Introducing F5 BIG-IP Cloud Edition

PRESENTED BY:

Radovan Gibala

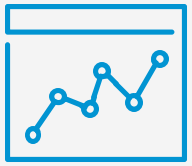
WE MAKE APPS GO FASTER. SMARTER. SAFER.

Agenda

- Evolving IT landscape and challenges
- Introducing F5 BIG-IP Cloud Edition use cases
- Key features and benefits
- BIG-IP Cloud Edition overview
- Summary

EVOLVING IT LANDSCAPE AND CHALLENGES

Evolving Application Landscape



Explosion in apps demands scalable operations

- New app growth will increase 19% CAGR by 2021[1]
- Enterprises have on average 200 apps[2] and smartphone users have more than 80 apps on their phone[3]

[1]Source: Cisco Global Cloud Index (2016–2021)
[2]Source: F5 2018 SOAD Report

Increasing web application attacks

- 36% with less than 25% of their apps protected with a WAF[2]
- Web app attacks are the #1 source of data breaches (29%)[4]
- 3B credentials reported stolen in 2016[5]

[4]Source: Verizon 2017 Data Breach Investigations Report
[5]Source: Shape 2017 Credential Spill Report
[5]Source: Techcrunch Jan 17 2018 article

App teams require fast time to market

- 40% of IT spend on apps today are based on DevOps model[6]
- More than 70% of configuration and deployment steps are automated[6]

[6]Source: F5 2018 SOAD Report and 2017 State of DevOps Report

NetOps Needs To Collaborate With App Team

And adapt quickly to automate and deliver app services to internal customers

Frictionless access and right-sized offers

- Fast and flexible instantiation
- Faster development & deployment
- Better alignment to capacity needs with autoscale

Development integration and automation

- Private and public cloud platform support
- Deployment without deep domain expertise
- Greater automation through published REST APIs

Agility and per-app visibility

- Self-service deployments that conform to corporate standards
- Simplified upgrades
- App-centric performance and analytics

INTRODUCING BIG-IP CLOUD EDITION

Introducing BIG-IP Cloud Edition…

Industry-leading application services,

Now easier to use and dedicated for any app, anywhere

Per-App VE

Dedicated

Right-sized

Industry-leading ADC & WAF

Enhanced BIG-IQ management

Per-app analytics

AutoScale and multi-cloud presence

Self-service

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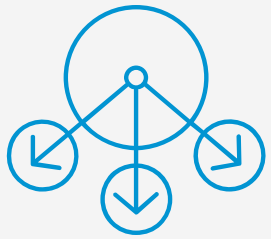
Four Key Use Cases



Dedicated services for apps

Easiest to use and operate

Cost Effective services for next tier of apps

Best protection for more apps

Self-Service for app team

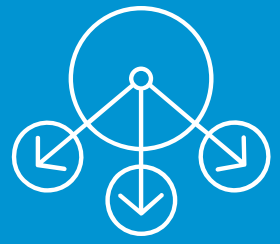
Agile app services

AutoScale when needed

On-demand scalability

KEY FEATURES AND BENEFITS

Four Key Use Cases



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Deliver Dedicated F5 App Services For Each App

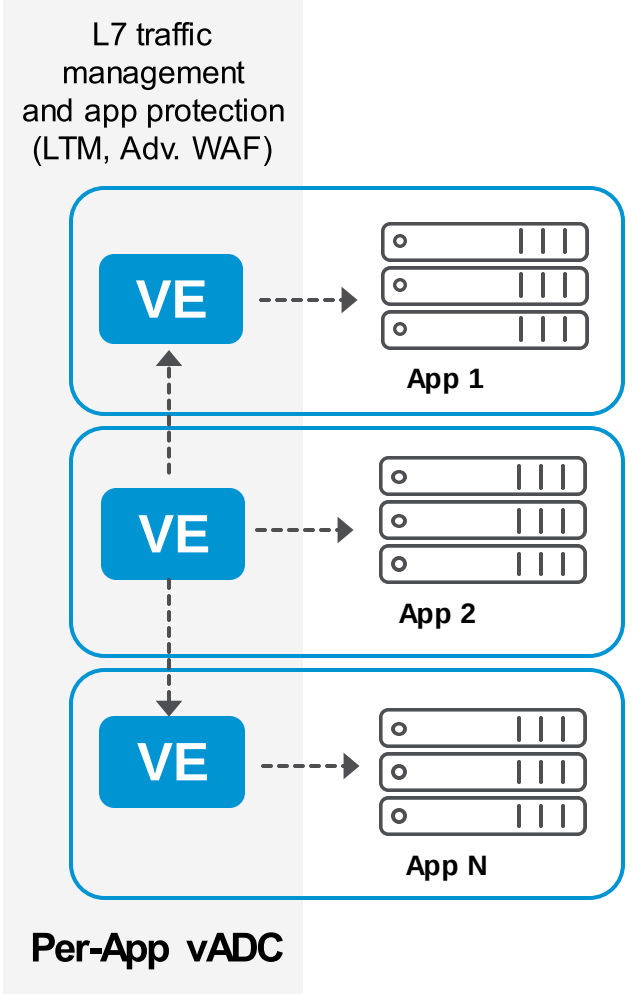
Break down barriers to deploying existing and new apps faster

Proven F5 per-app services for NetOps and app teams

- Industry-leading dedicated traffic management and app protection for existing apps
- Cost effective F5 app services for the next tier of apps

Benefits

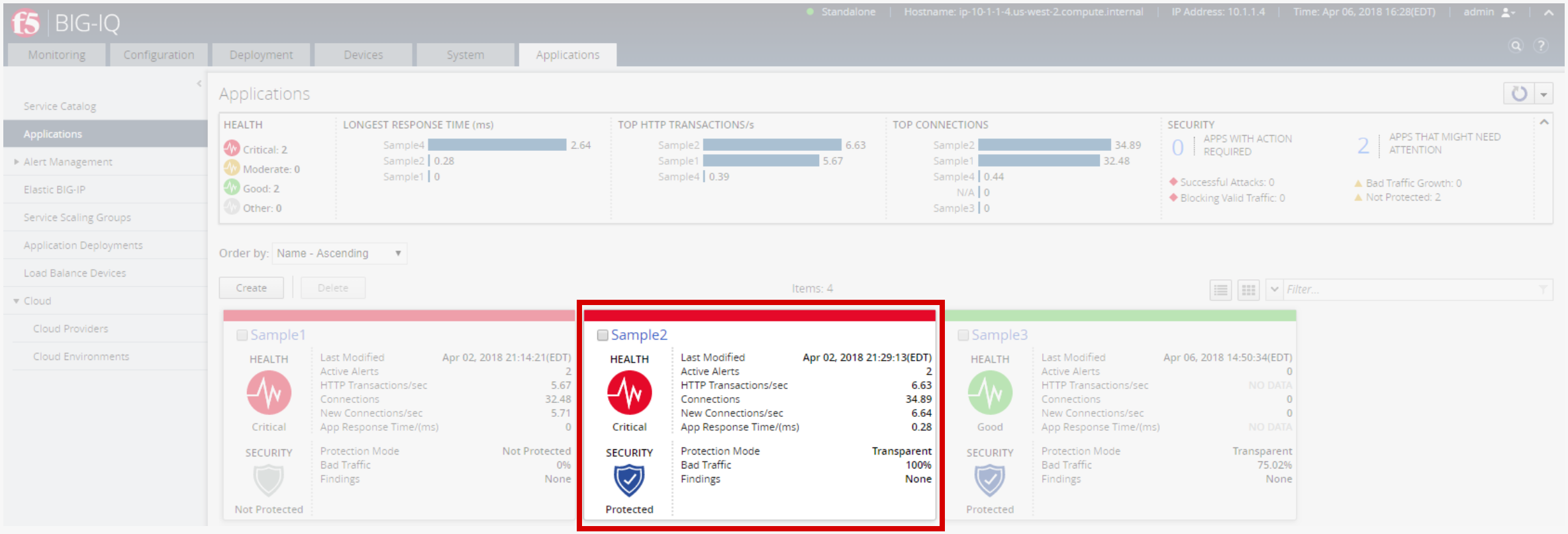
- Right-sized to enable per app deployment of services
- Isolation of service failure reduces impacts to business operations
- Improved productivity with automated provisioning
- Advance protection for all apps



Comprehensive, Easy To View Application Dashboard

Drill down to app health, key metrics and events/alerts

UI subject to change



Quick dashboard view of applications

- Drill down to specific app
- App health, performance stats, and security status

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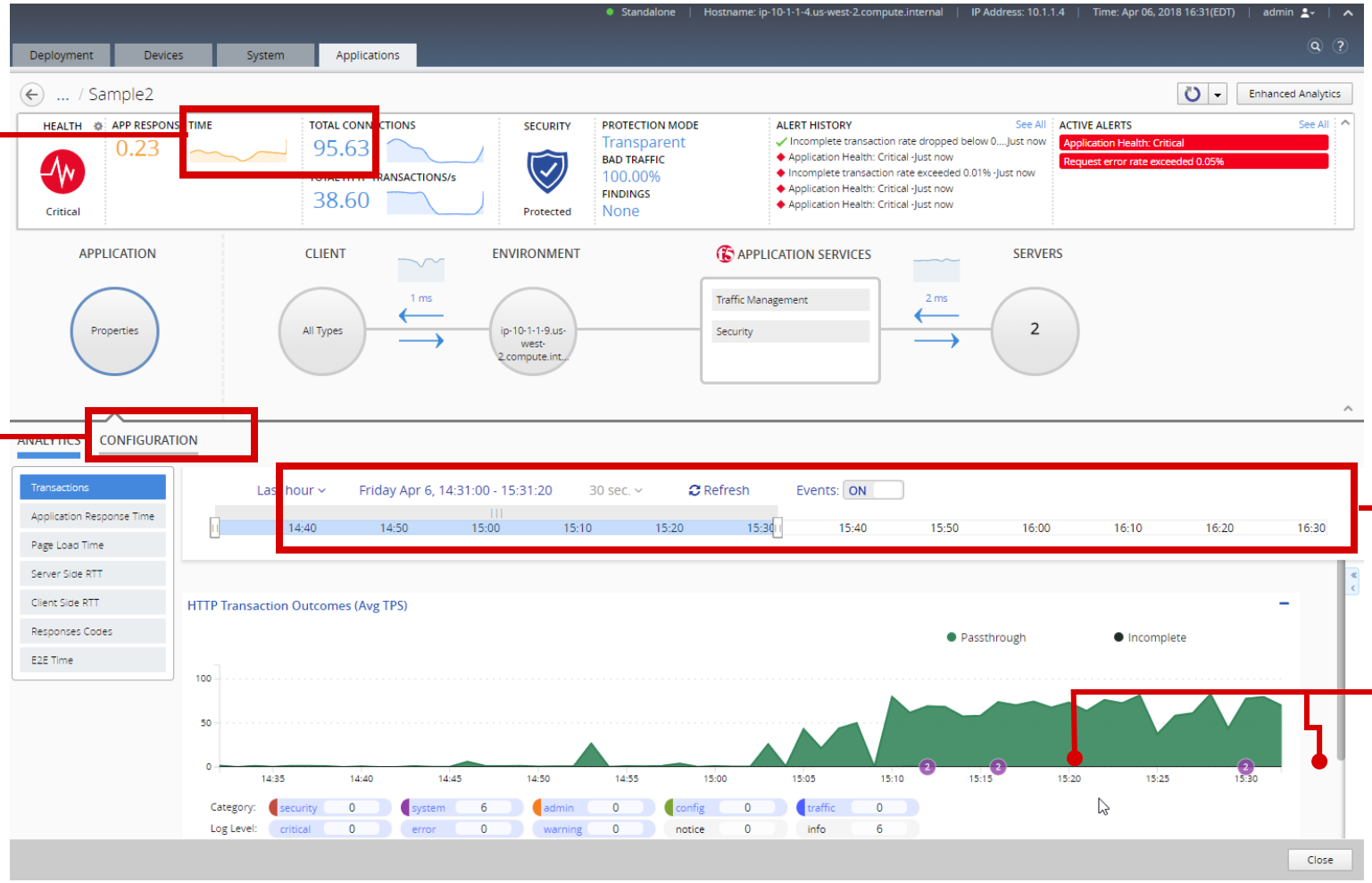
Application-Specific Analytics For App Team

Fast issue resolution with granular per-app analytics

UI subject to change

App Performance

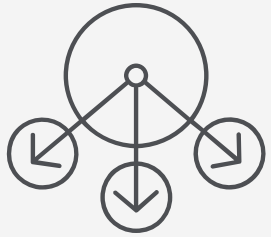
View analytics or configuration



Adjust timescale

Overlay events

Four key use cases



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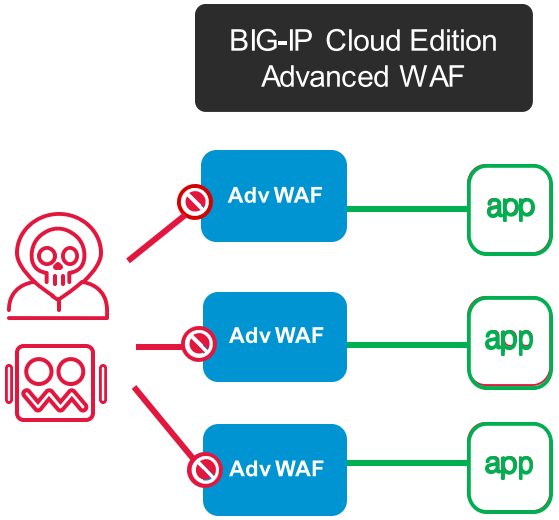
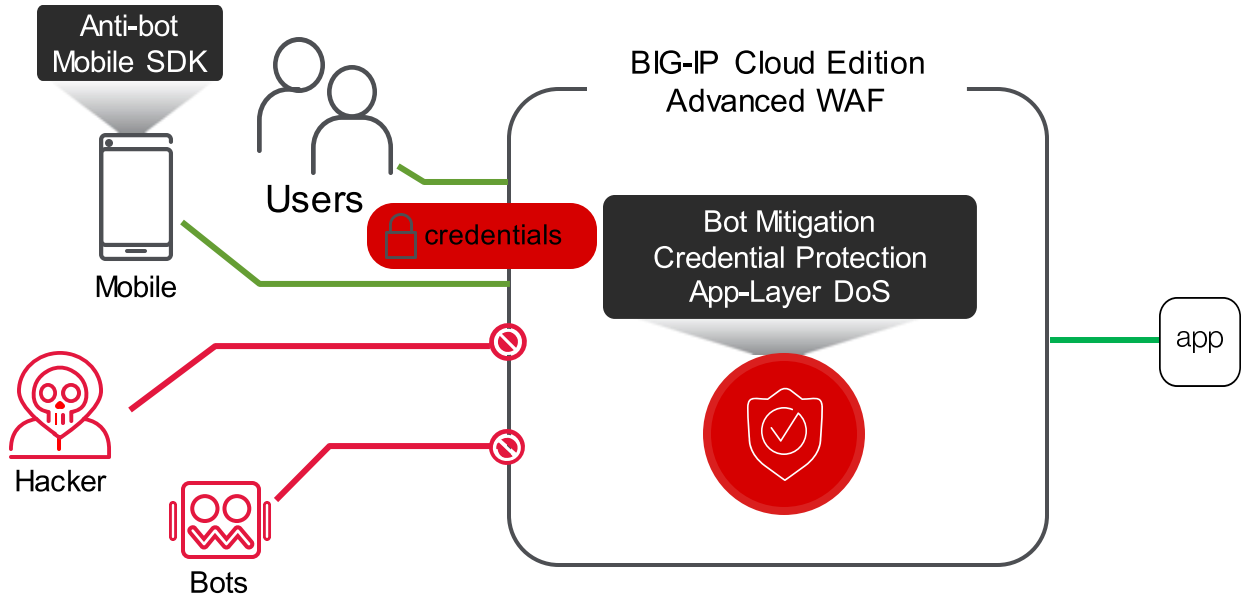
Advanced Protection For More Applications

Reduce security risk for all apps



Protect all applications

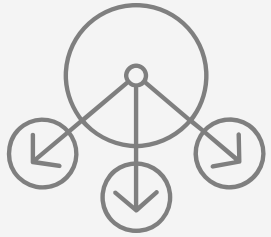
- Prevent attacks, takeover, or data exfiltration through unprotected web and mobile apps
- Stop L7 DDoS attacks that impact app performance and availability
- Centralize polices and audit logs ensure consistency for compliance reporting



Advanced protection: stop new, evolving attacks

- Only leading per-app advanced WAF to protect against sophisticated attacks
- Policy builder auto-tunes blocking for a wide range of attacks
- Proactive bot detection and mitigation
- Prevention of credential theft and stuffing

Four Key Use Cases



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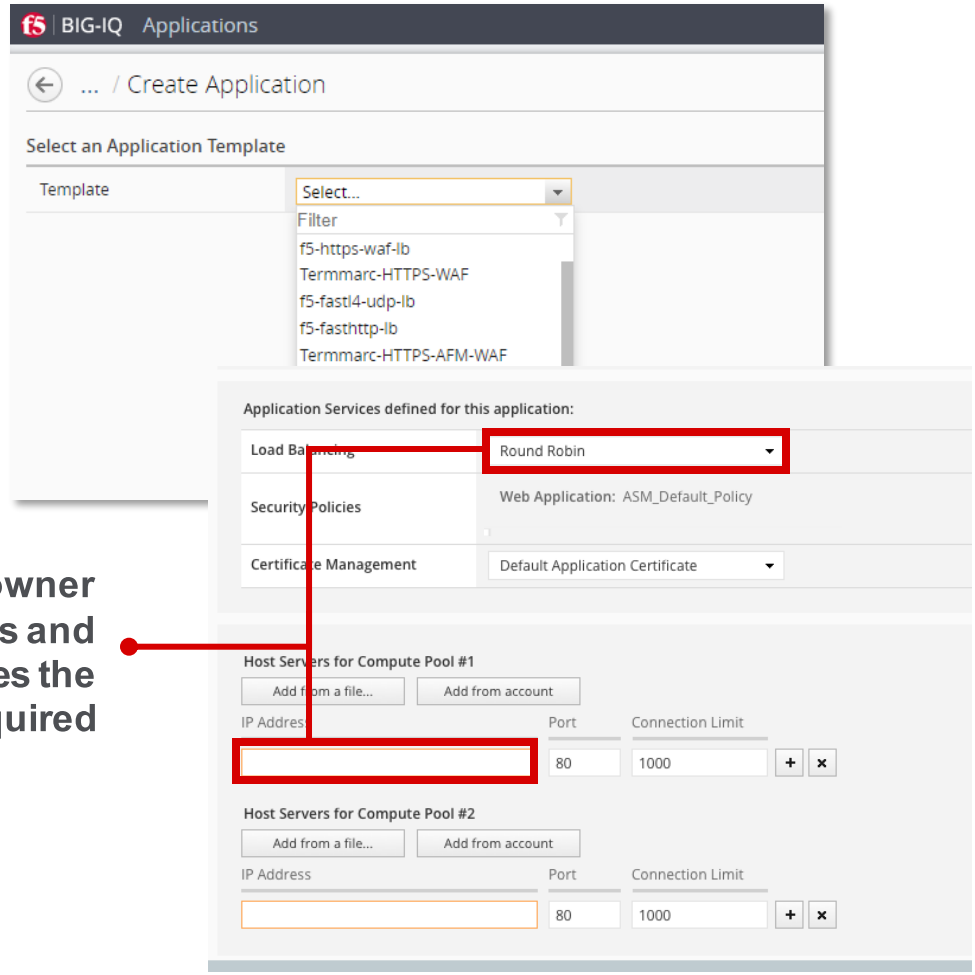
App Team Uses Simple Templates To Deploy New Apps

Self-service provisioning in seconds

UI subject to change

Pre-built and approved app templates for easy deployment

- Catalog of templates for common deployments
- Templates based on approved policies/configurations
- Easy deployment via GUI or single API
- No networking expertise needed



App owner selects and populates the fields required

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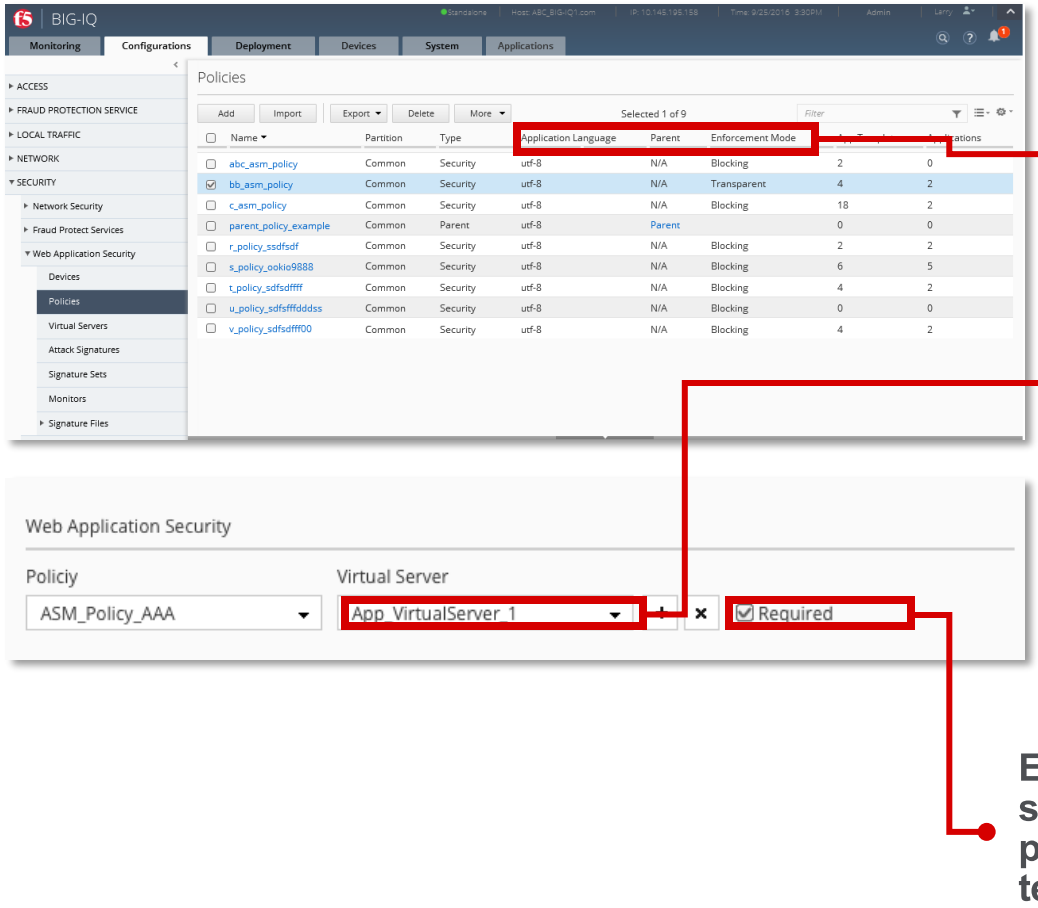
App Team Uses Approved Security Policies

NetOps/SecOps publishes WAF policies for specific apps

UI subject to change

Deploy WAF confidently

- Existing or new security policy is attached to app template
- WAF policy deployed automatically for each app



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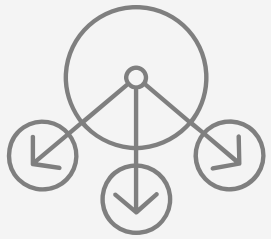

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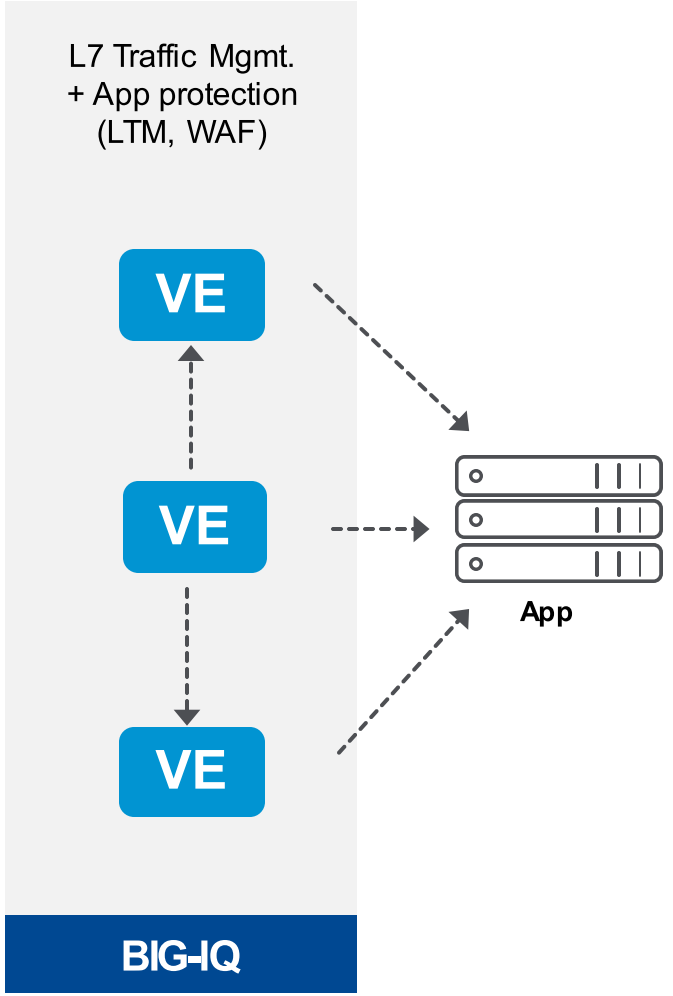
Autoscaling Of App Services

On demand scalability with no need to overprovision

- Quick response to increased load with auto-scaling of app services and security
- Auto-scale based on threshold policies
- Once traffic peak subsides, additional instances are spun down



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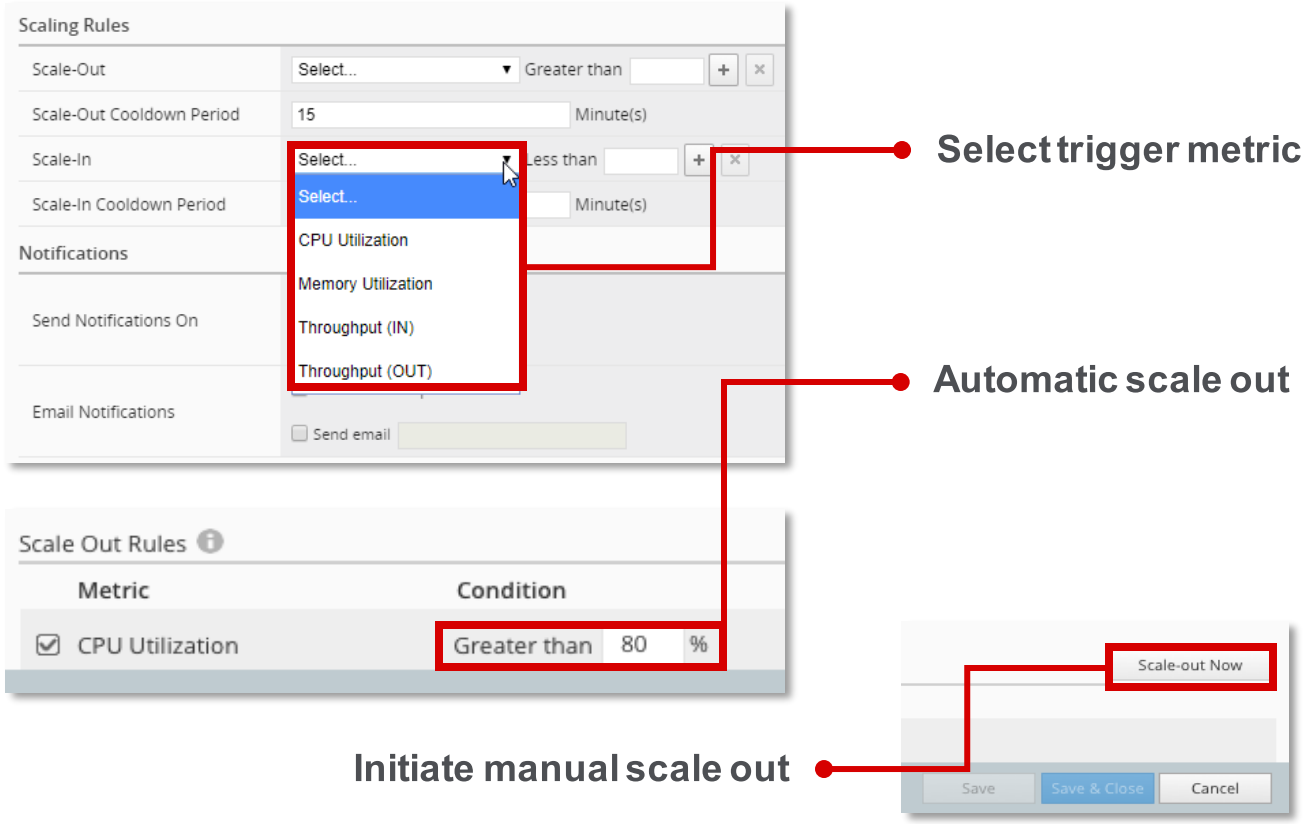
Autoscaling Of App Services

UI subject to change

- Template-based autoscaling policies
- Trigger based on CPU, memory, throughput—in/out
- Manual scale-out for pre-planned events
- Supported in VMware and AWS*

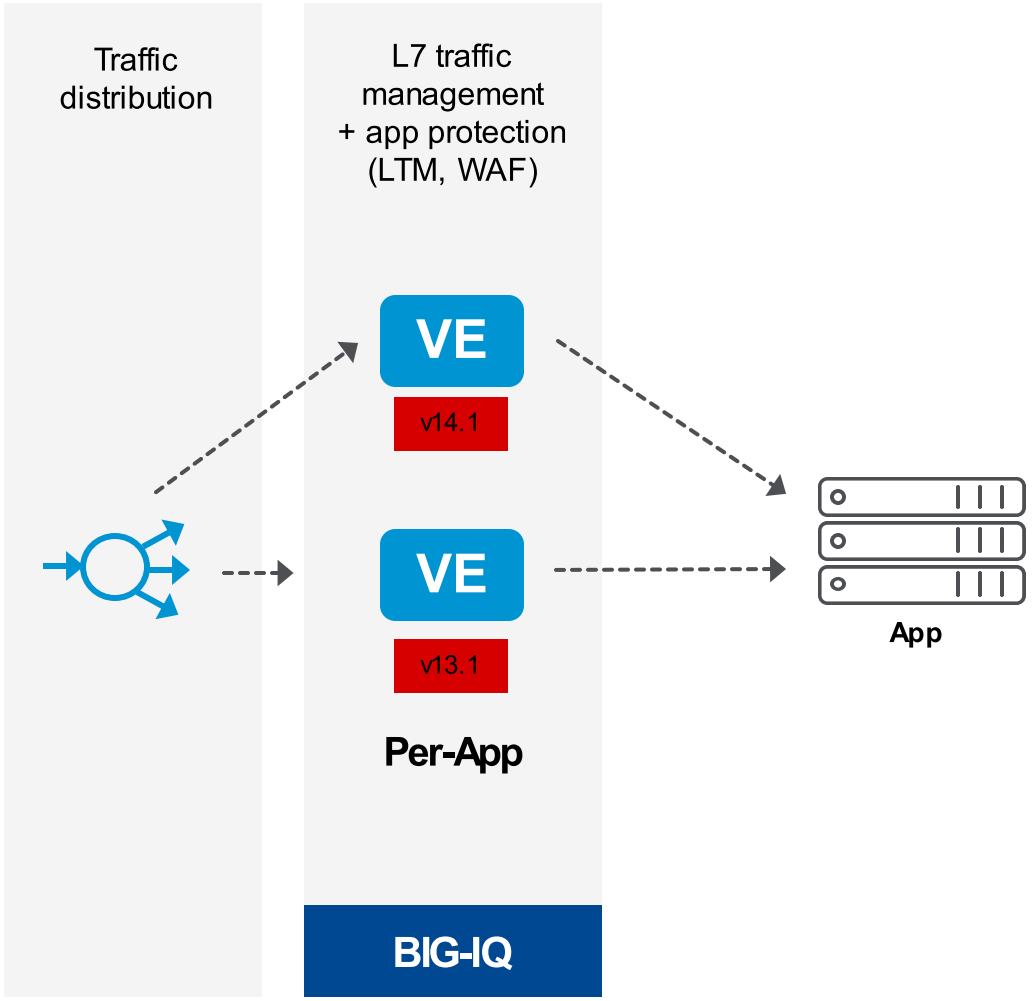


* - Additional environments planned

Seamless Update To New Software Version

Traditional in-place upgrades go away

- Automated rolling upgrades
- Eliminate manual upgrades
- Supported in VMware and AWS*



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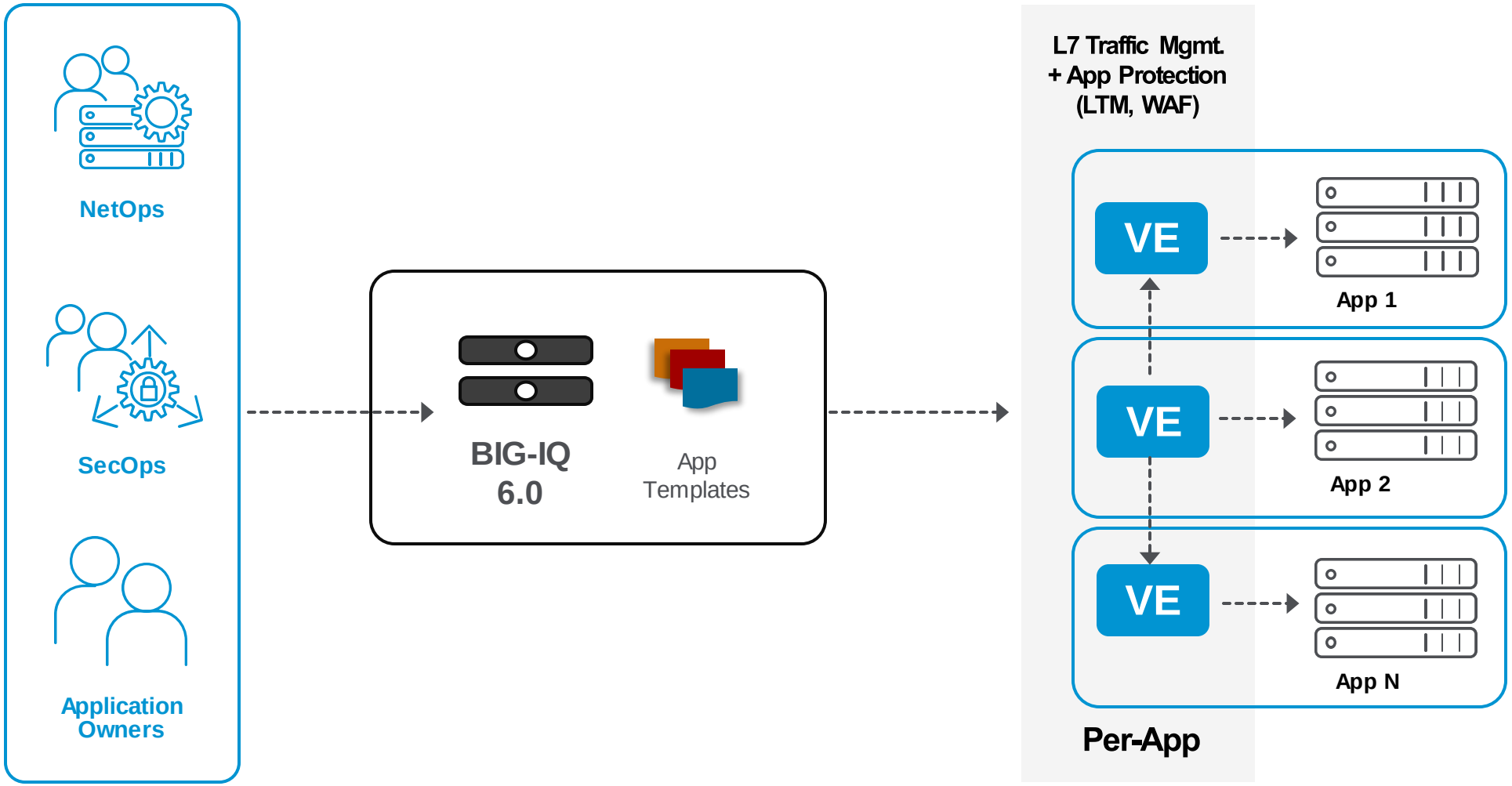
PRODUCT OVERVIEW

BIG-IP Cloud Edition Overview

Lifecycle management of app services and security



BIG-IP Cloud Edition Details

Dedicated **VE** per application

Targeted to a single application. Deployable with the application.

BIG-IP Per-App VE	LTM and advanced WAF
Performance	25Mbps and 200Mbps
Config limits	1 virtual IP, 3 virtual servers (1 wildcard VS out of 3 VS)
BIG-IQ management	Enhanced lifecycle management, analytics, autoScale
BIG-IP VE service scaling	Traffic distribution for autoscaling/rolling upgrades (VMware)
Consumption models	Perpetual, subscription, and ELA (*)
Min BIG-IP version	13.1.0.5 or later
Min BIG-IQ version	6.0 or later

*Min quantity or $ deal size requirements will apply

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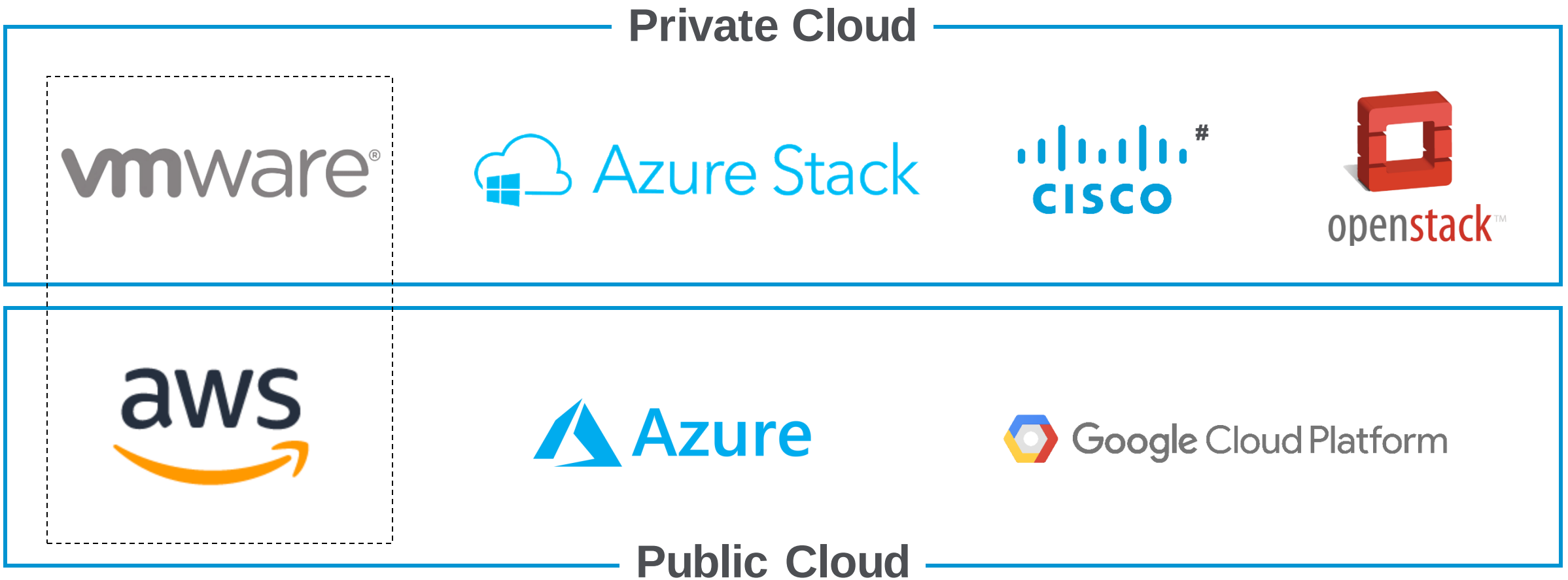
BIG-IP Cloud Edition Availability In Public/Private Clouds

Providing consistent app services across cloud environments



*Full enablement of CE lifecycle management. Other clouds planned. | # ACI Unmanaged Mode.

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Summary—BIG-IP Cloud Edition Delivers…

- Dedicated F5 app services for each app
- Comprehensive, easy to view analytics for each app
- Best protection for more apps to close security gaps
- Simple app templates for app teams to deploy services in seconds
- Policy based autoscale to quickly meet capacity needs

Easy-to-use F5 per-app services for any app, anywhere

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WE MAKE APPS

FASTER. SMARTER. SAFER.

Understanding Per-App VE Compared To Standard VE

	Per-App VE	VE
# of applications supported	1 Virtual IP* 3 virtual servers	No Limit
App services	• LTM • Adv WAF	GBB (all app services)
Throughput instances	25M, 200M	25M, 200M, 1G, 3G, 5G, 10G, Hi Perf#
Consumption models	Subscription, ELA, Perpetual	Subscription, ELA, Perpetual, PAYG
Code base (TMOS)	Same	
Ecosystem support (Private/public cloud, container integration)	Same	
BIG-IQ 6.0 later—visibility, management & analytics	Same	

*1 wild-card included in Virtual IP | # No license limitations on throughput

BIG-IP Cloud Edition Consumption Models

	ELA/subscription	Perpetual
BIG-IP per-app virtual edition (LTM, Adv WAF)	☑	☑
BIG-IQ management and analytics	☑	☑
AutoScale	Unlimited VEs	Fixed number of pre-purchased VEs
BIG-IP VE service scaling (required for autoscaling in VMware) w/optional AFM add-on	☑	☑
Contract required	☑	☒
Min purchase	Min deal size requirements	20 Per-App VEs
Purchase	Frictionless	Individual RegKeys
Reporting required	☑	☒

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Reduced BIG-IP VE/Per-App VE Spin-up Time & Image Size*

Spin-up time

Up to 50% reduction in spin-up time for LTM

Up to 40% reduction in spin-up time for ASM

Faster time to production

Improved agility for DevOps

Disk image size

40–50% smaller disk image size

Reduced CapEx/OpEx costs

- Single slot image formats are introduced only in qcow2 & OVA formats in BIG-IP 13.1.0.2
- Two slot image sizes are reduced in BIG-IP 13.1.0.2

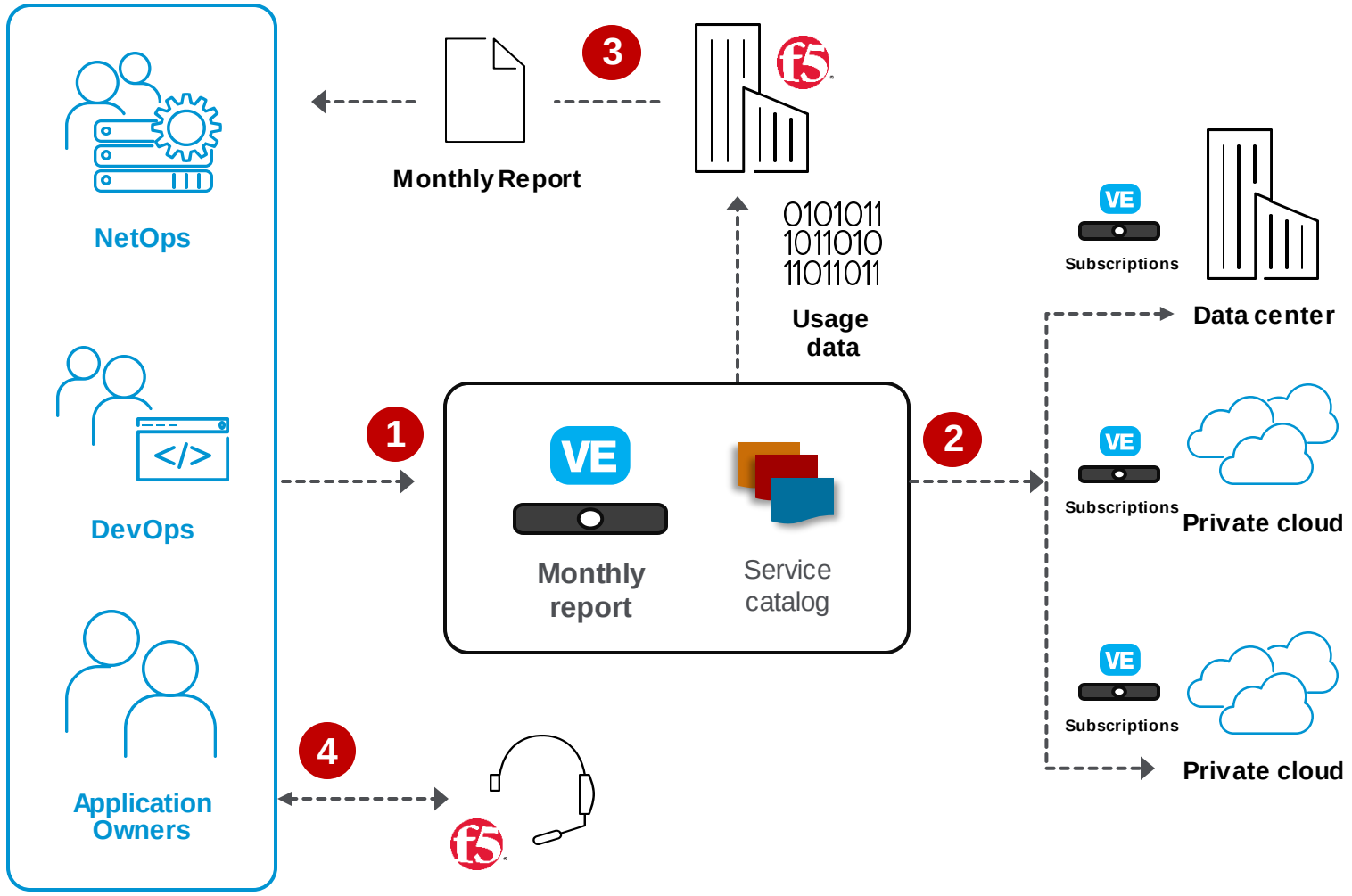
*Applies to both Per-App VE and standard VE

Self-licensing Of App Services And Security

Utilizing BIG-IQ CM or license manager (subscription or ELA)

Operational process

1. Initial order of licenses populated on BIG-IQ License Manager, available for immediate deployment
2. Additional licenses on-demand through self-service
3. Activity report and billing report for incremental purchases that are prorated and co-termed (subscription) or capture against ELA
4. Per-app VE via (subscription or ELA) automatically covered with 24x7 F5 premium support and software upgrades



BIG-IQ Role-Based Management

Network engineer	Security Manager	App 1 Team	App 2 Team…
• Assigns roles • Device management • App templates and service catalog • System management	• Set security policy • Assign roles • Manage security templates • Security alerting and reporting	• Visualization-centric application management • Lightweight editing	• Visualization-centric application management + lightweight editing

Sample roles

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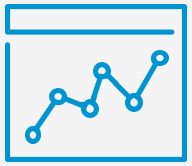
New Challenges Emerge

IT unable to support business growth at scale



Explosion in apps demands scalable operations

- Inability to deploy and scale app services efficiently
- Lack of visibility into each app's availability and health

[1]*Source: Cisco Global Cloud Index (2016–2021)*
[2]*Source: F5 2018 SOAD Report*

Increasing web application attacks

- Every unprotected app is a potential security vulnerability
- Compliance gaps due to non-standard policies

[4]Source: Verizon 2017 Data Breach Investigations Report
[5]Source: Shape 2017 Credential Spill Report

App teams require fast time to market

- Multi-tenant app services model inhibits flexibility and control
- IT-dependency and security requirements slow time to service

[6]*Source: F5 2018 SOAD Report and 2017 State of DevOps Report*

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