BIG-IP Local Traffic Manager









Optimize, Secure, and Monetize Service Provider Networks

Key benefits

- · Optimize network performance
- · Simplify network architecture and improve network efficiency
- · Secure your network and data
- · Granularly control traffic steering and routing
- Achieve carrier-grade performance with high availability and scalability

Growth in data and applications is placing significant pressure on service provider networks. Service providers must continue to offer their subscribers a high quality of experience (QoE), while also improving network efficiency and performance. At the same time, service providers are looking to improve profitability by bolstering ARPU and reducing infrastructure costs.

F5® BIG-IP® Local Traffic Manager™ (LTM) enables both fixed and mobile service providers to simplify network architecture, optimize network performance, and secure it from potential threats with strategic points of control in the network that provide Layer 4–7 load balancing and policy-based routing. With carrier-grade, purpose-built BIG-IP LTM devices, you can immediately start to scale and secure your networks to alleviate the strain of the data boom while offering subscribers an optimal user experience.

Optimize network performance

BIG-IP LTM consolidates multiple services onto a single platform within fixed and mobile networks. It provides Layer 4–7 load balancing and Layer 7 traffic management, enabling optimization and offload of other network resources, including VAS servers.

TCP Express™ combines cutting-edge TCP/IP techniques that minimize the effects of congestion and packet loss for 3G/4G networks, delivering up to a 2x performance gain for subscribers and a 4x improvement in bandwidth efficiency, which can reduce your OpEx while increasing network performance.

BIG-IP LTM provides sophisticated monitors to check network services and availability, as well as specialized monitors for multiple network protocols, including HTTP, SIP, RADIUS, Diameter, XML/SOAP and RTSP. F5 analytics captures statistics such as throughput and server latency with views per virtual servers, pools and nodes—giving you more efficient troubleshooting, network visibility and performance tuning and optimization.

Simplify network architecture and improve network efficiency

BIG-IP LTM offers advanced tools such as F5s iApps™ Templates, which are used to define and tie all related services and resources to the specific application being deployed. The application service object created provides a contextual view and advanced statistics of those services, and makes it easy to deploy and manage while maintaining flexibility and control of your network infrastructure.

Secure your network

From network firewall and protocol-level security to application attack filtering, the ICSA Labs certified BIG-IP LTM protects your network with a suite of security services. It provides native Layer 2–4 network firewall services to deliver stateful packet inspection, protecting your data center resources. It offers high performance, scalability, and customization for secure access and web application attack protection.

Take control of traffic routing

The F5 TMOS® operating system gives you complete control of the connection, packets, and payloads for applications. Using F5's event-driven iRules® scripting language, you can customize how you intercept, inspect, transform, and direct inbound and outbound application traffic.

BIG-IP LTM provides policy-based routing, so you can implement policies at the application layer to route packets to different paths in the network. With this control, you can implement rules to enhance quality of service and save costs by utilizing bandwidth more efficiently.

Achieve carrier-grade performance

BIG-IP LTM offers best-in-class performance and scalability for total concurrent sessions, traffic throughput, and transactions per second. The high-availability platform includes sophisticated health monitoring, fast system failover, and comprehensive connection mirroring to ensure service uptime and at-peak performance.

BIG-IP LTM features

Availability

- · Comprehensive load-balancing
- · Comprehensive L3-L7 load balancing
- · Message-based load balancing
- · In-band server health monitoring
- · Customized health monitoring
- · Application connection persistence
- Device Service Clustering for HA scaling and configuration syncing

Optimization

- · Hardware accelerated SSL offload
- · HTTP compression and caching
- · HTTP server offload
- · TCP optimization
- · L7 Rate Shaping™

Security

- · ICSA Labs Certified Network Firewall
- · DoS attack and SYN flood protection
- · HTTP header sanitization
- · Web application protection
- · Mobile and remote access control

Management

- · iApps[™] for app-level configuration and management
- · High-speed logging
- · iRules and iControl®
- \cdot Web-based management GUI

Learn more

For more information about BIG-IP LTM, use the search function on <u>f5.com</u> to find these resources.

Datasheet

BIG-IP System Hardware Datasheet

Solution profiles

Video Traffic Steering and Service Availability with BIG-IP Devices

 $\frac{\text{Intelligent Traffic Management with}}{\text{BIG-IP Systems}}$

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