



# Next-Gen Application Services with BIG-IP Next

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# Agenda

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History of BIG-IP TMOS

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An Introduction to BIG-IP Next

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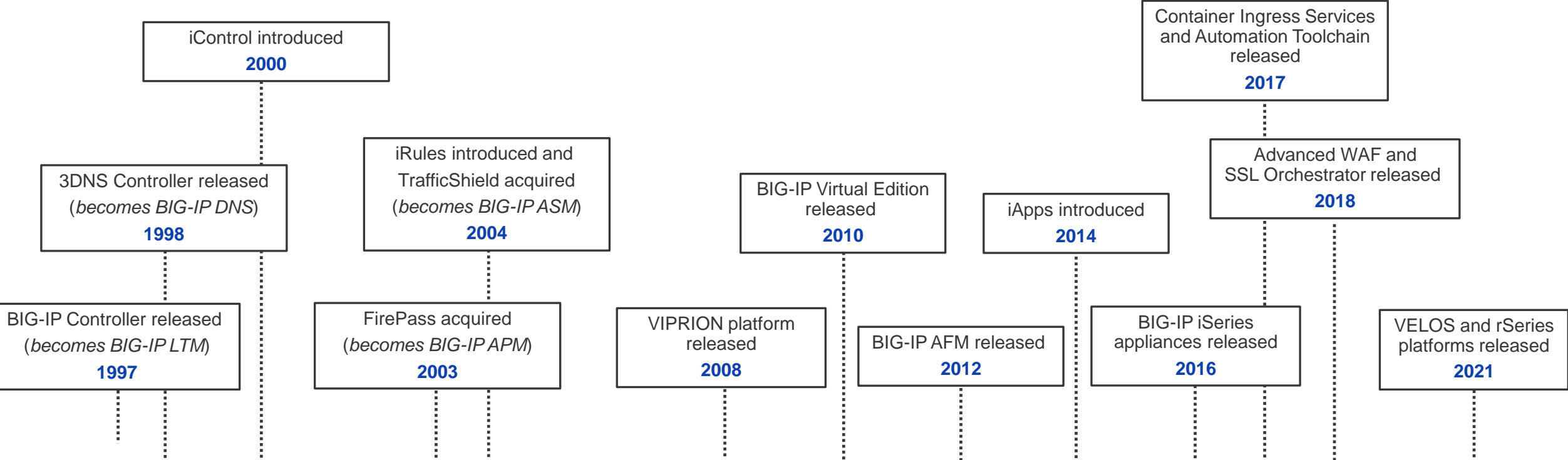
What to Expect from BIG-IP Next

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Transitioning to BIG-IP Next

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# BIG-IP: The most trusted ADC for the last 25+ years



1997

2004

### TMOS software architecture introduced

- Last major architectural change to BIG-IP software
- Resulted in creation of TMM, iRules, full-proxy architecture and paved the way for BIG-IP VE

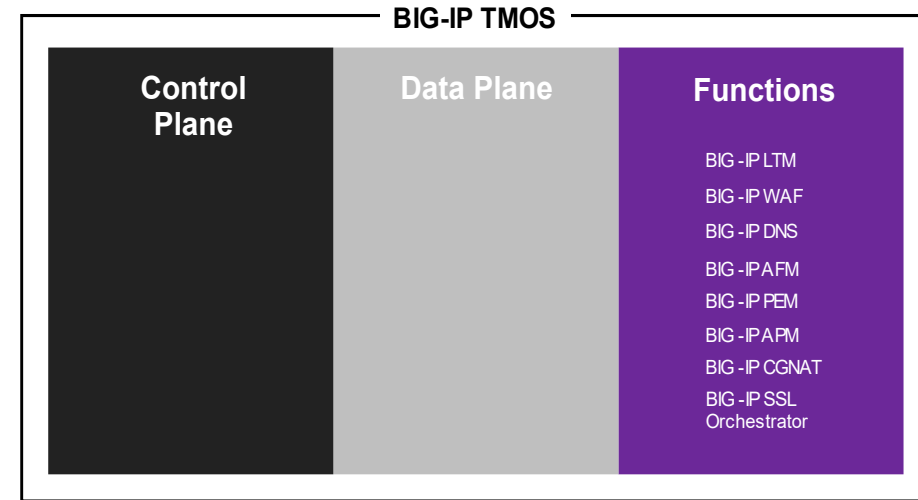


**The time has come for BIG-IP to  
evolve to support **you** and the  
next era of **apps**.**

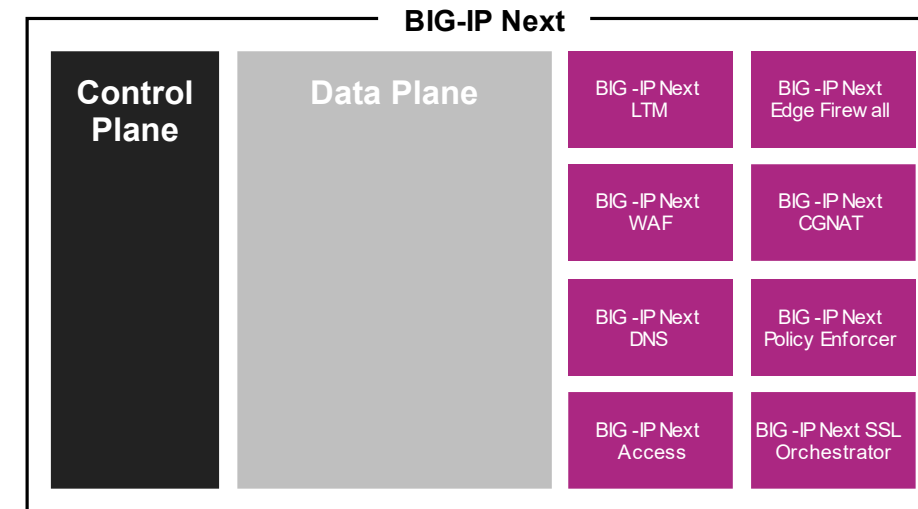
# Introducing BIG-IP Next: F5's next-gen BIG-IP software

## What is BIG-IP Next?

- The same BIG-IP you know and trust, modernized and optimized for the future
- Architected using interconnected, containerized services which are abstracted away from users
- Built around a declarative and app-centric configuration framework



**BIG-IP TMOS**  
*(Monolithic)*

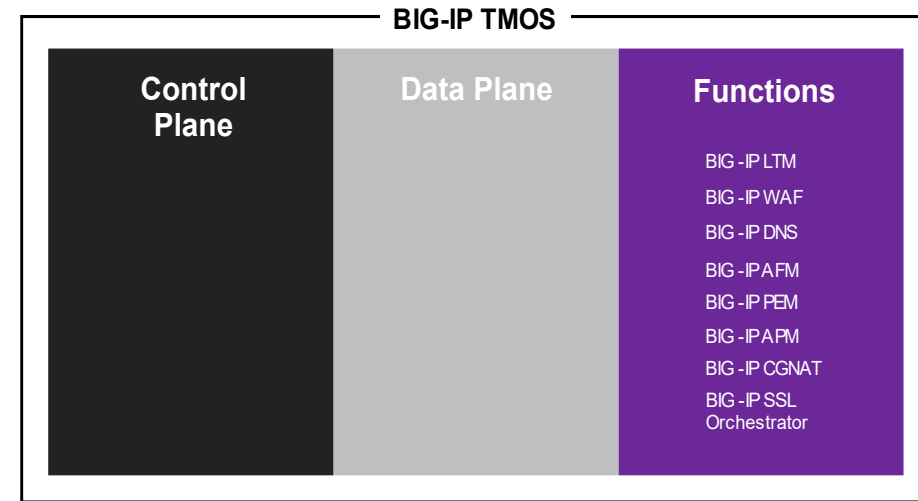


**BIG-IP Next**  
*(Container-based)*

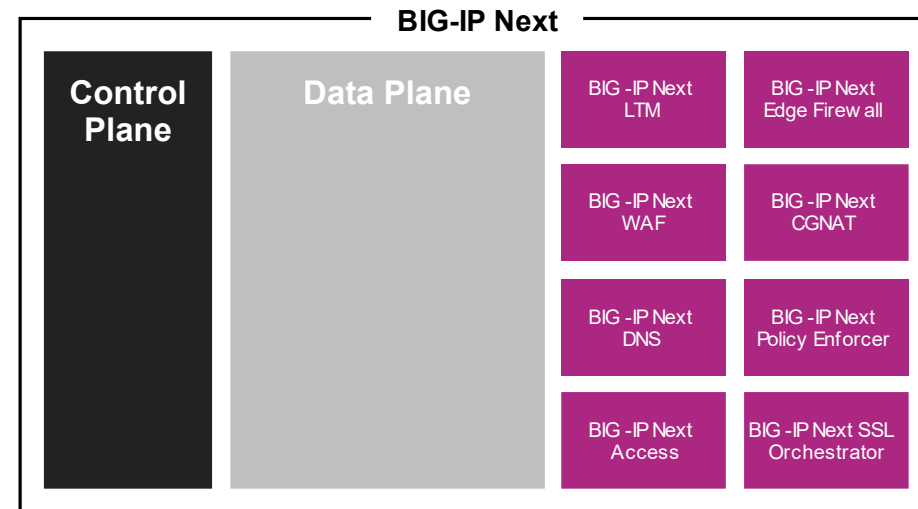
# Introducing BIG-IP Next: F5's next-gen BIG-IP software

## Reasons to adopt BIG-IP Next:

1. Reduced operational complexity
2. Comprehensive automatability
3. Improved security and lower risk
4. Guaranteed scalability, performance, and resiliency
5. Enhanced observability
6. Maintained BIG-IP suite of functionality



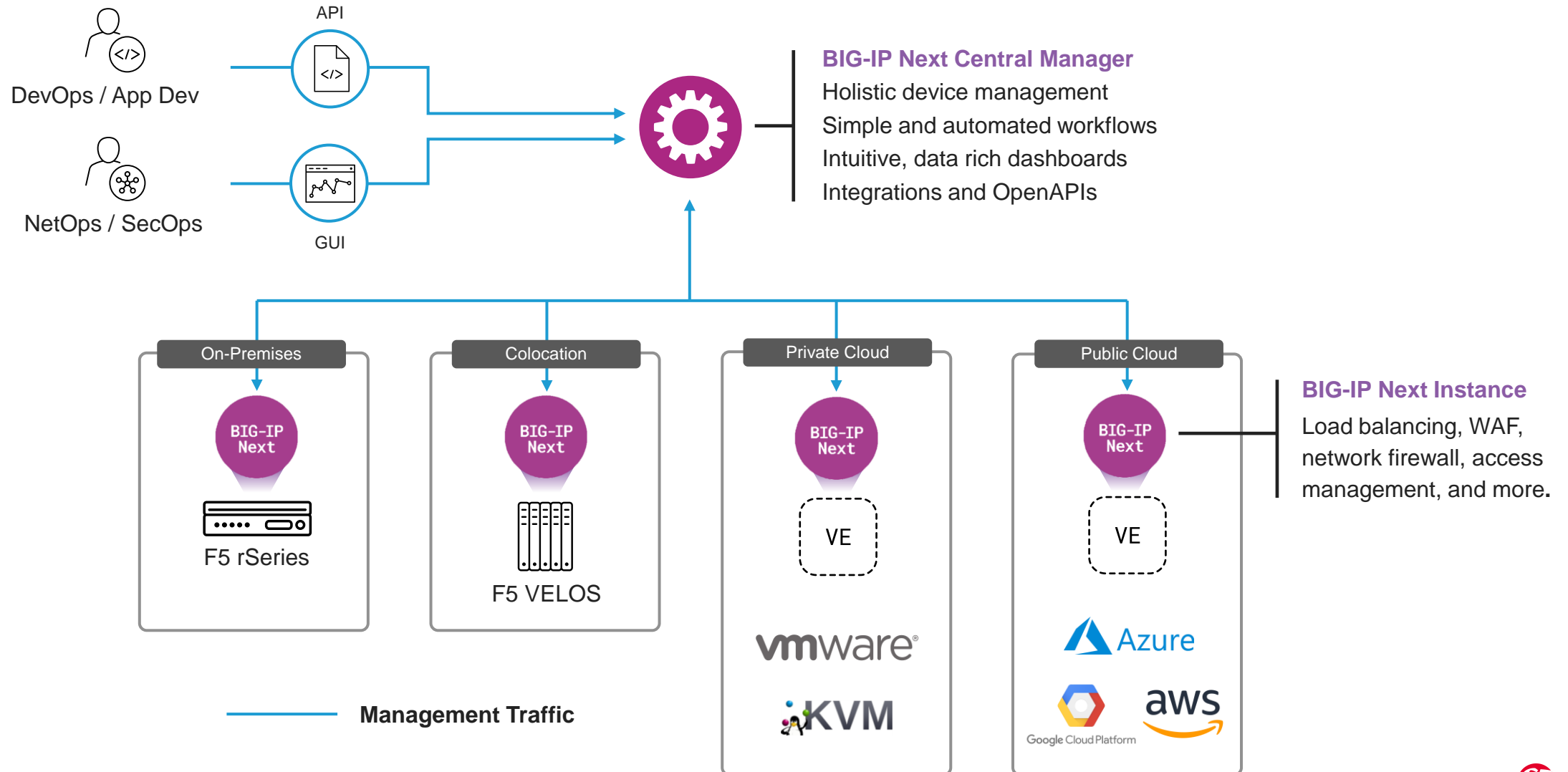
**BIG-IP TMOS**  
*(Monolithic)*



**BIG-IP Next**  
*(Container-based)*

# A unified solution for complex, distributed architectures

## BIG-IP Next Instances and BIG-IP Next Central Manager



# A unified solution for complex, distributed architectures

Single source of truth control across environments

## Comprehensive Dashboards, Analytics, and Data Streaming

Obtain granular insights into the health and performance of apps and BIG-IP Next instances, and stream telemetry to 3<sup>rd</sup> party software.

## Centralized Monitoring, Alerting, and Reporting

Receive alerts to rapidly respond to application events and schedule reports to be automatically exported for auditing purposes.

## Accelerated BIG-IP Next Migrations

Easily migrate workloads from BIG-IP TMOS with the BIG-IP Next Central Manager Migration Service.

## Rapid and Declarative App Deployment

Configure L4-L7 services with declarative APIs and templates in a fast, repeatable, and automated manner.

## Streamlined Instance Onboarding

Declaratively onboard BIG-IP Next instances with all the necessary L1-L3 settings needed to get up and running.

## Seamless Instance Upgrades, Backup, and Restore

Initiate rapid Instance software upgrades and backup/restore Instance configurations.

## Simplified Certificate Management

Complete TLS/SSL certificate lifecycle management ensures operational continuity, compliance, and security.

## Licensing Management and Visibility

Allocate licenses to BIG-IP Next instances, track total consumption and manage subscription lifecycles.

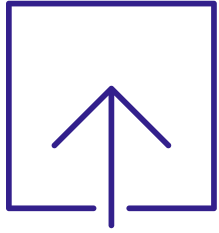
## QKView Management and iHealth Integration

Generate QKView files for BIG-IP Next instances and upload these directly to iHealth to begin issue troubleshooting.



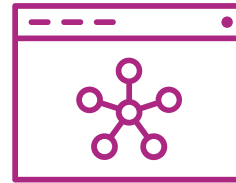


# BIG-IP Next reduces operational complexity



## Rapid, Simple, and Hitless Upgrades

- Major BIG-IP Next cluster upgrades in ~20 minutes and in less than 10 clicks
- BIG-IP Next control plane upgrades that are hitless in nature, requiring zero app downtime



## Modernized User Interface and Configuration Simplicity

- Modern GUI that has been redesigned to be intuitive, user friendly, and workflow-centric
- Comprehensive suite of declarative and reusable configuration templates abstract away deployment complexity and enable deployments in seconds

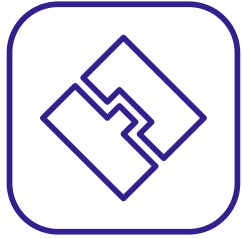


## Comprehensive Fleet Management

- All management and configuration tasks performed through the BIG-IP Next Central Manager, providing a single, modern interface and API for total control
- HA clusters treated as single entities, streamlining operations

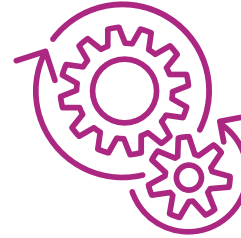


# BIG-IP Next delivers greater automation efficiency



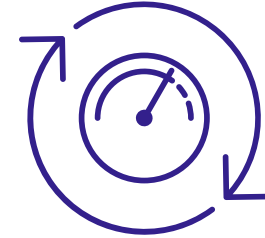
## Fully Integrated Automation and Telemetry Tooling

- Automation tools fully integrated, eliminating the need for post-deployment extensions
- Built-in app services configuration (AS3), configuration templates, device onboarding and telemetry streaming



## Declarative, API-Centric Framework

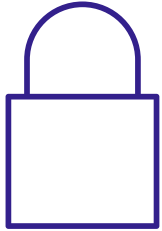
- BIG-IP Next can be managed via its API, making it easily automatable
- Deploy fully configured apps in seconds in a repeatable, reliable manner



## Rearchitected Control Plane Optimized for Automation

- Greater API efficiency with more API requests per second
- Configuration updates in <10ms to support highly dynamic environments
- Multi-threading enables BIG-IP Next automation from up to 10 unique orchestrators concurrently

# BIG-IP Next improves security and reduces business risk



## Elevated Software Release Security and Quality

- Secure Software Development (SSD) best practices ensure security is leading priority throughout development; improving software quality and reducing vulnerabilities



## Rapid Development of Security Features and Software Patches

- Quarterly security feature releases ensure cutting-edge security postures that thwart evolving threats
- Patches for newly discovered vulnerabilities delivered in as little as 24hrs

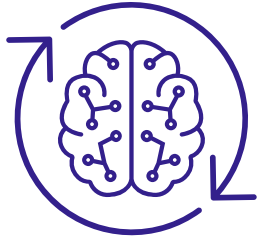


## Configuration Versioning, Access Controls, and Auditing

- Version control for elements such as iRules and app templates enables easy rollback to known good version and streamlines troubleshooting
- Role-based access controls limit configuration changes while auditing provides visibility into change history

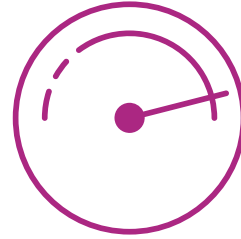


# BIG-IP Next guarantees performance, scalability & resiliency



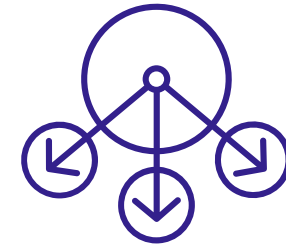
## Superior Control Plane Scale

- Unrivalled object scale with support for up to 2.5M configuration objects
- Dedicated and variable compute resources ensures control plane performance and availability



## Industry-Leading Data Plane Performance

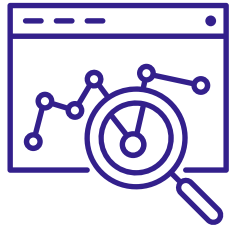
- Unparalleled data plane performance and scale carried forward from BIG-IP TMOS
- Massive throughput with ultra-low latency to provide optimal app experiences for millions of users



## Seamless Global App Resiliency

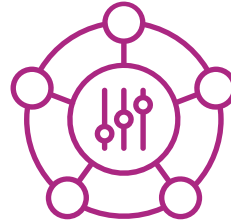
- Effortlessly implement Global Server Load Balancing (GSLB) within any multi-site app deployment, providing maximum application redundancy with minimal configuration effort

# BIG-IP Next enhances application observability



## Granular App and Device Dashboards

- Granular dashboards with extensive app and network insights help optimize application performance and troubleshoot issues
- Synthetic monitoring integration with F5 Distributed Cloud Services



## Centralized Monitoring, Alerting, and Reporting

- Birds-eye visibility spanning entire app portfolios and BIG-IP Next fleet across distributed environments
- Receive alerts to rapidly respond to application events and automate report creation for auditing purposes



## Third-Party Telemetry Streaming

- App and device data exportation from BIG-IP Next Central Manager to all popular third-party backend visualization software including Splunk, Grafana, and many more.
- Telemetry streaming is baked into BIG-IP Next eliminating the need for post-deployment extensions

# BIG-IP Next maintains core BIG-IP TMOS functions



















- 1
- 2
- 3
- 4
- 5
- 6



# BIG-IP Next maintains core BIG-IP TMOS functions



-  Configuration & iRules Versioning
-  Modernized, Intuitive User Interface
-  Declarative Configuration Via APIs & Templates
-  Software Upgrades In Minutes
-  Superior Control Plane Scale & Performance
-  Hitless Upgrades For Non-Data Plane Components
-  Accelerated Feature Delivery
-  Seamless Global App Resiliency
-  Fully Integrated Automation Suite
-  Elevated Software Quality
-  Granular App & Security Dashboards
-  Multi-Threaded Control Plane
-  Simplified Cluster Management
-  Software Patches Released in Hours/Days
-  Single-Step Multi-Site Deployments
-  Comprehensive Centralized Management & Visibility

# Game-changing improvements for day-to-day operations

Use Case	BIG-IP TMOS		BIG-IP Next
Software upgrades	Hours	▶	10 minutes (and hitless if no data plane involvement)
Centralized management and visibility	Requires BIG-IQ purchase	▶	Free via BIG-IP Next Central Manager
App deployment	Days / weeks	▶	Seconds / minutes
Multi-site app deployment	Multi-step process	▶	Single-step process (with seamless GSLB configuration)
Automation pipeline integration	1000s of lines of code	▶	10s of lines of code
Software releases containing new features	2 x per year	▶	4 x per year
Configuration versioning	Not available	▶	Available (including iRules)



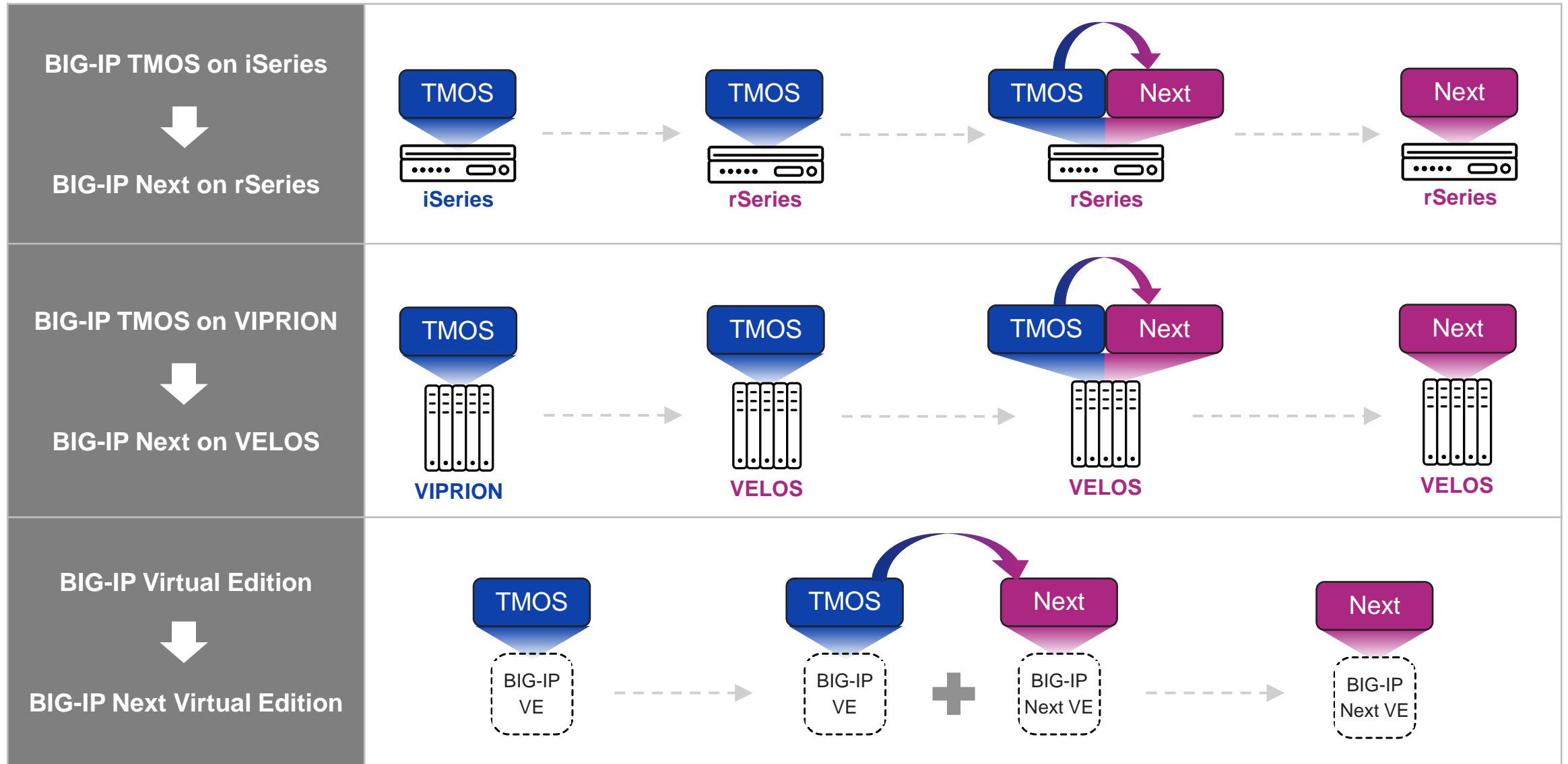
# Transitioning to BIG-IP Next

# rSeries & VELOS facilitate cross-gen multi-tenancy

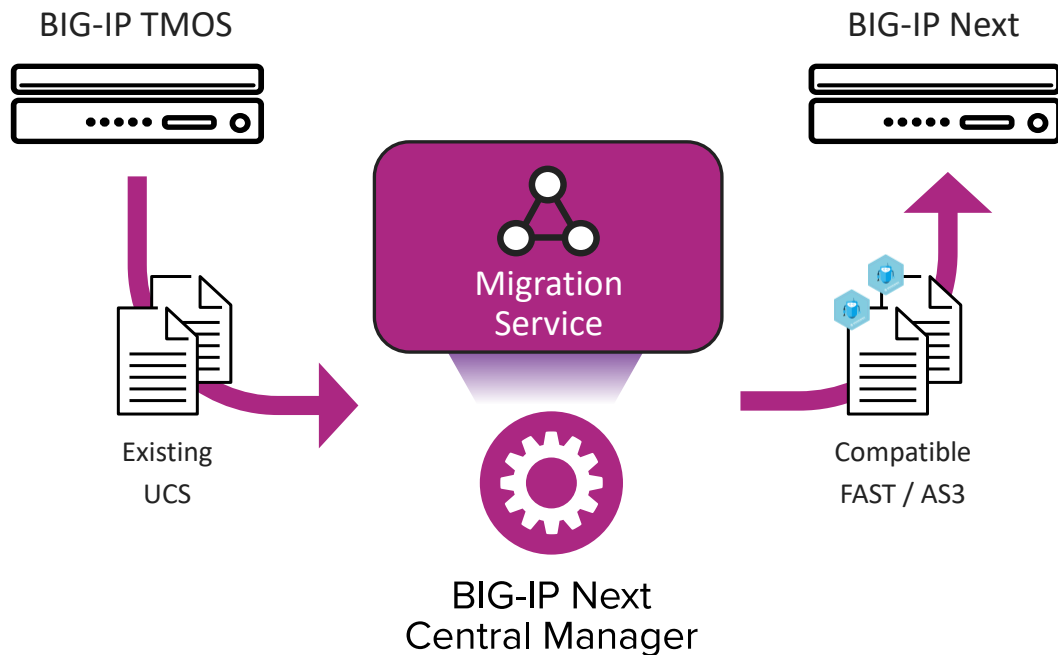


**Operate BIG-IP TMOS and BIG-IP Next side-by-side on the same rSeries or VELOS system**

# Transition to BIG-IP Next, app-by-app, at your own pace



# BIG-IP Next Central Manager Migration Service



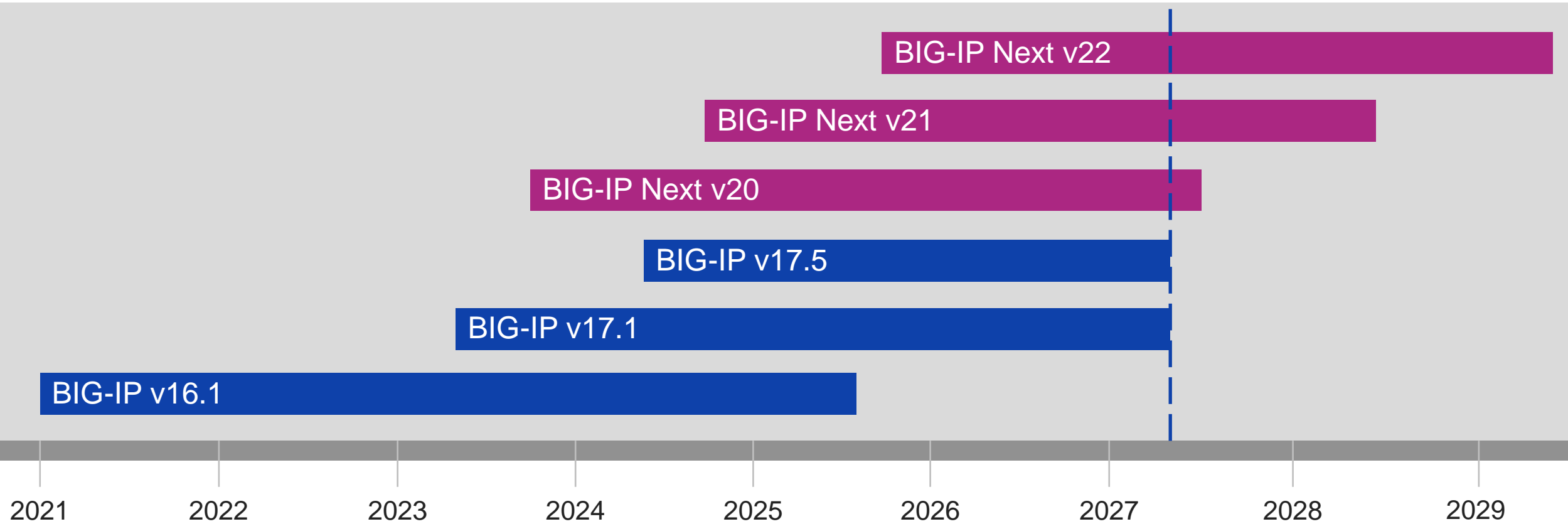
- Modify configs from earlier BIG-IP versions (v12.1+ and later) to be compatible with BIG-IP Next
- Convert existing BIG-IP configuration files into AS3 declarations and templates on BIG-IP Next
- Automatically identify and resolve common migration issues
- Migrate apps individually, on a per-app basis
- Standardize on AS3 based configurations for migration repeatability

Integrated component of **BIG-IP Next Central Manager**

# You don't have to transition immediately, time is on your side

BIG-IP TMOS

End of Life: **Apr 2027**



 BIG-IP TMOS version lifespan

 BIG-IP Next version lifespan



**Thank *you!***

**Don't forget to visit the  
BIG-IP Next booth!**

