



Komplexní řešení pro poskytovatele internetu

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WE MAKE APPS



FASTER.
SMARTER.
SAFER.

SIMAC COMPANY OVERVIEW

OPERATING COMPANIES

INFORMATION TECHNOLOGY

- › Simac IT NL
- › Simac ICT Belgium
- › Simac Technik
- › Simac PSF
- › Simac BMS
- › Wavetel
- › Aranea

SMART SOLUTIONS

- › Simac Document Solutions
- › Simac Electronics
- › Simac IDS
- › Simac Learning Solutions
- › Simac Masic
- › Simac QuadCore
- › Simac Triangle

SOCIAL RESPONSIBILITY

Simac sponsors 98 initiatives and projects

ENERGY / ENVIRONMENT

- › CO₂ emissions per FTE: decrease of 9,5% in 2019
- › 17% of our annual electricity consumption in 2019 is generated with solar panels

SIMAC OFFICES

9

NETHERLANDS
Veldhoven / Ede / Hoogeveen / Weert / Drunen /
Heerlen / Baarn / Eindhoven / 's-Hertogenbosch

5

BELGIUM
Kortenberg / Bastogne / Haasrode /
Pulderbos / Lummen

4

FRANCE
Paris / Lorient / Rennes / Metz

2

LUXEMBOURG
Leudelange / Bascharage

2

CZECH REPUBLIC
Prague / Brno

1

GERMANY
Cologne

1

UNITED KINGDOM
Manchester

CERTIFICATIONS

- › ISO9001 – Quality
- › ISO27001 – Information security
- › ISO14001 – Environmental management
- › ISO50001 – Energy management
- › ISAE3402 Type II – Quality assurance services
- › NEN 7510 – Information security healthcare

PARTICIPATIONS

- › Aquestora
- › Centrale24
- › Chess Wise
- › GX International
- › Passengera
- › Sensite Solutions
- › Simac Professional
- › Trearms
- › Vital10

RESULTS 2019

TURNOVER

276.314

223.151
258.619

OPERATING RESULT

11.159

10.336
13.088

NET PROFIT

7.047

7.767
10.883

EURO'S X 1.000

FIGURES 2017
FIGURES 2018

HIGHLIGHTS 2019

- › Acquisition hmb
- › Acquisition 50% share in Centrale24
- › Opening office in Lummen (Belgium)
- › Split-up Simac QuadCore
- › Merger Simac IT NL
- › ISO50001 energy management certificate awarded
- › Opening new office Simac Triangle in Eindhoven

OUR SERVICES

INFORMATION TECHNOLOGY

- › Networking
- › Cloud services
- › Workspace and mobility
- › IT security
- › Retail services
- › Healthcare services
- › Cabling & Infrastructure
- › Internet of Things
- › IT Staffing
- › IT Performance Monitoring
- › Smart City Technology

SMART SOLUTIONS

- › Machine vision solutions
- › Mechatronics
- › ID solutions
- › Connectivity
- › Document automation
- › Invoice processing
- › Industrial automation
- › Managed print services
- › Installation and measurement equipment
- › Client tracking systems
- › E-learning

THE SIX SIMAC PILLARS

- 1 FINANCIAL SOLID FOUNDATION
- 2 DIVERSIFICATION OF ACTIVITIES
- 3 LONG-TERM CONTRACTS WITH CUSTOMERS
- 4 EMPLOYEE AND CULTURE ARE CENTRAL
- 5 ROOM FOR INNOVATION
- 6 RESPONSIBLE INTERACTION WITH ENVIRONMENT

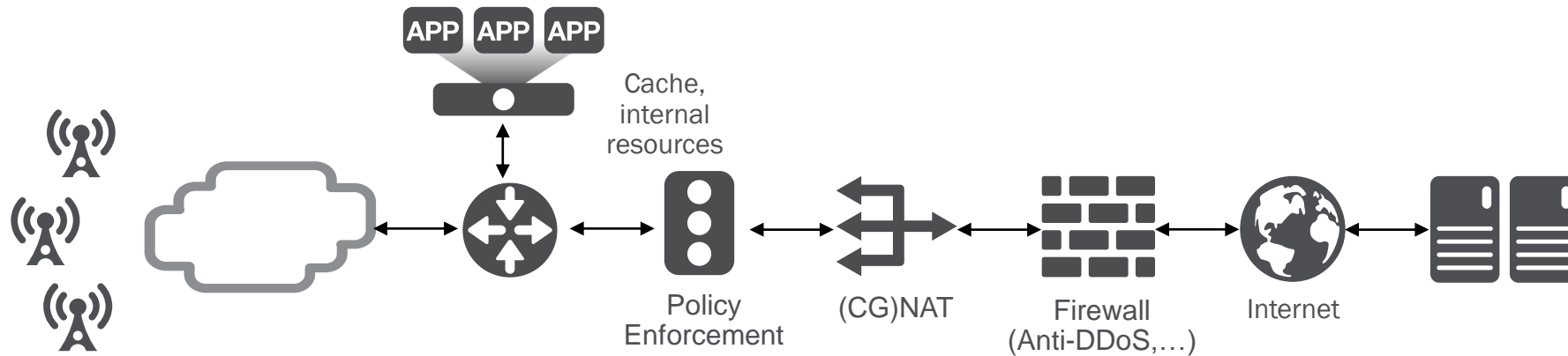
Jaké ISP funkce F5 podporuje

- Carrier-Grade NAT (CGNAT)
- Gi-FW
- Plnohodnotná DDoS ochrana
- Aplikace politik na zákazníky
- DPI (Deep-packet-inspection)

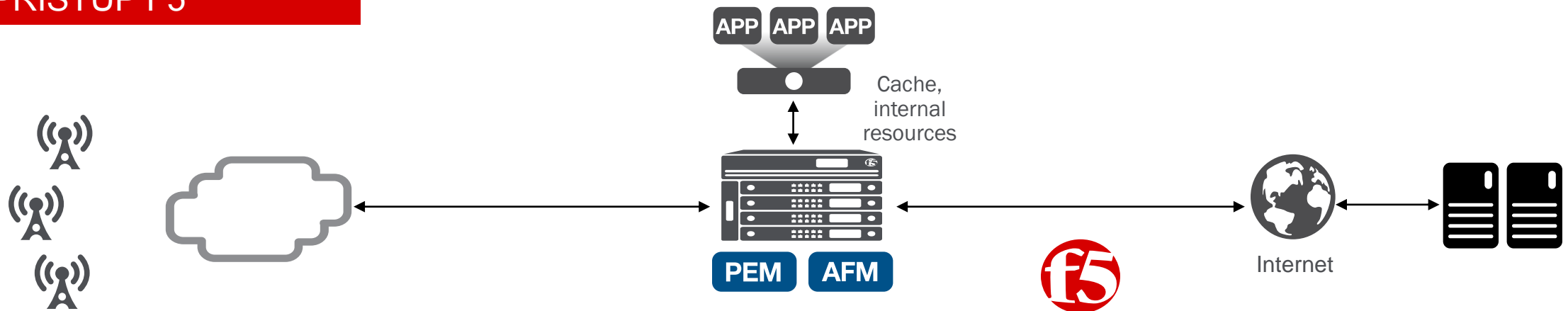
Edge (okraj) sítě poskytovatele internetu

Přehled funkcionalit

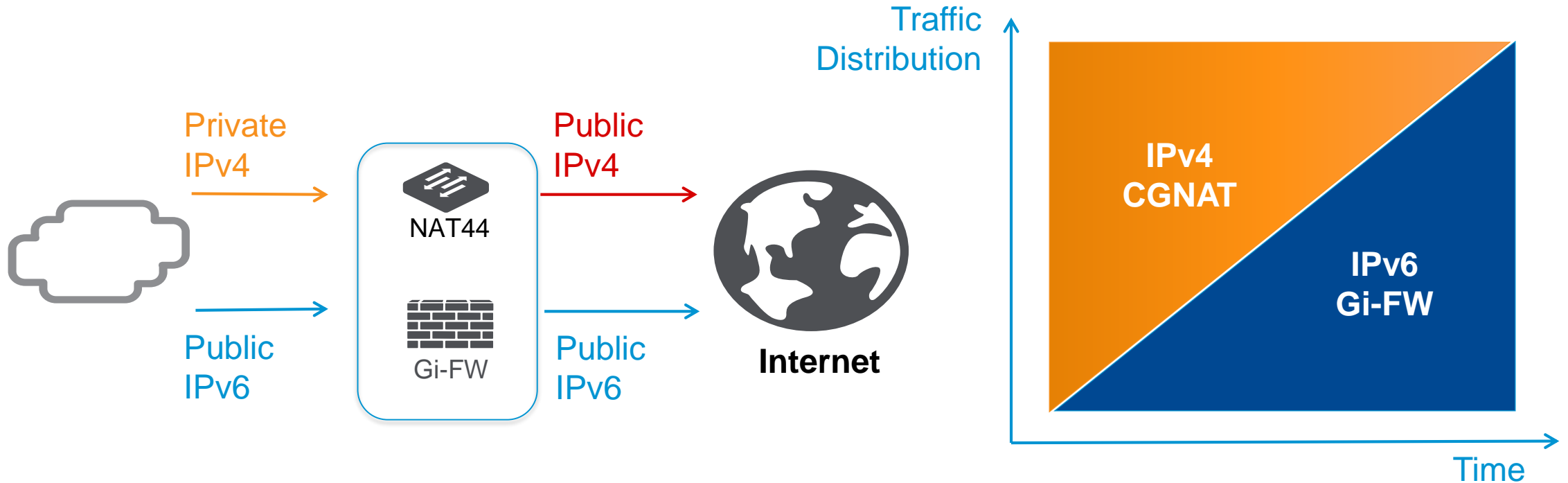
TRADIČNÍ PŘÍSTUP



PŘÍSTUP F5



Konsolidovaný SP-FW + CGNAT



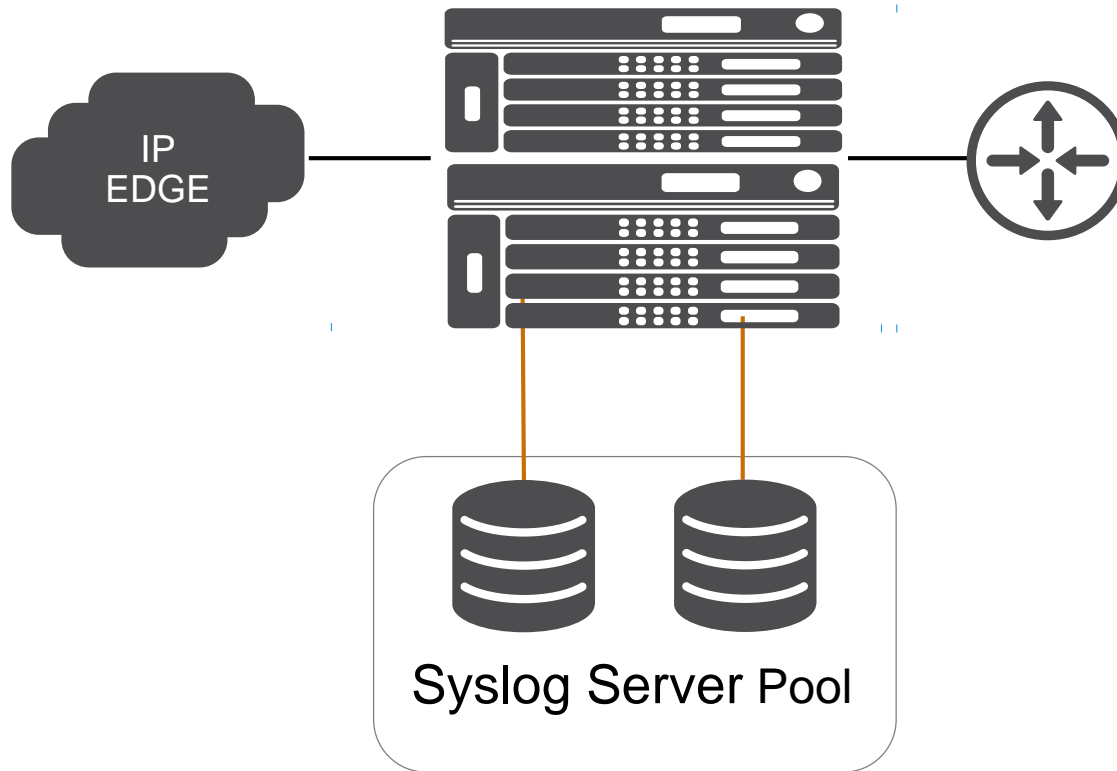
UNPRECEDENTED SCALE
&
PERFORMANCE

GRADUAL TRANSITION
FROM IPV4 CGNAT TO
IPV6 GI-FW

INVESTMENT
PROTECTION

Carrier-grade NAT (CGNAT)

Vysokorychlostní flexibilní logování pro data retention



Customized log content

- IP, ports, **User**, ...

Carrier Grade Performance

- High Speed Logging
- Syslog (TCP/UDP), IPFIX

Scalability/Reliability

- Pool of syslog servers
- LB per log message
- Health check

Logging Infrastructure is a critical part of CGNAT implementations

Plnohodnotná DDoS ochrana

- Manual Configuration
- Detection / Reporting only
- Auto-Threshold (Learning)
- Dynamic Attack Signatures
- Bad Actor and Attacked Destination Detection
- Ability to initiate BGP Blackhole, Redirect, Flowspec

Partition	Common
Description	
Threshold Sensitivity	Medium
Default Whitelist	None Manage Address Lists
Families	<input checked="" type="checkbox"/> Network <input type="checkbox"/> DNS <input type="checkbox"/> SIP

Filter Attack Vectors

State: --- Vector Type: --- Add Filter: ---

Network | 1 Vector Enabled, Dynamic Signatures Disabled

Network Family settings

[Configure settings](#) (Includes Dynamic Signatures)

	Vector Name	Type	State	Threshold Mode	Detection EPS	Detection %	Mitigation EPS	Bad A
<input type="checkbox"/>	TTL <= <tunable>	Bad Header IPv4	Disabled					
<input type="checkbox"/>	IPv6 Hop Count <= <tunable>	Bad Header IPv6	Disabled					
<input type="checkbox"/>	IPv6 Extension Header Too Large	Bad Header IPv6	Disabled					
<input type="checkbox"/>	IPv6 Extended Header Frames	Bad Header IPv6	Disabled					
<input type="checkbox"/>	IP Option Frames	Bad Header IPv4	Disabled					
<input type="checkbox"/>	Too Many Extension Headers	Bad Header IPv6	Disabled					
<input type="checkbox"/>	Unknown TCP Option Type	Bad Header TCP	Disabled					
<input type="checkbox"/>	Option Present With Illegal Length	Bad Header TCP	Disabled					
<input type="checkbox"/>	TCP Option Overruns TCP Header	Bad Header TCP	Disabled					
<input type="checkbox"/>	TCP Flags-Bad URG	Bad Header TCP	Disabled					
<input type="checkbox"/>	IP Fragment Flood	Flood	Disabled					
<input type="checkbox"/>	IPv6 Fragment Flood	Flood	Disabled					
<input type="checkbox"/>	TCP SYN Flood	Flood	Mitigate	Fully Automatic	Infinite	500	Infinite	Enable
<input type="checkbox"/>	TCP SYN ACK Flood	Flood	Disabled					
<input type="checkbox"/>	TCP RST Flood	Flood	Disabled					
<input type="checkbox"/>	TCP Window Size	Flood	Disabled					
<input type="checkbox"/>	ICMPv4 Flood	Flood	Disabled					
<input type="checkbox"/>	ICMPv6 Flood	Flood	Disabled					
<input type="checkbox"/>	UDP Flood	Flood	Disabled					

Properties

TCP SYN Flood

State: Mitigate

Threshold Mode: ☒ Fully Automatic ☐ Auto Detection / Multiplier Based Mitigation ☐ Manual Detection / Auto Mitigation ☐ Fully Manual

Attack Floor EPS: 100

Attack Ceiling EPS: Infinite

☒ **Bad Actor Detection**

☒ Add Source Address to Category

Category Name: denial_of_service

Sustained Attack Detection Time: 60 seconds

Category Duration Time: 14400 seconds

☒ Allow External Advertisement

☒ **Attacked Destination Detection**

☒ Add Destination Address to Category

Category Name: attacked_ips

Sustained Attack Detection Time: 10 seconds

Category Duration Time: 900 seconds

☒ Allow External Advertisement

Aplikace politik na zákazníky a DPI

- Shaping
- Traffic steering
- HTTP redirect insertion
- ~ 4000 signatures in DPI engine
- Customizable by scripting
- Reporting

The screenshot displays the 'Policy Enforcement' configuration page for a policy named '10Mbps_PAID : logging'. The interface is divided into several sections:

- General Properties:** Includes fields for 'Name' (logging) and 'Precedence' (100).
- Device and Tethering Detection:** Includes dropdowns for 'Device Type & OS Detection' (Disabled) and 'Tethering Detection' (Disabled).
- Classification:** A tabbed interface with 'URL', 'Flow', and 'Custom' options. The 'Custom' tab is active, showing 'Classification Criteria'.
- Classification Criteria:** A list of match criteria with a search bar and a 'Match' button. The 'Application' dropdown is open, showing a list of applications including 'youtube_music', 'youtube', 'youtube_gaming', 'youtube_hd', 'youtube_music', 'youtube_safety_mode', 'youtube_studio', 'youtube_tv', 'youtube_upload', 'youtube_video', 'youtube_video_abr', 'youview', 'yting', 'ytn', 'yts_am', 'yugma', 'yum', 'yupptv', 'yuuguu', 'yuzbirplus_fbapp', and 'yy'. The 'Application' field is currently set to 'youtube'.
- Reporting:** Includes checkboxes for 'Usage Reporting' (Disabled), 'Application Reporting' (Disabled), and 'TCP Analytics' (Disabled).

At the bottom right, a note states: 'are enabled, they must have the same destination (PCRF over Gx or Sd)'.

Ukázka reportingu (externí nástroj)



Přehled F5 platformem

Good, Better, Best Platforms



Virtual

F5 Virtual Editions

Provide flexible deployment options for virtual environments and the cloud, both private and public

Virtual ADC 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
- License Management with BIG-IQ

Physical

F5 physical ADCs

High-performance w/dedicated hardware

Physical ADC is best for:

- Fastest performance
- Highest scale
- SSL offload, compression, and accelerated DoS mitigation
- An all F5 solution: integrated HW+SW
- Edge and front door services
- Purpose-built isolation for application delivery workloads
- iSeries have FPGA based TurboFlex for chip-level customization

Hybrid

Physical + virtual = hybrid ADC infrastructure

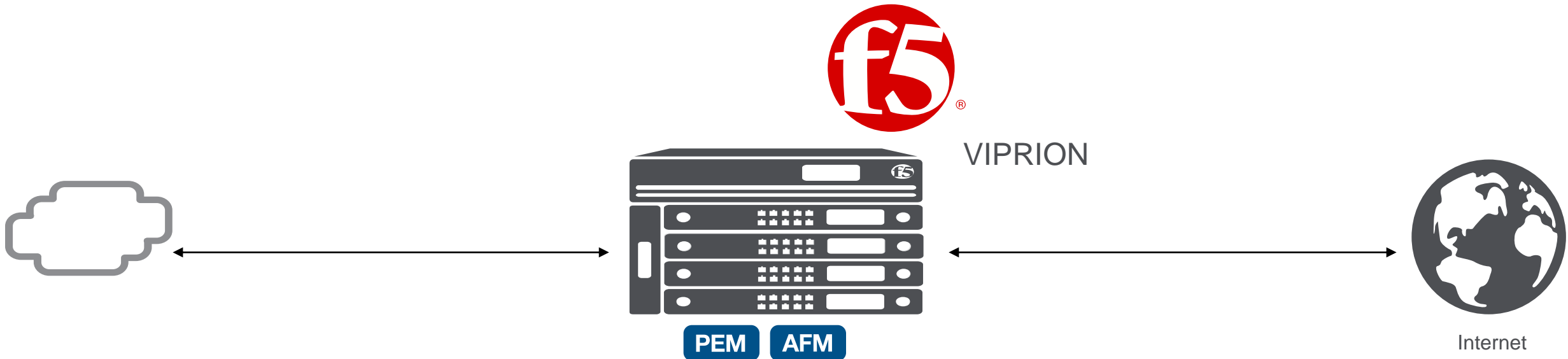
Ultimate flexibility and performance

Hybrid ADC is best for:

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

Škálování (VIPRION)

- Add blades
- More blades => higher performance



Děkujeme za pozornost

