BIG·IP 2000

Key Features & Benefits:

Architecture:

- (16) 10/100 BASE–TX Ports
- (2) 1000 BASE–SX Ports
- 100 TPS SSL included at no additional charge; upgradable to 800 TPS
- Switch capacity:
  – 9.6 Gb/s for backplane
- 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
- 1 GHz of centralized processing power; provides more power to intercept, inspect, transform, and direct Layer 7 (application traffic) than web or content switches
- Provides significant cost savings and flexibility for SSL acceleration and capacity

Traffic Management:

- All the advanced features and functions of award-winning BIG-IP software
- Static and Dynamic load balancing modes for diverse server platforms and applications
- Active/Active mode for added performance and scalability
- Full stateful session failover from active to backup or active to active IP Application Switch
- Fully supports traffic management for HTTP 1.1 using Keep Alives
- Unique One Connect™ Content switching reduces bandwidth costs and server overhead by up to 20%
- Multiple modes of persistence to ensure transaction integrity
- Simple and advanced business rules to ensure QoS
- Smart content and application determination to route requests for content to appropriate devices
- iControl enabled – allows applications to directly control network traffic by preemptively avoiding application failures
- Award-winning 3-DNS wide-area load balancing available as an option
- Real-time performance monitoring and statistics
- Easy to install and manage

BIG-IP® 2000 IP Application Switch

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

The BIG-IP® 2000 provides all-in-one Internet Traffic Management (ITM), combining:
- **Load Balancing**
- **Content Switching**
- **Traffic Management**
- **SSL Acceleration/Web Acceleration**
- **Ethernet Switching**
- **Wide Area Load Balancing available**

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

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 2000 delivers the processing power to allow deep inspection of traffic required by current and new enterprise applications. Unlike distributed architectures, BIG-IP 2000 can apply all of its processing power to any port at any time – where decisions need to be made.

Integrated SSL Security
Mission-critical applications require secure delivery over Internet technologies. BIG-IP 2000 incorporates SSL acceleration, allowing 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 2000 via a software key, allowing customers to purchase SSL capacity only when they need it.

Port Density
BIG-IP 2000 delivers 2 Gigabit Ethernet ports to accommodate redundant links and fully meshed topologies. 16 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
F5's IP Application Switch family represents the only ITM solutions with an architecture optimized for IP traffic, thanks to their centralized processing and switch fabric design. BIG-IP 2000 is an "all-in-one" solution that eliminates the need to deploy multiple devices, reducing administration duties and lowering your total cost of ownership.
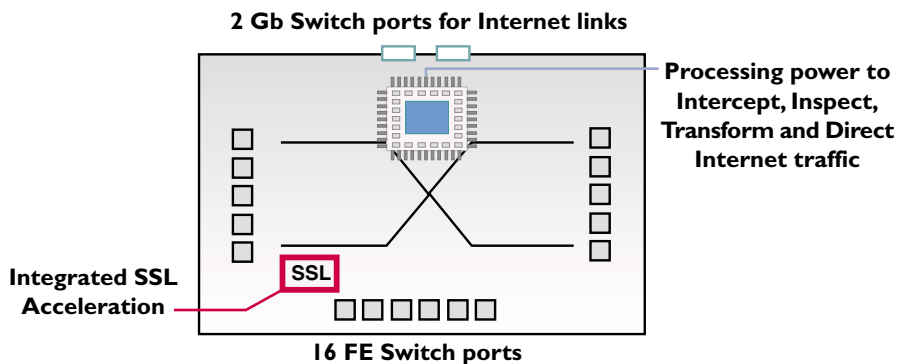
Processing Power
BIG-IP 2000's specialized design applies 1 GHz of processing power to provide all the intelligent traffic handling that is required to deliver applications over the Internet. It deeply examines packets and intelligently directs existing and new types of traffic to the correct destination. By applying intelligence and security to traffic where and when it's needed, BIG-IP 2000 ensures maximum reliability and performance for applications and infrastructure.

iControl Integration
As part of F5's iControl, BIG-IP 2000 can communicate seamlessly with all F5 products and any application that supports F5's iControl API. F5 is the only company with a fully integrated product suite that communicates with other applications - delivering a complete application aware network.

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F5 NETWORKS

BIG-IP 2000 • IP APPLICATION SWITCH   CONTROL YOUR WORLD

2 Gb Switch ports for Internet links

Processing power to Intercept, Inspect, Transform and Direct Internet traffic

Integrated SSL Acceleration

SSL

16 FE Switch ports

Integrated SSL

Internet traffic management solutions must handle SSL; the amount of SSL traffic on the Internet and intranets is growing quickly. If your ITM solution does not include SSL, it will not address your business requirements. Of all the major vendors, only F5's BIG-IP 2000 includes 100 TPS SSL capacity – at no additional charge. Can easily be upgraded to provide more capacity on demand.

Most Intelligent, Most Flexible ITM

Intelligence Beyond The Switch

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

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 point.

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.
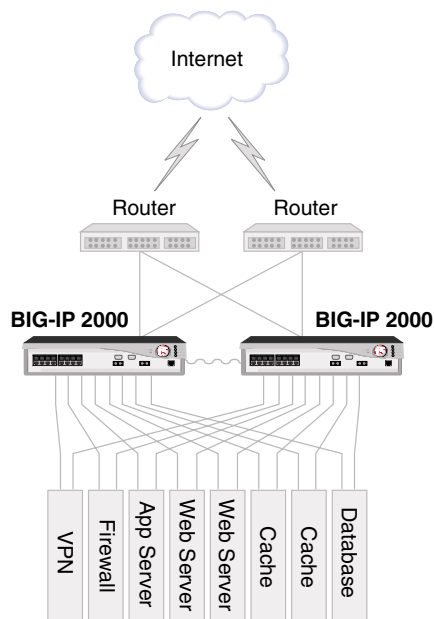
Superior Return on Investment

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.

Internet

Router   Router

BIG-IP 2000   **BIG-IP 2000**

VPN | Firewall | App Server | Web Server | Web Server | Cache | Cache | Database

Redundant BIG-IP 2000s are positioned between the router and the server array in a meshed network.

BIG-IP 2000 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, Cool Talk, Net Meeting, Real Audio, Real Video, Netshow, Quick Time, PointCast, any HTTP encapsulated data

BIG-IP Device Redundancy:
Watchdog timer, fail-safe cable (primary & secondary), network backup

Web Server Application Compatibility:
Any HTTP server

Routing Protocols:
RIP, OSPF, BGP

BIG-IP 2000 Physical Specifications:

Dimensions:
17" w/o mounting ears (19" with) x 21.7" x 3.44"

Weight:
26 lbs (per unit, not including shipping)

Processor:
1GHz PIII

Network Interface:
16-10/100 Mbps + 1 10/100 Mbps management port

2-Gb fiber 1000 BASE SX

Hard Drive Capacity:
No spinning media. 256MB flash

RAM:
512 MB (expandable to 2 GB)

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

D45 Platform

(SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTIFICATION)

f5
NETWORKS®

Part No. SS-BIGIP-2000 0102