



Overview

- Which customers to target for WarpTCP
- Customer questions
- What are some benefit propositions for different customers

Customers and Use Cases to Target

- **Cases where the TCP throughput is much less than the connection capacity**
- **Optimizing internet access (Any organization that supplies internet access to users)**
 - Cellular Carriers
 - Internet Service Providers
 - Enterprise
 - Universities, Colleges, Schools etc.
 - Hotels
 - Airports
 - Public areas + mass transit
- **Optimizing content delivery to a number of users**
 - E-Commerce
 - Enterprise with a number of users accessing content
 - Central office with a number of satellite offices

Customer Questions (1/5)

- **What makes you different from other WAN optimization solutions? (Riverbed, Silverpeak)**
 - WarpTCP is not WAN optimization, it only requires a single box between the server and client.
 - WarpTCP can optimize internet traffic without any modification to the clients. Old WAN optimization cannot.
 - WarpTCP can optimize traffic coming from a single source to a large number of users. Old WAN optimization cannot
- **What makes you different from current TCP optimizations ?**
 - Existing TCP optimization solutions do not address the root cause of the sensitivity issue of TCP to Jitter. They primarily just tune the different settings available for TCP. WarpTCP replaces the congestion control algorithm for TCP.
- **How does this solution work with ADCs (Application Delivery Controllers)**
 - It is complementary in that the ADC does a good job of optimizing the application, but it does not do much better at delivering the data to the client. We see 3.5X throughput improvement when placed in front of an F5.



Customer Questions (2/5)

- **Under what conditions will WarpTCP give benefit?**
 - When TCP is limiting the throughput, and not the physical connection
 - When the TCP connection crosses a jittery network. Some possible examples below
 - Wi-Fi
 - LTE
 - VPN
 - Cable modem (DOCSIS)
 - Under-developed networks
 - When file sizes are greater than ~20KB
- **Who are your competitors ?**
 - There are other TCP optimization solutions, but they have not addressed the root issue for TCP, and as a result get poor performance. Sandvine, Appex, Fastsoft (purchased by Akamai)
- **How does WarpTCP perform with encrypted traffic?**
 - WarpTCP does not decrypt the TCP payload, as a result its benefit is independent of encryption



Customer Questions (3/5)

- **How does WarpEngine deal with failover?**
 - WarpEngine Products have a Bypass NIC which can fail to a wire (or Fiber) when power is lost.
- **How Many Simultaneous sessions can you support with WarpEngine ?**
 - 500K Simultaneous TCP sessions with WarpEngine
 - 5M Sessions with WarpEngine-X
- **How big of a box do I need ?**
 - First select for the interface (1G vs 10G, and fiber)
 - Select the License that meets the TCP throughput requirements
- **What use cases will WarpTCP not give benefit?**
 - Those use cases that do not use TCP (for example)
 - VOIP
 - VOLTE

Customer Questions (4/5)

- **How can I try this out ?**
 - We can do a POC (Proof of Concept)
 - For first time buyers we have a try and buy, terms NET 60 with no penalty for return in the first 60 days
- **How much does it cost (MSRP) ?**
 - WarpEngine-X: \$299K for 10Gbps, and WarpEngine: \$99K for 1Gbps, and lower cost for reduced licenses
 - Licenses are for proxied TCP throughput. Other traffic does not impact the license
- **Where are you deployed?**
 - Internationally, with enterprise as well as carriers
- **Who is using you ?**
 - Publicly available information: INFAC in Korea, KOICA in Korea

Customer Questions (5/5)

- **Where have you been successful with deployments ?**
 - Long distance connections
 - Cellular Carriers
 - VPN connections
- **Where can I get test results ?**
 - See slides, [white papers](#), and [blog](#)
- **Where can I find Deployment examples**
 - Contact Badu Network Sales



Benefit Propositions

- WarpTCP box cost is less than maintenance of multiple WAN Optimization boxes for delivering content to multiple locations.
- Installing WarpTCP is cheaper than upgrading infrastructure
 - Cell towers are hard to duplicate
- Customer does not have control over the network that the TCP traffic is traveling through
 - Content providers