

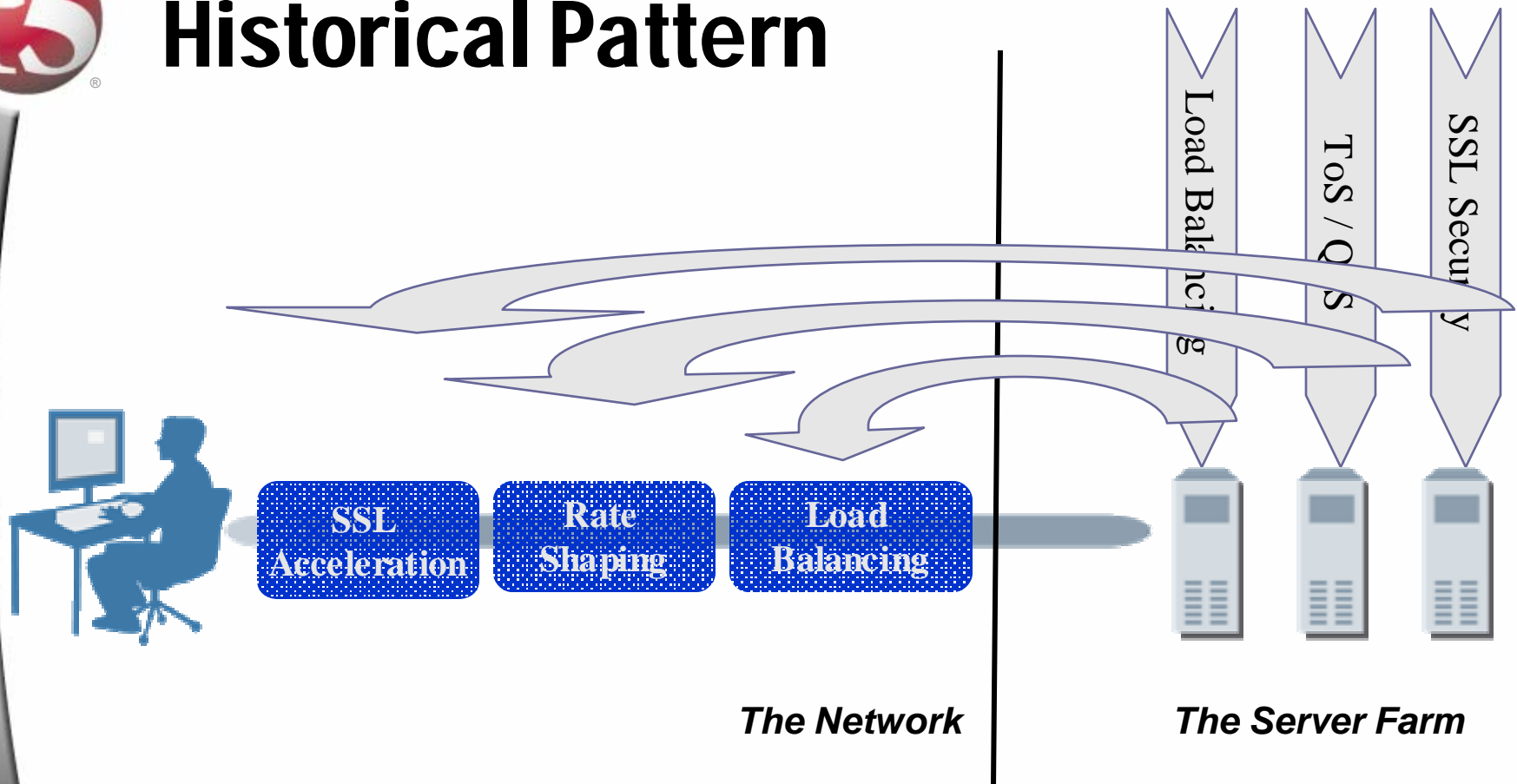


The Road to Five-Nines

**Dan Matte
Vice President
Product Management
F5 Networks, Inc.
May 13, 2004**



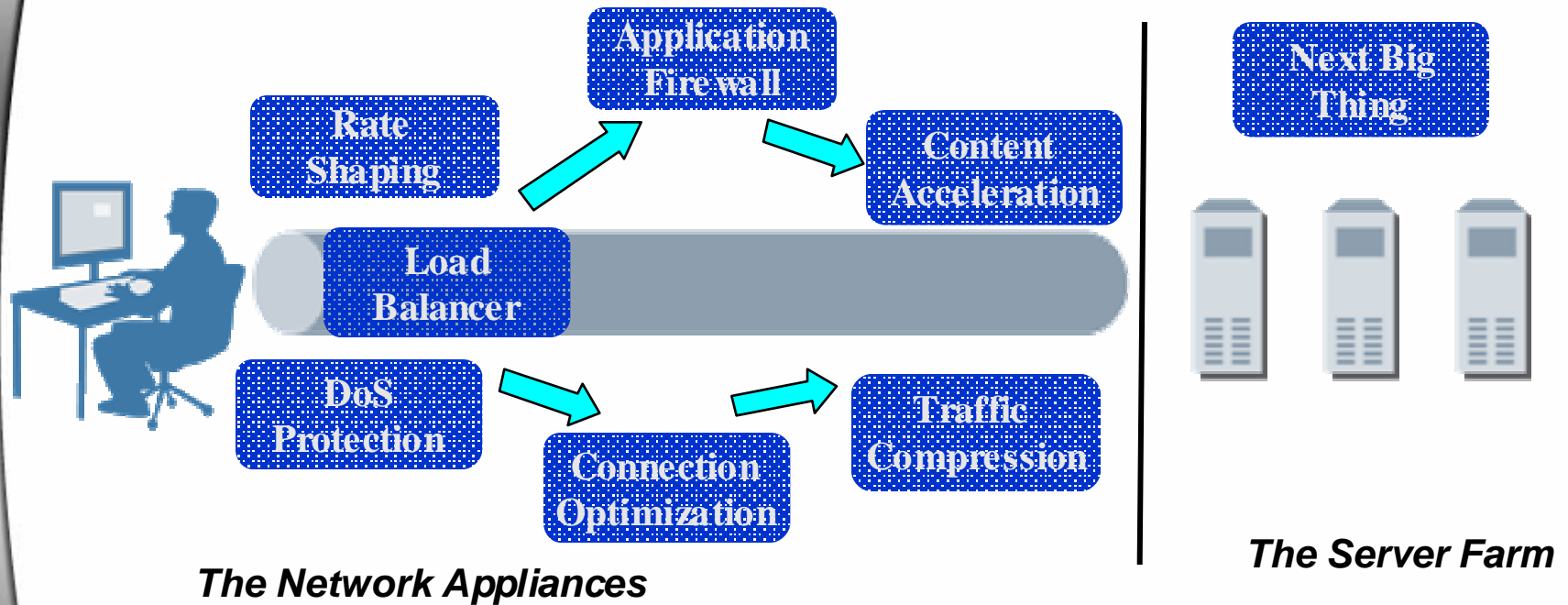
Historical Pattern



- New Functions Introduced on Servers
- Appliances Replace Software on Servers



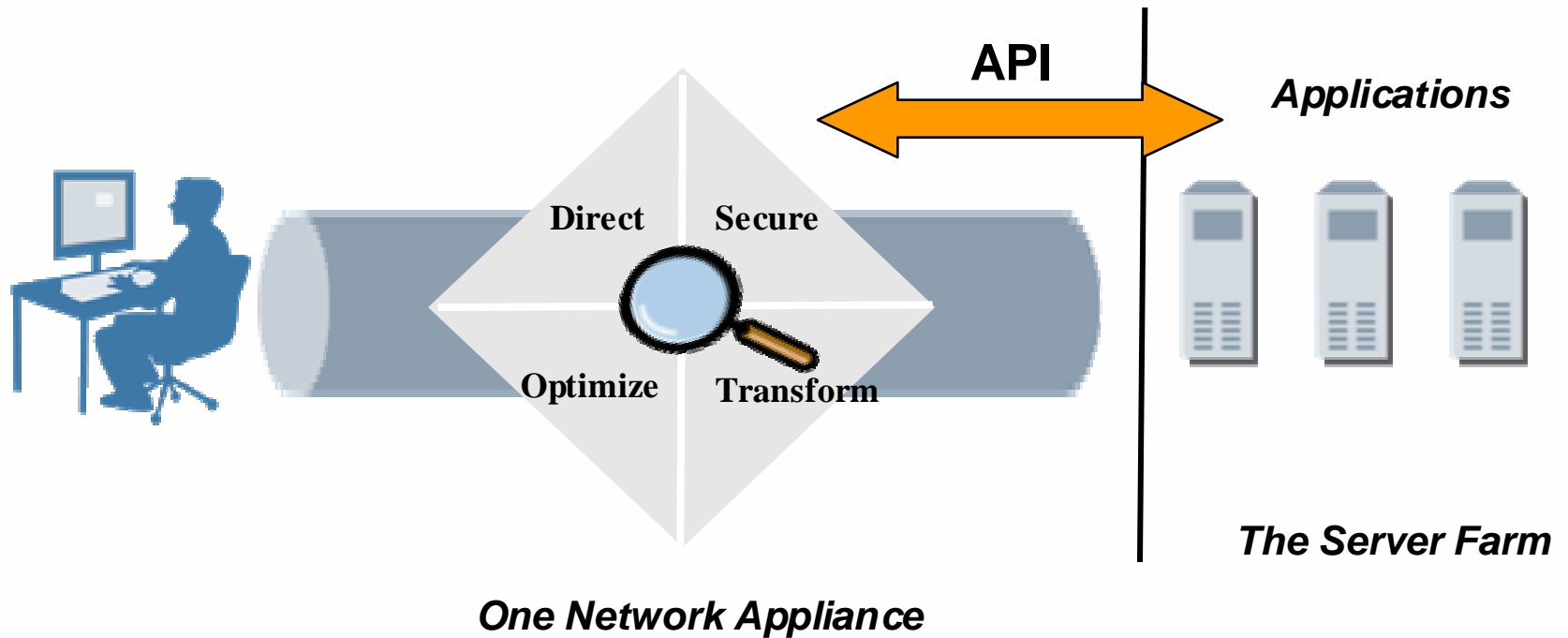
Problem – Multiple Appliances



- Latency
- Difficult to Manage
- Costly



Solution - Application Switch



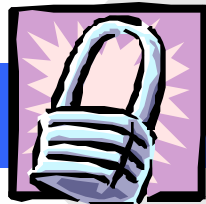


Local Traffic Manager

TRAFFIC
DECRYPTION

APPLICATION
CONTENT

DYNAMIC
RULES



Inspect
Application
Content



Mobile
Application



Application
Server



Database



Web Server



Security
Server



Web Services

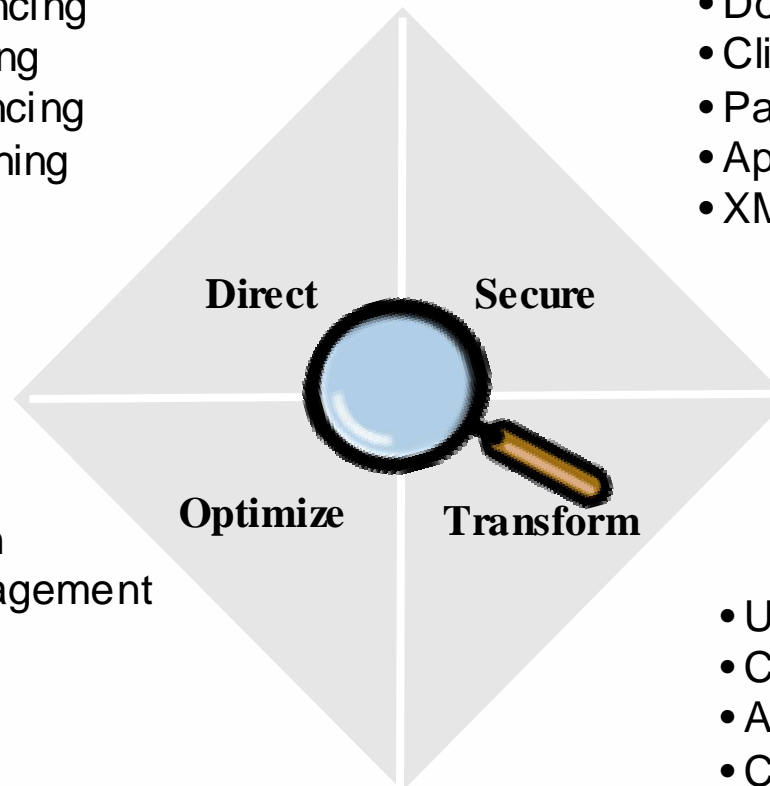
Foundation for Consolidation



Expanding the Network Services

- Server load balancing
- Link load balancing
- Global load balancing
- Application switching
- Persistence

- DoS Prevention
- Client Authentication
- Packet Filtering
- Application Security
- XML Security

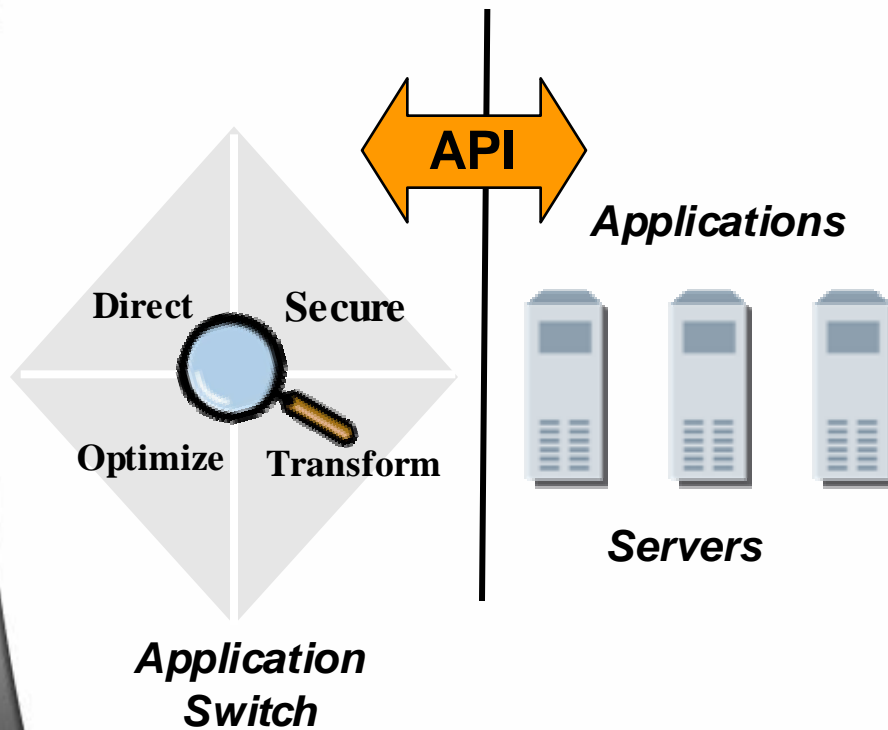


- SSL Acceleration
- Connection Management
- Compression
- Rate Shaping

- URI/URL Rewrite
- Cookie Rewrite
- Application Proxy
- Content Proxy
- IPv6 Gateway



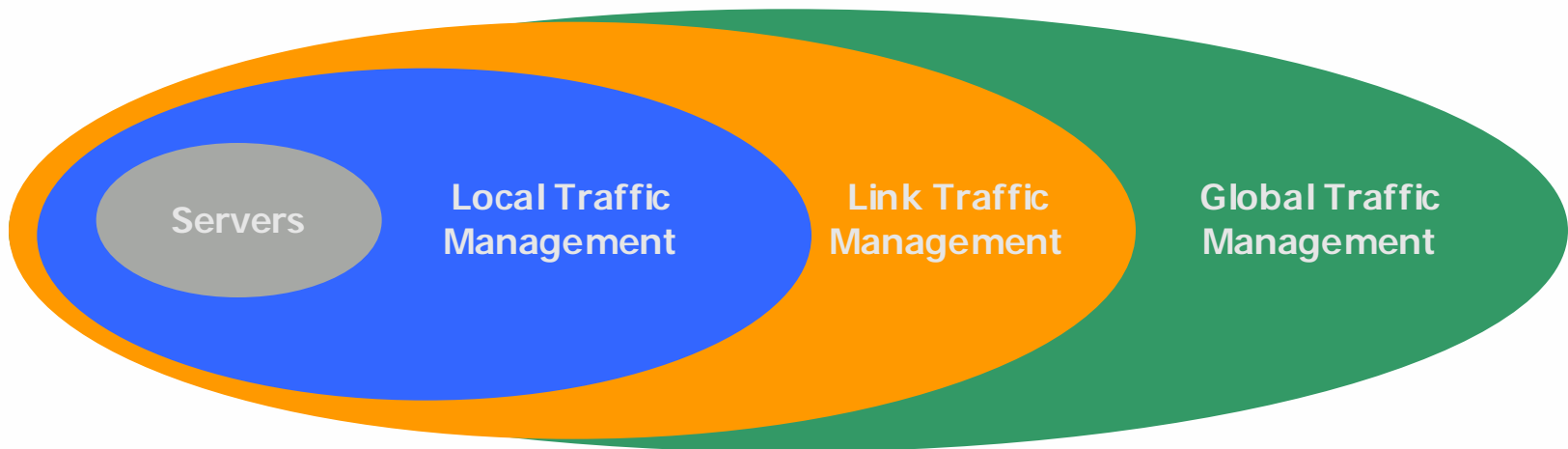
Cooperation is Essential



- **Networks support the applications**
 - API required to deliver a holistic solution for high availability
- **An API enables...**
 - Enhanced monitoring
 - Automated management and control
 - Application instrumentation to influence traffic management
 - Complimentary fit with Service Oriented Architectures (SOAs)



Application Traffic Management

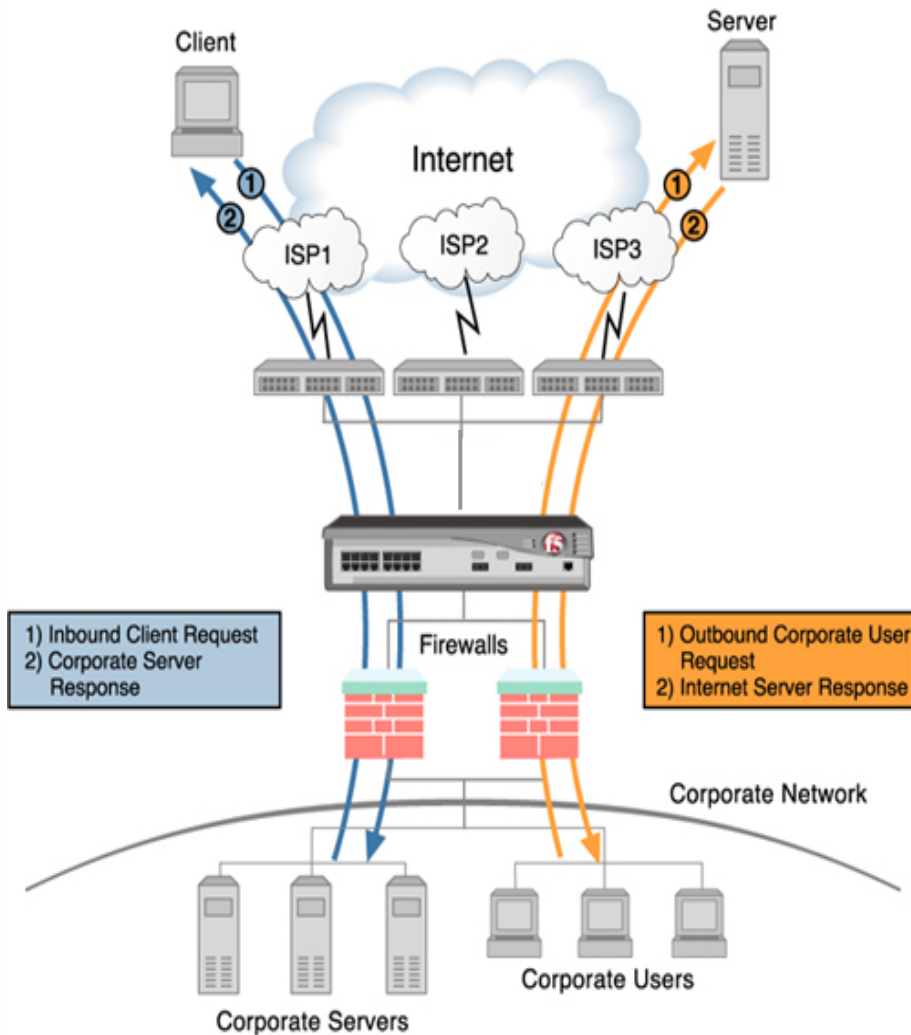


Key Benefits

- Improved availability
- Better end user performance
- Reduced costs



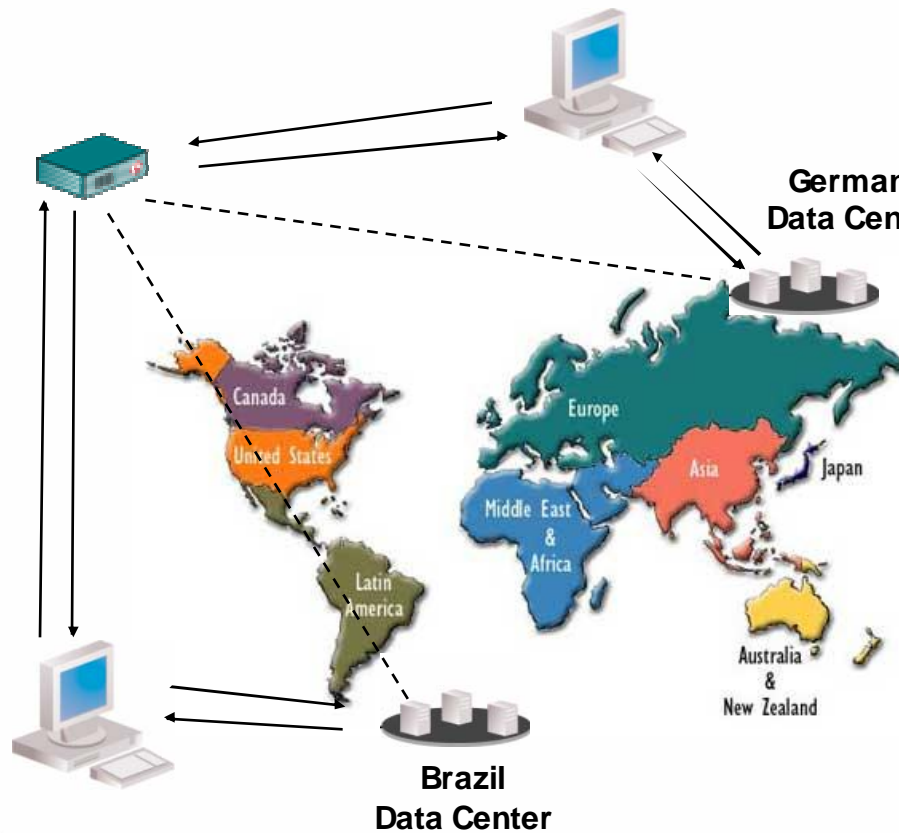
Link Traffic Management Solution



- **High availability and best link selection**
 - Inbound traffic
 - Outbound traffic
- **Solution extensions**
 - Firewall balancing
- **Redundant configurations**



Global Traffic Management Solution



- **High availability**
 - Data center outages
 - Disaster recovery
- **Improved performance**
 - Geographic preference
 - “Best” performing site
- **Cost optimization**
 - Resource balancing

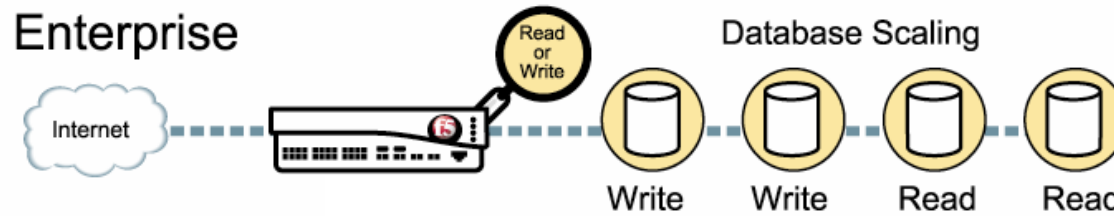
----- = Performance metrics collected



Traffic Management Examples

IMPACT

Savings:



\$170,000
to
\$450,000

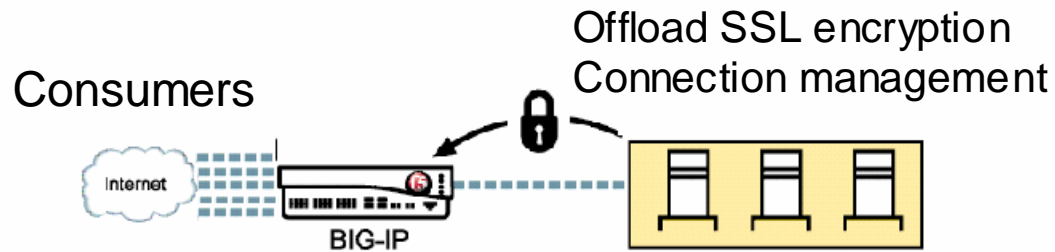


\$350,000
to
\$750,000

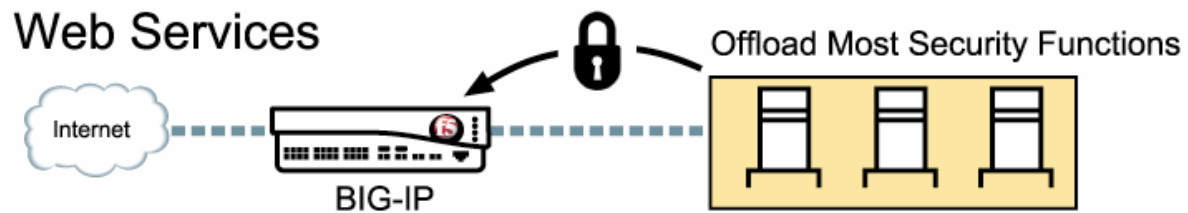


Optimization Examples

IMPACT



Reduced 2 million server connections to 200 connections

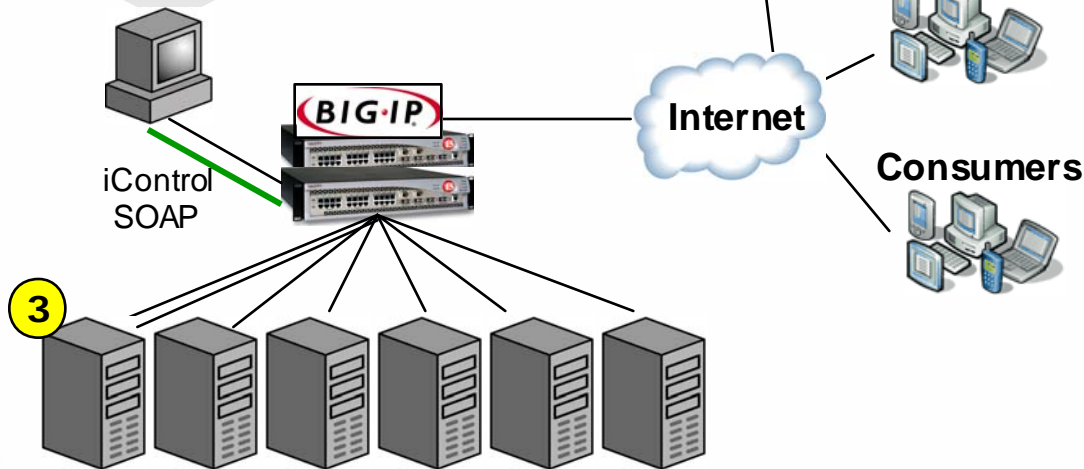


Savings:

\$1,000,000
to
\$1,500,000



API Example



IMPACT

Solution

- Automate process of updating 170+ servers with new files while maintaining high site availability

CUSTOMER BENEFITS

- 92% reduction in time spent updating servers
- Reduction of human errors
- Better customer experience
- Rapid development via SOAP and Visual Studio.NET

RETURN ON INVESTMENT

- Saves IT 8-12 hrs/day
- \$146,000 saved each year



Checklist for Vendor Selection

- ✓ **Total solution for traffic management**
- ✓ **Extensible architecture**
- ✓ **Real world performance metrics**
- ✓ **Depth of application awareness**
- ✓ **Stateful redundancy**
- ✓ **Open API to integrate with applications**



CONTROL YOUR WORLD