UNLEASH APP DEPLOYMENT WITH CONFIDENCE

A GUIDE TO BIG-IP CLOUD EDITION SCALABLE PER-APP SERVICES.

INTRODUCTION

Your application teams are facing increased pressure to deliver more capabilities to the business faster than ever before.

This, in turn, places increased pressure on network operations to enable faster deployments, but without sacrificing security, performance, or availability. These pressures are driving change across IT in culture and processes as well as tools.

Network and security operations teams are collaborating closely with application development teams, finding ways to remove friction from application development and delivery processes. Application teams, in general, prefer to consume network and security services in an as-a-service model. This allows them to focus on creating functional code that delivers business value rather than non-functional code for external services that have to be versioned and maintained over time.
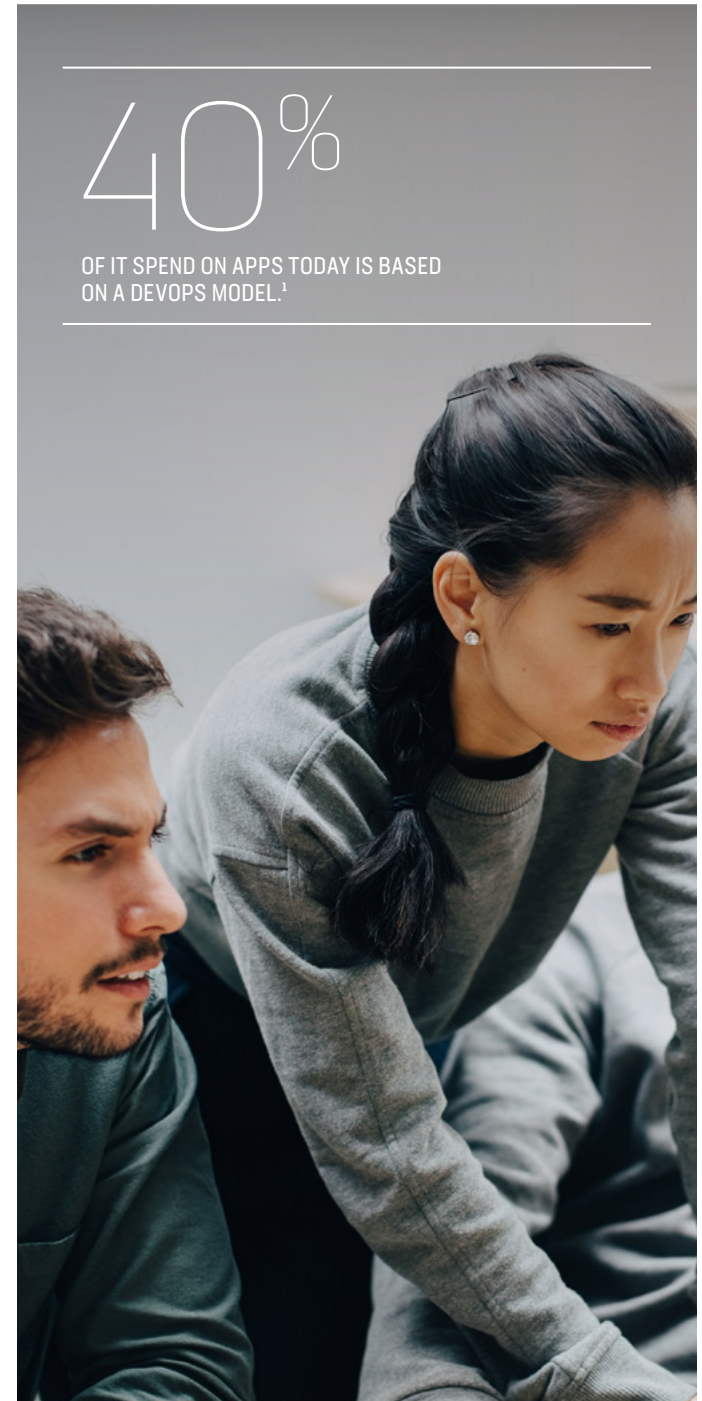
F5® BIG-IP® Cloud Edition offers a new way to deliver application services that supports application teams' need for greater flexibility and speed—while enabling operations teams to enforce consistent network and security policies across the entire application portfolio.

40%
OF IT SPEND ON APPS TODAY IS BASED ON A DEVOPS MODEL.[1]

61%
OF NETOPS TEAM MEMBERS BELIEVE THAT DEVOPS AND DEVELOPERS SHOULD HAVE MORE ACCESS TO SELF-SERVICE CAPABILITIES.[2]

[1] Puppet 2017 State of DevOps Report
[2] F5 2017 DevOps and NetOps Survey Report

NEW WORK ENVIRONMENTS REQUIRE A NEW APPROACH

Multi-tenant architectures offer big advantages in terms of consolidated management of mission-critical applications, but the stability and capacity of such systems comes at a price. As demand for individualized application support grows, a consolidated solution may no longer meet your needs. Upgrades and configuration changes need to be coordinated across all application owners who often disagree over whether or when to implement changes, which means that application deployments can be delayed by days or weeks. After deployment, performance improvements and security updates may be delayed for similar reasons.

While these impacts may have been manageable in the past, application teams, under pressure to deliver business value, are demanding better, more individualized services in real time. The best way to address that need, while meeting corporate security and performance standards, is to provide application teams with on-demand access to pre-built, validated performance, availability, and security services.

CONSOLIDATED MULTI-TENANT ARCHITECTURE
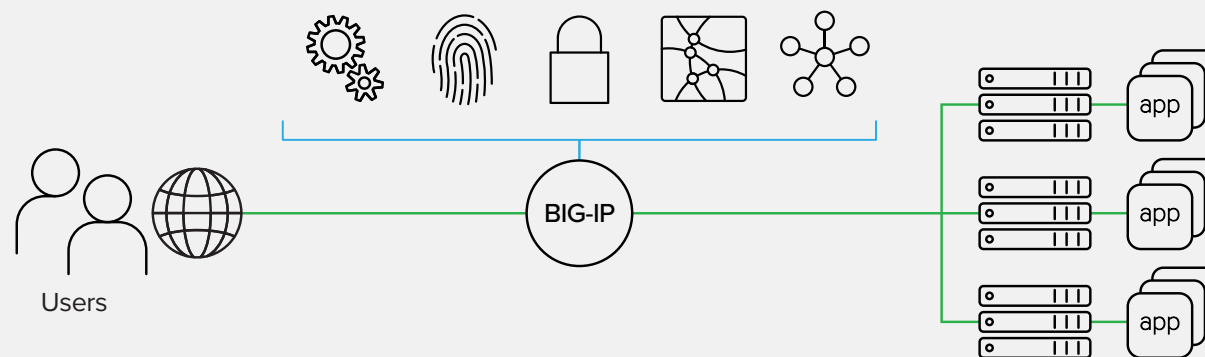
MULTI-TENANT ARCHITECTURES OFFER BIG ADVANTAGES IN TERMS OF STABILITY AND PERFORMANCE, BUT WITH THAT CAN COME ADDED COMPLEXITY AND ISSUES OF MANAGEABILITY.
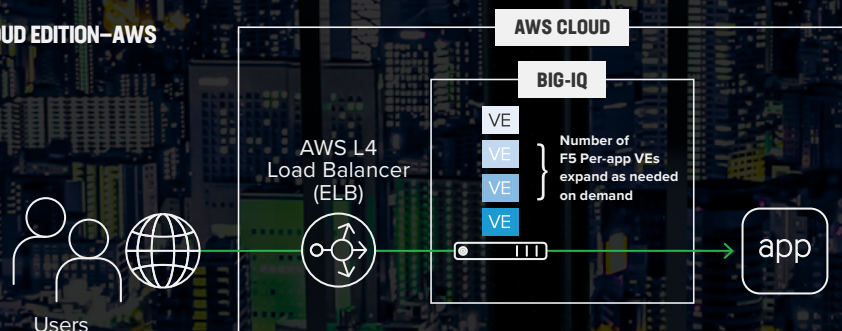
HOW IT WORKS

BIG-IP Cloud Edition comes with pre-built templates you that you can use out of the box or modify to meet your needs. The templates automatically configure BIG-IP instances with advanced availability and security services. You decide which services to offer each of your application teams and how much individual control you want to provide them with. You can also offer visibility into the performance of applications in production along with self-service scaling options.
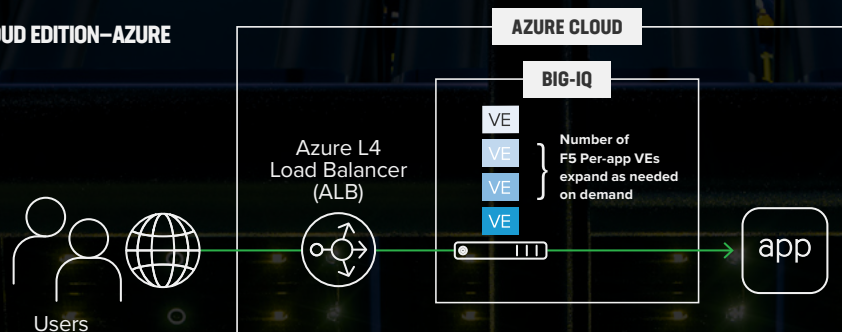
BIG-IP Cloud Edition removes friction between application owners and network operations teams, and extends the benefits of robust security, performance, and availability services to more applications—at the speed and scale your business requires.

Figure 1. BIG-IP Cloud Edition also takes a fundamentally different approach to management. Time-consuming device management tasks—creating, onboarding and licensing BIG-IP devices; scaling services; and upgrading devices—are handled automatically. That leaves the BIG-IP operator free to focus on creating the services framework for the application teams to attach to their application when they deploy.
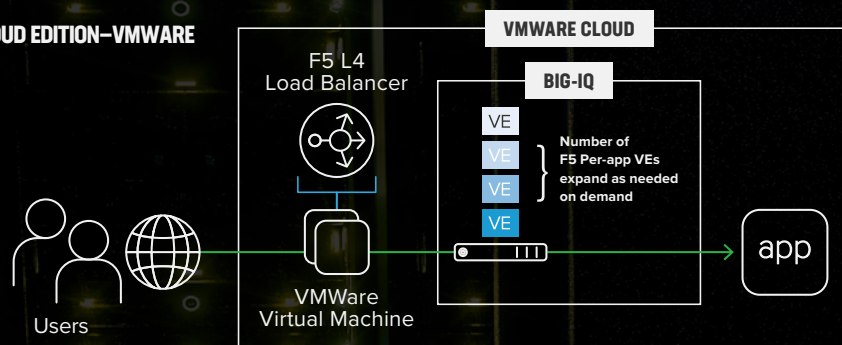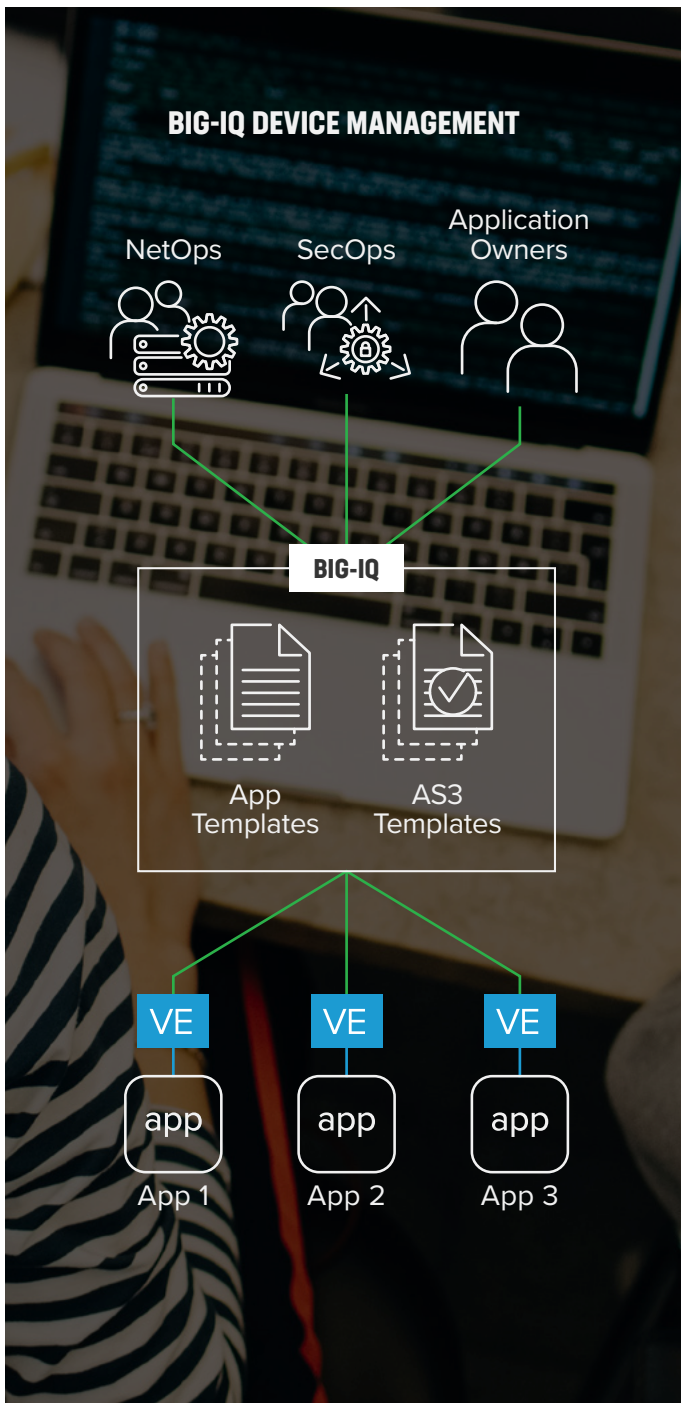
CLOUD EDITION—AWS

AWS CLOUD

BIG-IQ

Users

AWS L4 Load Balancer (ELB)

VE
VE
VE
VE
VE

Number of F5 Per-app VEs expand as needed on demand

app

CLOUD EDITION—AZURE

AZURE CLOUD

BIG-IQ

Users

Azure L4 Load Balancer (ALB)

VE
VE
VE
VE

Number of F5 Per-app VEs expand as needed on demand

app

CLOUD EDITION—VMWARE

VMWARE CLOUD

BIG-IQ

Users

F5 L4 Load Balancer

VMWare Virtual Machine

VE
VE
VE
VE

Number of F5 Per-app VEs expand as needed on demand

app

BIG-IQ DEVICE MANAGEMENT

NetOps   SecOps   Application Owners

BIG-IQ

App Templates   AS3 Templates

VE   VE   VE

app   app   app

App 1   App 2   App 3

AUTOSCALING AND SIMPLIFIED UPGRADES

Make it easy to keep applications highly available, fully protected, and compliant.

BIG-IP Cloud Edition also offers autoscaling, which eliminates the need for over-provisioning. You determine the environmental parameters that trigger BIG-IP Cloud Edition to add new instances. Comprehensive dashboards make it easy to evaluate environmental issues that could impact performance.

The application team gets their own easy-to-read dashboards as well. The BIG-IP operator can determine the elements displayed in the dashboard and can choose to provide options to tweak the scaling triggers. This gives the application team the ability to respond to certain application performance issues without involving the network operations team.

Upgrades also become dramatically simpler compared to the traditional consolidated model.

When it is time to upgrade the instances supporting a particular application, simply spin up new instances to accept new traffic, gracefully retiring the old version as connections bleed off.

This method delivers a cleaner, safer, and easier way to coordinate the upgrade process. Keeping your platforms up to date and offering new features to your users can become routine and low risk. And that should make everyone happy.

Learn more at **f5.com/cloudedition.**

UNLEASH YOUR APPS WITH MULTI-CLOUD FREEDOM

With cloud, the options have multiplied and so has the complexity. Ensuring every app works flawlessly in every environment is a big ask. You need to scale, you need consistent security, you need to automate and simplify operations to do it faster. You need to move apps freely between clouds with consistent services. You need the freedom to deliver any app, anywhere with confidence.

To learn more, visit **f5.com/multicloud.**