Hypertext Transfer Protocol (HTTP)

The Hypertext Transfer Protocol (HTTP) is a networking protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for most of the world's business organizations. Web-based applications are widely used by companies for their mission critical data transfer and other browser-based operations, including inbound and outbound communication. As geographic distance increases between centralized data and remote workers accessing critical applications, network performance degrades and application response time slows, hurting productivity. In order to mitigate the effects of latency, adding more bandwidth is not the solution. Instead,what is needed is an efficient and revolutionary way to optimize HTTP-based transfers.

Test Results

WITH ARYAKA	TIME
40x faster	11.1 seconds

WITHOUT ARYAKA	TIME
Slow and unproductive	407.3 seconds

Aryaka Optimizes HTTP performance

Aryaka's cloud-based WAN Optimization and Application Acceleration solution delivered as-a-service offers significant performance speed-up for HTTP-based applications. Aryaka's technology addresses bandwidth constraints through compression and de-duplication (ARR™), dramatically increasing the application performance over WAN in the most demanding customer environments.

Aryaka optimizes the HTTP traffic, accelerates the performance and dramatically improves the transaction throughput of the web service. The bandwidth utilization is reduced by 60-98% and round-trips are sharply decreased by as much as 95%. In addition, the dedicated, closed and secure Aryaka network minimizes latency variations and maximizes the use of the available bandwidth.
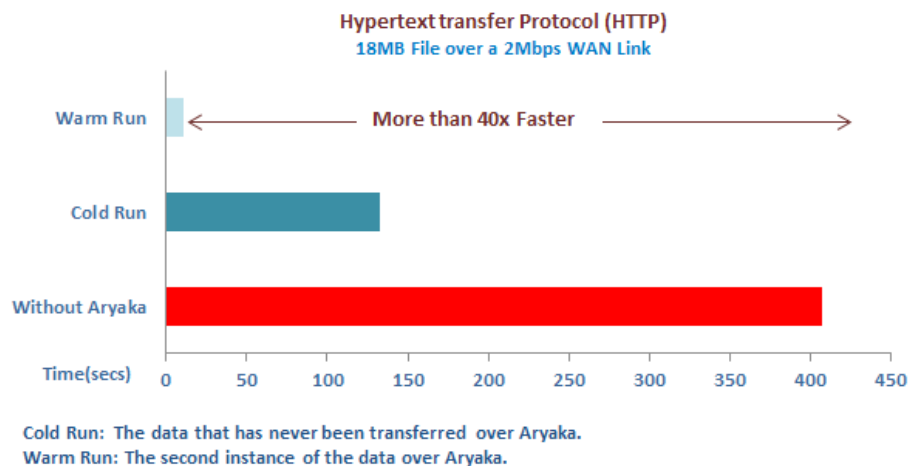
- ✔ 18 MB file took about 407.3 seconds over the WAN
- ✔ The transfer was optimized more than 40x over Aryaka
- ✔ It took less than 13 seconds to complete the transfer
- ✔ HTTP data transfers over Aryaka showed improvement when tested under intense packet loss conditions
- ✔ On a network with 5% induced packet loss, the transfer over Aryaka was over 60x faster

Hypertext transfer Protocol (HTTP)
18MB File over a 2Mbps WAN Link

Cold Run: The data that has never been transferred over Aryaka.
Warm Run: The second instance of the data over Aryaka.

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Use Case

6.5 Mpbs bandwidth utilization was reduced to 180 Kbps

More than 40x traffic optimization

Reference Architecture

Key Benefits

- Faster File-sharing
- Quick user-response
- Increased Productivity
- Optimal performance with minimal delay
- Significant Bandwidth & cost savings
- Real-time Reporting

Test Bed Parameters

Client – Windows Vista Ultimate 64

Server – Windows Server 2008r2

File type – binary, text and images

File size – 18MB

2Mbps WAN link

30ms and 25ms latency on two edge links (2% loss)

240ms latency on the core networkwith 2ms jitter

The protocol being tested is the CIFS SMB suite

ABOUT ARYAKA, INC:

Aryaka is the world's first cloud-based WAN optimization company solving application and network performance issues faced by the distributed enterprise. Aryaka has been named "Cool Vendor" by a leading analyst firm and to the GigaOm Structure 50 list for companies that will shape the future of cloud computing. Aryaka eliminates the need for expensive and complex appliances as well as long-haul connectivity, and enhances collaboration across locations. It offers significant cost, ease-of-use and performance advantages, helping global companies achieve dramatic productivity gains and increased visibility into their WAN applications, locations and performance, while providing 24/7 world-class support.