

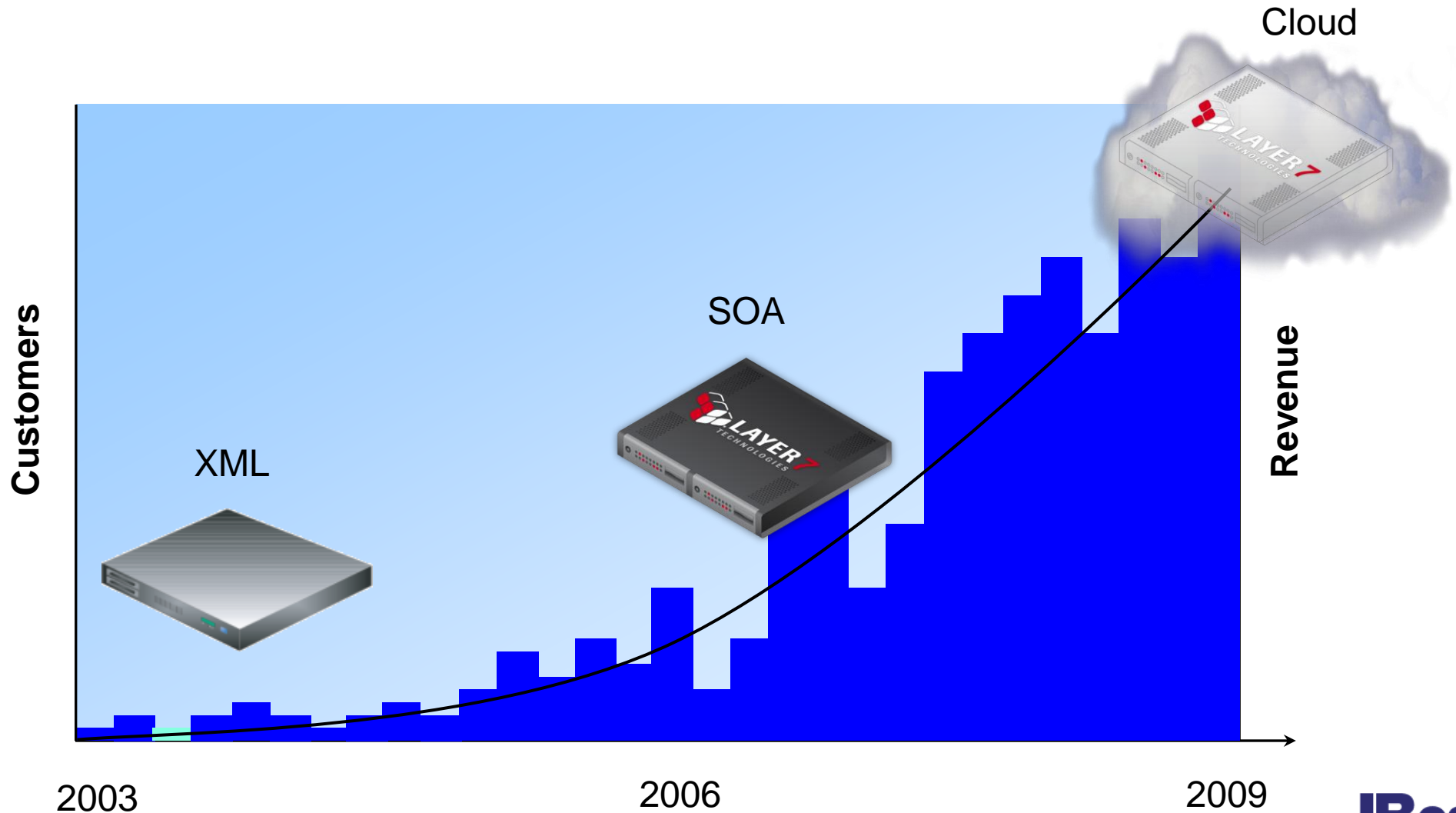
Managing SOA Security and Operations with SecureSpan

Francois Lascelles
Technical Director, Layer 7 Technologies



About Layer 7

Layer 7 is the leading vendor of security and governance for:





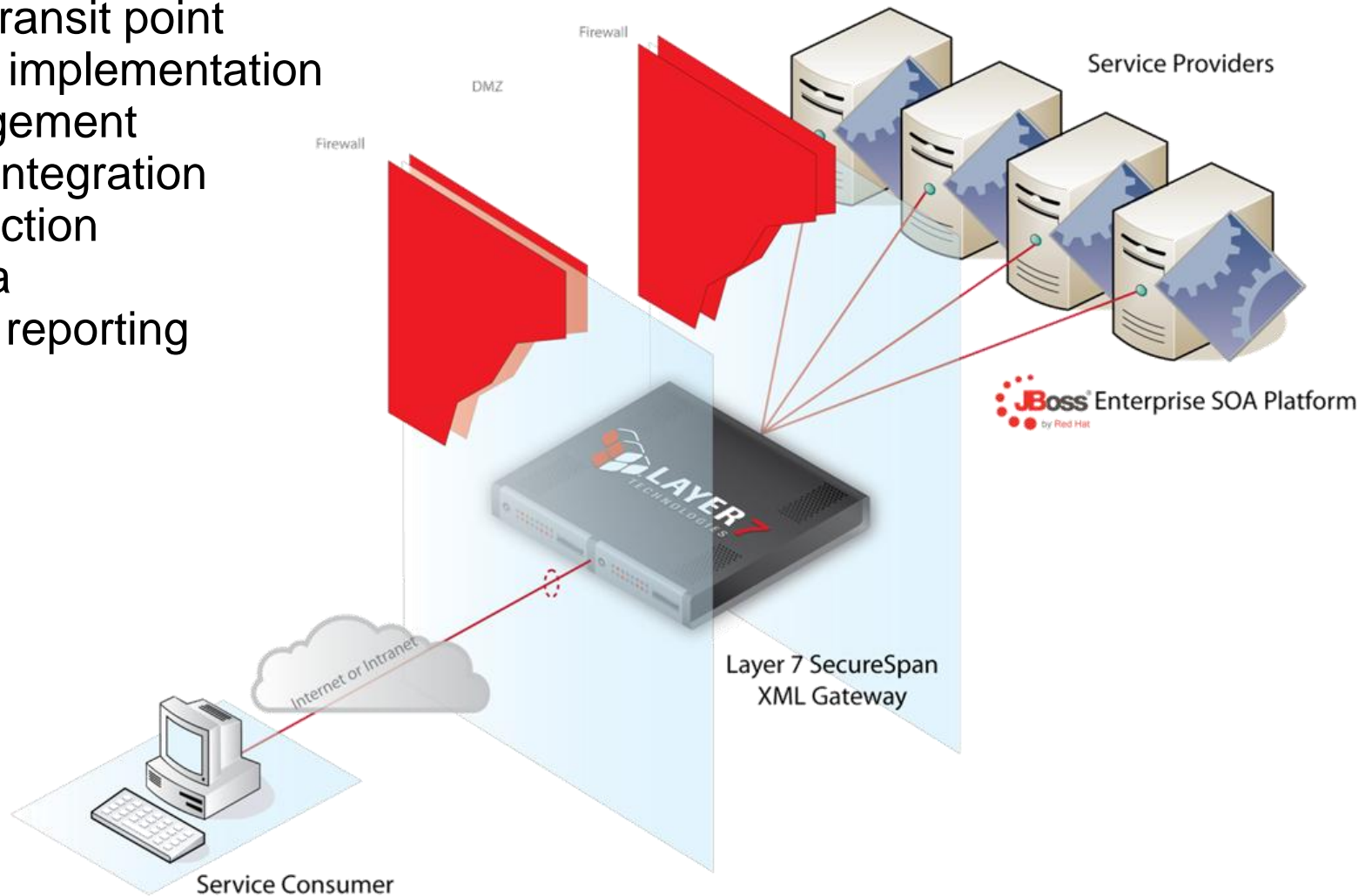
Why Layer 7 SecureSpan?

- Faster time to market
 - Reduce development, deployment and management efforts
 - JBossESB infrastructure service, delegate business logic
 - Faster additions, changes
- Governance
 - Enterprise-wide view of services
 - Real time monitoring, reporting
- Agility
 - Service virtualization
 - Decoupled policy enforcement
- Security
 - Threat protection, access control, trust management, ...



SecureSpan XML Gateway

- secure ws transit point
- ws-security implementation
- trust management
- mediation, integration
- threat protection
- auditing, sla
- monitoring, reporting





Hardware or software appliance form factor

COTS appliance form factor enables ‘drop-in’ solution with minimal deployment time and instant value. No agents to deploy, no dependencies.

Hardware Appliance

- Military grade, hardened device
- Telecom grade performance
- FIPS 140-2 certified crypto
- Hard and soft XML acceleration

Virtual Appliance

- Pre-installed, hardened RHEL image
- ESX certified, Amazon, private clouds
- FIPS 140-2 certified crypto (soft mode)
- Soft (native) XML acceleration



Policy Studio

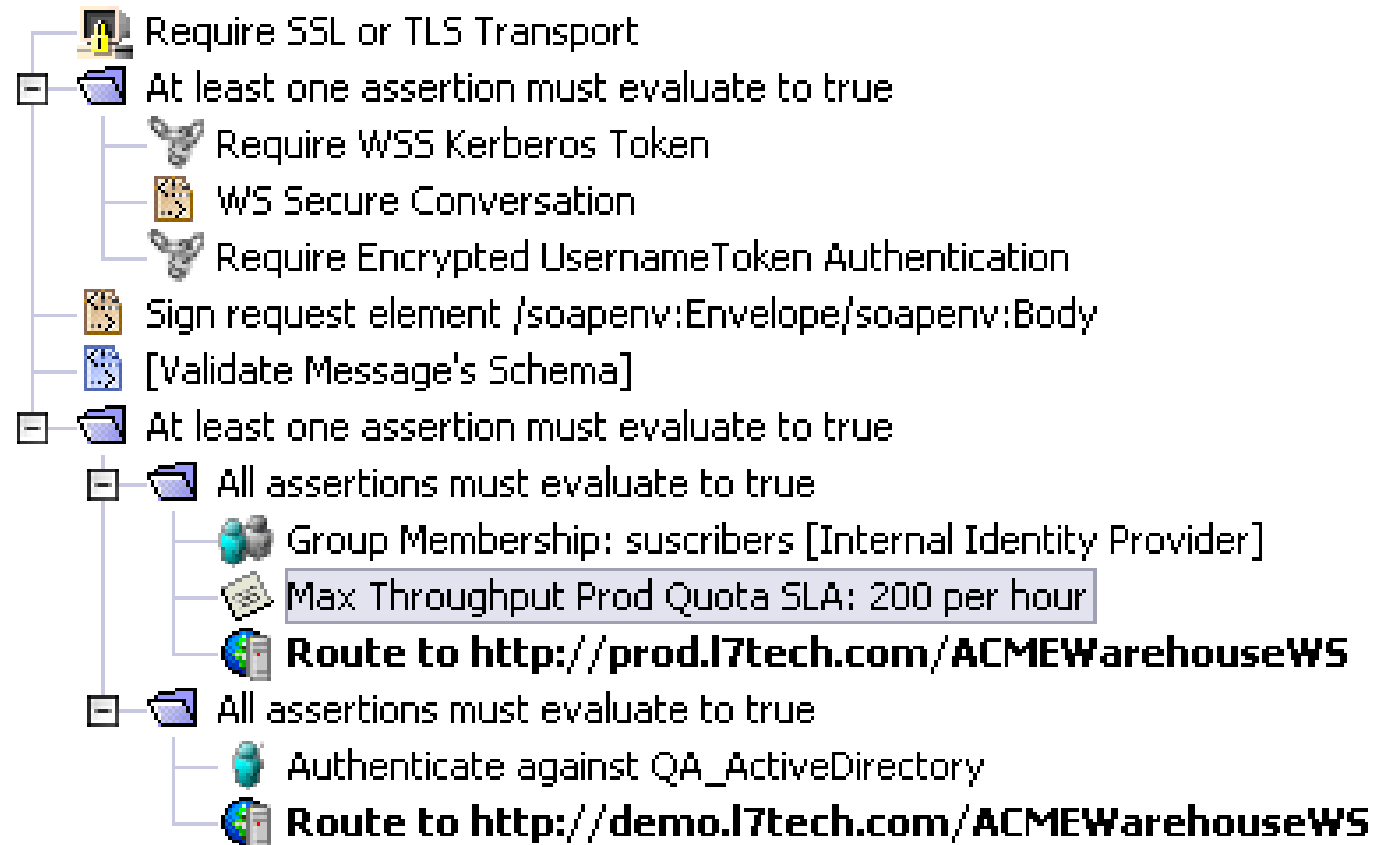
Policies are created by organizing assertions in logical tree structures.

Policies are changed on the fly, without service interruptions.

Rich palette, extensible through JAVA API.

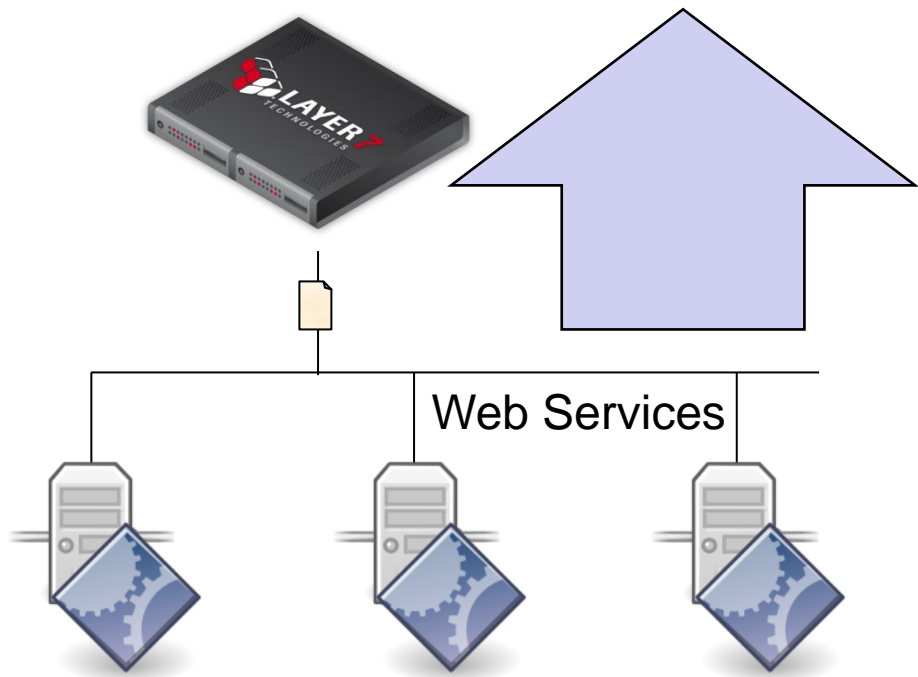
Design, implementation and deployment in hours, not months or years.

Automated, scripted provisioning and management through API.





Message level aware intermediary

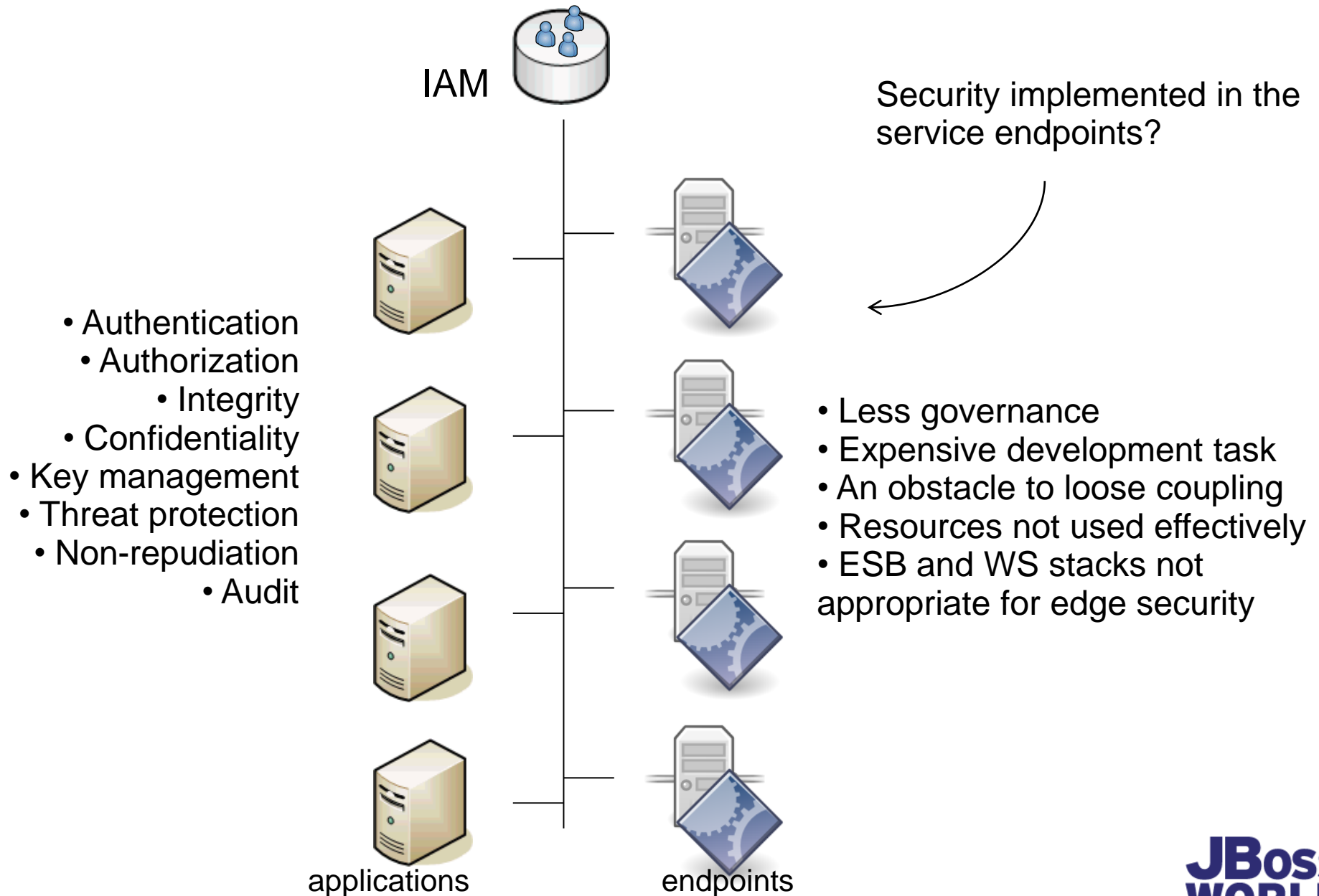


Delegate common or expensive XML related tasks from your endpoints to your infrastructure.

Cut development costs and increase governance by implementing more business logic at infrastructure level.

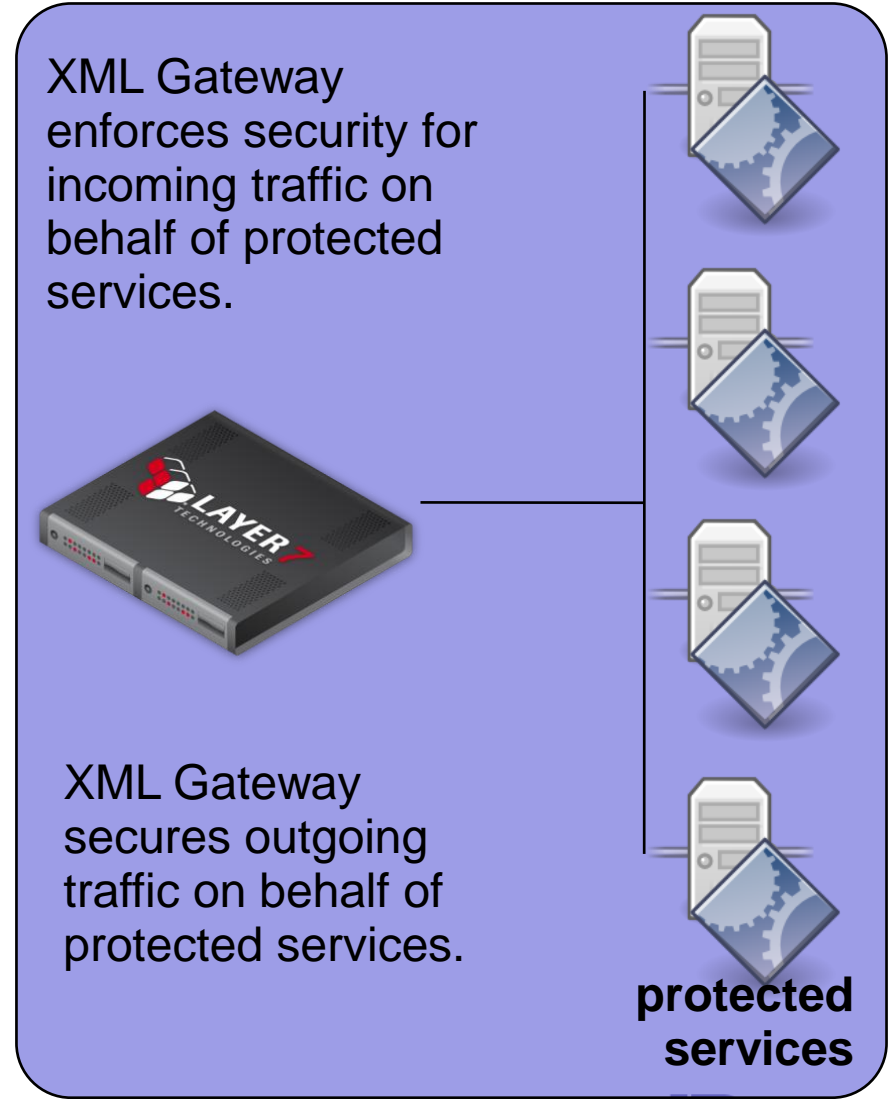
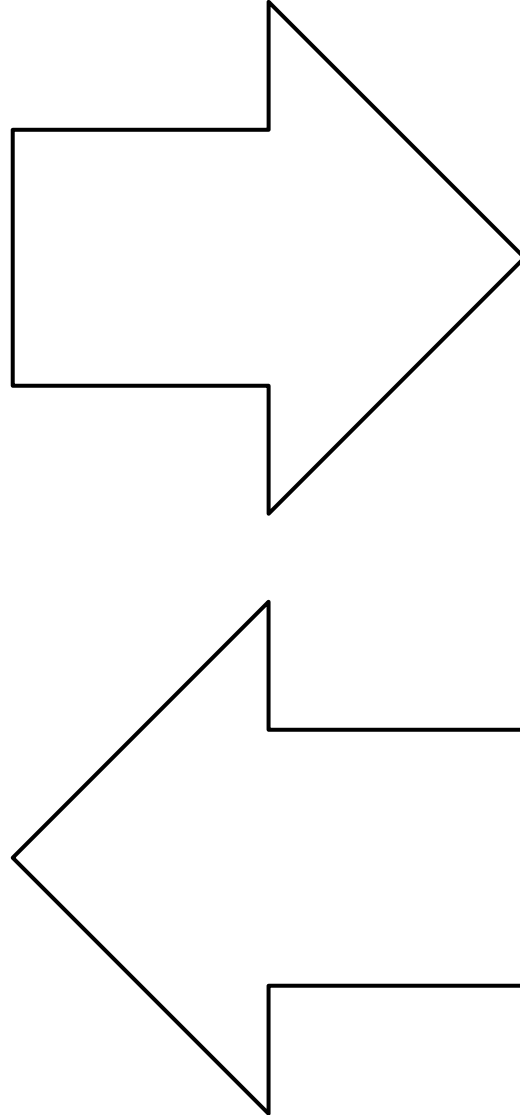
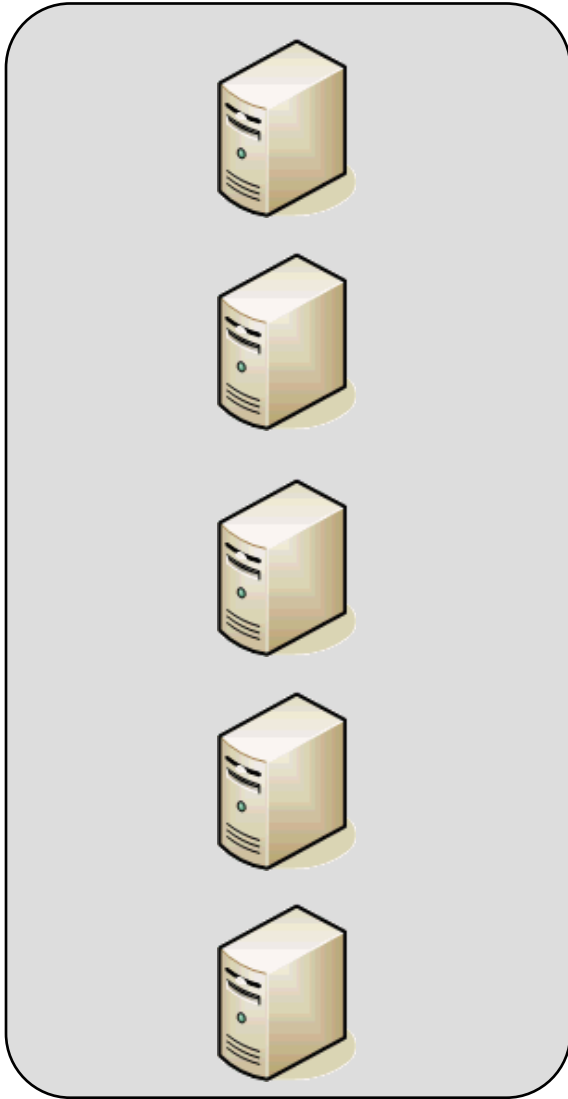


How to implement security in the Enterprise SOA?





Delegating endpoint security





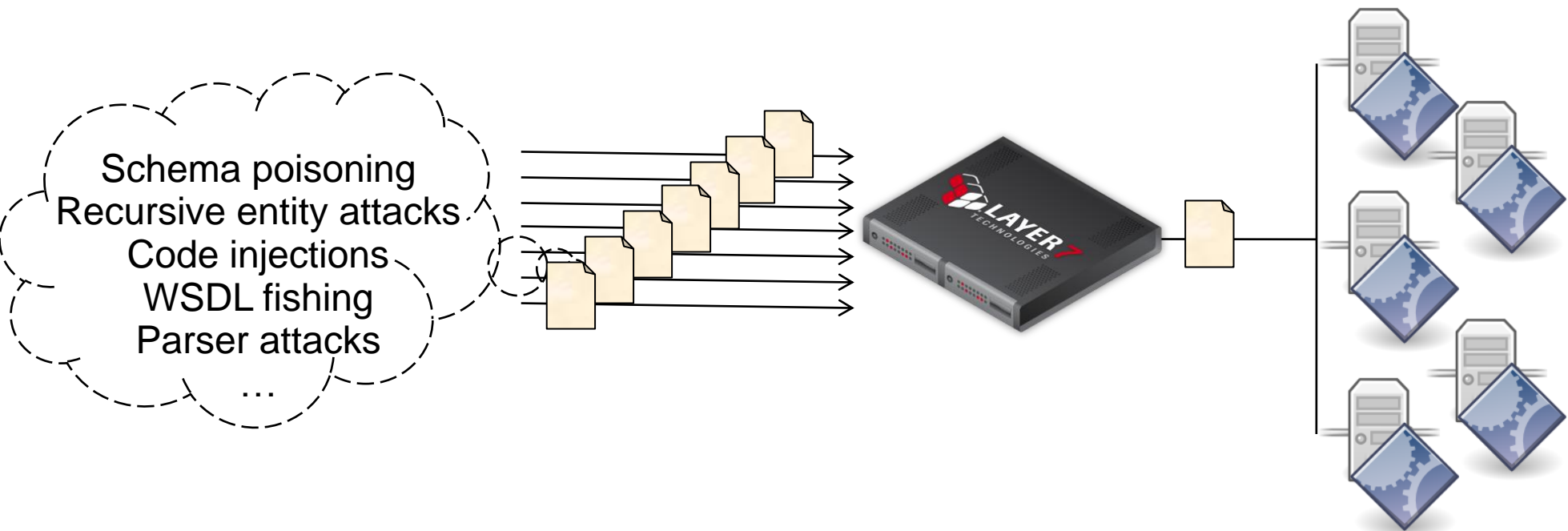
Identity Federation, Trust Management

- Identity and Access Management interfacing
 - Runtime access control rules enforcement
 - LDAP, SUN OpenSSO, Novell AM, Oracle AM, Netegrity, Tivoli, MSAD
- STS, SSO
 - SAML issuing, validation
 - WS-Trust, SAML-P
 - WS-SecureConversation
 - WS Federation
- Fined grain trust management



Threat Protection

- Network/OS level threats
- Message level threats
- Consistent security policies for heterogeneous environment





Service level monitoring, enforcement

- Real time contract lookup and enforcement (SLA)
- Throughput quotas
 - Per identity, per operation
- Throttling
 - Protect service endpoints
- Monitoring of response times
 - Custom alert triggers
 - Custom reporting
- Priority routing rules



Loose coupling, late binding

Routing based on

- remote IP
- content
- identity, identity attribute
- pattern

Last minute binding involving consultation of resource

- LDAP
- UDDI
- database
- external WS

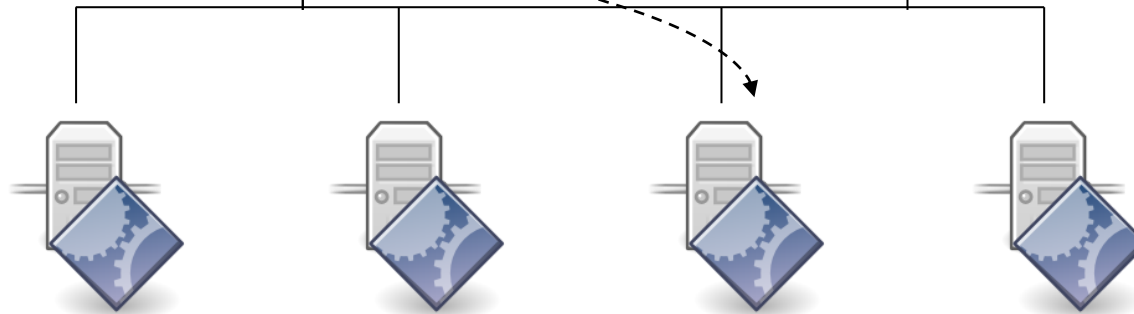
New type of request



Who does that?

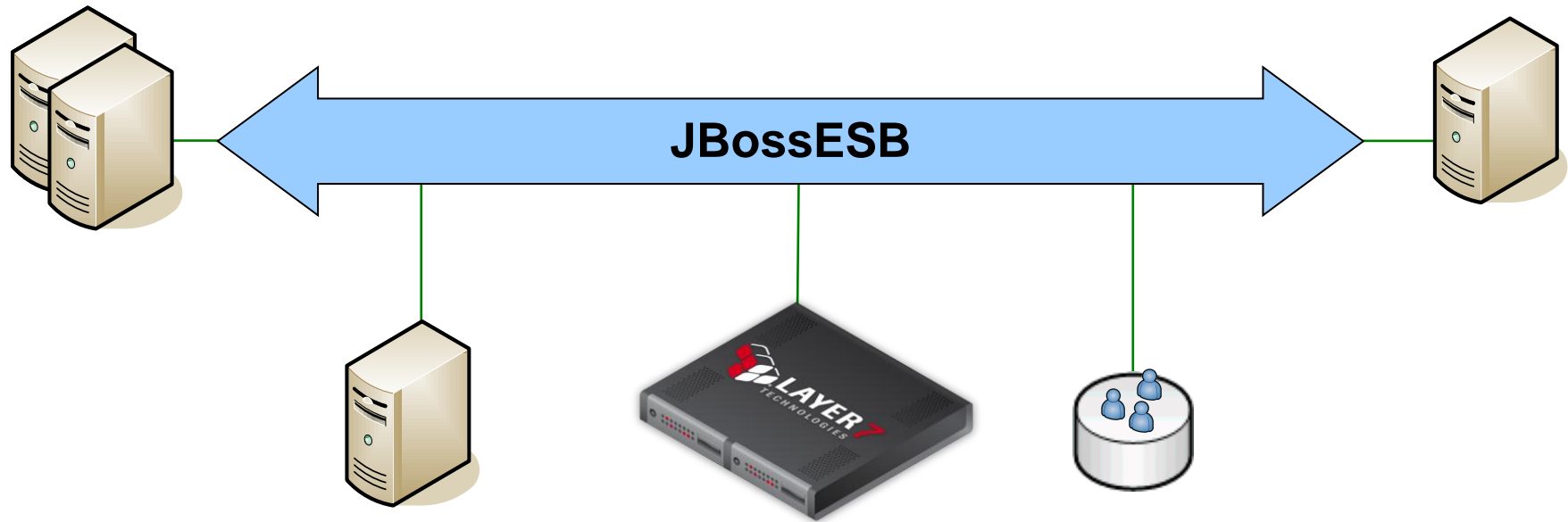


Route message to appropriate endpoint





ESB co-processing



SecureSpan Infrastructure Service

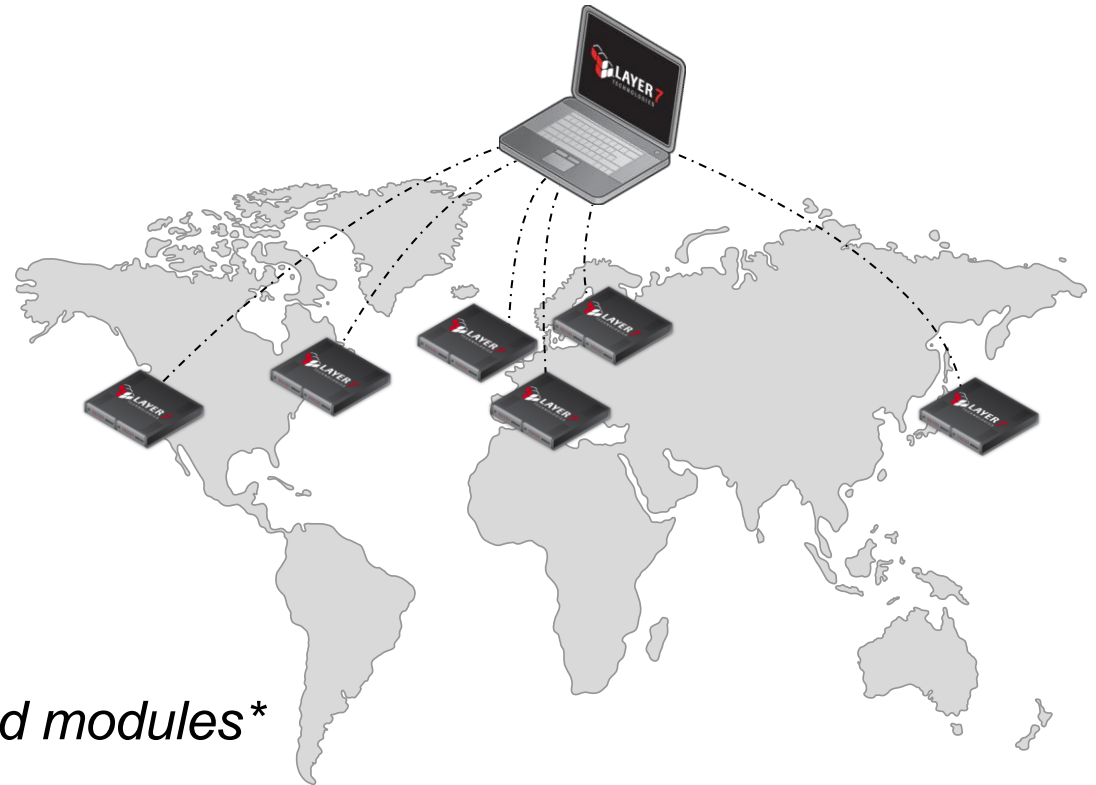
- Accelerated XSLT
- Accelerated XSD
- Accelerated pattern detection
- WSS Processing
- SLA Enforcement



Enterprise Service Manager

Agent-less WS Management

- Enterprise wide view of services
- Performance and usage reports
- Service and policy migration
- Remote gateway start/stop
- Custom reports
- Remote gateway upgrade, upload modules**





Assisted migration across environments

Manage Gateways

Manage Policies

Reports

Tools

Settings

Migration | Submission | Approval | Mapping

Source

Select a source Gateway Cluster:

Name			
[-] Layer 7 Technologies			
[-] Retail Operations			
○ Dev		●	🔑
● Production		●	🔑
[-] Wholesale Network			

Select items to copy:

<input checked="" type="checkbox"/>	[-] Standby for Wholesale Network			folder
<input type="checkbox"/>	🔍 purchasing	🔍	34	published s
<input checked="" type="checkbox"/>	🔍 inventory	🔍	21	published s
<input checked="" type="checkbox"/>	🔍 Policy Fragment 1	🔍	5	policy fragm
<input type="checkbox"/>	🔍 Policy Fragment 2	🔍	17	policy fragm
<input type="checkbox"/>	🔍 accounting [/acc]	🔍	11	published s

Item Details:

Destination

Select a destination Gateway Cluster:

[-] Retail Operations			
○ Dev		●	🔑
○ Production		●	🔑
[-] Wholesale Network			
○ Dev		●	🔑
● Production		●	🔑

Select a destination folder: enable new services

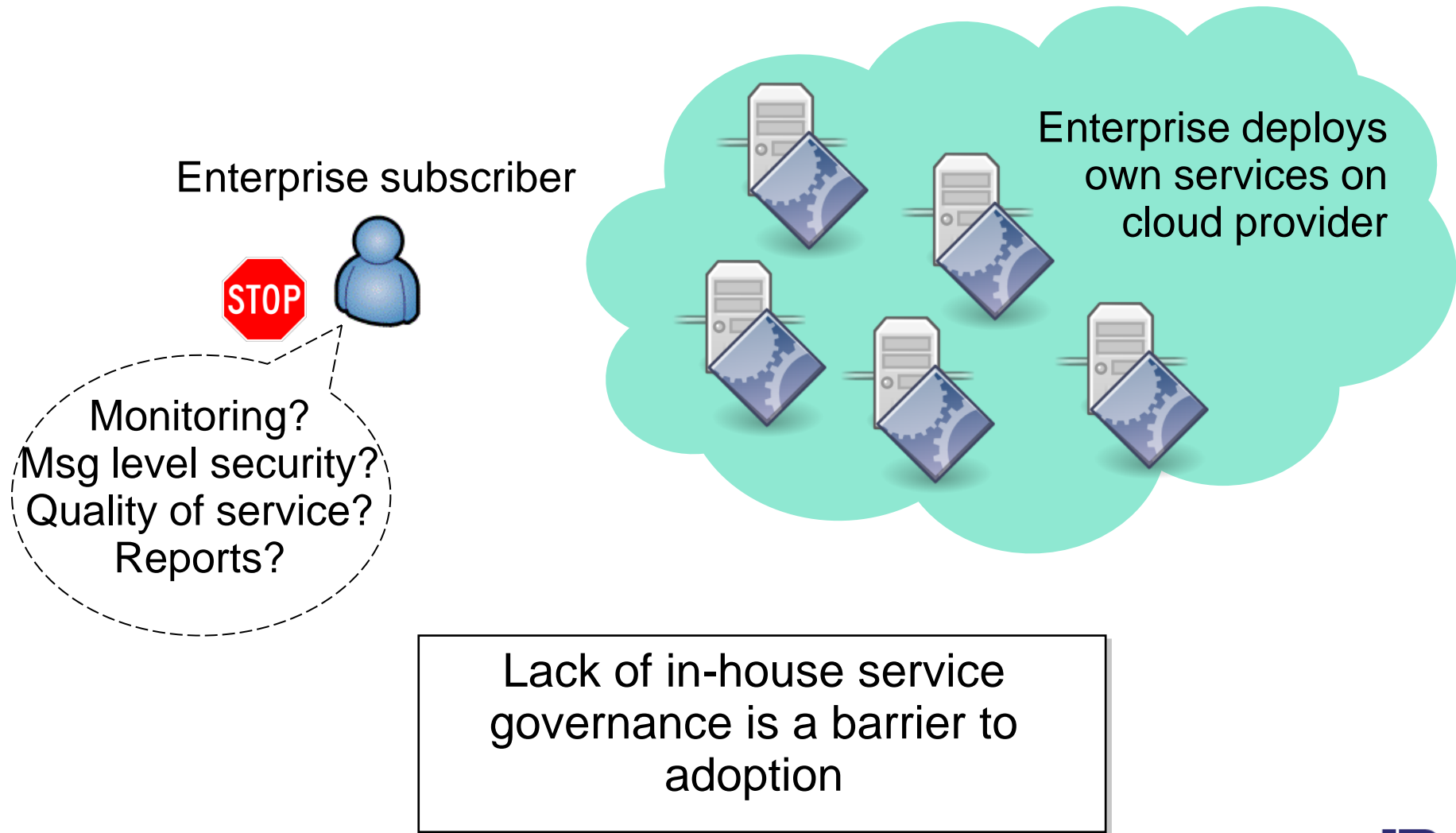
Name		Ver.	Type
[-] /			folder
[-] ● Standby for Retail Operations			folder
🔍 accounting [/acc]	🔍	10	published sen
🔍 sales	🔍	8	published sen
🔍 Policy Fragment 1	🔍	9	policy fragmer

Item Details:



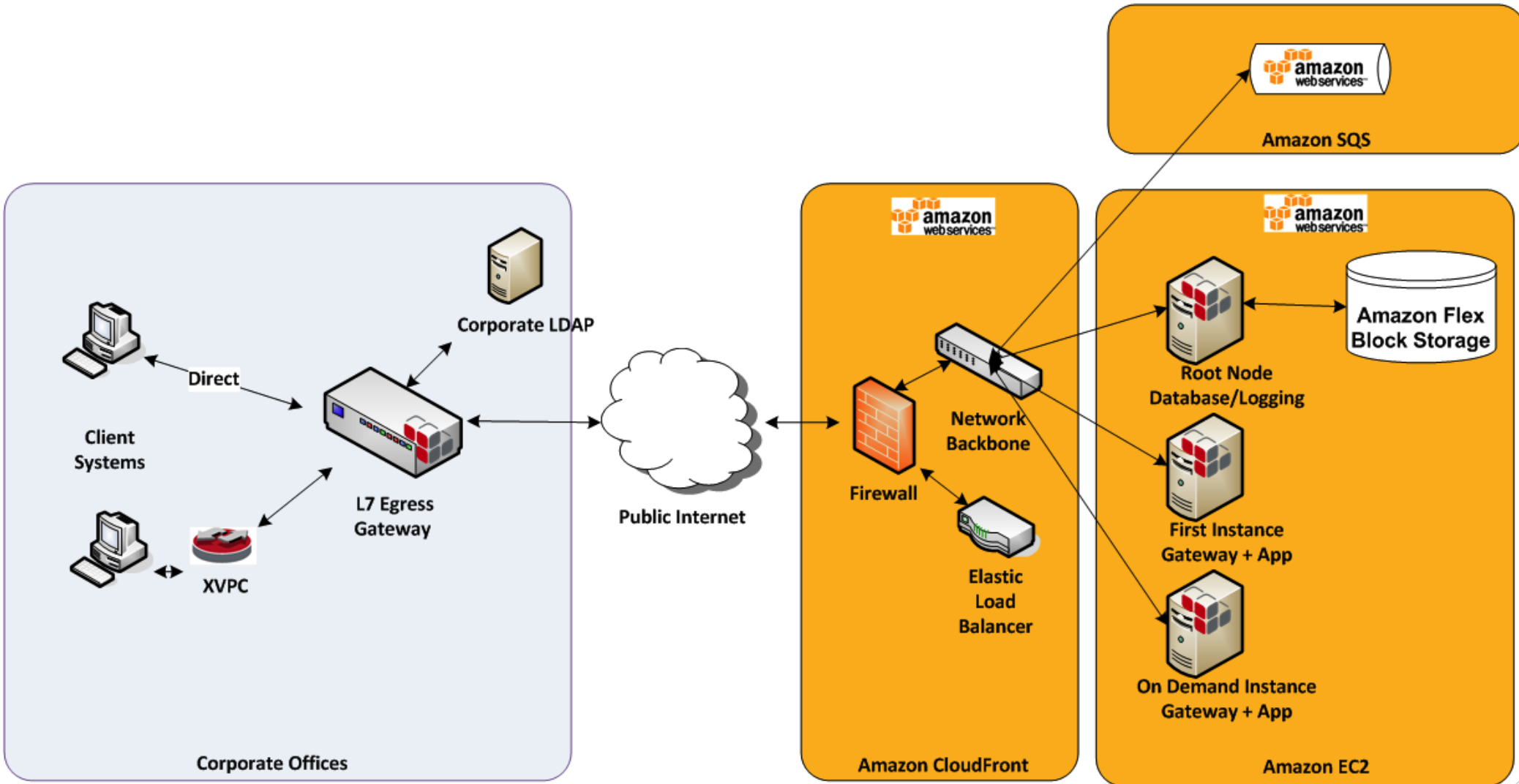


Enterprise services in the cloud





SecureSpan on public/enterprise cloud





Customer case: air traffic scheduling service provider

Runway information fed from airports

Hosted service
Data agglomeration

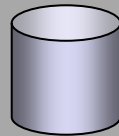
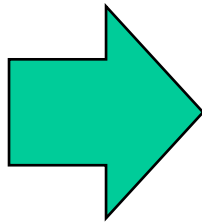
Repurposed data sent to airlines and outsourced systems

LHR

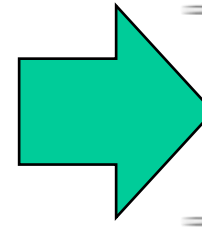
AMS

FRA

YYZ



Fixed file length proprietary format



EDS flight planner



Lufthansa systems

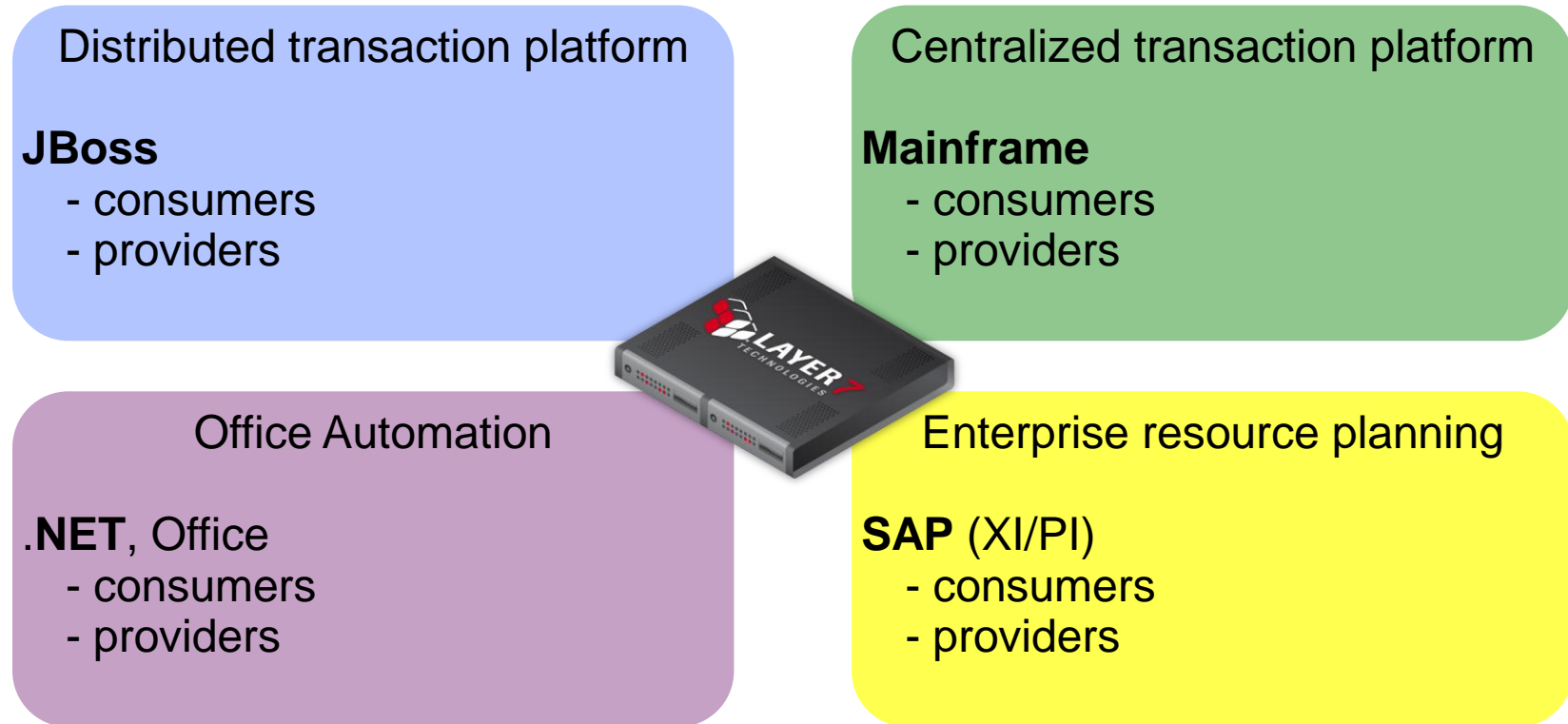


Swiss airline

- Edge security, threat protection
- Trust management
- Transformation
- Service virtualization



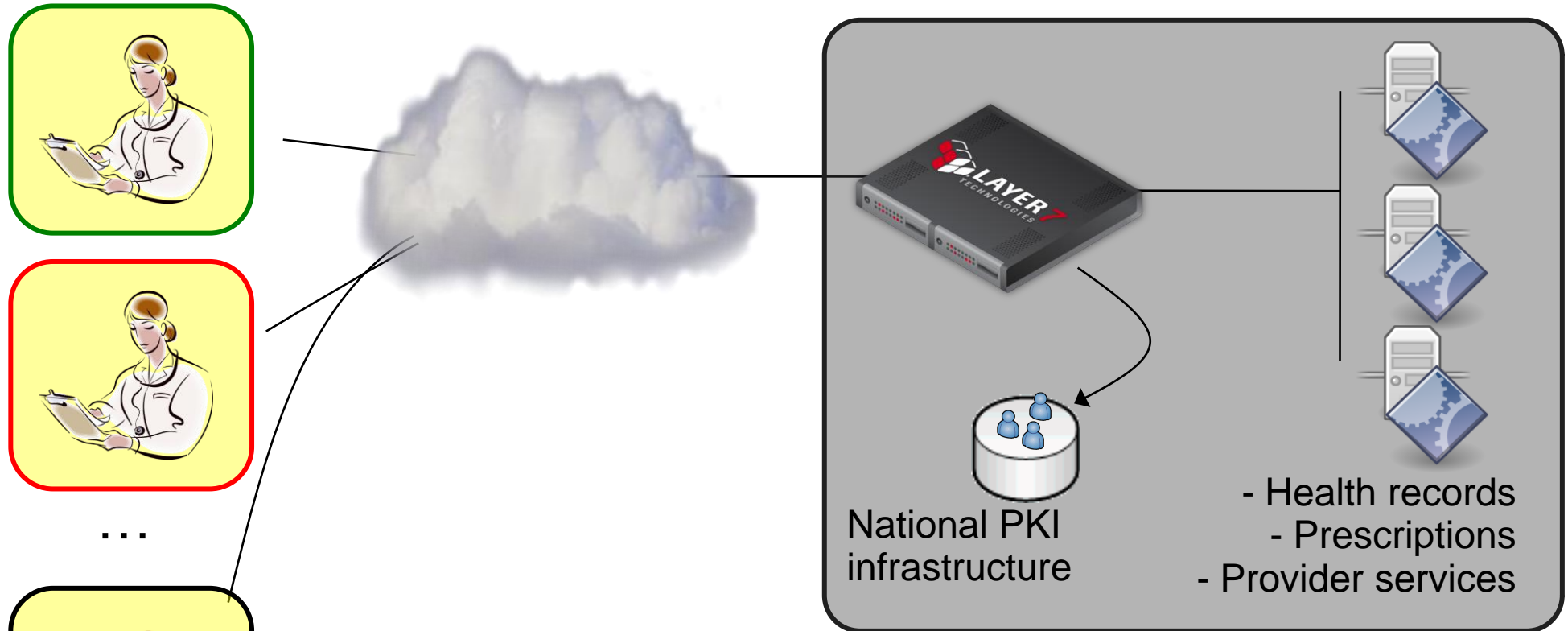
Customer case: insurance cross platform integration



- Central access point to all services
- Transport mediation (e.g. http to mq)
- WS mediation (e.g. addressing, security)
- Identity mapping



Customer case: healthcare electronic exchange

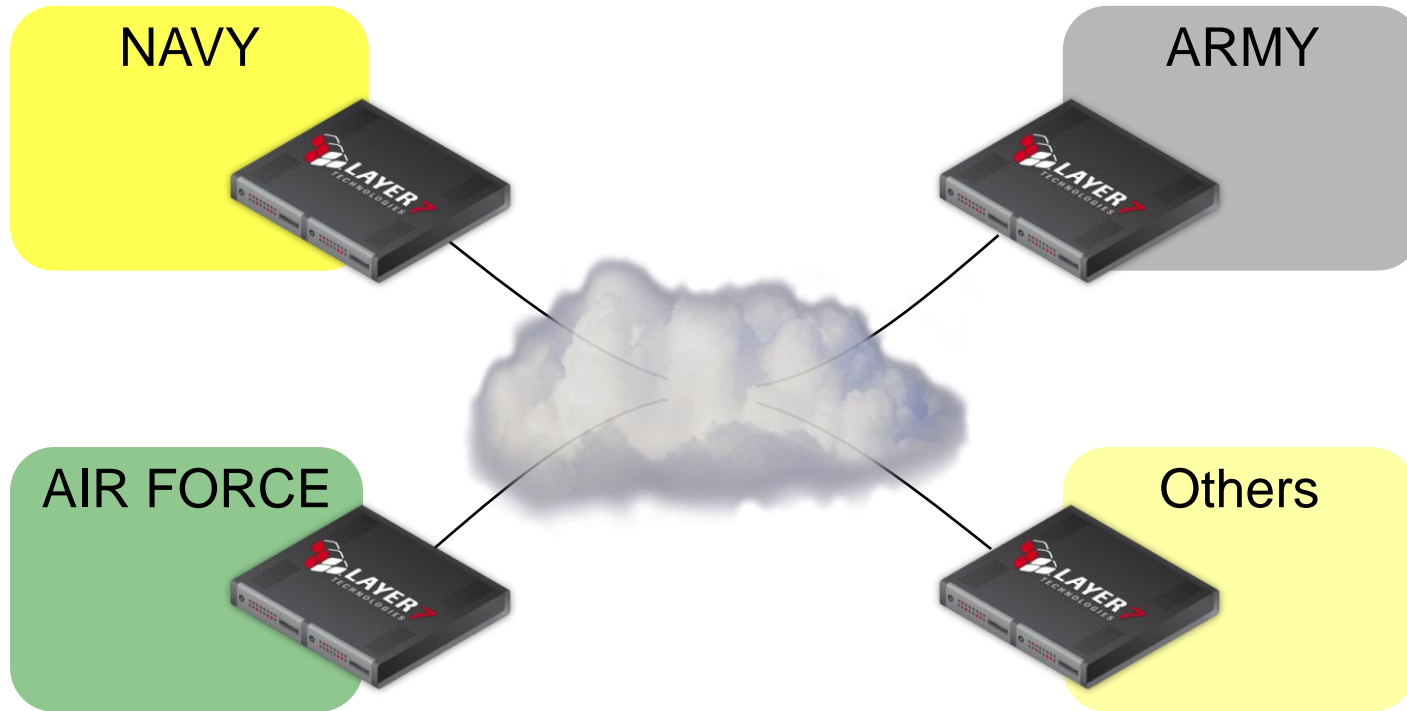


Hospital and emergency applications

- Service virtualization for simulation projects
- Complex security validation
 - SHA256 based signatures
 - Custom token extensions
- Full PKI integration, revocation checking
- Sophisticated validation (XSD, Schematron)



Customer case: military CDS



- Guard pattern
- Federation/Trust Management/SAML
- Data screening
- FIPS 140-2 level 3 compliancy
- Common criteria EAL4+

QUESTIONS?

**TELL US WHAT YOU THINK:
REDHAT.COM/JBOSSWORLD-SURVEY**

For more information about SecureSpan:

<http://www.layer7tech.com>