Take a Flexible and Adaptable Approach to Application Delivery

F5® BIG-IP® devices work on a modular system, so you can add new functions—as necessary—to quickly adapt to changing application and business needs. F5 BIG-IP® Local Traffic Manager™ (LTM) helps you deliver your applications to users in a reliable, secure, and optimized way. By making intelligent traffic decisions that adapt to the changing demands of your applications, BIG-IP LTM ensures their consistent availability and scalability. With BIG-IP LTM, you have the power to simplify, automate, and customize applications faster and more predictably. The following modules are available for the BIG-IP system, including BIG-IP LTM.

BIG-IP DNS

F5 BIG-IP DNS distributes DNS and user application requests based on business policies, data center and network conditions, user location, and application performance. BIG-IP DNS delivers F5’s high-performance DNS services with visibility, reporting, and analysis; scales and secures DNS responses geographically to survive DDoS attacks; delivers a complete, real-time DNSSEC solution; and ensures global application high availability.

Key benefits

Scales DNS to more than 10 million RPS with a fully loaded chassis.
Dramatically scales DNS to more than 10 million query RPS and controls DNS traffic. It ensures that users are connected to the best site and delivers on-demand scaling for DNS and global apps.

Gains control and secures global application delivery.
Routes users based on business, geolocation, application, and network requirements to gain flexibility and control. Also ensures application availability during DNS DDoS attacks or volume spikes.

Improves application performance.
Sends users to the site with the best application performance based on application and network conditions.

Deploys flexibly, scales as you grow, and manages your network efficiently.
BIG-IP DNS Virtual Edition (VE) delivers flexible global application management in virtual and cloud environments. Multiple management tools give you complete visibility and control: advanced logging, statistics and reporting; and a single point of control for your DNS and global app delivery resources.
BIG-IP Application Security Manager

F5 BIG-IP Application Security Manager™ (ASM), built on proven F5 Advanced WAF technology, redefines application security and addresses the most prevalent threats organizations face today. It proactively detects and mitigates bots, secures credentials and sensitive data, and defends against application DoS. BIG-IP ASM is offered as an appliance, virtual edition, and as a managed service (F5 Silverline® Web Application Firewall).

Key benefits

- **Protects against malicious bots.**
  Secures applications and sensitive data from bots, automated attacks, web scrapers, and exploits—and extends bot protection to mobile applications via an easy-to-use web portal without requiring any changes to the application or mobile device.

- **Safeguards credentials and sensitive data.**
  Secures credentials and sensitive data from theft and abuse, prevents data breaches with encryption, and mitigates automated attacks leveraging stolen credentials with credential stuffing protection.

- **Defends against sophisticated application DoS.**
  Discovers and fingerprints new, unusual, and anomalous traffic patterns without human intervention, distinguishing and isolating potential malicious traffic from legitimate traffic, while reducing false positives and improving accuracy and performance.

- **Mitigates sophisticated threat campaigns.**
  According to F5 Labs research, targeted signatures provide critical intelligence to fingerprint and mitigate sophisticated attacks with near real-time updates, protecting against pervasive attacks.

- **Protects APIs.**
  Ensures API methods are enforced on URLs, automatically detects API threats, enforces strict policy rules, and blocks attacks and special content types—securing applications against API attacks.

- **Ensures application security and compliance.**
  Comprehensively secures against sophisticated layer 7 attacks, blocking threats that evade traditional web application firewalls (WAFs) and enabling compliance with key regulatory mandates.

- **Protects immediately.**
  Pre-built policies, thousands of out-of-the-box signatures, and a streamlined approach to policy management decreases operational expenses.

- **Patches vulnerabilities fast.**
  Identifies and resolves app vulnerabilities in minutes with leading dynamic application security testing (DAST) integration and automatic virtual patching.

- **Magnifies threat knowledge.**
  Simplifies understanding security status with detailed forensic analysis, full visibility into HTTP and WebSocket traffic, and rich insight into all events and user types.
BIG-IP Access Policy Manager

F5 BIG-IP Access Policy Manager™ (APM) is a secure, flexible, high-performance solution that delivers unified global access to your network, cloud, and applications. By converging and consolidating remote, mobile, network, virtual desktop, and web access within a single management interface—and enabling the creation and enforcement of simple, easy-to-manage, intelligent access policies—BIG-IP APM helps liberate valuable IT resources and scale cost-effectively.

**Key benefits**

- **Centralizes identity and access control.** Delivers a simplified, central point of control for access management to the network, cloud, and applications via dynamically enforced user, application, network/cloud, and threat/vulnerability context-based policies.

- **Unifies access controls.** Consolidates remote, mobile, network, virtual desktop infrastructure (VDI), and web access in one control interface with adaptive identity federation, single sign-on (SSO), and multi-factor authentication (MFA).

- **Defends the weakest links.** Protects against data loss, malware, and rogue device access with comprehensive endpoint posture and security checks.

- **Bridges federation and SSO.** Bridges access to both on-premises and cloud apps via a single login while enabling SSO even if an application is not SAML-enabled by converting access requests to an application-appropriate authentication method.

- **Consolidates and simplifies federation.** Replaces web access proxy tiers with an integrated solution for VMware Horizon/Workspace ONE, Citrix XenApp, Microsoft Exchange, and others, and provides a secure proxy for Microsoft Active Directory Federation Services (ADFS), reducing infrastructure and management costs.

- **Secures and manages web access.** Controls access to the web and web-based applications, as well as to suspicious web content, while defending against highly complex web threats.

- **Secures access point authentication.** Enables secure authentication for REST and SOAP APIs, and integrates OpenAPI or Swagger files, ensuring appropriate authentication actions are taken while saving time and cost.

- **Flexible, high performing, and scalable.** Support all of your users easily, quickly, and cost-effectively with no performance trade-offs for security, even in the most demanding environments.
BIG-IP Advanced Firewall Manager

F5 BIG-IP Advanced Firewall Manager™ (AFM) is a high-performance, stateful, full-proxy network firewall designed to guard data centers against incoming threats that enter the network on the most widely deployed protocols—including HTTP/S, SMTP, DNS, and FTP. By aligning firewall policies with the applications they protect, BIG-IP AFM streamlines application deployment, security, and monitoring. BIG-IP AFM gives enterprises and service providers the scalability, flexibility, performance, and control needed to mitigate the most aggressive attacks before they reach the data center. BIG-IP AFM forms the core of the F5 application delivery firewall solution.

Key benefits

Scales to meet network demand.
Meets demanding data center scalability needs with a solution built on top of F5’s proven TMOS® architecture, hardware systems, and virtual editions.

Protects with a full-proxy firewall.
Terminates incoming client connections and inspects them, mitigating threats based on security and application parameters before forwarding them on to the server.

Streamlines firewall deployment.
Simplifies security configuration with firewall policies oriented around applications and an efficient rules and policy user interface which speeds up app deployment.

Customizes reporting for visibility.
Logs events at high speeds and defines per-application logging configuration, allowing flexibility in log destinations and information logged.

Inspects SSL sessions.
Fully terminates SSL connections to identify potentially hidden attacks—and does this at high scale with high throughput.

Ensures application availability.
Provides protection against 38 denial-of-service (DoS) vectors to ensure application availability, with detailed visibility into attack conditions. For certain platforms, SYN flood protection is handled in the hardware.
F5 Services

F5 Services offers world-class support, training, and consulting to help you get the most from your F5 investment. Whether it’s providing fast answers to questions, training internal teams, or handling entire implementations from design to deployment, F5 Services can help you achieve IT agility. For more information about F5 Services, contact consulting@f5.com or visit f5.com/services.

More information

To learn more about BIG-IP modules, use the search function on f5.com to find these and other resources.

Datasheets

BIG-IP Access Policy Manager
BIG-IP Advanced Firewall Manager
BIG-IP Application Security Manager
BIG-IP DNS
BIG-IP Local Traffic Manager