APPEX
NETWORKS

LotServer™

Maximizing Network Performance,
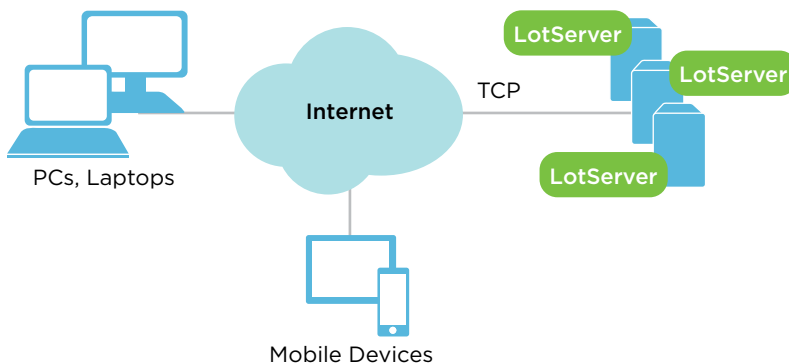Responsiveness and Availability

LotServer™

Accelerates content delivery from the point of origin

Web performance optimization is crucial for today's web applications to provide the best customer experience possible. However, standard TCP is governed by packet loss, so it actually depends on dropped packets to know when to slow down and eventually find the best speed. This limited flow control mechanism results in a poor end user experience on today's Internet. The problem worsens with the demands of mobile devices and cloud computing applications which are latency sensitive.

LotServer™ is based on AppEx Learning-Based Acceleration™ technology, the only asymmetric web performance acceleration solution that adapts itself to the unique connection characteristics of every session. Learning-Based Acceleration™ for web, mobile and cloud can make a difference for your web application delivery.

A loadable kernel software module

LotServer™ is a loadable kernel software module that runs on application, web or cache servers to accelerate content delivery to remote users. LotServer™ can be deployed on hundreds or even thousands of servers in large infrastructures such as a cloud, CDN or hosting company.

LotServer™ is able to significantly improve the overall user experience by speeding up web page loads and reducing user wait time. LotServer™ is the only product in the market today that supports asymmetric deployment and can be deployed in minutes without any changes made to applications, browsers or network devices.
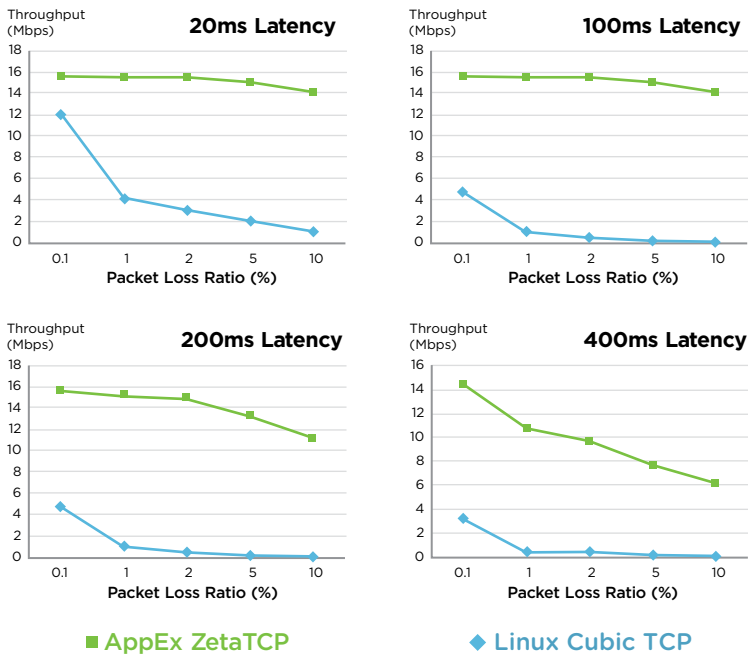
Portability is one of the important design objectives of LotServer™. It is powered by ZetaTCP™ and is a lightweight module embedded in the OS, which consumes very little resource on the servers. LotServer™ currently supports the following platforms:

• Windows Server 2003 and above.
• All Linux distributions

Use Cases

• Websites with rich media content, such as video, pictures and flash
• Websites that have mobile access from smartphones and tablets
• eCommerce sites that depend on fast web pages loads to increase revenue and retain loyal customers
• Content Delivery Networks (CDNs)
• Online gaming providers
• Cloud/SaaS (software as a service) providers
• Organizations with long-distance, cross-carrier or international network application deployments
• Wireless video surveillance servers
• Centralized thin client applications with global users
• Moving large files across the Internet
• Speed up latency sensitive applications in the cloud or across the Internet

Learning Based ZetaTCP vs. Linux Cubic

20ms Latency

Throughput (Mbps)

18 16 14 12 10 8 6 4 2 0

0.1 1 2 5 10

Packet Loss Ratio (%)

100ms Latency

Throughput (Mbps)

18 16 14 12 10 8 6 4 2 0

0.1 1 2 5 10

Packet Loss Ratio (%)

200ms Latency

Throughput (Mbps)

18 16 14 12 10 8 6 4 2 0

0.1 1 2 5 10

Packet Loss Ratio (%)

400ms Latency

Throughput (Mbps)

16 14 12 10 8 6 4 2 0

0.1 1 2 5 10

Packet Loss Ratio (%)

■ **AppEx ZetaTCP**   ◆ **Linux Cubic TCP**

ZetaTCP™

ZetaTCP™ is a series of TCP acceleration algorithms and is the core technology in LotServer™. ZetaTCP™ has a learning capability that enables it to adjust optimizations dynamically based on feedback from real-time data. This enables ZetaTCP™ to quickly adjust to nearly any network condition as needed. ZetaTCP™ boosts TCP performance in the following ways:

- Improved congestion detection and handling
- Accurate and predictive loss-detection with rapid loss recovery

ZetaTCP™ is designed to be extremely scalable. It is deployed in some of the largest networks in the world and can also be embedded into devices such as smartphones or set top boxes. ZetaTCP™ is also transparent, accelerating the traffic without any modifications to the existing protocol stacks. ZetaTCP™ is deployed asymmetrically on the sending side of the connection (the client in this case) and is able to accelerate the traffic regardless of what variation of TCP is at the other end. Technical details and analysis can be found in the *ZetaTCP™ whitepaper*.

Summary

LotServer™ is a portable, scalable and transparent software that is ideal for optimizing network performance for server applications.

Powered by AppEx ZetaTCP™ technology, LotServer™ increases network bandwidth utilization, reduces the number of failed TCP connections, shortens response time, and improves the availability of server applications. It performs all the optimizations without any changes to the server or the client side. LotServer™ is especially effective in lossy and long-latency network environments.

AppEx Networks Corporation started its Learning-Based Acceleration™ development in 2006. After years of commercial deployment and technology refinement, LotServer™ has become a widely installed product for web acceleration. Its outstanding stability, high performance, and unparalleled versatility have made it a leader in the network acceleration industry.

Free Trial

AppEx now offers a risk-free trial of LotServer™ online. Trial customers are entitled to full functionality of LotServer™ and AppEx standard support services. **Click here** to download LotServer™.

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For a free trial of LotServer:
download.appexnetworks.com