

# Accelerating Microsoft Exchange Over the WAN

- **Robust Exchange performance, leveraging Outlook caching**
- **Safely enable continuous data replication between servers**
- **Upgrade and enlarge Exchange usage without upgrading the WAN**

## Compass enhances Exchange with:

- Up to 2,500% Exchange acceleration over the WAN
- Works with Outlook caching enabled
- QoS to enable continuous replication capabilities
- Protocol acceleration to mitigate latency and fill the pipe
- Transparency to simplify infrastructure integration

## The Mandate

Fast, effective and efficient communications make all of the difference in today's time compressed global markets. To facilitate this need for anywhere and anytime access to vital business communications, many organizations choose Microsoft's Exchange.

Developed to defend against mail communications security threats and the ever changing regulatory environment, Exchange makes communicating a rich experience, and workforce collaboration a given. With such functionality and reliability, it is little wonder that Exchange is able to deliver an enhanced communications infrastructure that meets the business challenges.

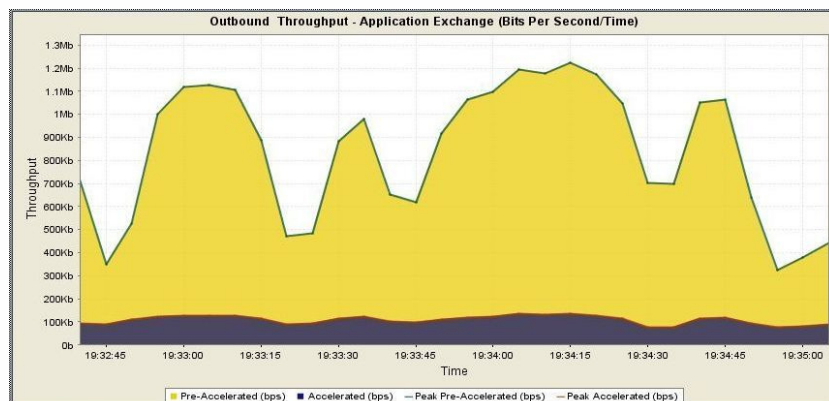
## The Challenge

Unfortunately, while bringing the functionality needed to meet the business communications challenges, Exchange is not always well suited to handle the challenges of the Wide Area Network (WAN).

For example, Exchange to Outlook traffic can be extremely heavy, which over the WAN translates into increased bandwidth and reduced performance – both of which impact user productivity, and make Exchange server consolidation impractical (studies have shown mail server consolidation can grow network traffic by 300%–400% or more).

In addition, the built-in Exchange compression features tend to have a large scaling impact on the servers, as they sap the precious CPU cycles away from other hungry real-time processes.

Next, with the vital nature of these communications, Microsoft realizes that continuity is critical and has implemented continuous replication capabilities. This SMTP traffic between Exchange servers is not insignificant, and especially when these servers are housed in different datacenters, their load on the WAN between them can be staggering.



Average throughput consistently accelerated by 350%, with frequent peak acceleration of over 2,500%.

## The Solution

Fortunately, when combined with Expand's Compass platform, the performance hindering WAN can be made to behave like the LAN.

To start, using advanced predictive compression algorithms that are lossless, Compass is able to reduce the Exchange traffic footprint on the WAN. In fact, on average, Compass will accelerate Exchange traffic by more than 350% with peaks of as much as 2,500%, even reducing transfer times.

The latest versions of Exchange and Outlook, with their rich multimedia experience that makes them so user friendly, will drastically change the WAN requirements if left unchecked. Compass makes the upgrade possible without the need to upgrade the network infrastructure.

The Compass approach to Exchange optimization is to integrate with Microsoft as much as possible. For example, starting with Outlook 2003, Microsoft enabled a cache function that does a fantastic job at mitigating poor user experience due to MAPI over the WAN. The Compass solution makes use of this secure performance optimization, so only new traffic needs to traverse the WAN (and Compass' predictive algorithms can easily handle this first-pass traffic). Why disable cache mode in the name of MAPI acceleration (as some vendors recommend), when delivering content locally will always give a better user experience? On the

other hand, by disabling Exchange's compression of MAPI traffic, allowing this to be handled by the award winning Compass technology, the Exchange server resources are immediately freed up, allowing better scalability and server response times.

Synchronization of data between Exchange servers is critical to continuity and scalable operations. With mostly SMTP traffic between Exchange servers, in addition to compression, Compass is able to greatly reduce transfer times by use of protocol (TCP) acceleration. When these Exchange servers are in different datacenters, Compass' QoS ensures that Exchange's continuous replication capabilities has the bandwidth it needs, without adversely impacting the performance of other application sharing the WAN.

Tightly and securely integrated with Microsoft Exchange, Expand's Compass platform ensures that the communications infrastructure is up to the business and technical challenges that face a distributed workforce, while seamlessly leveraging the best of Microsoft's optimization features.

By transparently optimizing Exchange traffic to the branch office and between datacenters, IT organizations are able to reliably achieve efficiency, security, and productivity, while supplying excellent user experience to the business for anywhere and anytime access to vital business communications.