# **BIG**·IP 5000

#### Key Features & Benefits:

#### Architecture:

- (24) 10/100 BASE-TX Ports
- (4) 1000 BASE–SX Ports
- Switch fabric capacity:
  8 Gb/s one direction
  16 Gb/s aggregate
- Flexibility and speed to directly connect servers, caches, firewalls, databases, and VPN endpoints
- Eliminates the need to buy additional switches; supports fully meshed network deployments
- 2 GHz of centralized processing power; provides more power to intercept, inspect, transform, and direct Layer 7 (application traffic) than web or content switches
- Integrated SSL Acceleration; supports up to 800 TPS
- Provides significant cost savings and flexibility for SSL acceleration and capacity
- I GB of RAM in base configuration provides the greatest amount of concurrent connections for unparalleled traffic capacity

#### Traffic Management:

- All the advanced features and functions of awardwinning BIG-IP software
- Static and Dynamic load balancing for diverse server platforms and applications
- Active/Active Controller feature for added performance, scalability, reliability
- Full stateful session failover from active to backup or active to active controller
- Multiple modes of persistence
- Simple and advanced business rules to ensure QoS
- Smart content and application determination to route requests for content to appropriate devices
- Unique One Connect<sup>™</sup> Content switching reduces bandwidth costs and server overhead by up to 20%
- iControl enabled allows applications to directly control network traffic by preemptively avoiding application failures
- Award-winning 3-DNS wide-area load balancing available
- Real-time performance monitoring and statistics
- · Easy to install and manage



#### **BIG-IP 5000<sup>®</sup> IP Application Switch**

Award-winning BIG-IP intelligence on a port-dense hardware platform for flexible, fast, secure IP-centric traffic management.

## The BIG-IP 5000<sup>®</sup> provides all-in-one Internet Traffic Management (ITM), combining:

- Load Balancing
- Content Switching
- Traffic Management
- Gigabit Ethernet Switching
- SSL Acceleration/Web Acceleration
- Wide Area Load Balancing

...into a single device that dramatically lowers total cost of ownership and reduces management complexities for enterprises and service providers.

#### Fastest, Best Performing ITM Supports High Traffic Volumes

ITM products must support large and ever increasing traffic volumes as new enterprise and service provider applications become available. BIG-IP 5000 delivers. No other ITM solution offers as much processing power to allow deep inspection of traffic required by current and new enterprise applications. Unlike distributed architectures, BIG-IP 5000 can apply all of its processing power to any port at any time – where decisions need to be made.

#### First Port-Dense ITM Solution with Integrated SSL Security

Mission-critical applications require secure delivery over Internet technologies. BIG-IP 5000 is the first port-dense ITM device to incorporate SSL acceleration. This allows customers to effectively manage enterprise applications being delivered over SSL, and provide advanced inspection for intelligent traffic management. The result is greater performance and a lower cost for implementing secure applications. Additional SSL capacity can be added to BIG-IP 5000 via a software key, allowing customers to purchase SSL capacity only when they need it.

### Best Port Density In A Standalone Device

BIG-IP 5000 delivers more port density than any other standalone ITM device. 4 Gigabit Ethernet ports accommodate redundant links and fully meshed topologies. 24 Fast Ethernet ports provide simultaneous and convenient connection of a variety of devices, including firewalls, caches, web servers, application servers and VPN gateways.

#### **Reduces Total Cost of Ownership**

BIG-IP 5000 is the only ITM solution with an architecture optimized for IP traffic, thanks to its centralized processing and switch fabric design. BIG-IP is an "all-in-one" solution that eliminates the need to deploy multiple devices, reducing administration duties and lowering your total cost of ownership.

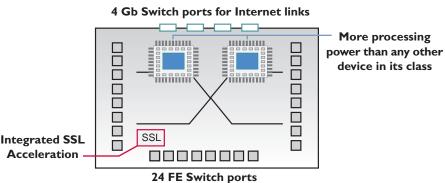
#### **Most Processing Power**

BIG-IP 5000's specialized design applies 2 GHz of processing power to provide all the intelligent traffic handling that is required to deliver applications over the Internet. It deeply examines packets and intelligently directs existing and new types of traffic to the correct destination. By applying intelligence and security to traffic where and when it's needed, BIG-IP 5000 ensures maximum reliability and performance for applications and infrastructure.

#### The Only Optimized Architecture

Unlike other solutions that have ITM functions retro-fitted onto an existing legacy ethernet switch architecture, BIG-IP 5000 was specifically designed to deliver SSL acceleration, processing power, and flexibility to adapt to changing application and ITM needs. As a part of F5's open Internet Control Architecture, BIG-IP 5000 can communicate seamlessly with all F5 products and any application that supports F5's iControl. (Continued on next page)





#### **Integrated SSL**

Most businesses - especially financial and healthcare - are securing an increasing amount of their traffic and applications using SSL. Accordingly, it is imperative that ITM devices include this functionality and be able to perform this task. Of all the major vendors, only F5's BIG-IP 5000 includes 100 TPS (transactions per second) SSL capacity - at no additional charge. Can easily be upgraded to provide more capacity on demand.

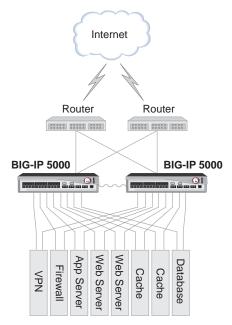
#### Most Intelligent, Most Flexible ITM

#### Intelligence for 99.999% Uptime

Leading-edge performance and innovation in load balancing and traffic management is critical to reliably deliver enterprise applications over Internet technologies. As Internet/intranet business use grows, and new types of data and applications pose increasingly complex content management challenges. BIG-IP delivers.

#### **Intelligence Beyond The Switch**

To make intelligent load balancing decisions and ensure the highest availability, BIG-IP 5000 can receive information directly from application servers (Windows 2000, Real



Redundant BIG-IP 5000s are positioned between the router and the server array in a meshed network.

Server, SNMP agents) through F5's open iControl interface. It can also read detailed information in a request header (such as type of content requested) in order to route the request to a server best able to handle it.

More processing

device in its class

#### Fastest Layer 7 Performance

BIG-IP delivers Layer 7 performance that is three to four times faster than competing products from Cisco Systems\*\*. Fast Layer 7 functionality provides network managers a cost-effective way to ensure that users will have a productive and trouble-free experience each time they transact business over the Internet or corporate intranet. www.tolly.com – reference report #200204

#### Link Aggregation Failover

BIG-IP supports industry standard 802.3ad for link aggregation, ensuring that maximum throughput can be attained and that high availability is built into your system at every DOINT.

#### Superior Return on Investment

Doing more with less is everything these days. BIG-IP reduces the need for increasingly larger and more expensive servers to accommodate increases in network traffic. It enables many inexpensive servers to function as a single, virtual server. And its intelligent features help customers reduce their total cost of ownership for their web infrastructure.

#### **3-DNS Wide-Area Load Balancing**

Add the industry's most respected wide-area load balancer to BIG-IP for combined server load balancing and global load balancing in a single box that simplifies management, reduces rack space requirements and lowers power consumption.

#### **Easy Installation**

BIG-IP can be installed on almost any type of network. There are no internal or external interface limitations; there are just ports with features assigned. This gives the network manager more flexibility to install BIG-IP into the network, and more flexibility to easily access features on any port.

#### VLANs and Tagged VLANs

VLANs (virtual LANs) allow networks to be administratively divided into numerous separate LANs. BIG-IP supports the familiar VLAN architecture utilized by most modern switches, providing greater flexibility and ease in making network topology changes.

#### **BIG-IP 5000 Specifications:**

Server/Node Operating System Compatibility: Any TCP/IP OS, including Windows NT, Windows 95, all UNIX platforms and Mac/OS

Internet/Intranet Protocol Support: All TCP services, UDP and SSL; nearly all IP-based protocols

Administrative Environment Support: DNS proxy, SMTP, F-secure SSH, SNMP, dynamic/static network monitoring, scheduled batch job processing, system status reports

#### and alarms event notification **Network Management & Monitoring:**

Secure SSL browser-based interface, remote encrypted login and file transfer using F-secure SSH monitor, BIG-IP system network monitoring utilities and additional contributed software; SNMP gets and traps

Dynamic Content Support: ASP (active server pages),VB (visual basic script),ActiveX, JAVA,VRML, CGI, CoolTalk, Net Meeting, Real Audio, Real Video, Netshow, Quick Time, PointCast, any HTTP encapsulated data

BIG-IP Device Redundancy: Watchdog timer card, fail-safe cable (primary & secondary) Web Server Application Compatibility:

Any HTTP serve Routing Protocols: RIP, OSPF, BGP

#### **BIG-IP 5000 Physical Specifications:**

**Dimensions:** 17"(w/o mounting ears - 19" w/) x 21.7" x 3.44" Weight:

26 lbs (per unit, not including shipping) **Processor:** 

2 IGHz PIII

Network Interface: 24-10/100 Mbps + 1 10/100 Mbps management port 4-Gb fiber

Hard Drive Capacity: No spinning media. 256MB flash

RAM: I GB (expandable to 2 GB only at time of purchase) **Operating Temperature:** 

23° to 122° F (-5° to 50° C) per Telcordia GR-63-CORE 5.1.1 and 5.1.2

**Relative Humidity:** 10 to 90% @ 40° C, per Telcordia GR-63-CORE 5.1.1 and 5.1.2

Power Supply: 350W 110/220 VAC AUTO Switching

Safety Agency Approval: UL 60950 (UL1950-3)

CSA-C22.2 No. 60950-00 (Bi-national standard with UL 60950) **CB TEST CERTIFICATION TO IEC 950** EN 60950

**Electromagnetic Emissions Certifications:** EN55022 1998 Class A EN55024 1998 Class A FCC Part 15B Class A

D50 Platform

(SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTIFICATION)

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