open systems

APPLICATION **OPTIMIZATION**

Improve the performance of applications that consume bandwidth between dedicated sites

Boost the application performance in your SD-WAN

High bandwidth usage and slow application performance

With everyone connecting on the move, as well as instant file sharing and the sheer number of applications, bandwidth can be a problem during peak hours at important locations. In addition, applications might be slow due to congested lines, packet loss or long latencies. High bandwidth usage and connectivity issues can lead to such a low application performance level that the end-user experience is seriously impacted.

Reduce bandwidth usage and accelerate applications

Application Optimization helps to address both problems, reducing bandwidth usage by applying caching and compression algorithms and accelerating slow applications by protocol optimization.

Application Optimization is the cherry on the SD-WAN cake

Application Optimization
Reduce bandwidth and accelerate apps

Bandwidth Control
Prioritize to protect your business-critical apps

Path Selection
Use all available bandwidth in an optimal way

Connectivity
Integrate reliable and fast lines

Why choose Open Systems Application Optimization?

APPLICATION KNOWLEDGE

Having already implemented basic SD-WAN features, we can build on deep knowledge of your application landscape. This allows specific, focused and efficient application optimization for the cases where it is really needed.

SEAMLESS ACTIVATION

Enable the entire state-of-the-art application optimization feature set – caching, compression, protocol optimization – without changing your WAN architecture or installing new hardware.
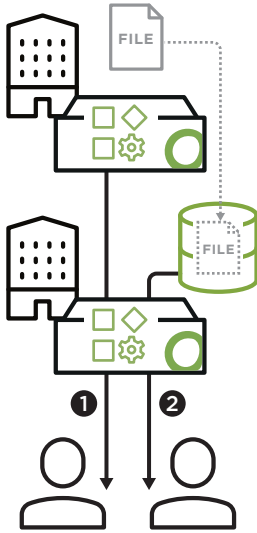
CUSTOMIZATION

With our in-house expertise and through our strategic partnership with the application optimization technology provider, custom requests have a high chance of being fulfilled – either by us or directly by the supplier.
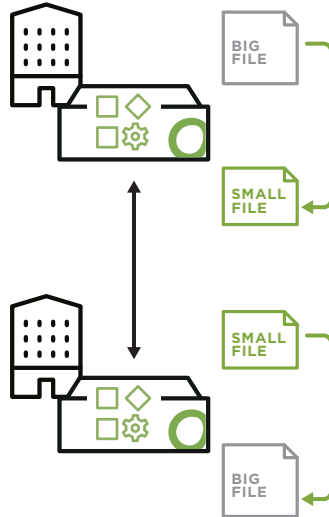
# How does Application Optimization work?

Caching

- Identify suitable blocks for caching
- Efficiently hash and distribute caching blocks
- Ensure data integrity and synchronization of cache data
- Locate cached blocks and replace them by small block references
- Identify caching blocks across protocols
- Apply caching for uploads and downloads

Compression

- Identify blocks for compression
- Compress data blocks without loss by reducing statistical redundancy (lossless)
- Send smaller blocks over the network
- Decompress data blocks: restore the original data blocks

Protocol Optimization
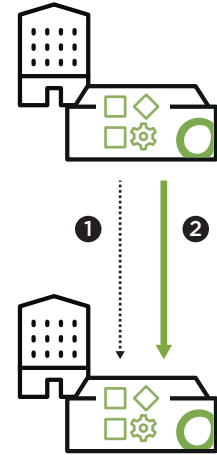
- Identify protocols for optimization
- Apply protocol optimization actions:
  1. Write ahead/read behind for CIFS
  2. Encode lengthy header information for HTTP traffic without loss
  3. Adapt congestion control windowing for TCP traffic
  4. If required: customized protocol optimization