

BIG-IP® v9 Series

F5 Sales Brief – BIG-IP® Local Traffic Manager

F5's BIG-IP is an application delivery networking system that provides the most intelligent and adaptable solution to secure, optimize, and deliver applications.

Business Benefits

- BIG-IP makes applications run faster and more reliably without rewriting them or incurring major infrastructure cost or adding significant management overhead
- Reduces server cost by up to 66%, increases server and application capacity by up to 50%, saves up to 80% in bandwidth costs, exponentially increasing availability

1500 Platform



3400 Platform



6400 Platform



6800 Platform



8400 Platform



Top 5 Challenges

Business Challenges	Technical Challenges	F5 Solution
Improving application security	Prevent network and application attacks, protect identity, improve performance	Provides DoS and SYN flood protection, network address/port translation, application attack filtering, and certificate management
Optimizing applications	Increase performance, reduce server costs, increase server and application capacity, reduce bandwidth costs	Provides intelligent compression, L7 rate shaping, content spooling/buffering, connection pooling, and content transformation, TCP optimization, persistence
Improving application delivery	Support any IP application or service (legacy or new), maximize uptime, ensure cost-effective scalability	Provides comprehensive load balancing, advanced application switching, session/flow switching, customized health monitoring, IPv6 gateway, persistence
Increasing Performance	Real-world performance at network speeds, successful and secure delivery of applications	Delivers the fastest unified traffic management solution on the market
Gaining operational efficiencies	Manage a larger number of complex applications without adding staff	Consolidates traffic management, security, and performance optimization functions on a single, easy-to-use platform to improve manageability

F5 Differentiators

- Full proxy architecture
- Unified technologies on TMOS for all BIG-IP platforms
- TCP Express
- Best top-end performance
- iRules Command Language
- iControl API and SDK
- Market leadership

Glossary of Terms

- **Application Delivery Networking** – The ability to secure, optimize, and deliver applications in an unpredictable network environment.
- **High Availability** – Application and network architectures that ensure users/customers are never affected by network, application, or site failures.
- **TMOS** – Modular, scalable architecture empowers BIG-IP to efficiently inspect, control, and isolate clients from the server-side flows and independently maintain optimal performance for each connecting device.
- **SSL** – Secure Sockets Layer is the common mechanism used by most Web applications for data security.

More Information

F5 Solution Center – <http://www.f5.com/solutions>

BIG-IP Local Traffic Manager -- <http://www.f5.com/products/bigip/>

Contact F5 Networks

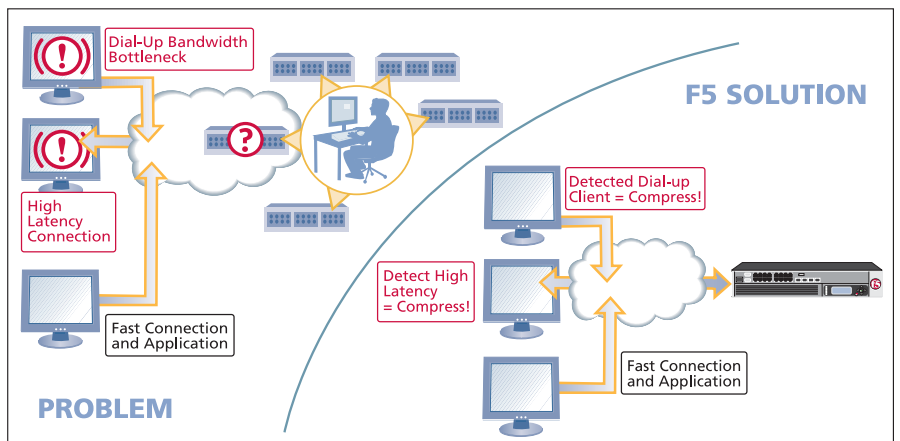
- 1-888-88BIGIP
- 206-272-5555
- www.f5.com/sales

Features/Benefits

Features	Description	Business Impact
Packet Velocity ASIC	Accelerates the processing of a large number of new connections per second.	Delivers top value measured in transactions / dollar.
Hardware	Optional SSL Bulk Encryption hardware accelerates both the key exchange and the encryption and decryption process. Optional Compression hardware accelerates HTTP compression to reduce the actual amount of data being transported.	Delivers higher SSL throughput and offloads SSL processing from the server to increase server capacity. Regardless of platform, the BIG-IP delivers a better value measured in SSL throughput / dollar. Delivers better application performance.
TMOS fast application proxy	Powered by independent client-side and server-side TCP stacks, TMOS is the only solution that can see, inspect, and control entire application conversations or flows, including requests and responses. With TMOS, any BIG-IP platform can leverage the benefits of TCP Express, iControl, iRules, and the software add-on modules.	Only solution to use a dual stack to deliver F5's unique optimization techniques.
TCP Express	This one-of-a-kind, highly optimized TCP stack offers a clientless approach for WAN optimization.	Delivers up to an 80% performance gain for users and up to a 4x improvement in bandwidth.
iRules Command Language	Includes exhaustive, network-specific commands to deliver true application-level control of the network.	Gives customers complete control over when, how, and what to do with application traffic at any moment within the application transaction.
iControl API	Enables 3rd-party applications to automatically interact with the network via XML and SOAP. This event-based API is integrated with development tools from Microsoft, BEA, and Oracle.	Gives 3rd-party applications complete control over BIG-IP devices.

Customer Example

Note: This example highlights performance, which is just a subset of the BIG-IP's capabilities.



Problem

Business XYZ was experiencing 5 to 30+ second page load times, limited scale, and an increasingly costly infrastructure. End user complaints were up, but it was too expensive to change the applications and was also becoming difficult to manage a growing number of point solutions in the network. XYZ needed to selectively compress data based on client connection, application, and servers to better service their customers and constituents while lowering their operational costs.

Solution

By utilizing the BIG-IP Local Traffic Manager, Business XYZ experienced a nearly 10x increase in application performance (from 20 to 2.5 seconds), a 70% bandwidth reduction that resulted in saving thousands of dollars in Telco costs per month, lower management costs (4 vendors/boxes unified into 1 cohesive solution), and organizational adaptability because they could offer standard-ized services across all application types.

Add-on Modules

- **Application Security** – Safeguards your network and applications from known and unknown threats via a positive security model (deny all except those specifically listed).
- **HTTP Compression** – Reduces HTTP traffic using industry-standard GZIP & Deflate compression algorithms to reduce bandwidth consumption and speed end user download times over slower bandwidth connections.
- **SSL Acceleration** – Dramatically improves server performance while offloading SSL processing from servers using the Advanced Encryption Standard (AES) encryption algorithm.
- **L7 Rate Shaping** – Prioritizes bandwidth for mission-critical applications, allocates bandwidth for specific traffic types based on any L4 or L7 parameter, and adjusts bandwidth to accommodate traffic spikes.
- **Advanced Client Authentication** – Provides client authentication for HTTP and other traffic types to LDAP, Radius, TACAS, and other 3rd-party authentication devices.
- **IPv6 Gateway** – Provides IP transformation and load balancing capabilities between IPv4 and IPv6 networks, easing IPv6 migration and the pooling of mixed IPv4 and IPv6 host resources to reduce management costs.
- **Routing** – Provides support for specific networking routing modules, including BGP, RIP, and OSPF.
- **Fast Cache** – Improves application and server performance by offloading repetitive requests for content from back-end resources.