

Optimizing Terminal Services Over the WAN

- 1,000% acceleration for Terminal Services
- Avoid network infrastructure upgrades that often accompany RDP-based application roll outs
- Transparently add 50% more RDP users on the same infrastructure
- QoS to protect Terminal Services performance
- Protocol acceleration to speed larger RDP transfers over the WAN
- Transparency to simplify infrastructure integration

The Mandate

With Terminal Services and Remote Desktop Connection clients, Microsoft has made application and data store consolidation to a single Windows server a practical option for the enterprise. In fact, for next to no cost beyond Windows licensing, enterprises can easily meet regulatory compliance and even application and data uptime goals with this ready to go server consolidation platform.

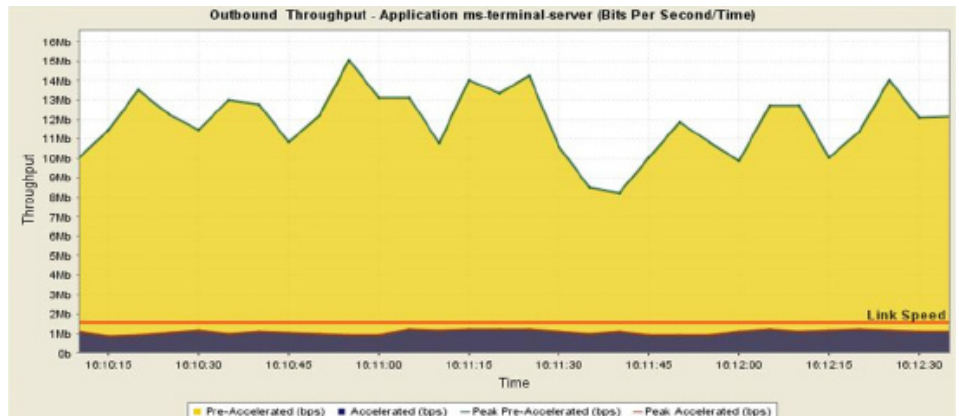
The economics of an RDP (Remote Desktop Protocol) solution, combined with Microsoft's commitment to functionality and stability, as well as a growing community of Remote Desktop Connection clients for non-Windows terminals, make this solution both attractive and viable.

The Challenge

While Microsoft has done a good job to minimize the chattiness and amount of data exchanged using RDP, the change to transporting application traffic across the WAN, where it previously traversed the LAN or even just the user PC, will create a slightly less exciting user experience.

To start, though thin, is the WAN ready for the extra load of RDP traffic? Link upgrades are often necessary, but even with larger capacity, unpredictable congestion will make for an unpleasant user experience.

In addition, as new users need to be added to the infrastructure, more bandwidth is needed and will be consumed irrespective of how busy the user is (each RDP user marshals a dedicated and persistent pull on available bandwidth).



Usable throughput consistently over 10 Mbps on a 1.5 Mbps link, with peak throughput of over 15 Mbps.

The Solution

When WAN congestion makes an efficient and economical plan perform poorly, Expand's technology is precisely the solution fit for the challenge. Unlike many other WAN Optimization products in the market which cannot optimize RDP because they use block-caching, Expand's transparent Real-time All-IP engine, which optimizes at the bit and byte level, has the granularity necessary to optimize RDP traffic. Reliably accelerating throughput on average by 300% transparently, congestion will be all but removed from the equation, without any changes to the client or server.

To completely remove congestion as an issue, Expand's easy to use QoS will make sure that what is important to the business is also important to the network. RDP will not be slowed or flat out disconnected as a result of other traffic sharing the WAN link.

In addition, Expand's TCP protocol acceleration will help speed those larger RDP transfers, such as graphic applications usage, web browsing, and image viewing. This kind of acceleration goes a long way combat the ill effects of latency on application performance. Taking this already valuable solution to the next level, Expand has a special RDP plug-in technology to further optimize the traffic. This technology allows on average 50% more user sessions on the same bandwidth.

