TIXway NFS/CIFS

ACCELERATED FILE ACCESS VIA WAN

TIXEL

For companies operating in distributed facilities, fast file access is an essential part of daily business. In times of cloud services, central storage and world wide workflows there is an increasing need to access files on the other side of the globe just as if they where on the local network.

However, standard network file systems are designed to work in local environments. When accessed from outside of that local environment, e. g. via a VPN, transfer speed usually collapses.

TIXEL's light-weight easy to setup software gateway delivers maximum speed for file exchange beyond the borders of a local network environment.

Easy Setup	**Great User Experience**	**High Performance**
Easy configuration and transparent workflow integration	Access remote files – as fast and easy as if they are stored locally	TIXEL's proven technology provides maximum data rates

ACCELERATING FILE SYSTEMS OVER WAN

Network file systems like NFS (Network File System) and CIFS (Common Internet File Systems, also known as SMB, Server Message Block) allow remote file access for several users. What works well in local environments has severe performance issues when used on high-bandwidth wide area connections ("long fat pipes").

Using intermediate storage (caches) may help in certain scenarios. However, this does not solve the speed issue for the initial data transfer (i. e. to fill the cache).

HOW IT WORKS

TIXway software acts as a gateway on both sides of the WAN link. NFS traffic is terminated locally and directly transferred with TIXEL's optimized WAN protocol.
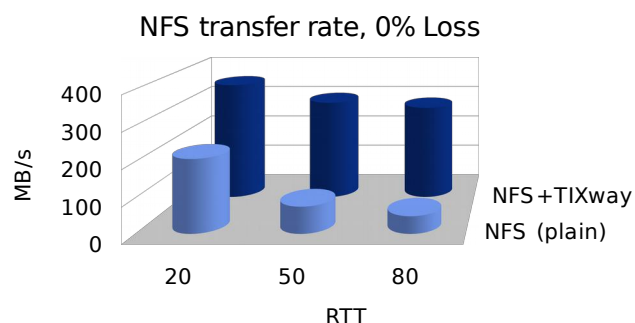
Clients just connect to the local gateway instead of going directly to the actual file server. Everything else remains the same. A gateway can serve multiple clients.

BENEFITS

- Accelerates and secures NFS and CIFS on VPNs, public Internet, leased lines and other IP networks.
- Minimizes transfer times – regardless of latency
- Content agnostic full speed transfer (no compression)
- Ultimate speed from the first bit (no caching)
- No unnecessary extra copies and extra storage

NFS PERFORMANCE

NFS performance degrades heavily when used over a WAN or metro link with round trip times (RTT) >10ms. With TIXway NFS delivers significantly higher date rates.

NFS transfer rate, 0% Loss

With typical packet loss of 0.1% plain NFS transfer rates are even worse and most of available network bandwidth is not used. With TIXway precious network capacity is finally utilized efficiently and transfers are up to 180 times faster.

NFS transfer rate, 0.1% Loss