can install TIXway on his or her virtual computers, or on additional, dedicated VMs to accelerate a large number of instances. Alternatively TIXway can be provided as "Acceleration as a Service" by a third party or the IaaS provider offering permanent or on-demand gateways.

