

JUNIPER

“차세대 보안의 의미와 네트워크 통합 방안”

JACOB

JUNE 2014

# COMMITTED TO INNOVATION AND INVESTMENT

Security is core to our business at Juniper

**\$1B**  
global  
revenue

## Market Leader

**#1** High-End  
Firewalls

**#1** Remote Access  
SSL VPN

**#3** Network  
Security

## Global Powerhouse

전세계 47 여개 국에서, 1000 리셀러 파트너 와 주니퍼 솔루션을 전세계에 서비스하고 있습니다.

## Dedicated Innovator

Juniper R&D - \$1.027B, 23% of revenues – 주니퍼 매출의 약 23%를 R&D 에 투입하여 최고의 서비스를 제공하고 있습니다. – 2011 Annual Report

# 내부 해킹 사례

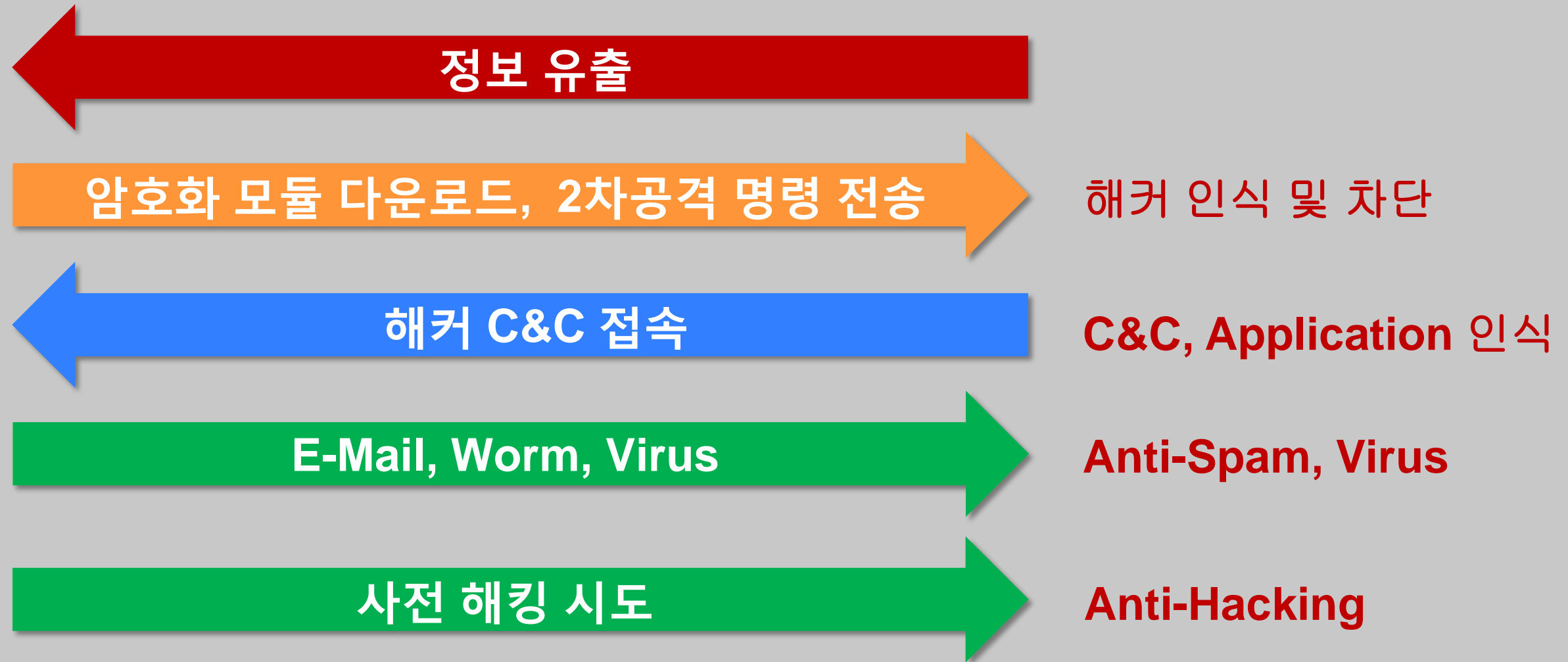


내부 계정 해킹  
자사 내부 임직원 비정상 행위 발견



RansomWare  
Information is Encrypted

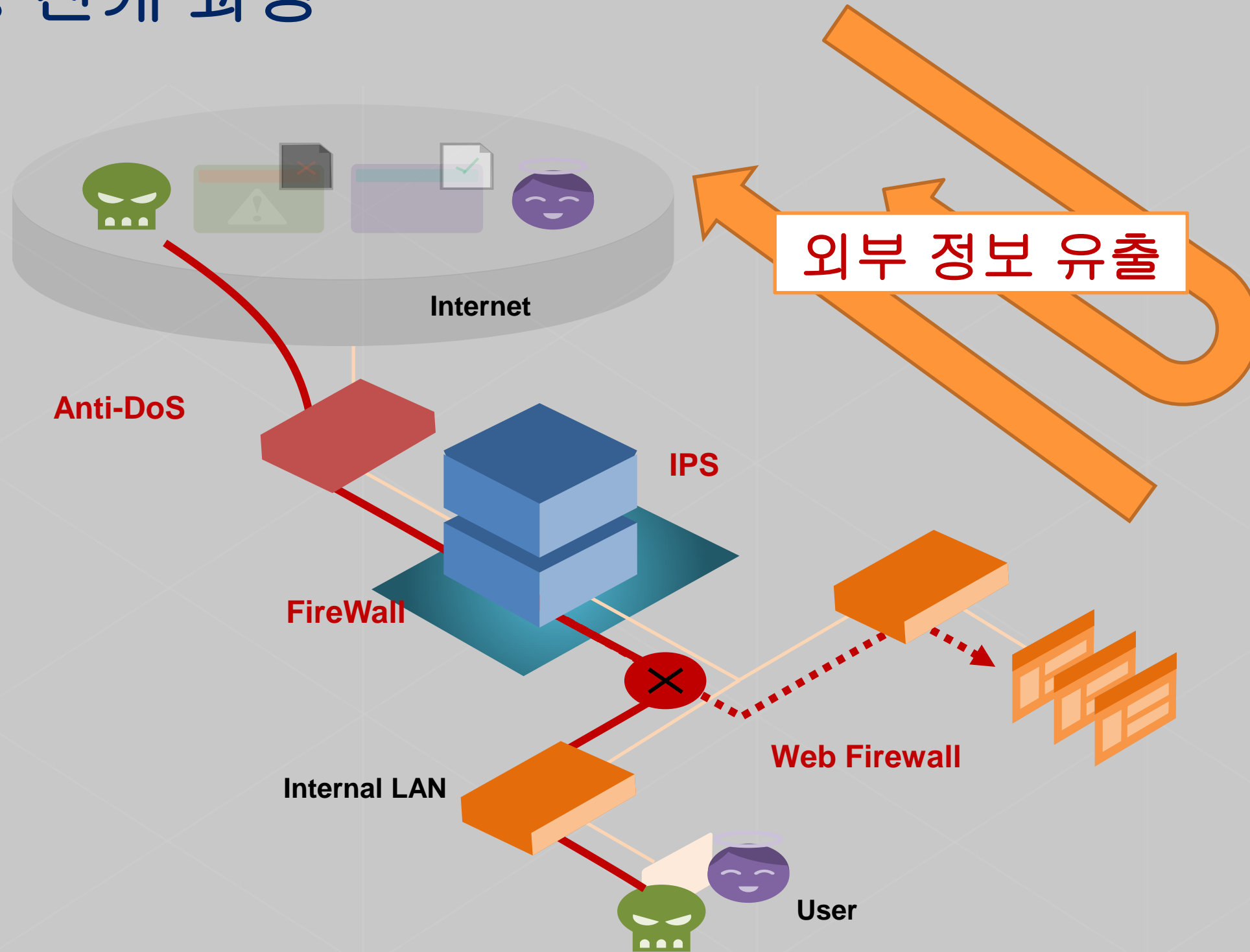
# 내부 해킹 전개 과정



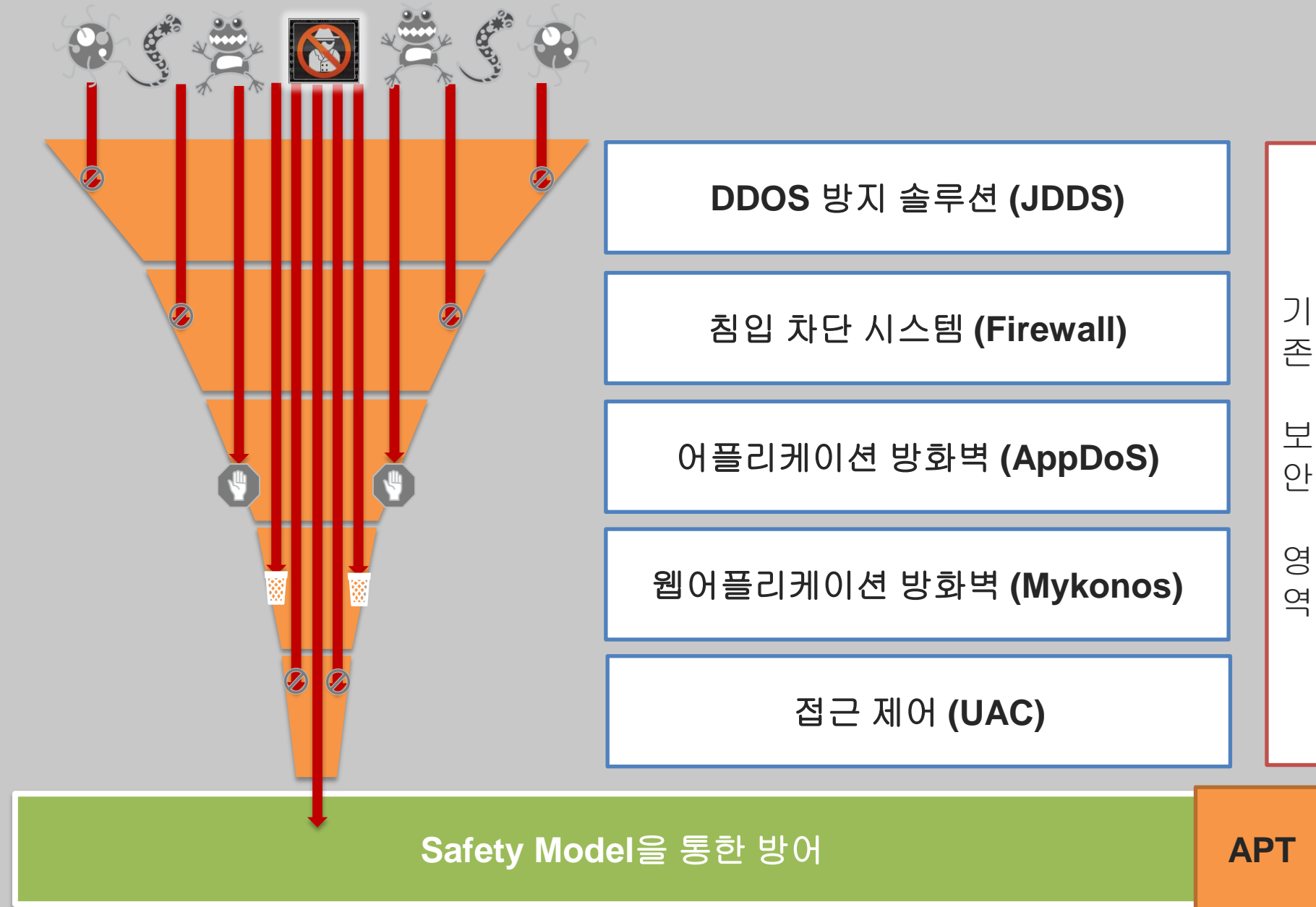
외부

내부

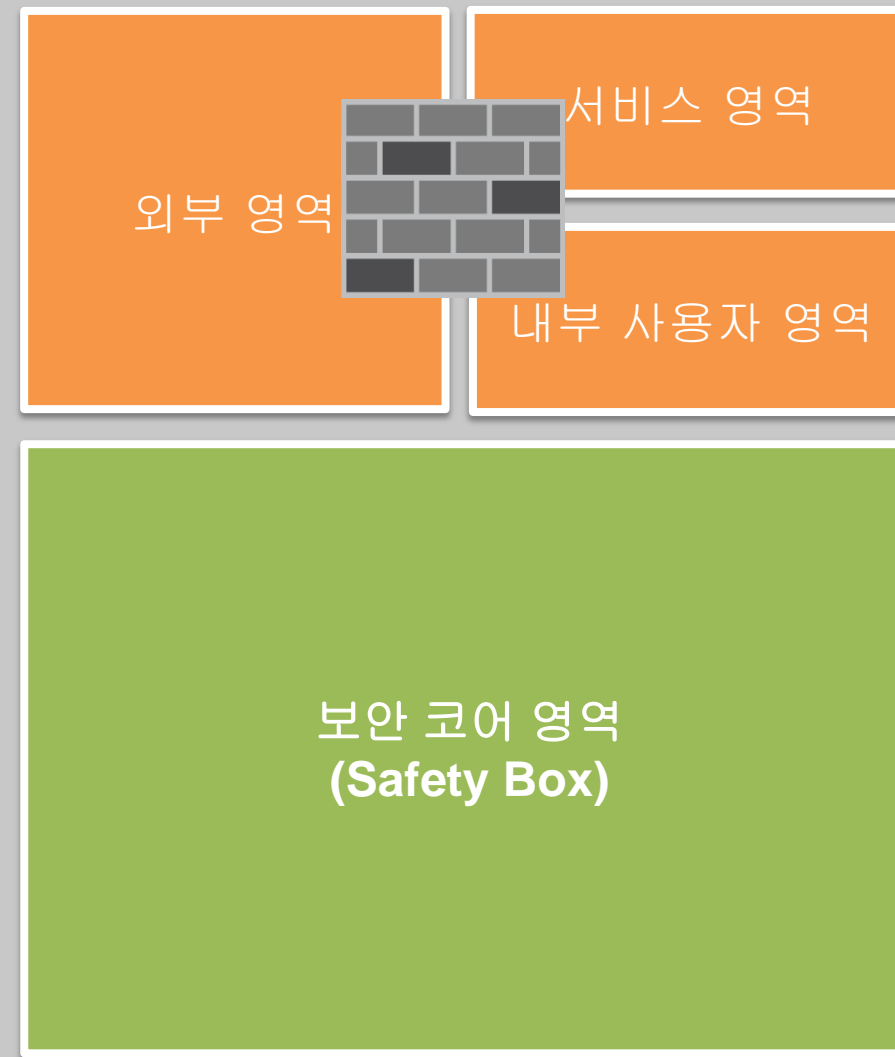
# 내부 해킹 전개 과정



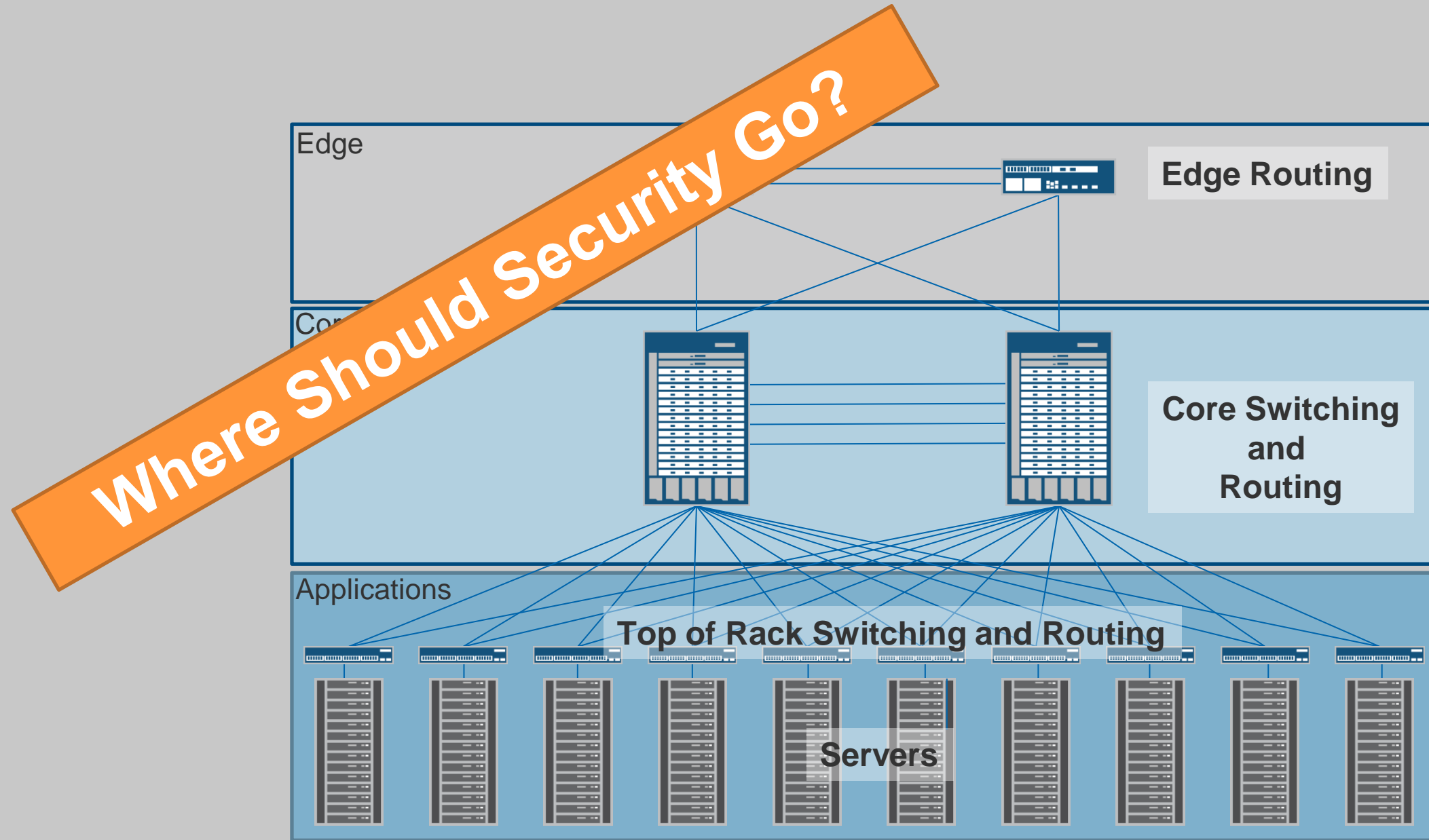
# 내부 시스템 보호 방안



# 효과적인 대응 방안

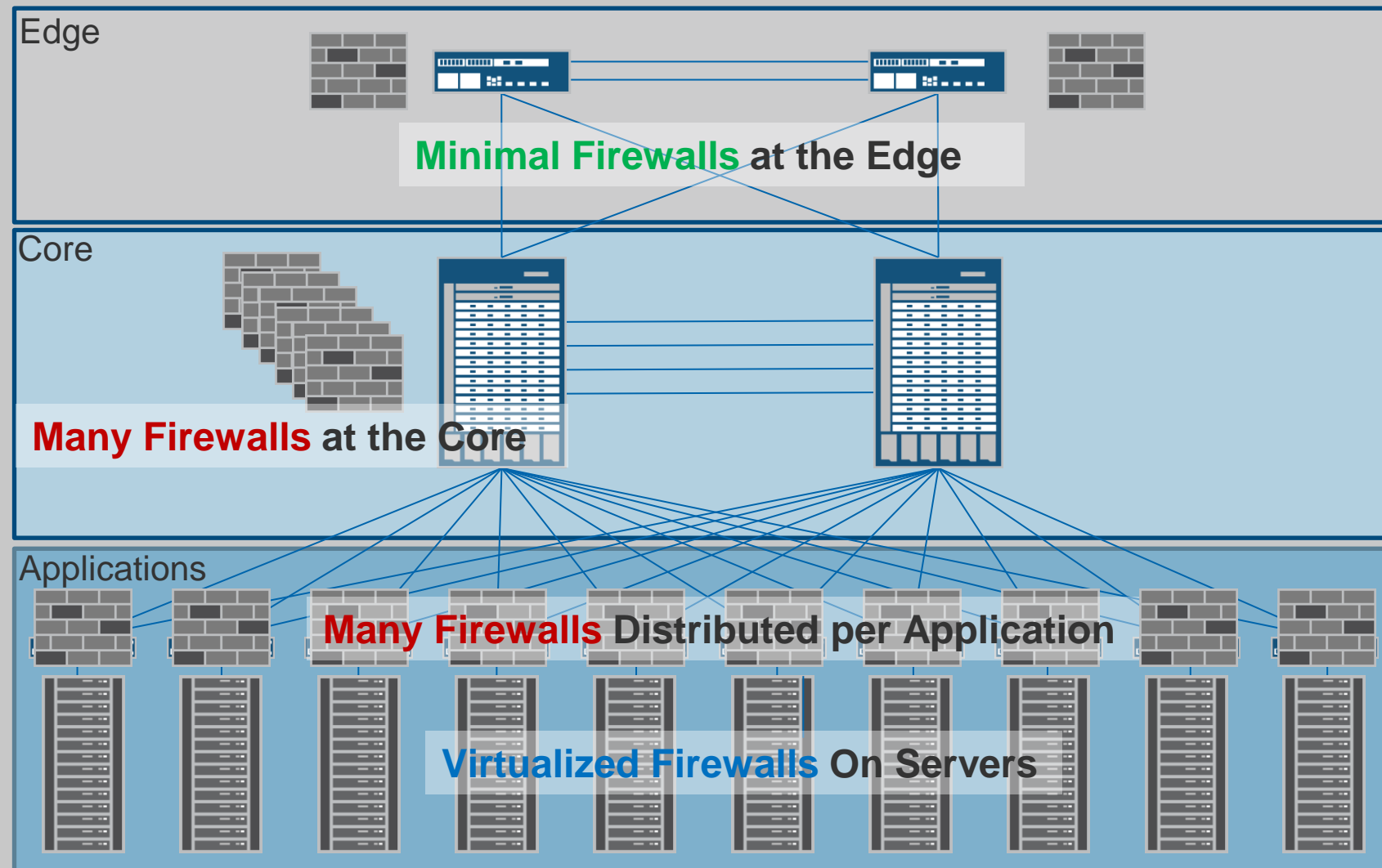


# 전통적인 네트워크 구성

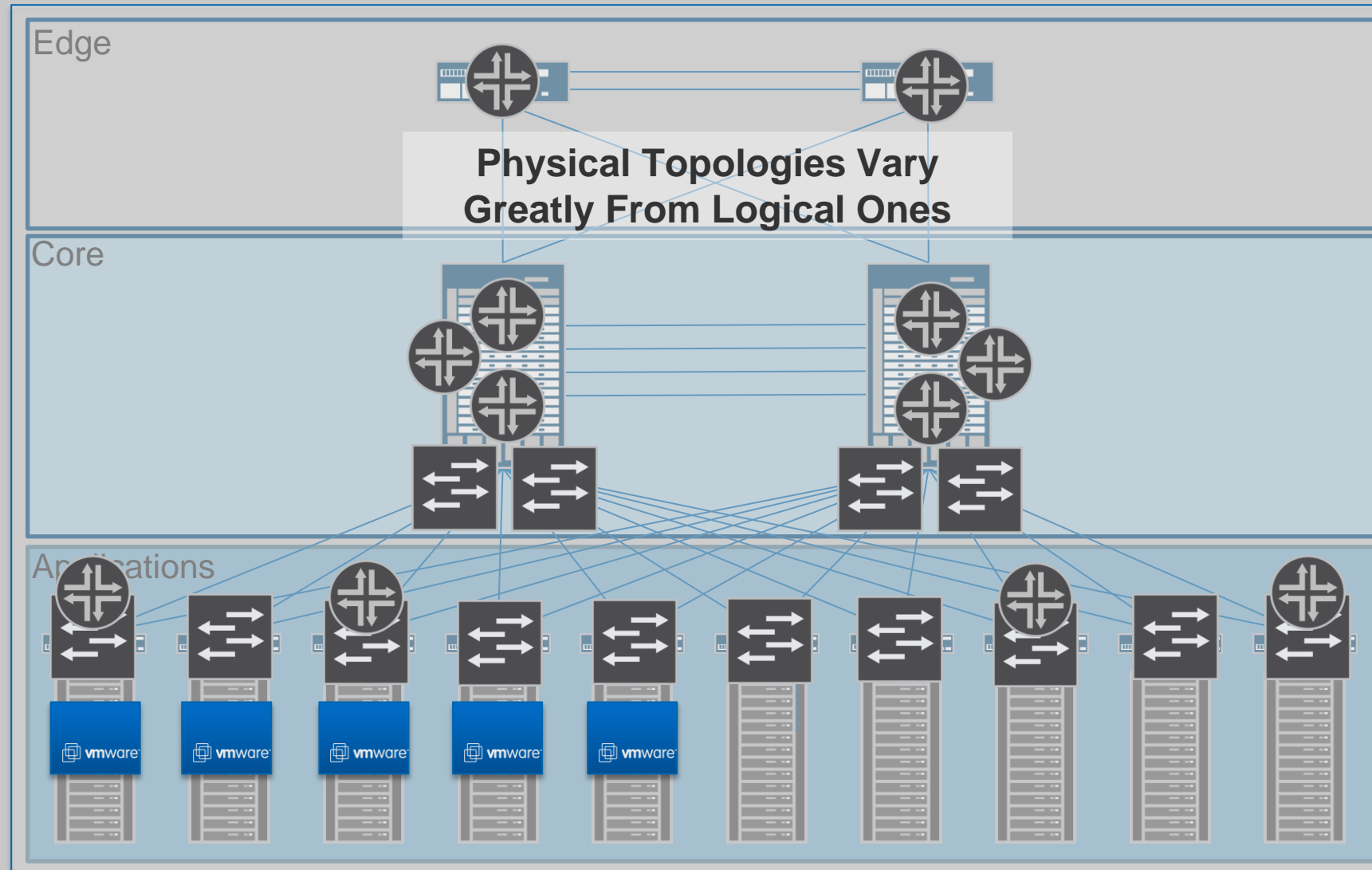




# 방화벽의 위치 선정



# 다양한 네트워크, 서버 구성



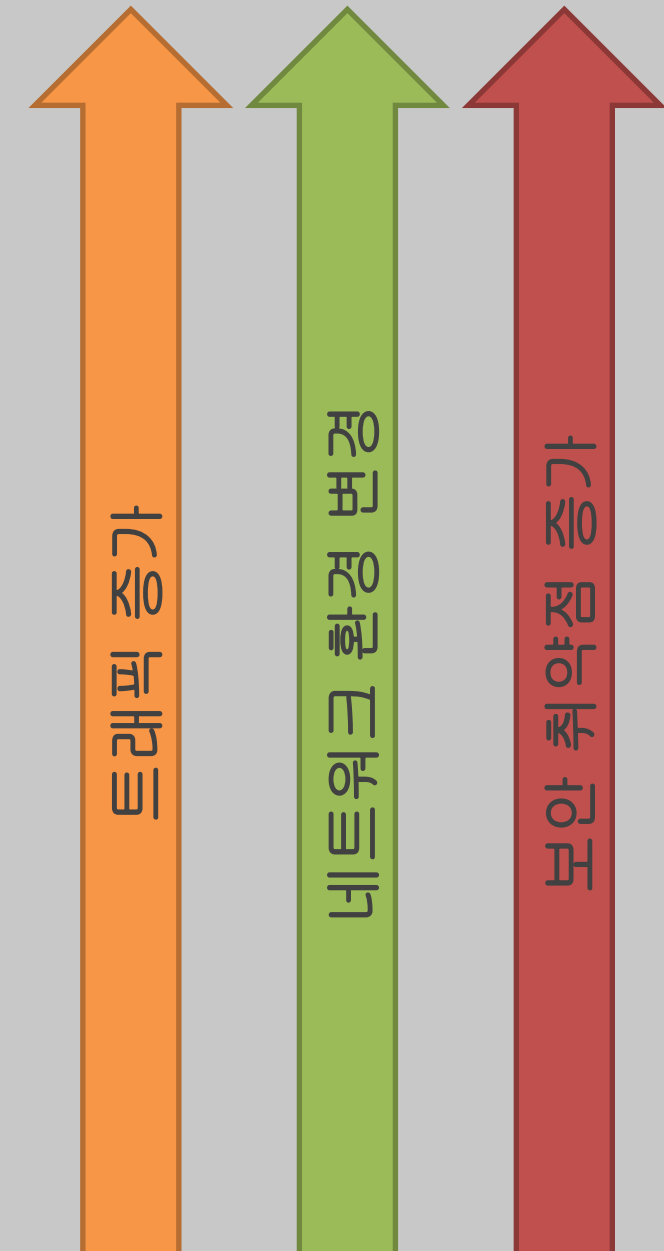
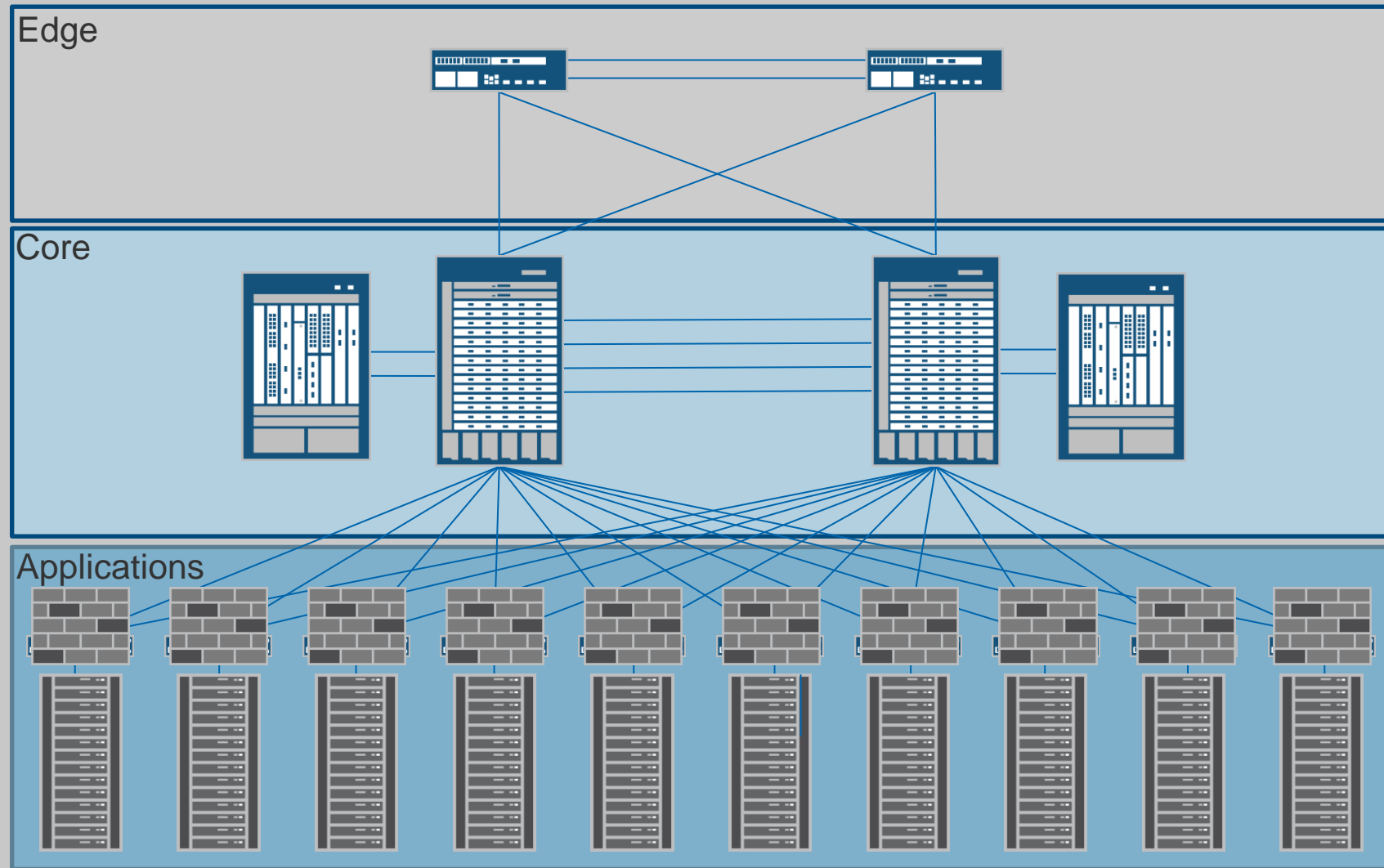
안정성

성능

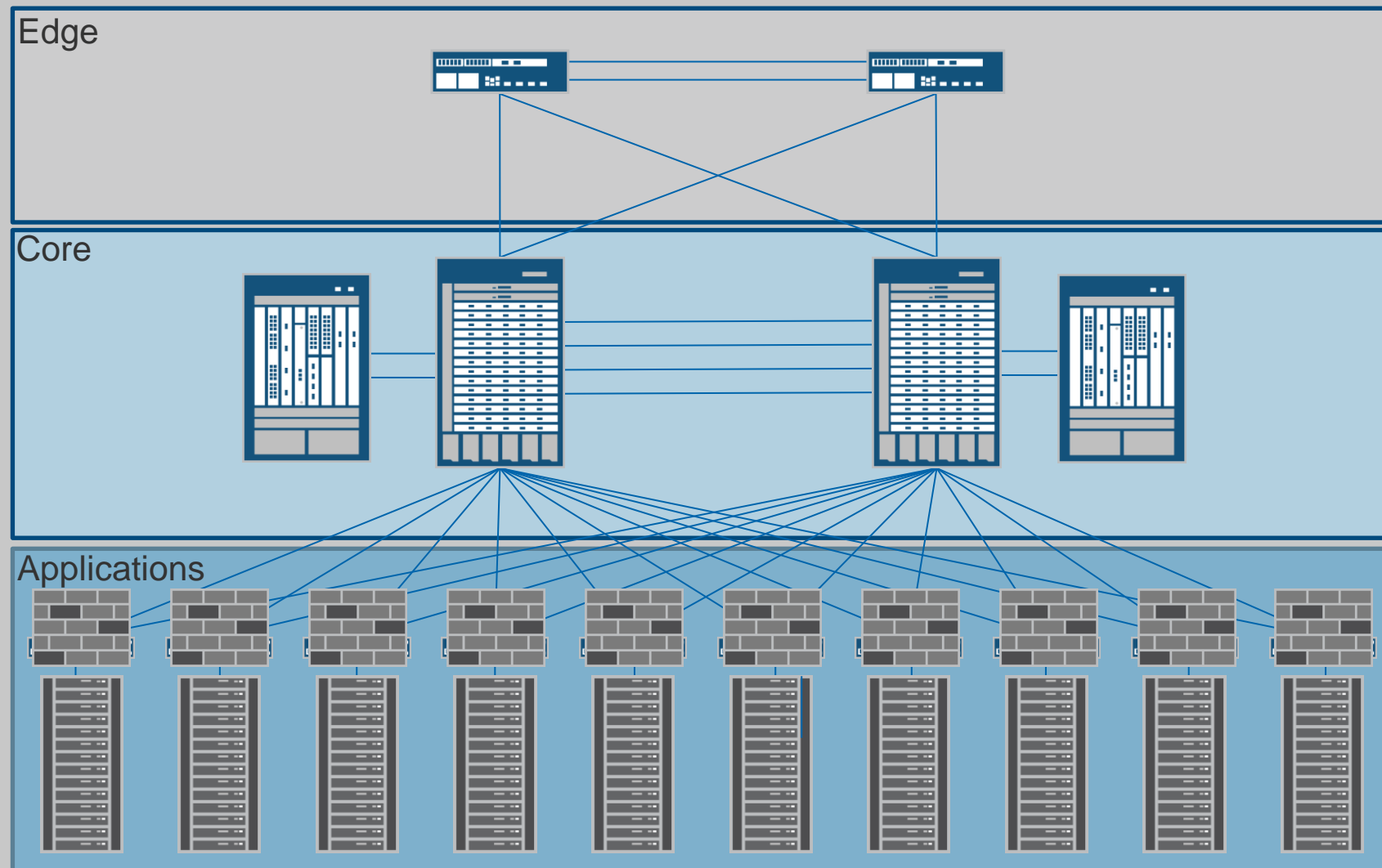
물리  
서버

가상  
서버

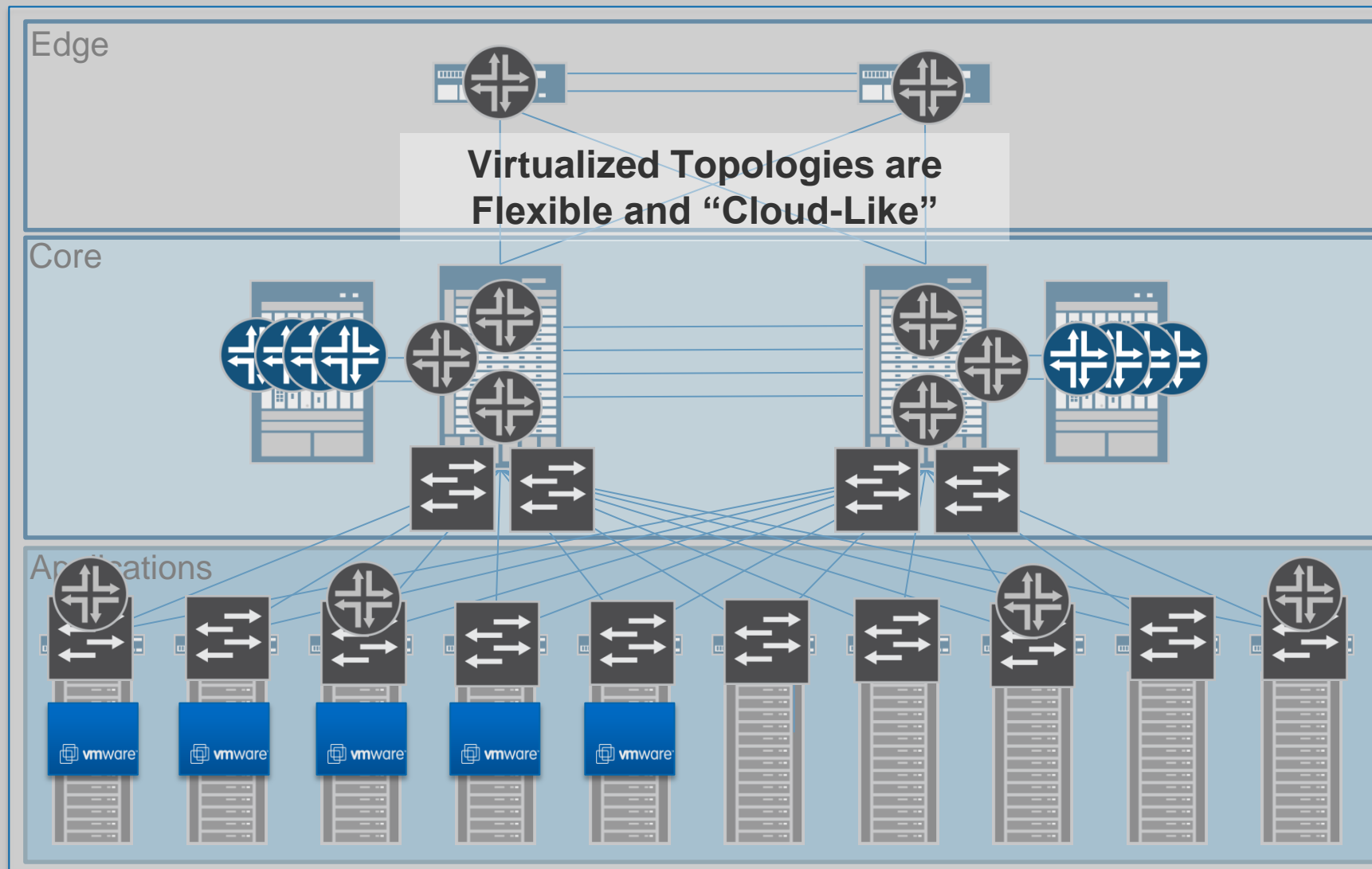
# RISK?



# 보안 통합 방안



# 진행형 네트워크 구성



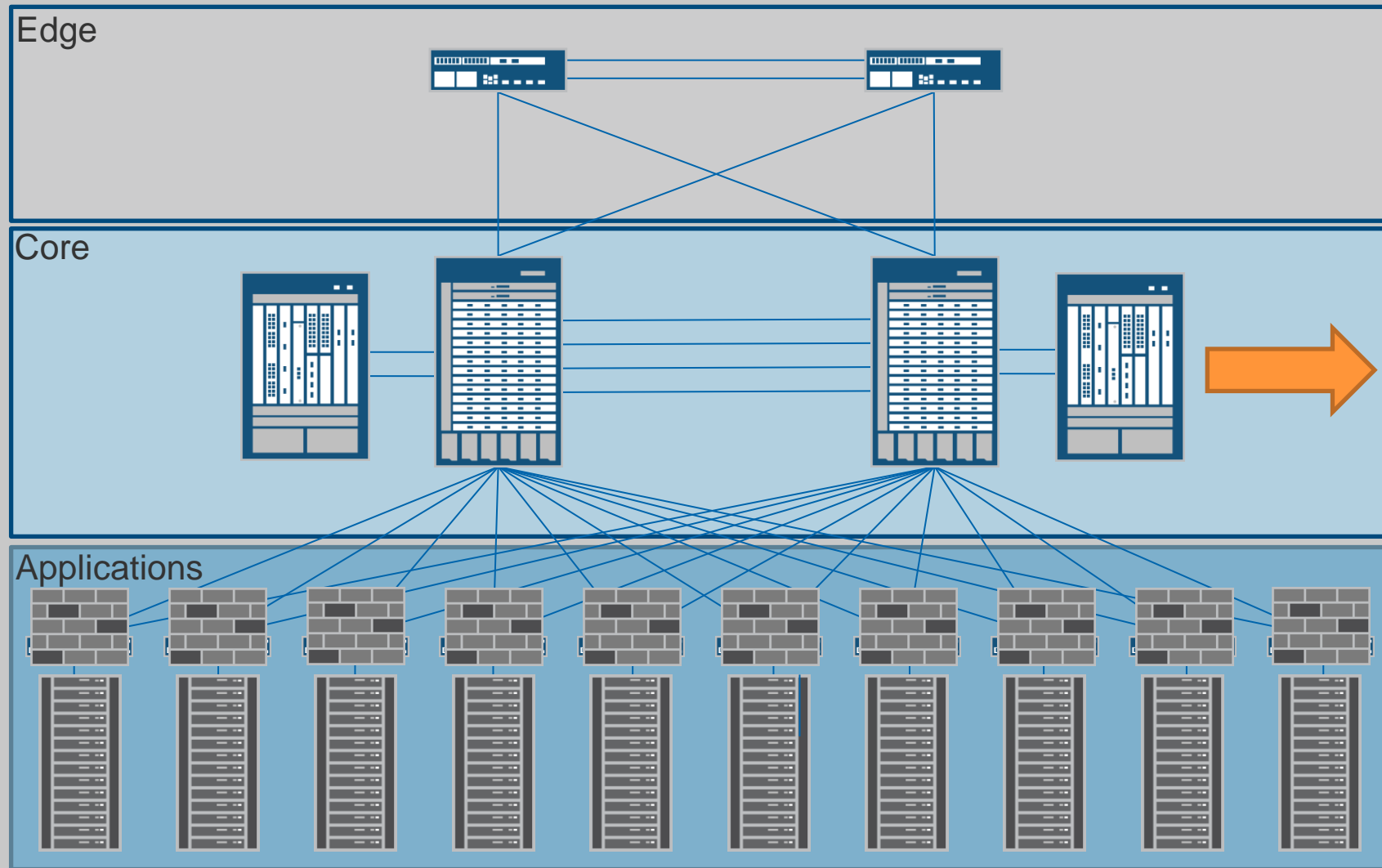
**10 vs 2**

**Simple**

**Flexible**

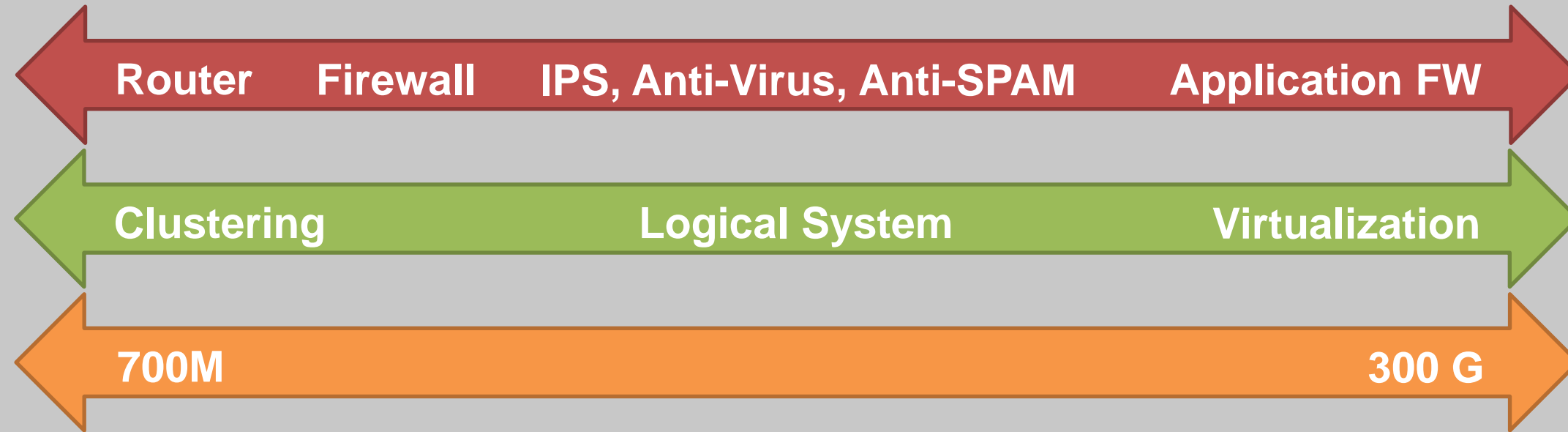
**Less Risk**

# 다양한 보안 기능



- |                               |                               |
|-------------------------------|-------------------------------|
| <b>Firewall</b>               | <b>Application Monitoring</b> |
| <b>Application Firewall</b>   | <b>Application QoS</b>        |
| <b>IPS</b>                    | <b>Application Analysis</b>   |
| <b>Anti-Virus</b>             | <b>700M ~ 300G Throughput</b> |
| <b>Anti-SPAM</b>              | <b>Virtual Router</b>         |
| <b>Web Filtering</b>          | <b>Virtual System</b>         |
| <b>Junos WebApp Secure</b>    | <b>Virtualization</b>         |
| <b>Junos Spotlight Secure</b> | <b>HA (High Availability)</b> |

# 주니퍼 INTELLIGENT FIREWALL

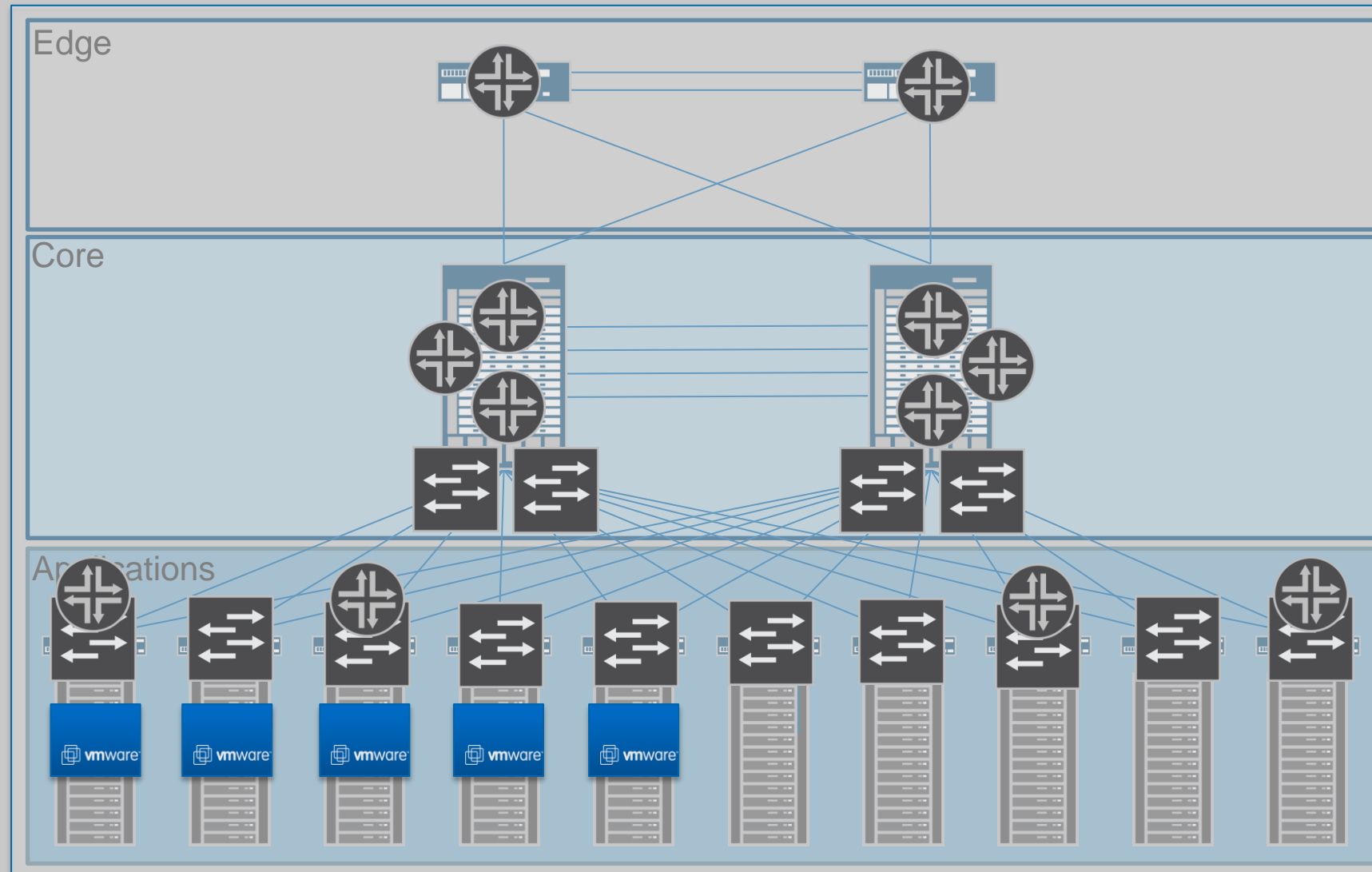


**SRX is All-In-One**



SRX Services Gateways

# 다양한 네트워크, 서버 구성

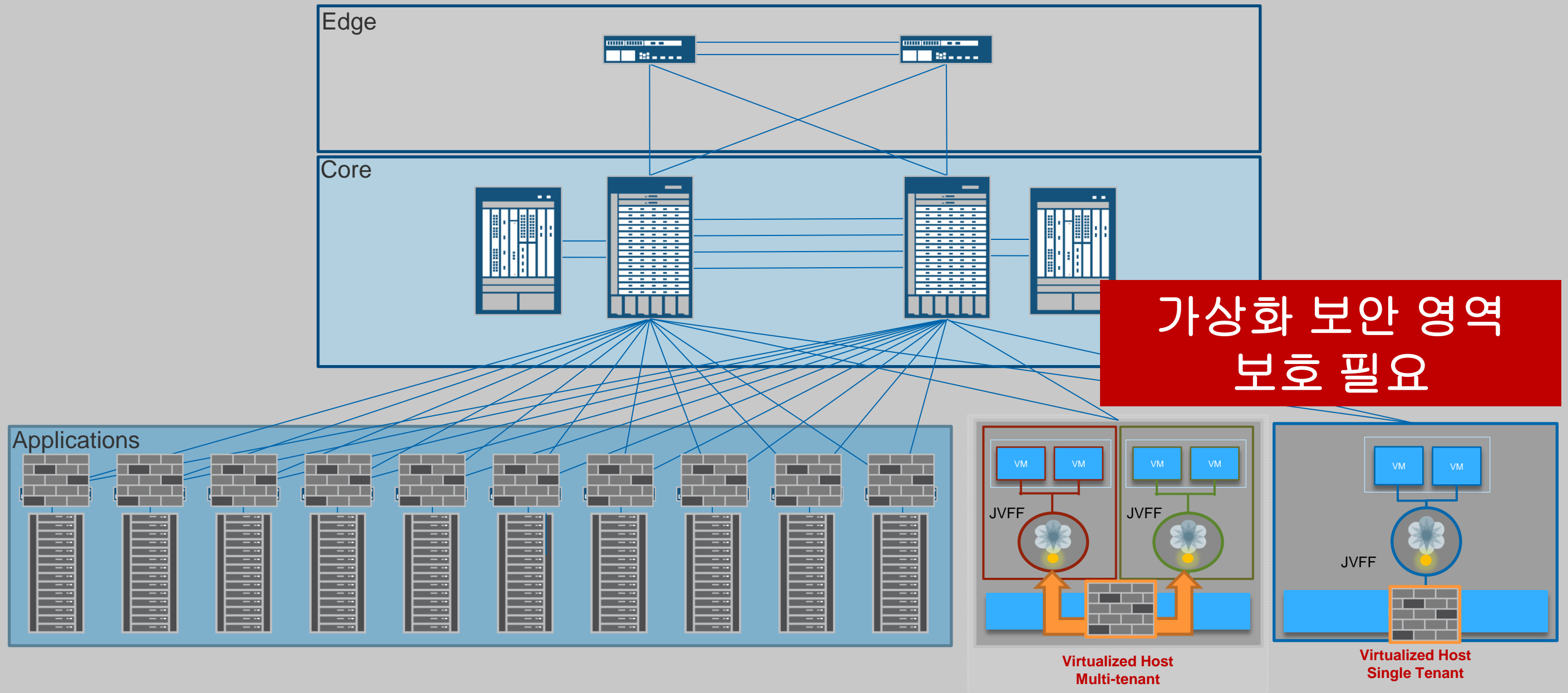


**VM 서버 구간**

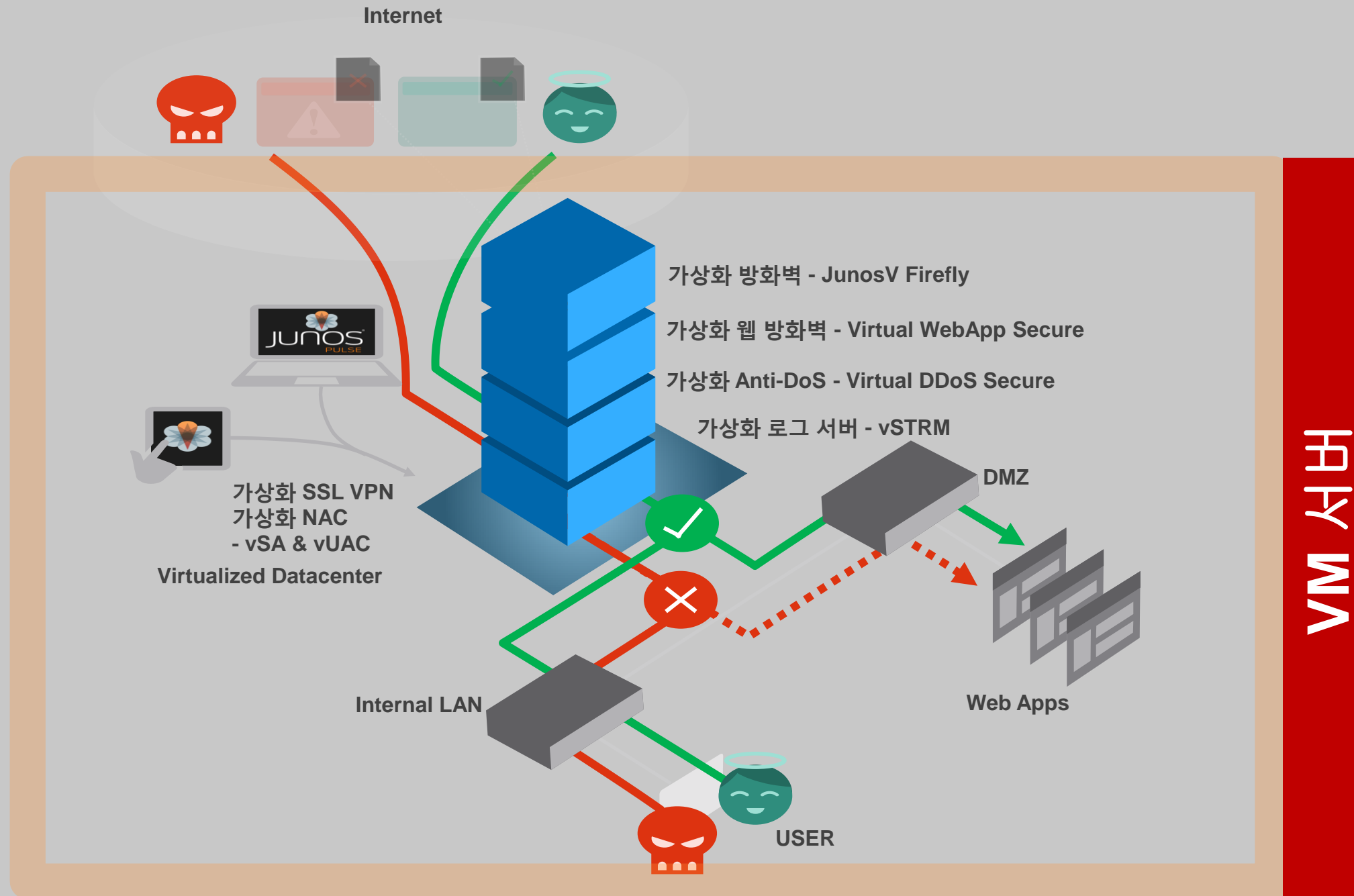
**물리적 서버 구간**



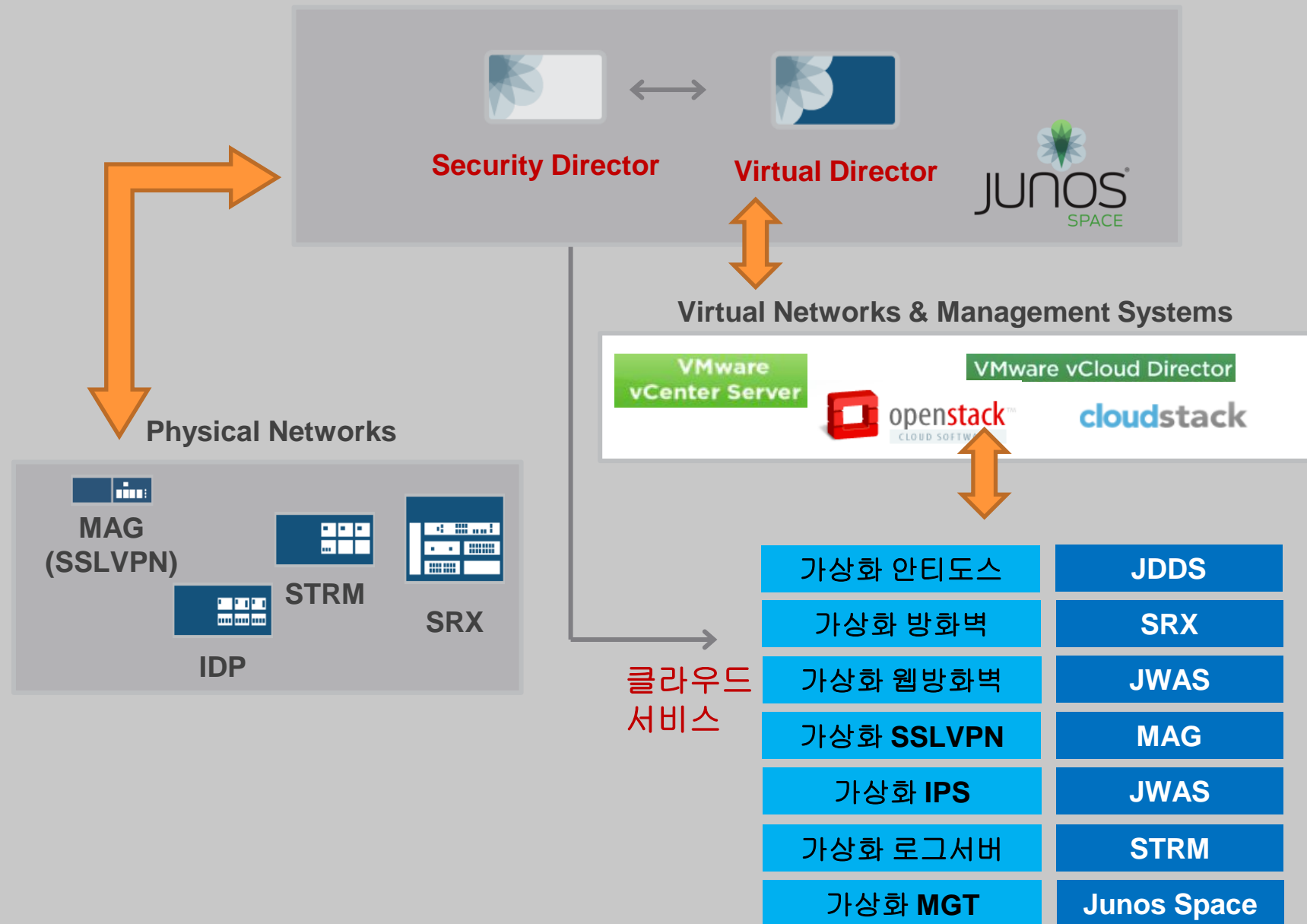
# 가상화를 통한 내부 네트워크 분리



# 가상화 네트워크 보안



# SDN을 통한 보안 구성



가상화 프로비저닝 제공



가상화 모니터링 제공



가상화 시스템 통합 제공

**LET'S TALK**

**NG Security?**

**We need BIG picture.**

# NEXT GENERATION SECURITY

## What is Next Generation Security?

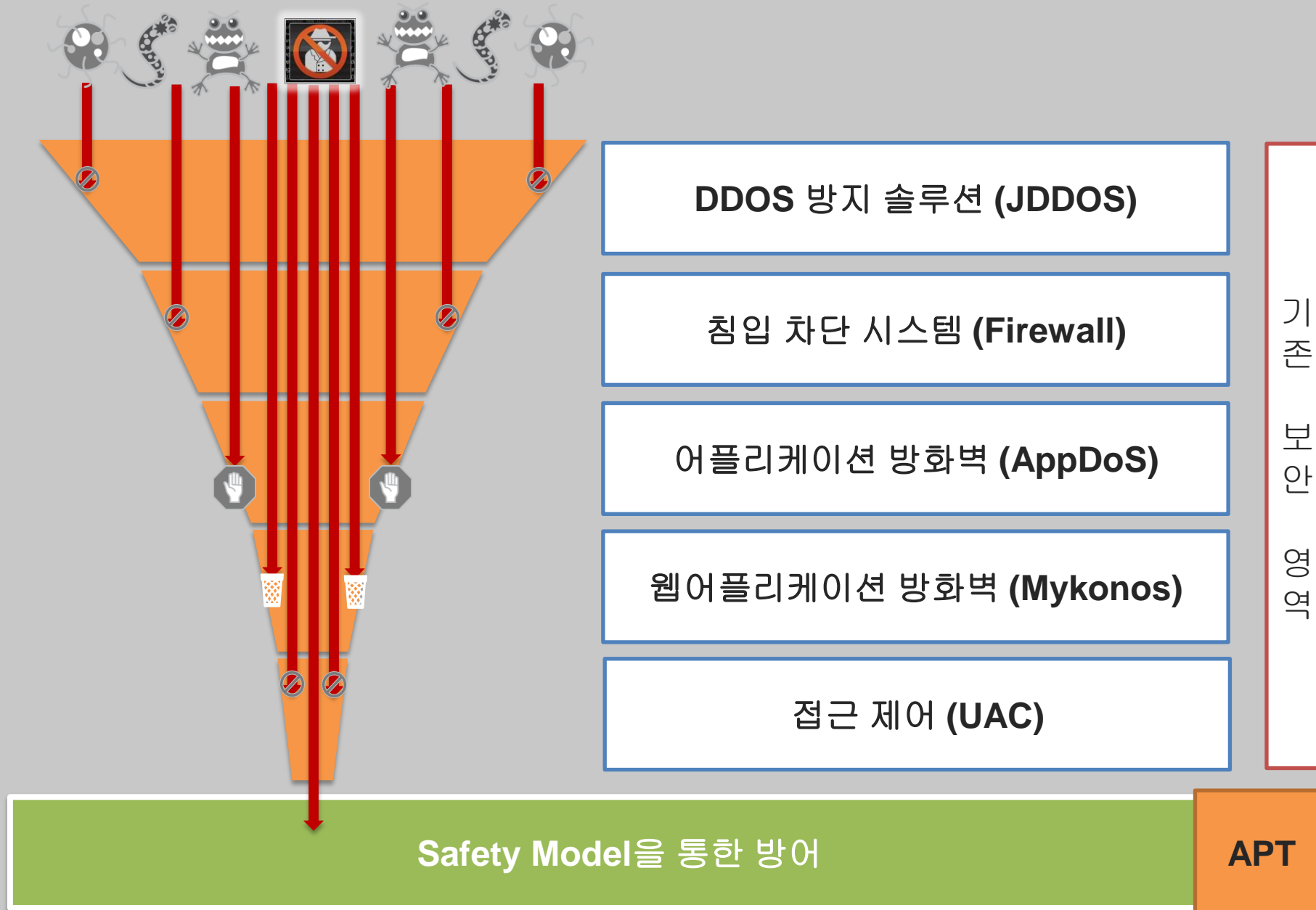
어플리케이션 Awareness  
사용자 제어

내부 >  
외부

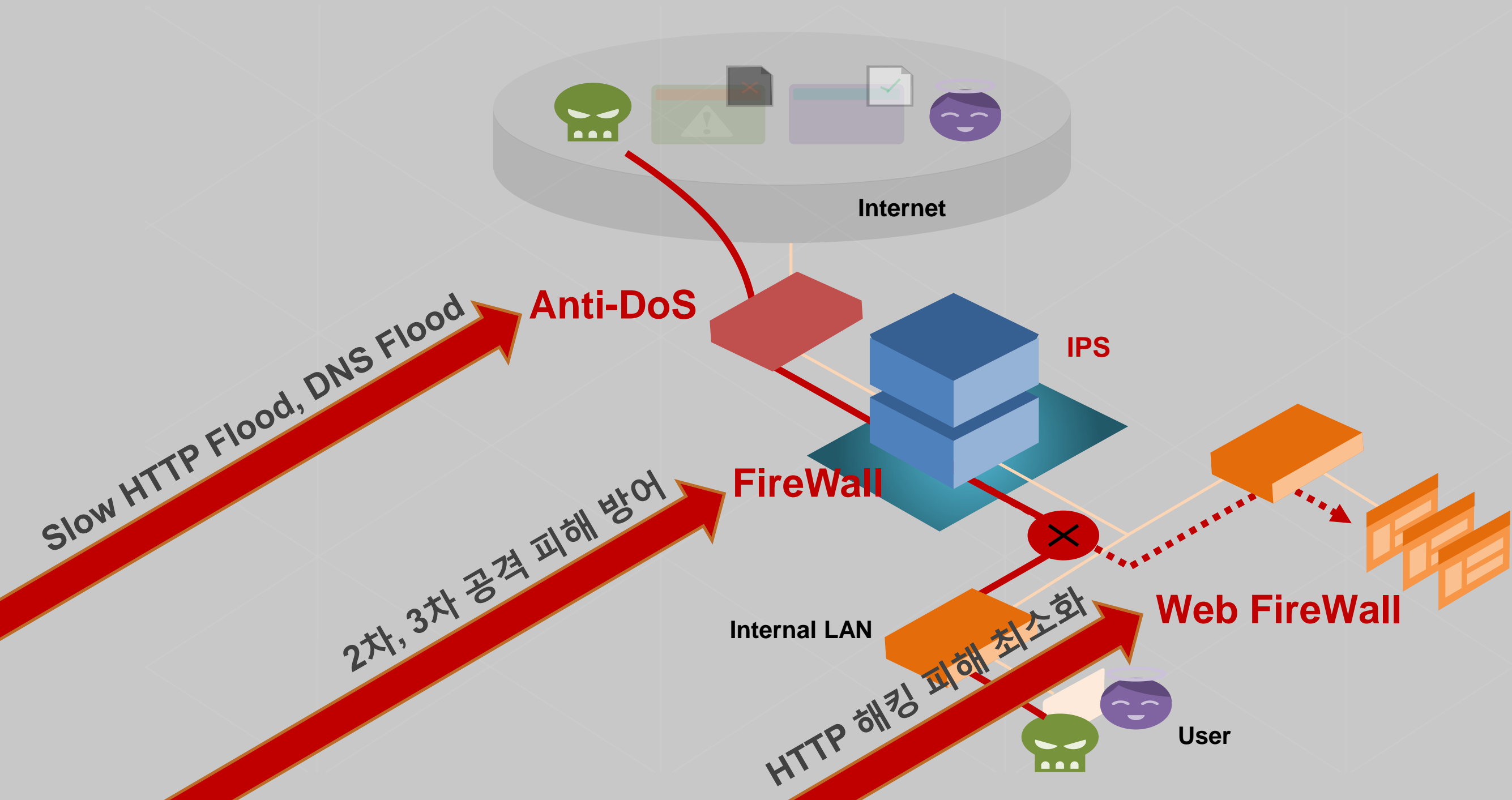
해킹 시도 사전 방어  
보안 시스템 통합

내부 <> 외부

# 효과적인 대응 방안



# OUR NETWORK TOPOLOGY



# 정보 유출 최소화 대응 방안

다양한 해킹 식별

Think Service

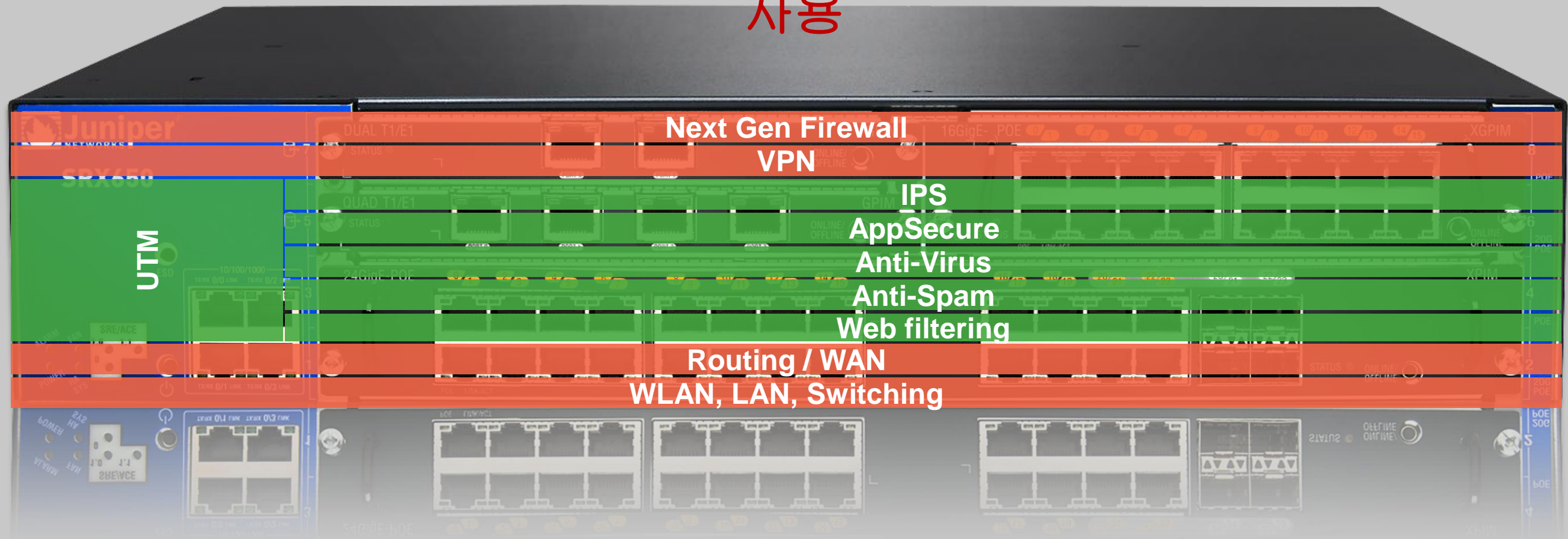
해킹 재발 방지

시스템 통합



# 다양한 보안 정책 지원

여러 기능을 통합 / 종합적으로  
사용



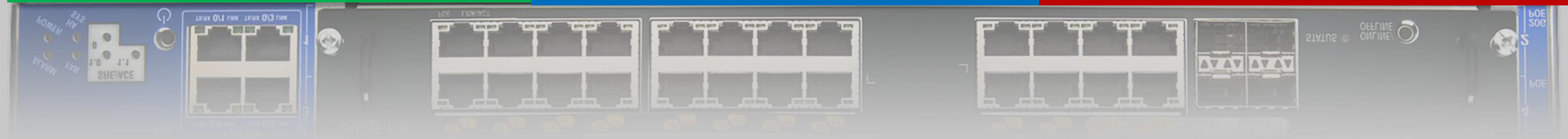
# 다양한 보안 정책 지원

최대 Application App Signature 지원

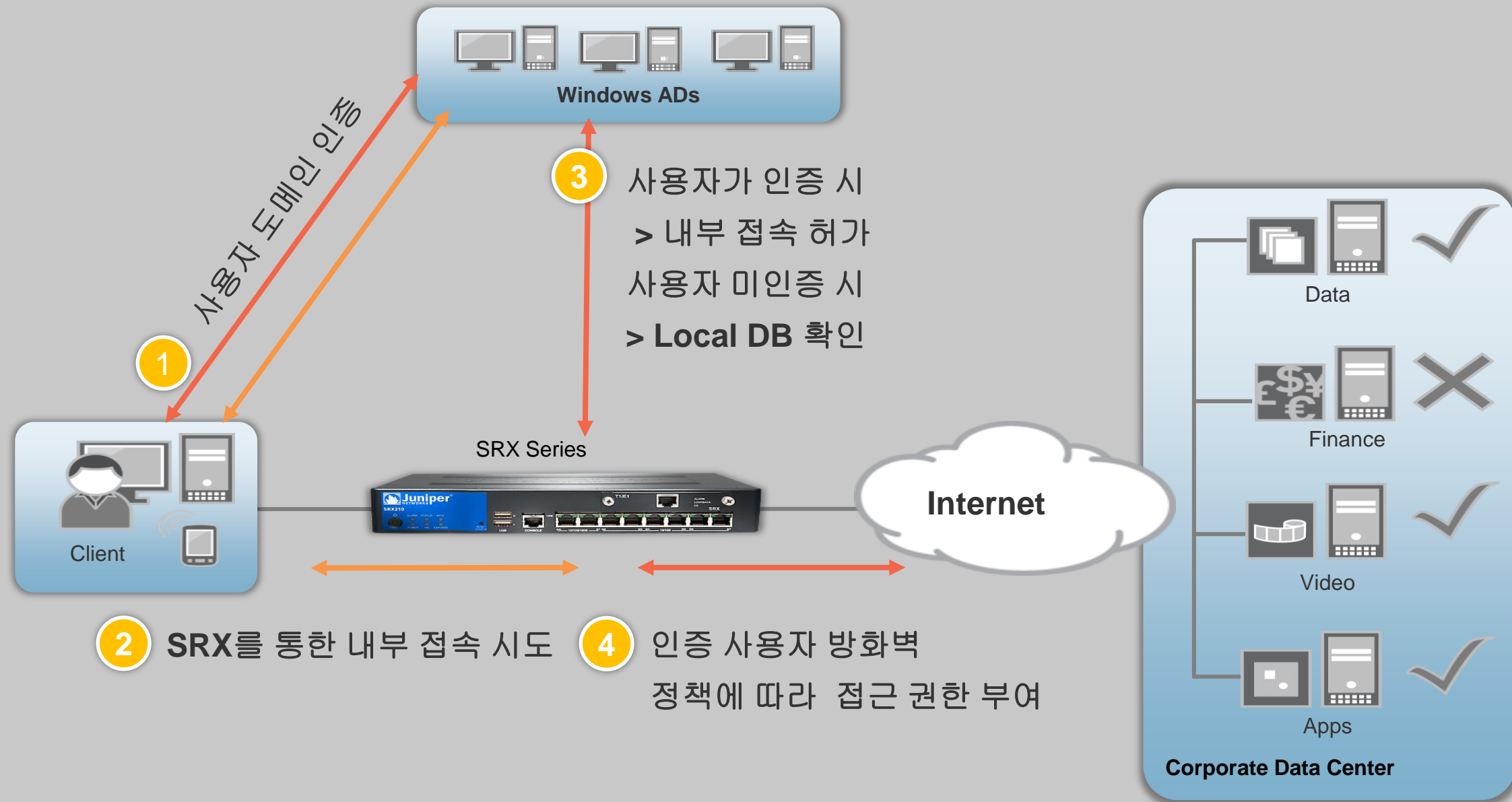
어플리케이션  
시그니처  
+ 3000

IPS 시그니처  
+8000

Anti-Virus  
Anti- Spam

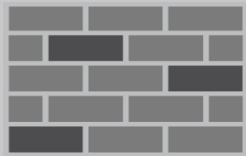


# 내부 / 외부 사용자 관리 방안




# 내부 / 외부 사용자 관리 방안 - ROLE 권한 식별


어플리케이션 트래픽에 대한 보안 정책 설정 및 모니터링



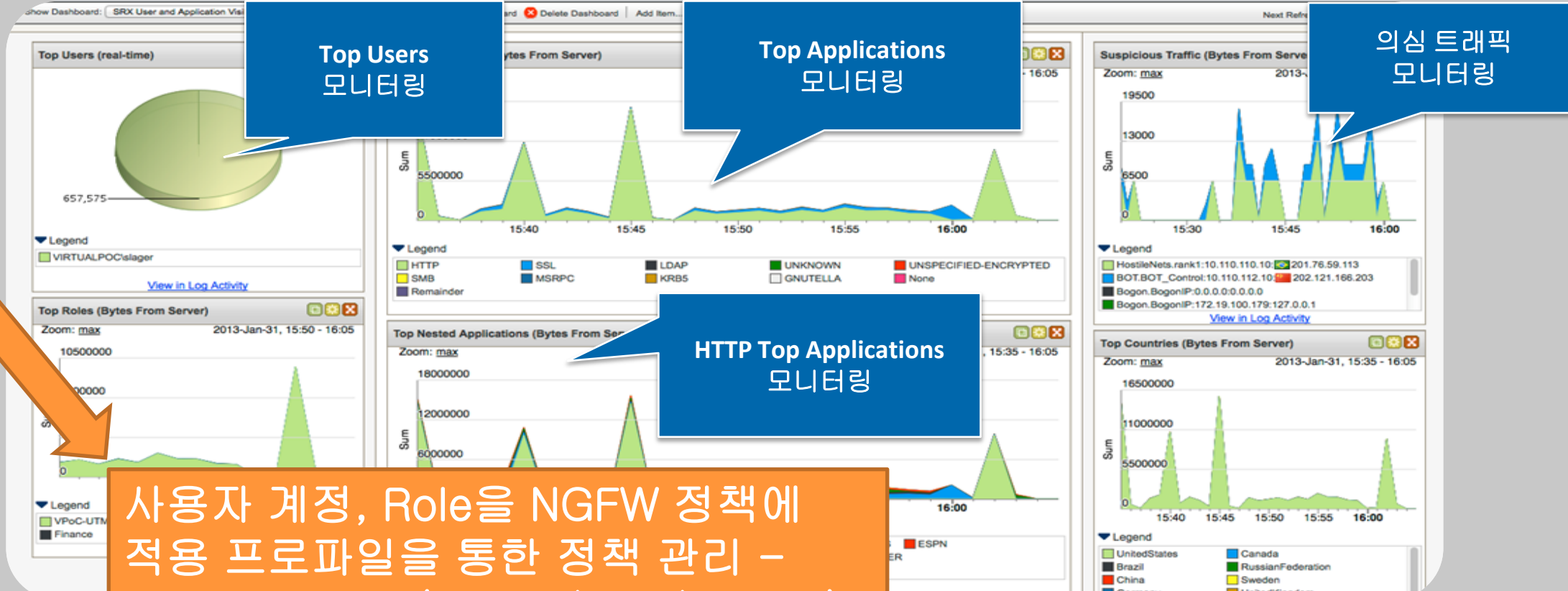
Traditional Firewall Policy



User and Group Awareness



AppTrack  
Application Awareness



Top Users  
모니터링

Top Applications  
모니터링

의심 트래픽  
모니터링

HTTP Top Applications  
모니터링

사용자 계정, Role을 NGFW 정책에  
적용 프로파일을 통한 정책 관리 -  
NAC, AD 연동 (사용자/부서/IP 대역)

Name	Zone	Source Address	User-Role	Zone	Destination Address	Service	Action	AppFW	Description
Global Policy Pre Rules (3 rules)									
AppFW Pre Rules (3 rules)									
new-1	trust	In1	Mktg	untrust	Any	http http-ext	Permit AppFW	Myspace_OK Facebook_Walls	Allow only approved Social Media
new-2	trust	In2	Sales	untrust	Any	http http-ext	Permit AppFW Block Selected	Job_Search_Sites	Block Job Search Sites
new-3	trust	In3	Eng.	untrust	Any	http http-ext	Permit AppFW + IDP + UTM	CNN Sites ESPN	Allow only approved News Sources

# 정보 유출 최소화 대응 방안

다양한 해킹 식별

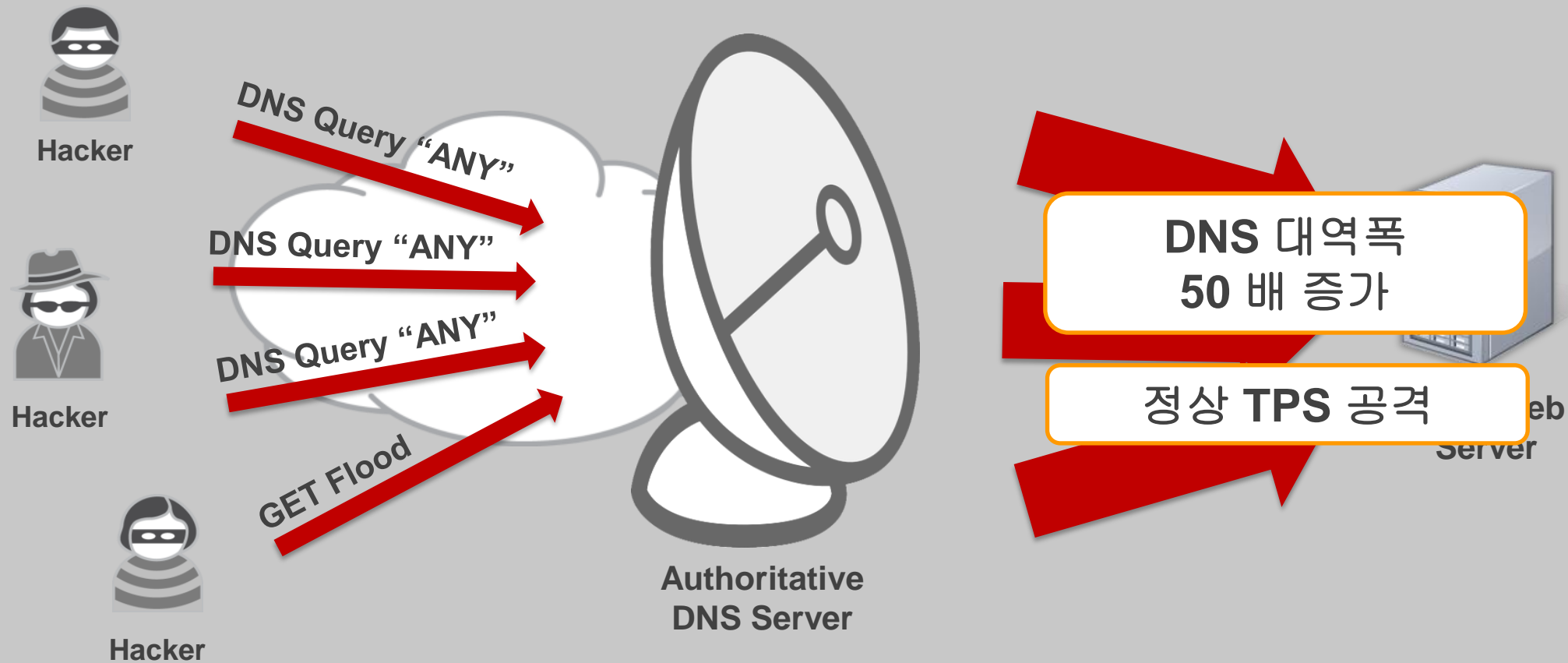
해킹 재발 방지

**Think Service**

시스템 통합

# WE NEED “OUTSIDE TO IN” SOLUTION - JDDDS

북한으로부터의 공격

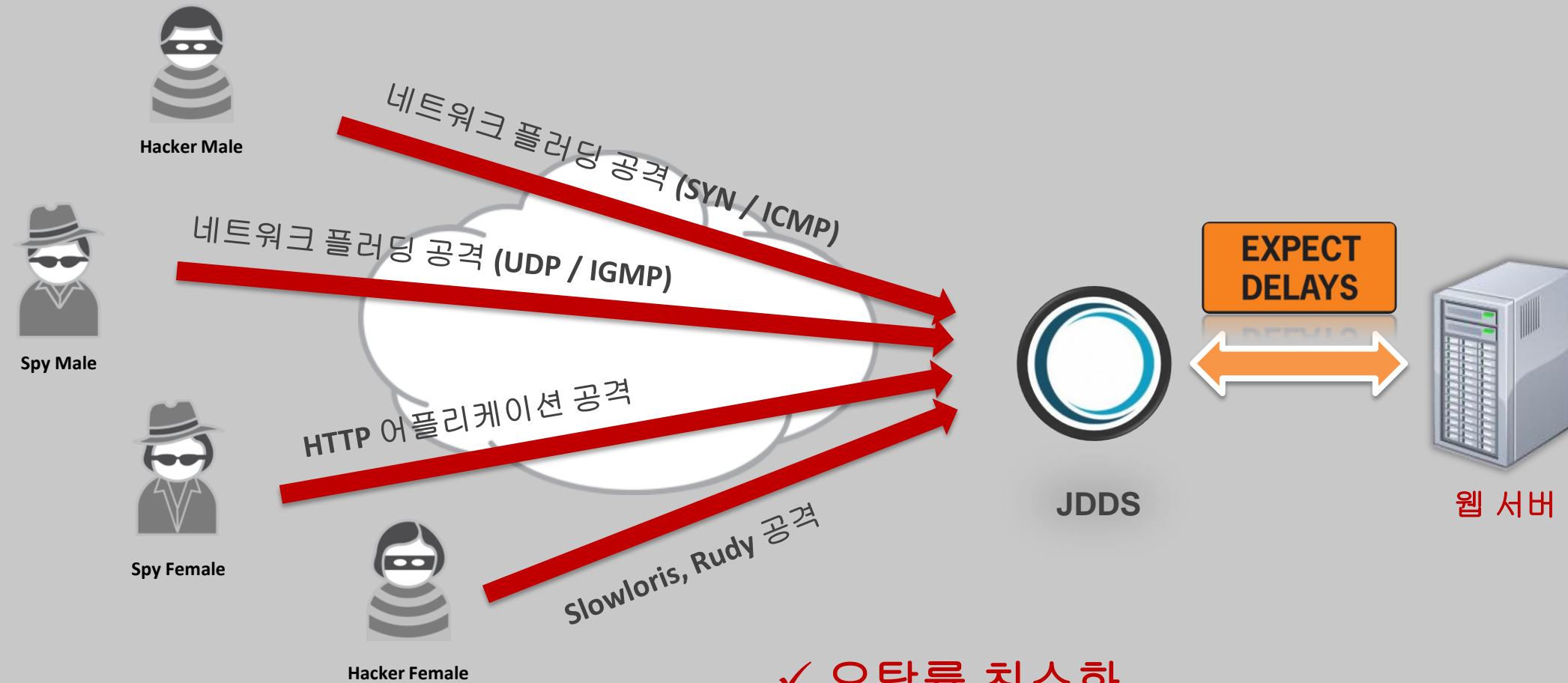


**DNS Bandwidth 확장** 대비 PPS 정체 - 오탐발생 확률 증가

**DNS 712 QPS, HTTP 60 TPS** - 임계치에 의한 오탐발생 확률 증가

**외부 DNS 서버 이용한 공격** - DNS 서버에 대한 오탐발생 확률 증가

# WE NEED “OUTSIDE TO IN” SOLUTION - JDDS



- ✓ **오탐률 최소화**  
\* 공격 트래픽 및 서버 Delay 체크
- ✓ 64M 해커 프로파일 Tracking 지원
- ✓ **Slow HTTP, Connection 공격 차단 지원**

# WE NEED “OUTSIDE TO IN” SOLUTION - JWAS





# 정보 유출 최소화 대응 방안

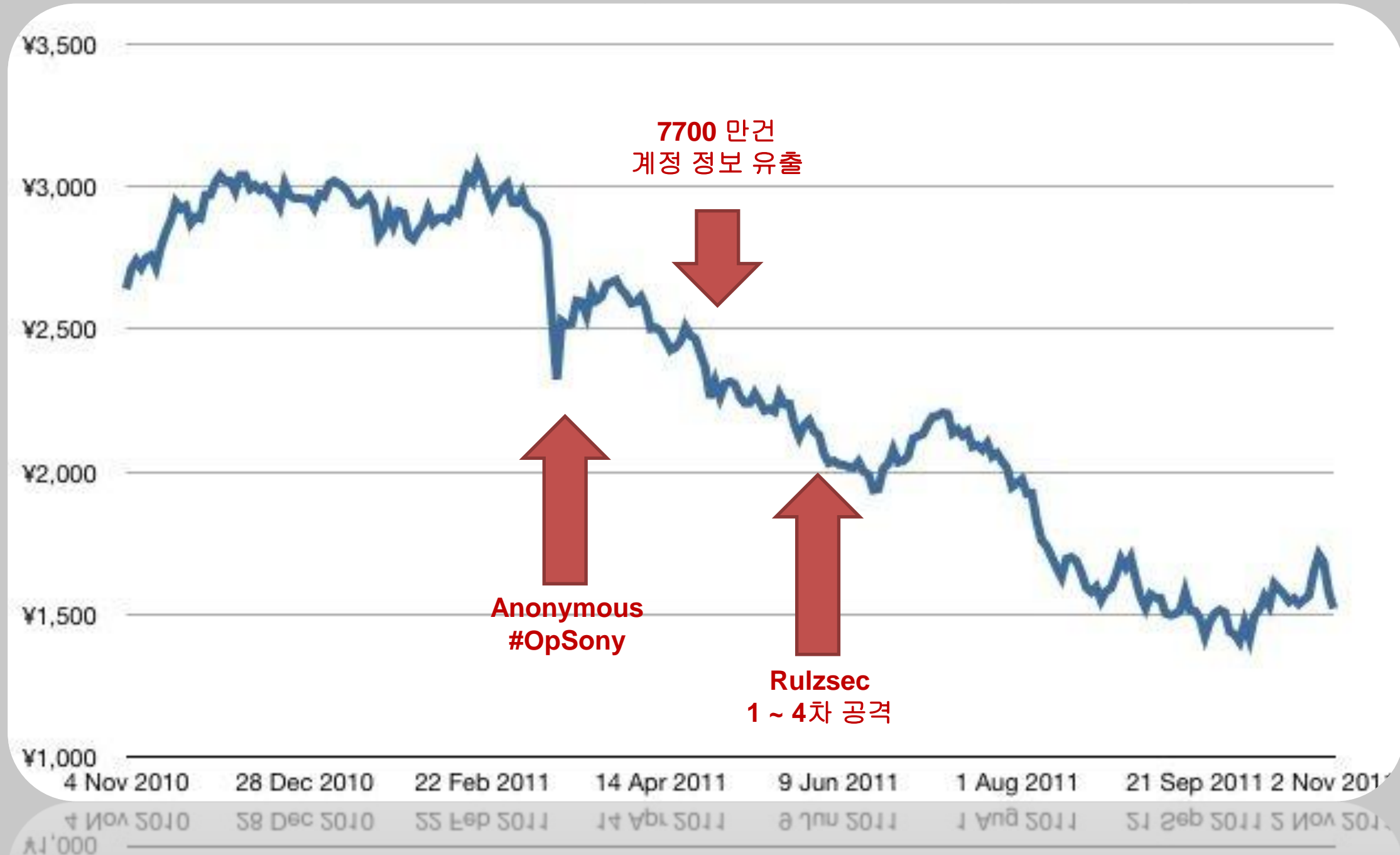
다양한 해킹 식별

해킹 재발 방지

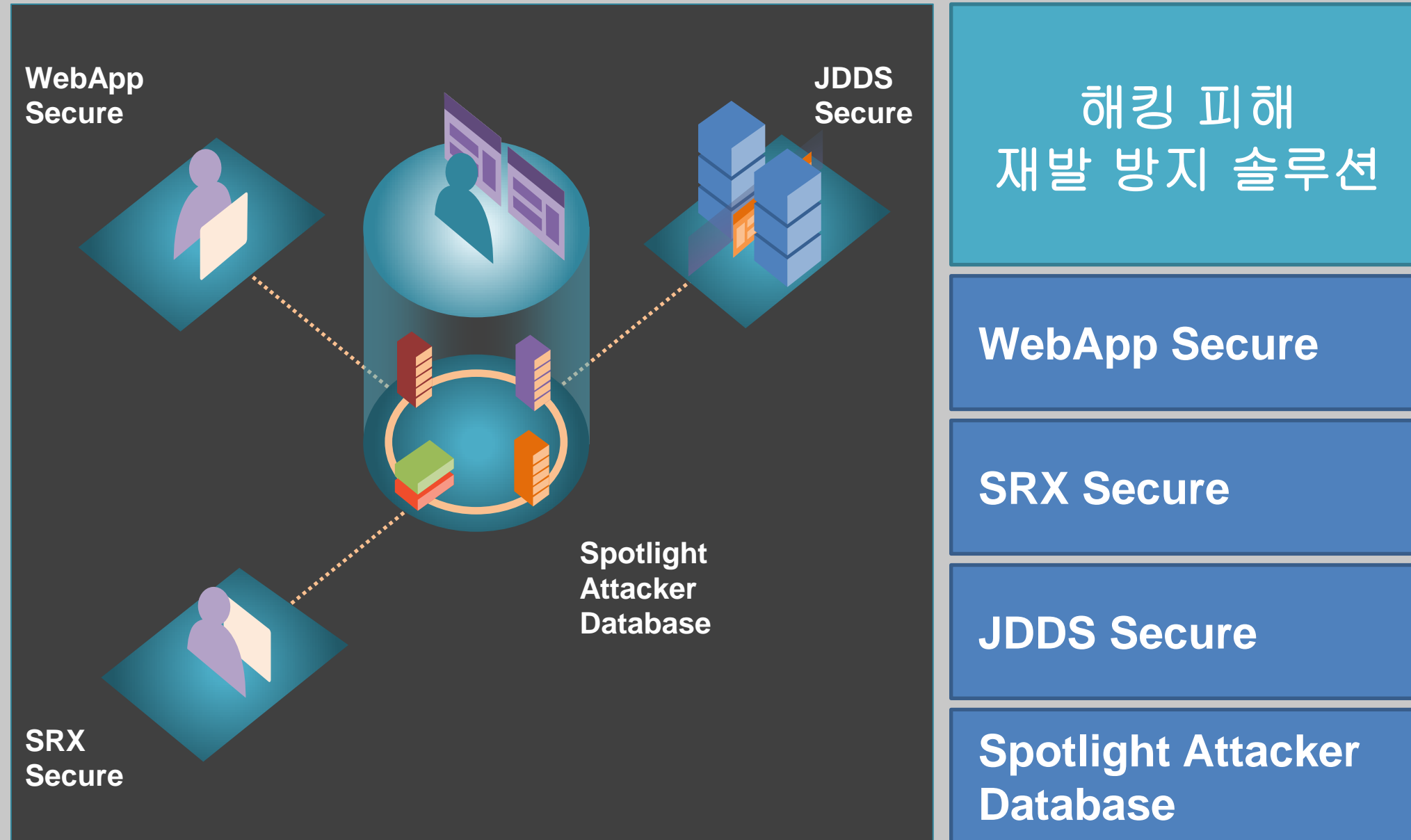
Think Service

시스템 통합

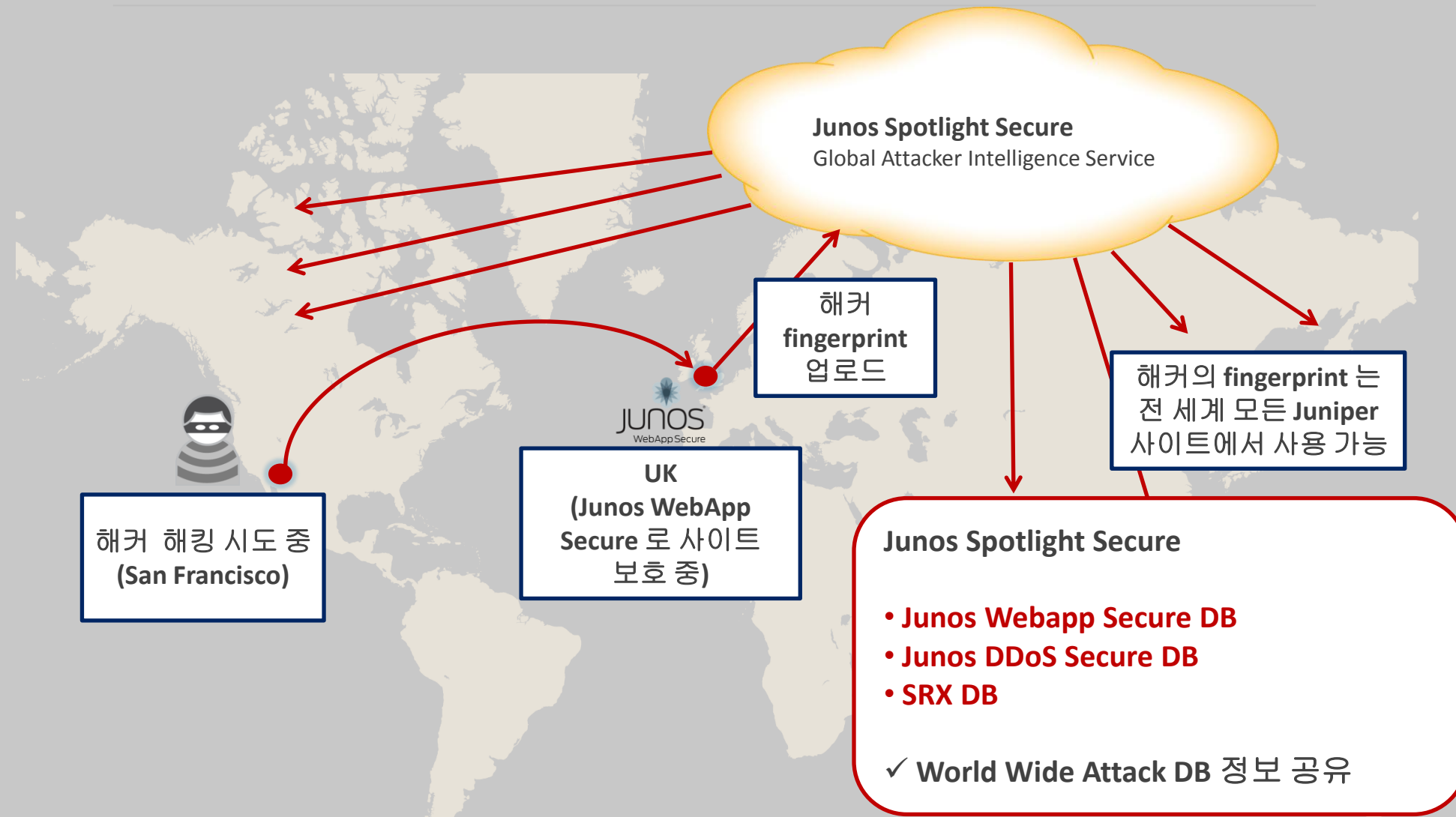
# 2차, 3차 공격의 피해



# WE NEED “OUTSIDE TO IN” SOLUTION



# WE NEED “OUTSIDE TO IN” SOLUTION



**Detect Anywhere, Stop Everywhere**

# 정보 유출 최소화 대응 방안

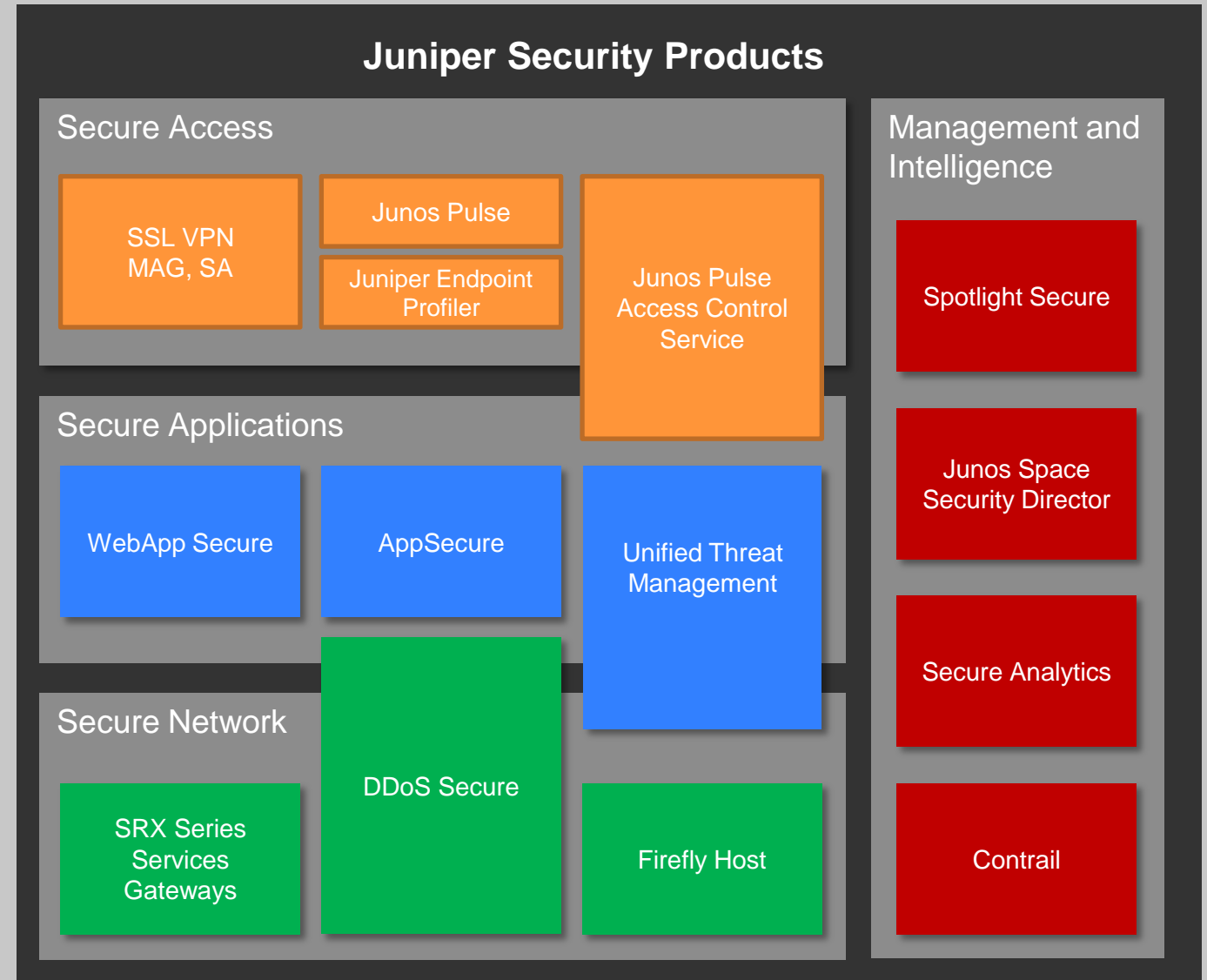
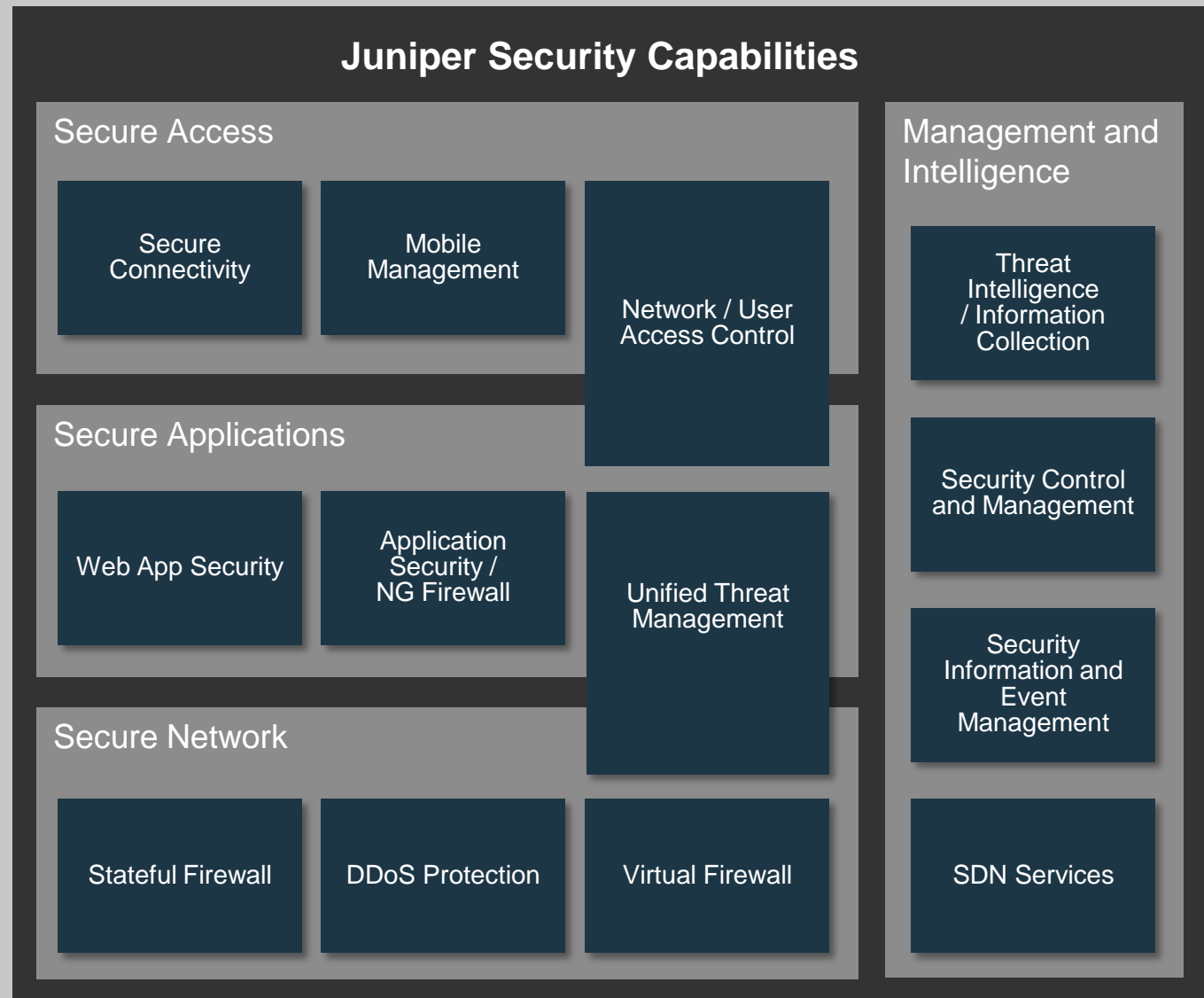
다양한 해킹 식별

Think Service

해킹 재발 방지

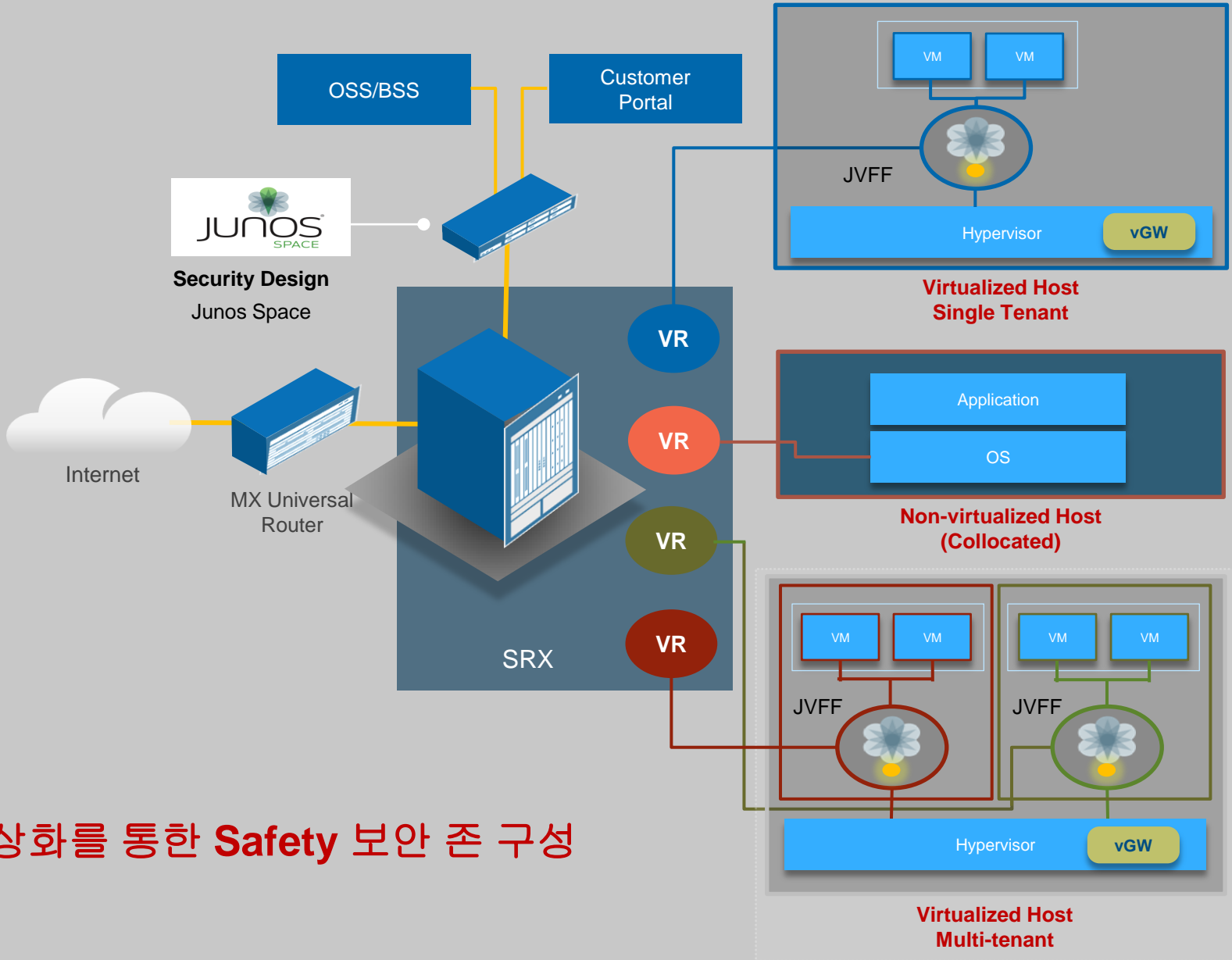
시스템 통합

# 다양한 주니퍼 솔루션



New 차세대 보안은  
이다.

# One Team



가상화를 통한 **Safety** 보안 존 구성

**Build what you want  
With SRX**





THANK YOU!

Tower festival  
something to W