



SSL Everywhere Sales Playbook



SSL Everywhere Sales Play Prerequisites

This playbook assumes a basic understanding of BIG-IP LTM technologies, SSL Everywhere reference architecture, use cases, and value, based on existing training materials.

BIG-IP LTM education

Web based training and product information

- Product Training [F5 University](#)
- Partner Central: [Local Traffic Manager](#)
- [Manuals and Release Notes](#) on f5.com

SSL Everywhere Reference Architecture

Solution information

- f5.com [SSL Everywhere](#)
- Partner Central: [SSL Everywhere RA](#)

The screenshot displays the F5 Partner Central website interface. At the top, there is a navigation bar with the F5 logo, 'Partner Central', and links for 'Solutions', 'Products', 'Learning', 'Marketing', 'Program', and 'Manage'. A 'Register a Deal' button is visible in the top right. The main header area is blue with the text 'SOLUTIONS Reference Architectures'. Below this, there is a video player showing a man speaking, with a play button overlay. To the right of the video, the section is titled 'SSL Everywhere' and contains a paragraph of text explaining the importance of SSL services for data centers and business protection. Below the text, there is a 'RELATED RESOURCES' section with four items: 'Customer Deck' (SSL Everywhere with F5), 'Business White Paper' (The Expectation of SSL Everywhere), 'Technical White Paper' (The F5 SSL Everywhere Reference Architecture), and 'White Board' (Video white board covering F5's SSL Everywhere capabilities). Each resource includes a thumbnail image and a link to view or read the document.



Topics To Drive SSL Everywhere Wins

TOPIC

[Make More Money Selling SSL Everywhere!](#)

[SSL Market And Customer Challenges](#)

[Identify SSL Everywhere Opportunities](#)

[Selling SSL Everywhere - Offload](#)

[Selling SSL Everywhere - Intercept](#)

[Winning With SSL](#)

[Licensing Options](#)

Note: You should be [trained](#) already in BIG-IP LTM

Make More Money Selling SSL Everywhere!



Engage with Customers

Security and privacy are competitive differentiators and therefore a topic business agenda item



Expand Account Footprint

Ensure F5 as a critical component of all SSL architectures and leverage F5's SSL leadership



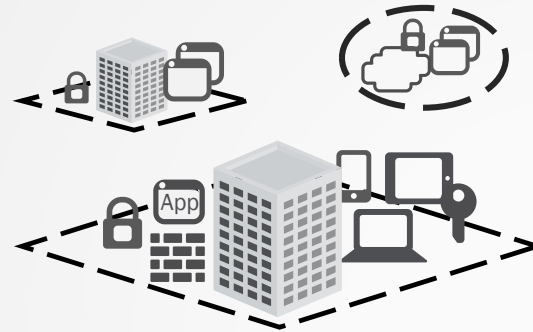
Grow Deal Size

SSL has become a critical component of all network projects due to the challenges of encryption

The New Perimeter Is An App Perimeter

Apps Are The Gateway to Data!

TRADITIONAL



TRADITIONAL NETWORK PERIMETER

F5



PER-APP / PER-USER PERIMETER

SSL-visible	×	✓
Location-independent	×	✓
Session-based	×	✓
Continuous trust verification	×	✓
Strategic control points	×	✓
App availability	×	✓

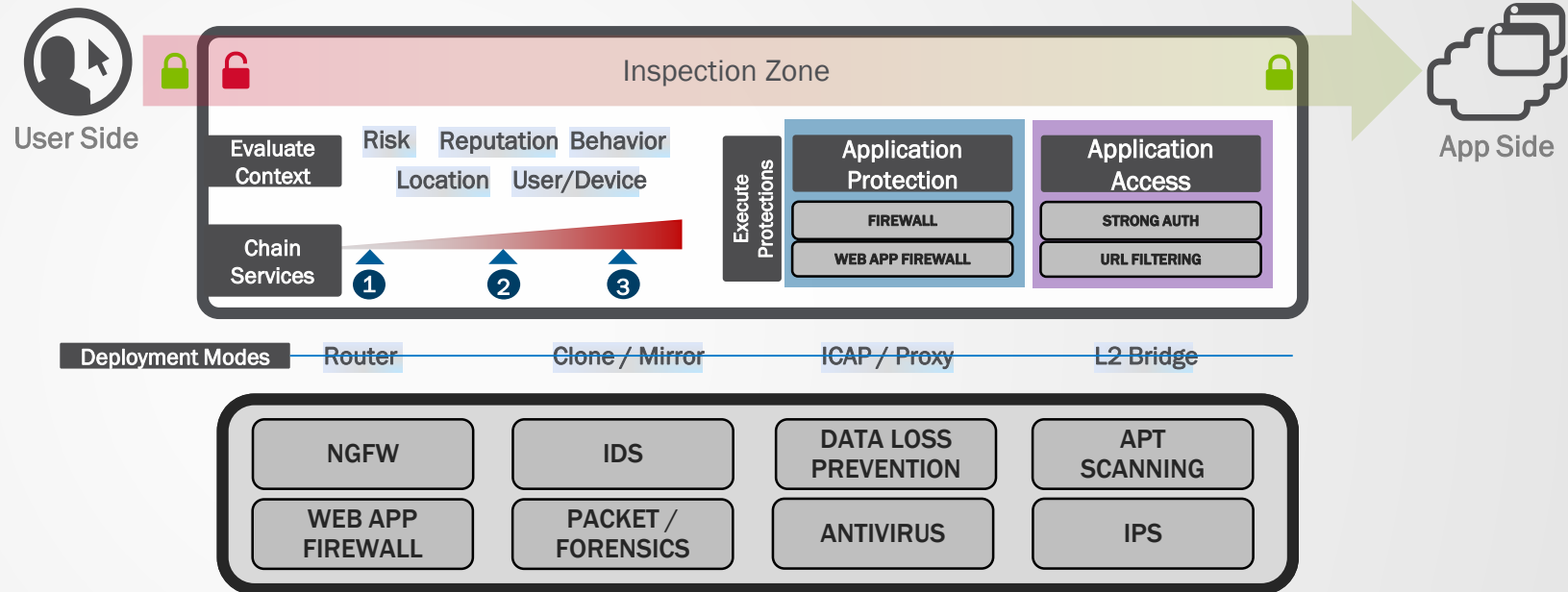
IT'S TIME TO RETHINK SECURITY ARCHITECTURES



F5 Architecture For The New Perimeter

Full Proxy defense against advanced security threats

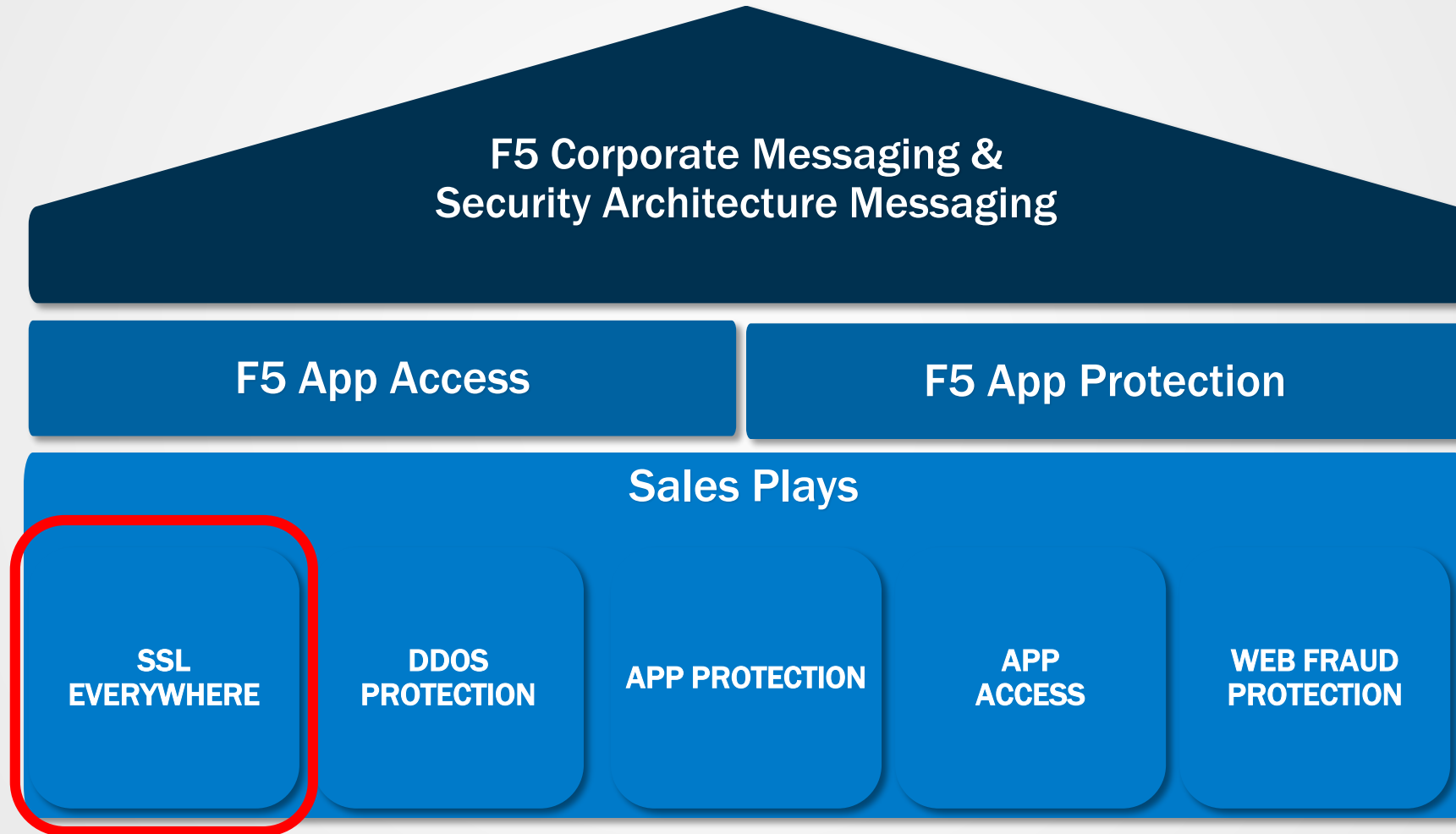
- Evaluate Context
 - User, device, location, etc.
 - Behavior
 - Threat risk vs. app value
- Chain Security Services
 - SSL inspection
 - Access & app protection
 - Partner ecosystem
- Execute Protection
 - Performance & scalability
 - Hybrid delivery
 - Per-app defense



A FOUNDATION FOR MORE COMPREHENSIVE SECURITY



F5 Security Messaging Hierarchy



Understanding the SSL Market and Customer Challenges



Key Takeaways For Market And Customer Challenge

- 1** SSL market is projected to double this year
- 2** Growth driven by data breaches, compliance, and privacy
- 3** SSL growth creates challenges for our customers and opportunity for F5



F5 Leads ADC & The SSL Market Is Growing

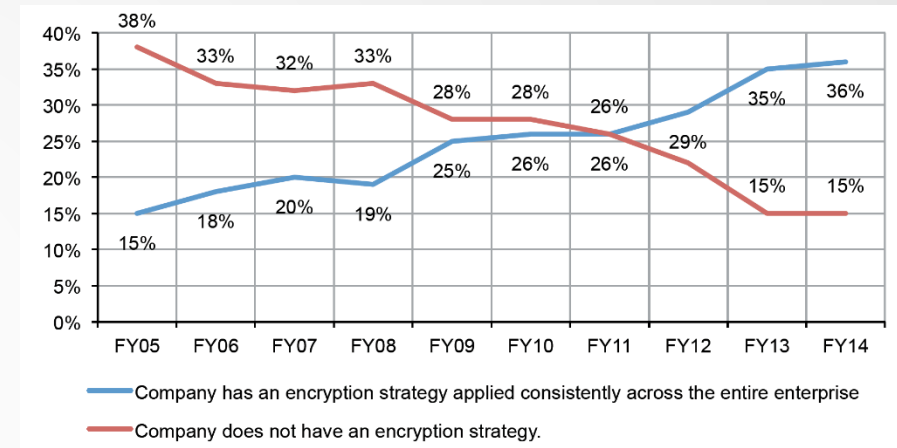
SSL Traffic Projected To Double This Year

Market Growth and Revenue Trends

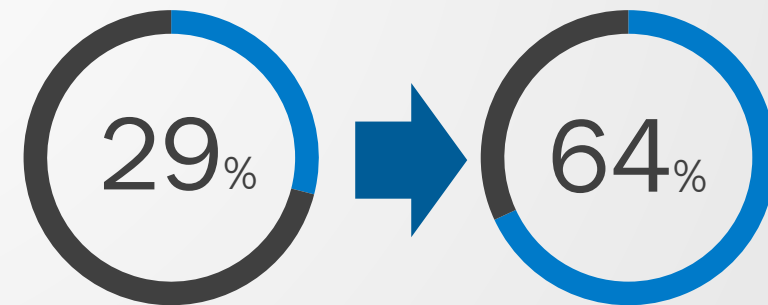
TAM in 2015 for ADC (includes SSL Offload) stands at \$2B
 TAM in 2015 for SSL Intercept is estimated at \$500M

- SSL traffic is projected to reach 64% by 2016, up from 29% in 2015
- F5’s ADC Market Share 52% in 2014, Gartner
- Gartner recognized F5 as a Leader in 2015 Gartner Magic Quadrant for Application Delivery Controllers
- SSL Cert Market will grow 21% (CAGR)

There is a steady increase in encryption strategy



Amount of Encrypted Traffic



SSL IN 2015

PROJECTED SSL IN 2016



SSL Is Growing Due To Data Breaches, Compliance, And Privacy

64% SAY COMPLIANCE IS MOST IMPORTANT DRIVER FOR SSL
Ponemon Institute

\$1000 Price Tag for a stolen cert in the underground market¹
Ponemon Institute

34% growth in keys and certificates over the past 2 years
Ponemon Institute



Only 3 in 10 Organizations Detected the Breach on Their Own (Source: Mandiant M-Trends 2015)

205 Days threats were present before detection
(Mandiant M-Trends 2015)

57% Europeans are worried their data is not safe Symantec

26% of SSL applications use non-standard ports
Palo Alto Networks



58%

of Security Teams need **better security to protect keys and certificates**
Ponemon Institute

SSL Growth Creates Challenges For Our Customers And Opportunity For F5

- Compliance is complex and costly
- Increased frequency of SSL attacks is stressing IT operations
- Maintaining consistent SSL policy is challenging
- Enabling SSL on next-gen security products kills performance

The Complexity of SSL Growth

\$1M⁺

Cost of single cyber attack can be well above \$1,000,000

50%

Received a C Grade or lower on their SSL assessment

81%

Performance loss when enabling SSL on NGFWs¹



Identifying SSL Opportunities



4 Key Steps to Identifying an SSL Opportunities

- 1 Identify customers with sensitive data
- 2 Identify your target persona
- 3 Ask qualifying questions
- 4 Determine which SSL deployment is right for your customer

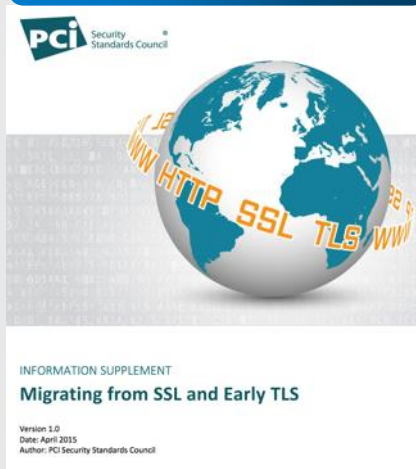


Step 1: Identify Customers With Sensitive Data

Example PCI

Latest PCI regulations require modern encryption by June 2016

Find Out More



All PCI merchants will review SSL in 2015!

Vertical	Sensitive Data	Examples	Regulation
Financial Services*	Financial, Personally identifiable information (PII)	Credit Cards (cardholder data), Bank account numbers, financial information and credit-related data, SSN	PCI, SOX, FDIC Disclosure laws
Retail	Cardholder data	Credit Cards (cardholder data)	PCI, Disclosure laws
Healthcare*	Protected Health Information (PHI)	information about health status, provision of health care, or payment for health care that can be linked to a specific individual.	HIPPA, HITECH
Government	Military and government data	Data specific to government programs, particularly those related to military departments.	Highly regulated

* highest increase in encryption deployments

64% SAY COMPLIANCE IS MOST IMPORTANT DRIVER FOR SSL



Step 2: Within Each Org., Identify Target Personas

EXECUTIVE LEADER

Concerned with the cost, necessity and ROI; adapting traditional business, technology, commerce, and marketing practices to a digital world.

- Managing organizational losses due to data breaches and attacks
- Maintaining compliance
- Data center consolidation

SECURITY/ NETWORK VP, DIR., ARCH.

Defines and Implements network infrastructure

- Deploys, maintains, and reports on security controls
- Investigates security incidents
- Collaborate with others to identify and define effective controls

APPLICATION OWNER

Deploys and manages the app service & roadmap and ensure the success of business/app

- Ensures services that meet key customer needs & key compliance standards
- Assess app health and ensures availability, performance and security
- Drives efforts to patch vulnerabilities

COMPLIANCE MGR

Maintain PCI regulatory compliance

- Maintains awareness of compliance risks;
- Ensures compliance
- Reports on the effectiveness of WAF solutions

BUSINESS UNIT LEADERS GAINING INFLUENCE OVER THEIR COMPANY'S ENCRYPTION STRATEGY.

Step 3: Ask Target Persona These Questions

SSL Offload

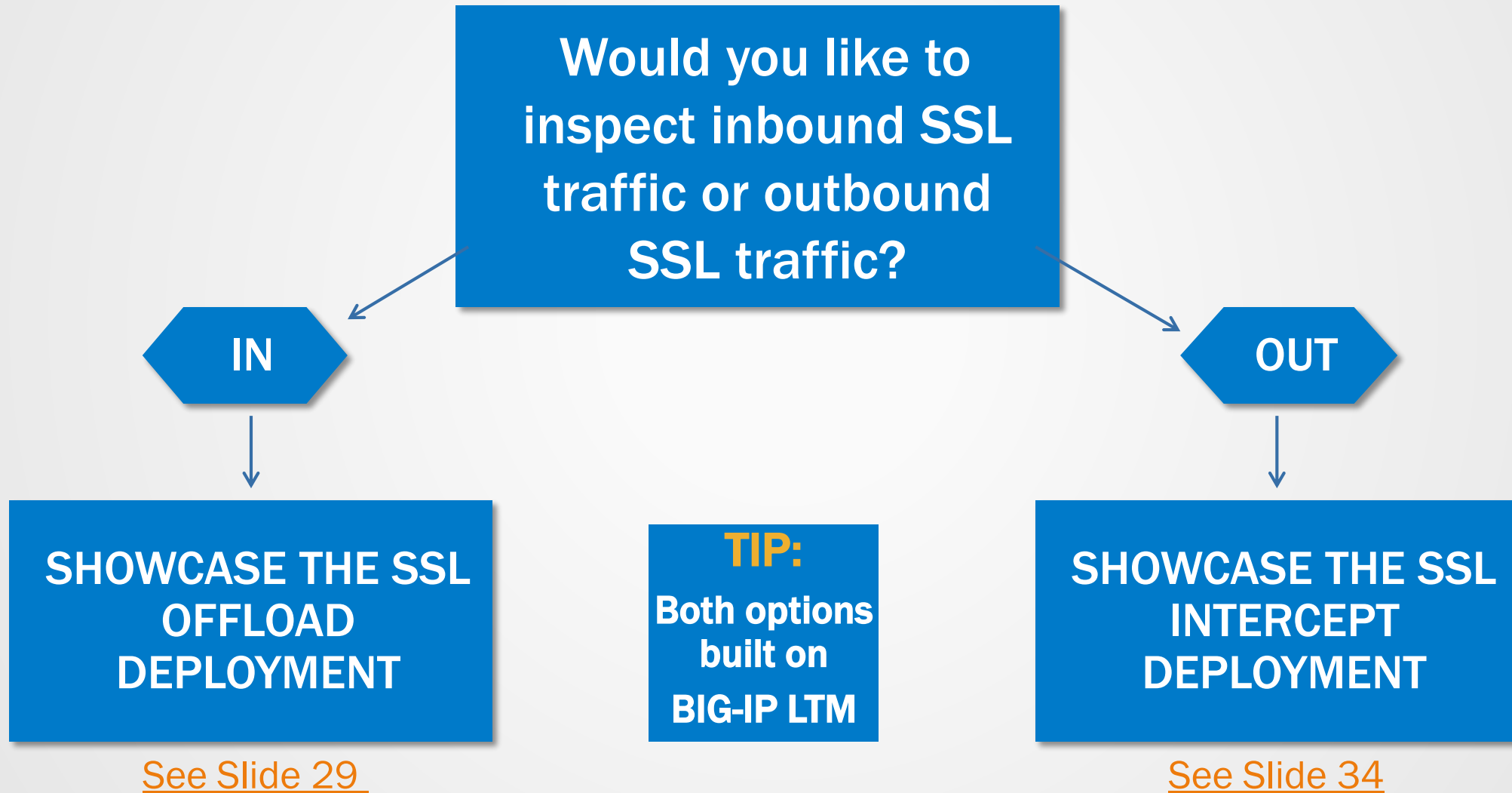
- Tell me how you are preparing for more stringent SSL regulatory compliance requirements.
- How have you responded to the latest SSL vulnerabilities?
- What are your processes for key protection and management?

SSL Intercept

- What's your plan to address the performance and latency impact associated with decrypting and re-encrypting at multiple points in the security service chain?
- How are you handling increases in inbound and outbound encrypted traffic?
- Does your outbound content filtering solution scale with the increase in encrypted traffic?



Step 4: Determine Which SSL Deployment Is Right



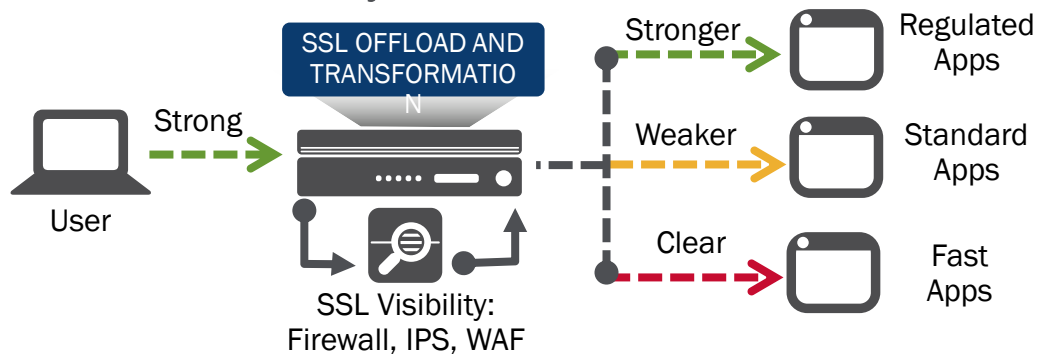
Step 4: Based On Answers Prescribe Deployment

LISTEN FOR THESE KEY WORDS

- Inbound
- Consolidation
- SSL performance
- SSL grade (SSL Labs)
- Compliance (PCI, FIPS)

Offload and Transformation

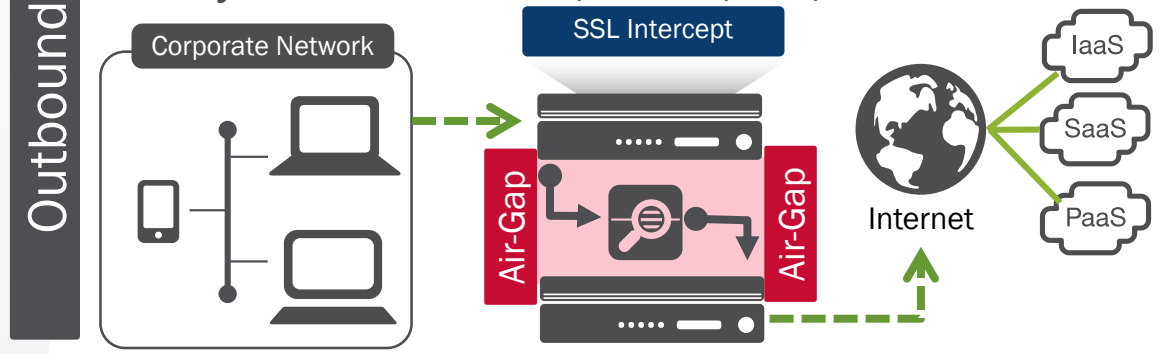
Use BIG-IP to enforce encryption policy to applications and for in-line SSL Visibility



- Outbound
- Visibility into encrypted traffic
- Deploying new security products (NGFW, IPS, DLP, etc.)
- Advanced security threats
- Security architecture

SSL Intercept (Air-Gap)

Use SSL Intercept for visibility into SSL traffic with 3rd party security devices like NGFW, NG-IPS, DLP, and APT threats



Selling SSL Offload



Key Selling Steps

- 1** Cover key functionality and value
- 2** Highlight differentiation and VE crypto offload
- 3** Handle objections



Step 1: Cover Key Functionality In Your Conversation

SSL OFFLOAD: ENFORCE CONSISTENT SSL POLICY WITHOUT COMPROMISING ON DATA PROTECTION, KEY PROTECTION, OR VISIBILITY

The most complete range of enterprise class features

Cipher Diversity

- Deeper protection with broader array of encryption options
- Enforce consistent SSL policy based on industry best practices

Performance

- Industry leading SSL scale and performance
- Improve end user performance with HTTP 2.0 and SPDY

Key Protection

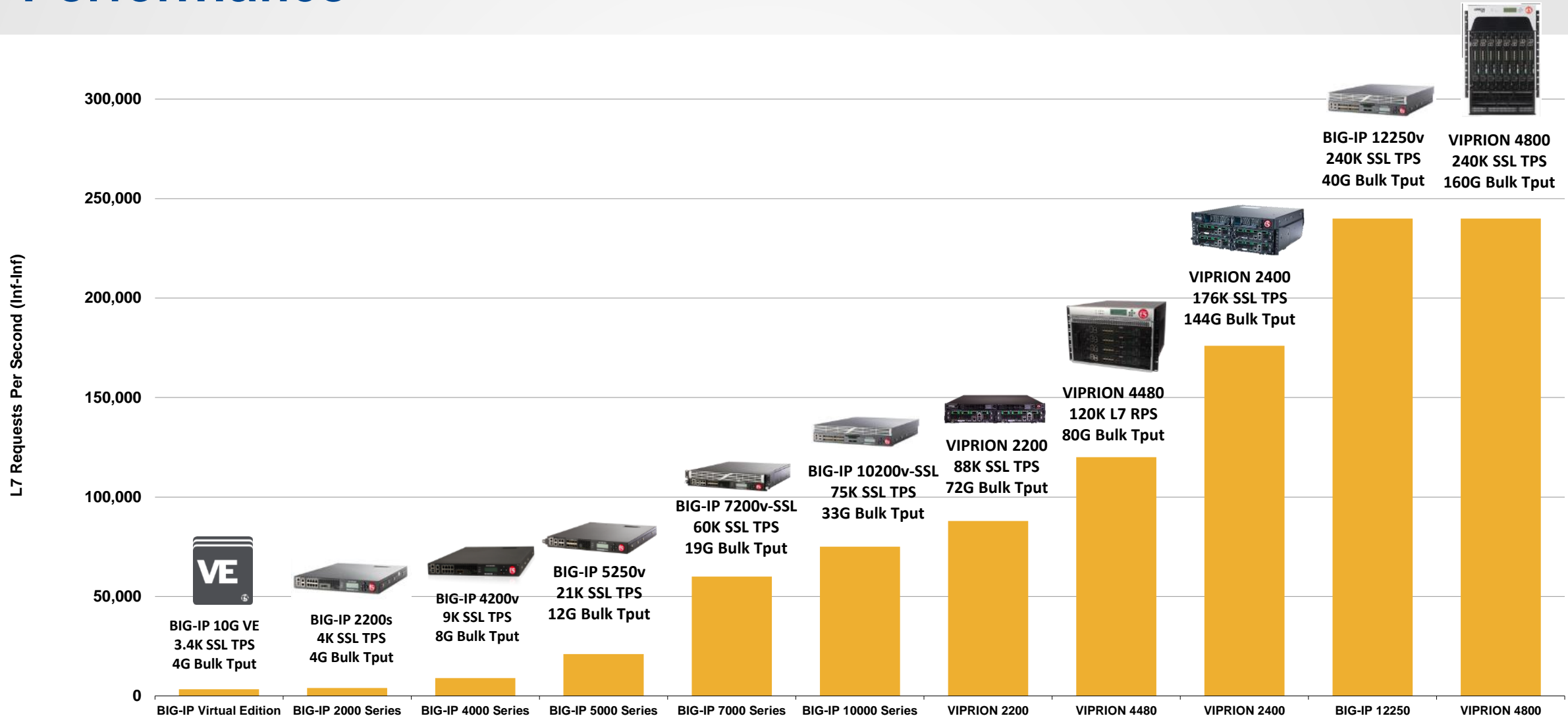
- HSMs protect keys and certs throughout physical, virtual, and cloud environments
- Open APIs to automate management digital certificate and encryption keys

iRules

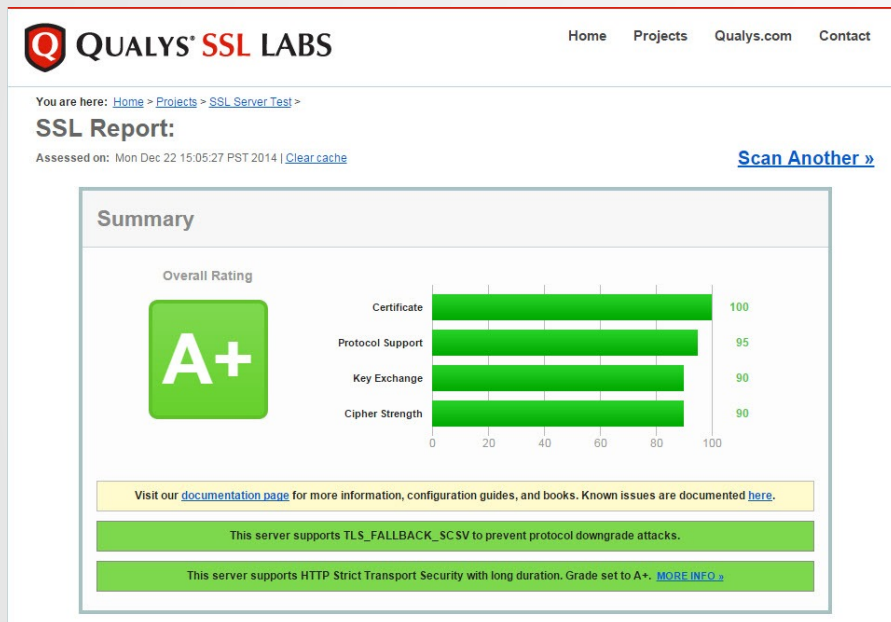
- Stop the latest SSL attacks with programmability
- Control your applications from connections and traffic



Step 2: Highlight Industry Leading SSL Scale and Performance



Step 2: Highlight Data Protection



	Session identifiers	Session tickets	OCSF stapling	Dynamic record sizing	ALPN	Forward secrecy	HTTP/2
Apache	yes	yes	yes	no	yes	yes	yes
ATS	yes	yes	yes	dynamic	yes	yes	yes
bud	no	yes	yes	static	yes	yes	no
F5 BIG-IP	yes	yes	yes	no	yes	yes	yes
HAProxy	yes	yes	yes	dynamic	yes	yes	no
Hitch	yes	yes	no	no	no	yes	no
IIS	yes	yes	yes	no	yes	yes	yes
NetScaler	yes	no	no	no	yes	yes	spdy/3.0
NGINX	yes	yes	yes	static	yes	yes	yes
node.js	yes	yes	optional	optional	yes	yes	yes



Step 2: Highlight Comprehensive SSL Lifecycle Management



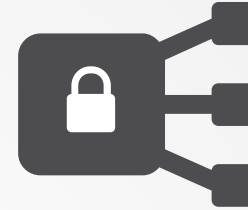
Secure Vault

Software based encrypted storage system for securing cryptographic keys with the highest performance



Internal HSM

Physical hardware designed to generate, store, and protect keys with high performance



Network HSM

Integration with leading network based hardware for use with all appliances, chassis, and Virtual Editions



Cloud HSM

Integration for high-assurance encryption services fit for the cloud.



Enterprise Key and Certificate Management

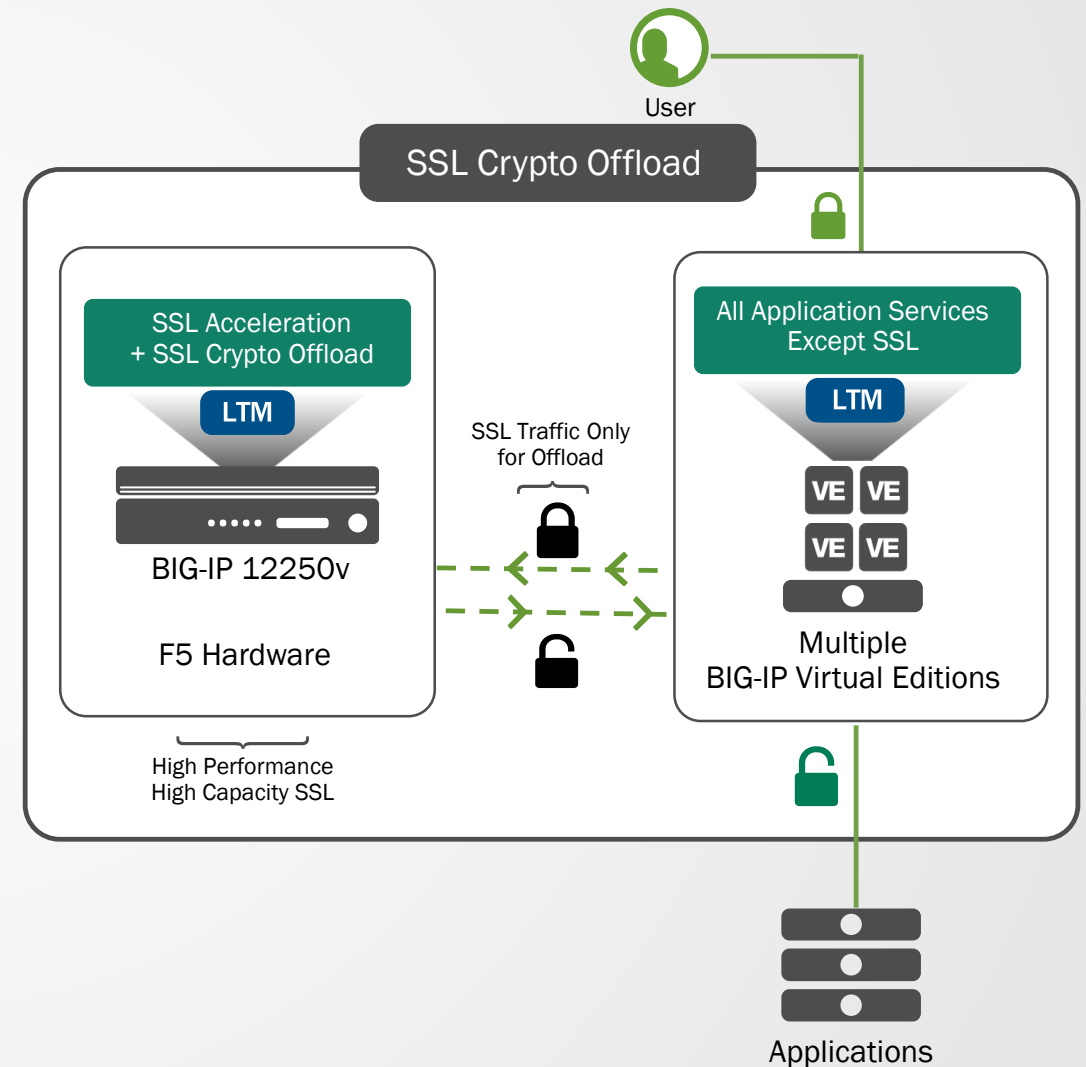
Open APIs to automate management for the digital certificate and encryption key technologies used by today's enterprises



Step 2: Highlight VE Crypto Offload

F5 Networks provides the industry's first SSL Crypto Offload for hybrid deployments

- Offload SSL processing from your Virtual Edition to the BIG-IP hardware platforms
- Achieve the maximum SSL performance of your virtual license
- Free up Virtual Edition CPU utilization for other application services



Step 2: Highlight VE Crypto Offload



SSL Performance



vCPU Utilization

Capacity



VE Stand-Alone

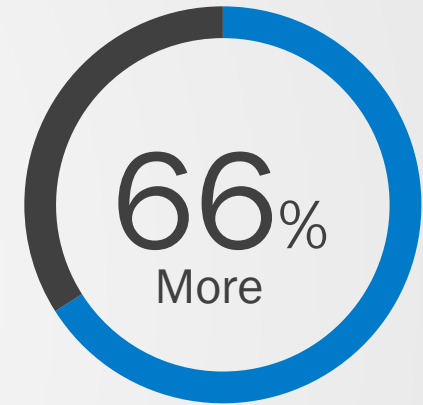
1,500
TPS

100%



1,500
TPS

34%



Hybrid deployments can do more L4-7 Application Service workloads than stand-alone VEs



Step 3: Handle Objections

OBJECTION	RESPONSE
The biggest challenge in planning and executing a data encryption strategy is discovering where sensitive data resides in the organization.	It's cost effective control to deploy SSL without Scale or Performance issues. Save time and money by transition to encrypt-by-default
I don't want to see my users private data like online banking	F5 offers both static and dynamic bypass list. URL filtering provides dynamic bypass. We recommend discussions with your legal department sooner than later to remove and project barriers in the future. (quote Gartner)
I want something simple	F5 helps consolidate multiple services, while simplify integration with multi vendor solutions. Allowing you to focus on universal policy enforcement rather than multiple SSL stacks. This gives you the ability provide a comprehensive defense in depth strategy.



Selling SSL Intercept



Key Selling Steps

1 Cover key functionality and value

2 Highlight differentiation

3 Handle objections



Step 1: Cover Key Functionality In Your Conversation

SSL INTERCEPT: ADVANCED THREAT PROTECTION WITH F5

The most complete range of enterprise class features

SSL Visibility

- Inspect SSL traffic for hidden threats like malware across third party vendors
- Chain security services with full proxy for visibility and policy enforcement

Advanced Protection

- Industry leading SSL scale and performance with hardware acceleration
- Integration with FireEye and other third party solutions to provide defense in-depth

Secure Architecture

- Firewall segmentation and key protection and an integral part of the design
- Flexible 1 or 2 box architecture for simplified troubleshooting and operations

URL Bypass

- Bypass URL categories such as banking to protect user privacy
- Dynamically and static options available for individual requirements

Step 2: As Defenses Evolve, Attackers Adapt and Innovate

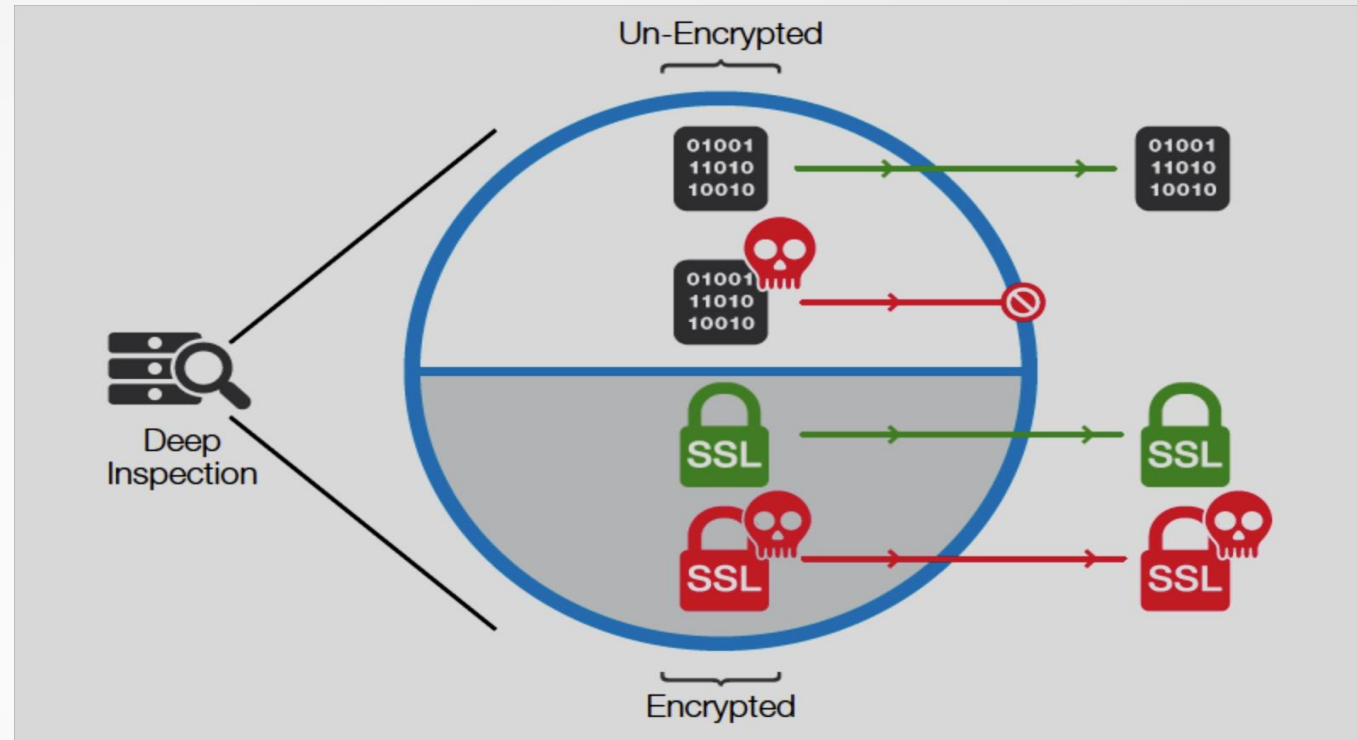
SSL the New Threat Vector

Spotlight on the Game Changers

- Year over year growth in SSL traffic is not stopping
- New SSL protocols and ciphers can break security products
- 80% performance degradation with SSL on NGFWs

Stealthy Techniques

- Attackers continued to use novel techniques to deploy and hide web-based malware
- Shells planted on servers use SSL encryption to evade network monitoring
- Because the victims had not configured their network architectures to permit security tools to inspect SSL traffic, the attacker's actions went undetected



“We expect this trend to continue, especially as more organizations adopt SSL encryption for all Internet-facing web services.”

[Mandiant 2015 M-Trends Report](#)

Step 2: Highlight the challenges of today's network

New SSL protocols can break infrastructure

- New ciphers address high profile vulnerabilities
- Compatibility breaks many security products
- F5 supports the broadest range of SSL protocols



Growing SSL stresses performance

- Multiple decrypt and encrypt points adds overhead
- SSL impacts performance by 80% on NGFWs
- F5 offers industry leading SSL scale and performance

Step 3: Handle Objections

OBJECTION	RESPONSE
I don't want to see my users private data like online banking	F5 offers both static and dynamic bypass list. URL Filtering provides dynamic bypass. We recommend discussions with your legal department sooner than later to remove and project barriers in the future.
I want something simple	F5 helps consolidate multiple services, while simplify integration with multi vendor solutions. Allowing you to focus on universal policy enforcement rather than multiple SSL stacks. This gives you the ability provide a comprehensive defense in depth strategy.
I heard you are more expensive than both Blue Coat and A10	Blue Coat charges \$15K for their 250 mbps. It can't help with scale, uptime, or defense. F5's 2000 starts at \$17K can do all of those. A10's SSL Insight (Outbound) requires 2 boxes doubling the cost of the solution and doesn't decrypt beyond port 443.



Winning With SSL Everywhere



Sales Win

Customer Story

What was customer trying to do?

Initially:

- Scale FireEye sensor deployment beyond 4 Gbps
- Avoid outages from sensor failures

Eventually:

- Added SSL decryption for outbound traffic with URL filtering to exclude certain traffic from decryption (PHI, Financial, etc.)

Who was the audience?

- Network architects
- Security architects

Who were we competing against?

- Cisco? We were able to prove that they had no solution

New or existing F5 customer?

- Existing F5 customer expanding deployment

What did we sell?

- \$1.68M P&I + \$185K FYB
- Dedicated B2250 blades per data center
- SSL forward Proxy and URL Filtering license

What won the deal?

- Trust and experience with the F5 account team
- Successful proof of concept
- Expanding the discussion beyond simple FireEye sensor LB
- Educating the customer on global privacy requirements
- The ability to pivot with the customer's changing requirements



Case Study: Blue Cross Blue Shield of Kansas City



“Before, SSL traffic was being terminated on the server itself. That led to performance problems, especially as our traffic numbers began to increase. [By offloading SSL from the servers to the BIG-IP LTM device.] It lowers our administration and maintenance of our servers, and saves a considerable amount of time and money.”

Chad O’ Neal
Web Technical Engineer

Customer Overview:

Health benefits provider, serving more than 880,000 members in greater Kansas City, Missouri, Kansas

Vertical: Insurance
Location: Kansas City, MO

BCBS needed to protect personal healthcare data while ensuring HA, performance and security of its site, which holds key healthcare plan information for providers, brokers, and employers.

BIG-IP LTM, Link Controller, and ASM Benefits:

- Met HIPAA security requirements
- Reduced page load times from 30 seconds to less than a second
- ISP redundancy removed serious network vulnerability by eliminating single point of failure
- Consolidation onto LTM saves money in the long run by reduced admin duties and maintenance costs

❖ Case Study:
<http://www.f5.com/pdf/case-studies/bluecross-blueshield-cs.pdf>

Licensing Options



SSL Licensing

Internal HSM/FIPS Models

BIP-IP 10200v FIPS	F5-BIG-LTM-10200V-F	\$119,995
BIG-IP 7200v FIPS	F5-BIG-LTM-7200V-F	\$94,995
BIG-IP 5200V FIPS	F5-BIG-LTM-5200V-F	\$76,995

BIG-IP Appliance - SSL Licenses

SSL Forward Proxy License	F5-ADD-BIG-SSL-FWD	\$4,995
Network Hardware Security Module	F5-ADD-BIG-EXT-HSM	\$4,995

VIPRION Chassis - SSL Licenses

SSL License Upgrade for 4800 Chassis (Max TPS)	F5-ADD-VPR-SSL8	\$69,995
SSL License Upgrade for 44X0/2400 Chassis (Max TPS)	F5-ADD-VPR-SSL4	\$34,995
SSL License Upgrade for 2200 Chassis (Max TPS)	F5-ADD-VPR-SSL2	\$34,995
SSL Forward Proxy License	F5-ADD-VPR-SSL-FWD	\$9,995



Flexible options to meet you where you are going

PLATFORMS

A broad selection of hardware and software platforms which can be blended to meet your needs.

LICENSING

Flexible options across perpetual licensing, subscription models and on-demand consumption.

SERVICES

A variety of F5 services and support options to help you succeed across the application lifecycle.



A Broad Selection of Platforms

F5 Platforms

25M 200M 1Gbps 3Gbps 5Gbps 10Gbps

2000 series* 4000 series 5000 Series 7000 Series 10000 Series 12000 Series VIPRION 2200 VIPRION 2400 VIPRION 4480 VIPRION 4800

FIPS 140-2

Virtual

F5 software

Provide flexible deployment options for virtual environments and the cloud with Virtual Edition

Virtual Edition is best for:

- Accelerated deployment
- Maximizing data center efficiency
- Private and public cloud deployments
- Application or tenant-based pods
- Keeping security close to the app
- Lab, test, and QA deployments

Physical

F5 hardware

High-performance with specialized and dedicated hardware

Physical Hardware is best for:

- Fastest performance
- Highest scale
- SSL offload, compression, and DoS mitigation
- An all F5 solution: integrated HW+SW
- Edge and front door services
- Purpose-built isolation for application delivery workloads

Hybrid

Physical + virtual = hybrid ADC infrastructure

Ultimate flexibility and performance

Hybrid is best for:

- Transitioning from physical to virtual and private data center to cloud
- Cloud bursting
- Splitting large workloads
- Tiered levels of service



Choose How to Consume F5 Software

Cloud options tailored to customer needs for greater flexibility and choice

Volume of F5-backed Apps

Cloud Licensing Program (CLP)	Bring Your Own License (BYOL)	Volume Licensing Subscription (VLS)
<p>On-demand Utility pricing with highest flexibility; pay-as-you-go or annual subscription.</p> <p>Public cloud</p> <p>Best for deployment flexibility; on-demand consumption</p> <p>OPEX</p>	<p>Perpetual VE License which customer owns and can move across private and public clouds.</p> <p>Public, private, and hybrid</p> <p>Best for few production workloads or existing licenses</p> <p>CAPEX</p>	<p>Subscription discounts for 100+ applications; 1 or 3-year terms, up to 78% discount. Includes premium support services.</p> <p>Public, private and hybrid</p> <p>Best for large scale workload production; F5 for every app.</p> <p>OPEX</p>
<p> via F5 Ready Cloud Provider</p>	<p> via F5 or channel partner</p>	

Price/License

\$\$\$

\$\$

\$



Find an F5 Ready Public Cloud Provider

Verified by F5 for greater cloud confidence

F5-verified

BIG-IP products verified by F5 for compatibility in F5 Ready clouds.

Global-reaching

F5-verified providers span Americas, EMEA, and APAC for broad reach and selection.

Flexible

Variety of purchase options: BYOL, on-demand Utility billing, Volume Licensing Subscription.



Note: F5 adds new partners on a regular cadence, check f5.com/f5ready for the most up-to-date list



Drive Greater ROI with Global Services

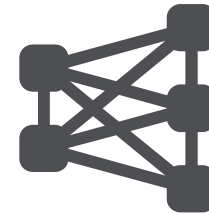
Throughout the Solution Lifecycle



Optimize

Maximize performance, health, security

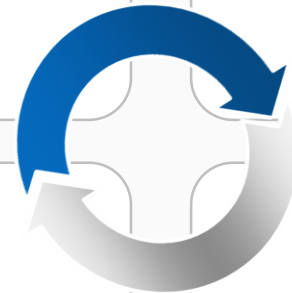
- Proactive Assessments and Integration
- iHealth / AskF5 / DevCentral
- Certification



Architect

Design for best-practices deployments

- Solution Definition Workshops
- Design and Assessments



Maintain

Ensure continued availability

- Upgrades and Expert Services
- World-class Support
- Premium Plus and Enhanced Services



Implement

Deploy quickly and optimally

- Installations and Migrations
- Web and Onsite Training

Global Services Optimized for your Initiatives

End-to-end Services and Support options to meet your customer's needs

	Traditional ADC	Security	Cloud
Architect Design for best practices	Solution Definition Workshop		
Implement Quick and optimal	Deployment & Migration Services		
	Training and Certification		
Maintain Backed by F5 Support	Maintenance Agreements		
	Premium Plus Support		
Optimize Maximize performance, health, security	Customization & Scripting		
	iHealth Diagnostics & Self-help Tools		



Flexible Services Options

Packaged, Custom & Hourly

Flexible F5 Purchase Options

Packaged

License: Fixed Price

Scoped to meet popular customer solutions.

Focus: Customer and technology trends. Carefully aligned with F5 pricing bundles GBB and popular customer solutions.

Modules/Services	Good	Better	Best
BIG-IP Local Traffic Manager	✓	✓	✓
BIG-IP Global Traffic Manager		✓	✓
BIG-IP Application Acceleration Manager		✓	✓
BIG-IP Advanced Firewall Manager		✓	✓
BIG-IP Application Security Manager			✓
BIG-IP Access Policy Manager			✓

MEASURE OF SUCCESS IS MODULE ADOPTION

- BIG-IP Local Traffic Manager Implementation Services
 - Onsite | Remote
- BIG-IP Local Global Manager Implementation Services
- BIG-IP Application Acceleration Manager Implementation Services
- BIG-IP AFM
 - Basic Implementation
 - Application Security Implementation
 - Migration
 - Application Security Migration
- BIG-IP Application Security Manager Implementation Services
- BIG-IP Access Policy Manager Implementation Services

Custom

License: Custom

Scoped to meet your specific business and solution needs. Flexible procurement options.

Focus: Complex or unique solutions, or where a customer can leverage our deep skills.

Hourly

License: Hourly

Small-scale services for ad-hoc customization and scripting

Focus: Extended application verification, complex monitors, iRules scripting, iControl API, and other automated tasks.

Partner Services



Guardian
Unity Partner

F5 UNITY Gold or Platinum Partners

Dedicated Professional Services staff backed by F5 certifications



Solutions for an application world.

