



# F5 and VMware. Realize the Virtual Possibilities.

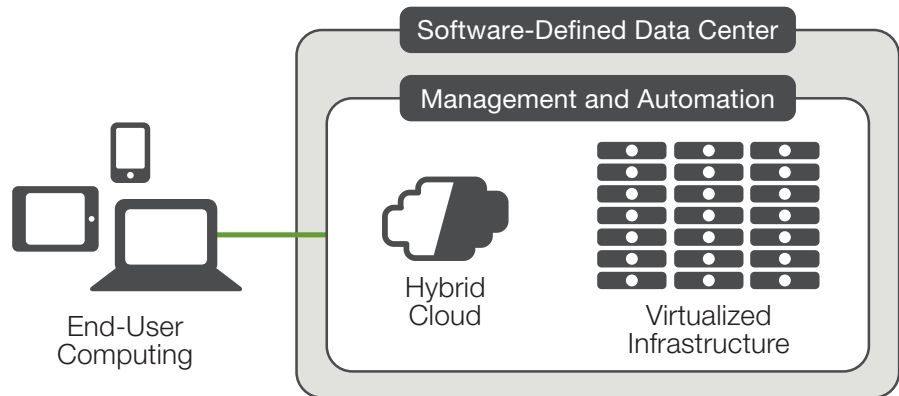


## **Simplify. Accelerate. Manage. Secure.**

Discover how F5 and VMware deliver a Software-Defined Data Center by providing simplified end-to-end networking through an application-centric approach.

## Overview

F5 and VMware have partnered for nearly a decade to develop industry-leading solutions. This collaboration began when F5 added Application Delivery Networking services to the vSphere platform. Today, F5® Software-Defined Application Services™ (SDAS) are delivered across VMware's Software-Defined Data Center (SDDC).



Together, F5 and VMware deliver the Software-Defined Data Center.

# F5 for Network Virtualization: VMware NSX

## Key benefits:

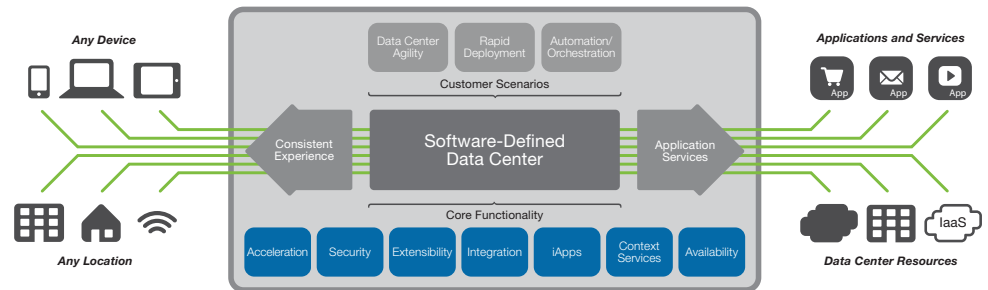
- Eliminate obstacles to the rapid deployment of applications and services.
- Create an agile environment able to react swiftly to unforeseen circumstances.
- Apply a repeatable and scalable solution for the delivery of performance, availability, and security services.

## Challenges

Existing network architectures are too complex and brittle to withstand the demands being placed upon them. This severely limits the speed of innovation while increasing management costs. Change is required to deploy new applications and services more efficiently, eliminate downtime due to unforeseen increases in workloads, and recover more quickly from disaster.

## Achieve Seamless Automation, Orchestration, and Provisioning of Software-Defined Application Services

Through a proxy architecture, the F5 BIG-IP® application services platform integrates with NSX network segments to expose a rich set of F5 application services to both network and virtualization operators. The BIG-IP platform delivers SDAS within NSX network virtualization for a reliable, enterprise-class application experience.



Achieve service provisioning, automation, and agility with F5 and VMware NSX.

# F5 for Business Mobility: Horizon and AirWatch

## Key benefits:

- Maximum performance, availability, scalability, and security.
- Secure access to any devices or applications—anytime and anywhere.
- Simplified and cost-efficient deployment.
- Secure, available, and scalable business mobility deployment.
- Easy enforcement of policies for mobile devices.
- Global intelligent management of network traffic and system availability.

## Challenges

To successfully provide application access, organizations must satisfy employee demand for bring-your-own devices (BYODs), as well as ensure quick and secure access to data and applications—anytime and anywhere. Organizations require simple, standardized, and low-cost solutions to manage data, desktops, devices, and applications. They also need multiple gateways for desktop virtualization and mobile devices.

## More Control and Better Security on Any Device, Anywhere

Secure access, single sign-on, intelligent traffic management, and server health monitoring are just some of the ways F5 improves the user experience and manageability for companies using VMware Horizon End-User Computing solutions.

F5 and VMware work closely together to help joint customers provide the best possible performance, ease of use, and security for their mobility deployments. F5's customized iApps® deployment packaging technology allows organizations to fully deploy applications in as little as two hours, and cost-effective licensing makes it easy to adopt iApps.

## Secure, Scalable, and Seamless Access

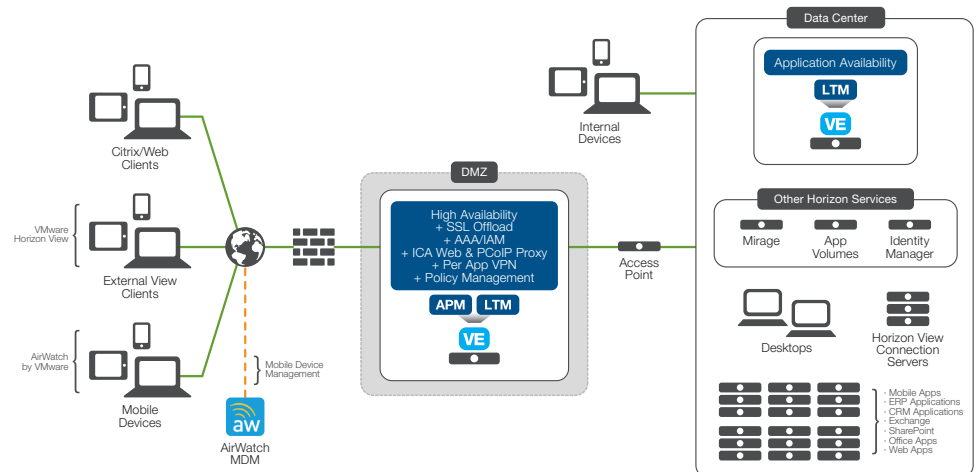
F5's proven solutions for VMware's Workspace Suite, which includes both Horizon and AirWatch, ensure that users enjoy fast, simple, and secure access to their corporate IT resources. Organizations can gain greater access control and server efficiency while delivering high performance, high availability, and a more productive environment.

## Mobile Application and Device Security

The integration of F5 solutions and AirWatch by VMware helps organizations successfully implement BYOD policies. F5 BIG-IP® Access Policy Manager (APM) consolidates application access and security, keeping corporate assets safe while increasing employee satisfaction and productivity. Integrating BIG-IP APM and AirWatch cloud-based solutions provides organizations with more flexibility and granularity in creating and enforcing corporate access policies for mobile devices.

## Simple and Secure Access to IT Resources

Users can access their IT resources through an easy-to-use and friendly portal. BIG-IP APM extends the capabilities of Workspace Suite by providing endpoint analysis, advanced identity management, and secure access to Workspace-enabled applications. Organizations can gain greater access control and server efficiency while delivering high performance, high availability, and a simple, more productive user workspace.



Secure access, intelligent traffic management, and simplified deployment for VMware End-User Computing.

# F5 for Hybrid Cloud: Continuous Application Availability

## Key benefits:

- Prevent downtime with seamless application failover and disaster recovery.
- Provide the best application experience by directing users to the nearest data center.
- Route traffic based on changing network and user volume conditions.
- Provide application availability between on-premises application deployment and vCloud Air deployment.
- Offer a single, global namespace for user connections.

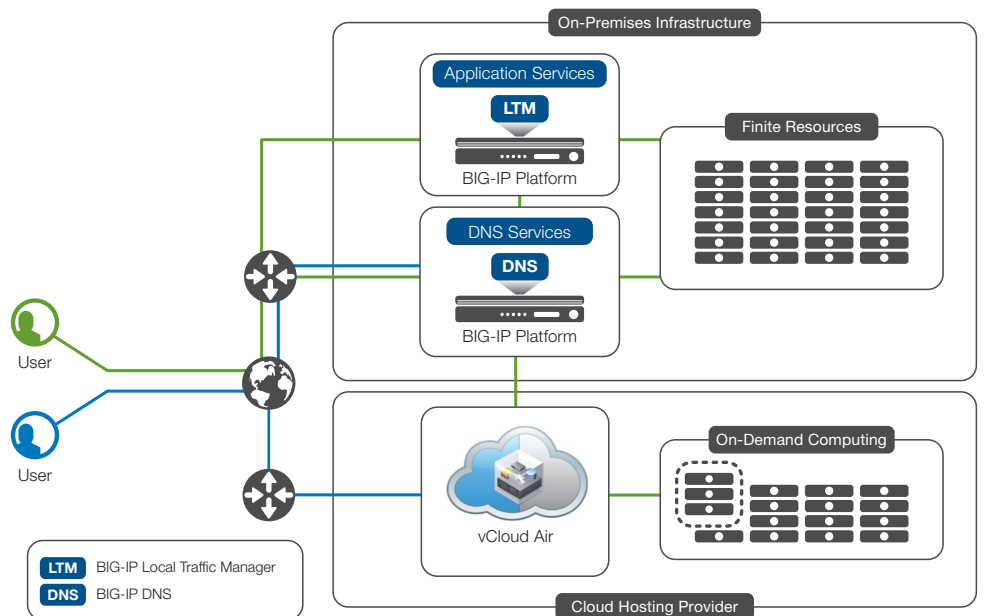
## Challenges

Organizations using hybrid environments face a variety of challenges. The user experience is dependent on geo-location, and it can be difficult to maintain persistent user connections across application and data centers. In addition, changing network and user volumes impact application performance. Downtimes during a disaster can disrupt business as well. Other challenges include meeting requirements for flexible licensing models and implementing business policies on application traffic.

## Increase Availability and Scale Performance of Applications in a Hybrid Cloud

As companies adopt public cloud platforms, they want the flexibility and efficiencies of on-premises environments for key application workloads. However, maintaining application availability, performance, and a seamless user experience while moving workloads to the cloud is challenging.

With F5 and VMware vCloud Air, organizations can route global application traffic across hybrid on-premises and cloud environments to scale applications and keep up with changing network conditions and user volume. Users can also be directed to the nearest data center to ensure they get the best application experience while traffic is routed according to their specific business policies.



F5 and vCloud Air move workloads while maintaining application availability.

# F5 for Hybrid Cloud: Application Performance and Protection

## Key benefits:

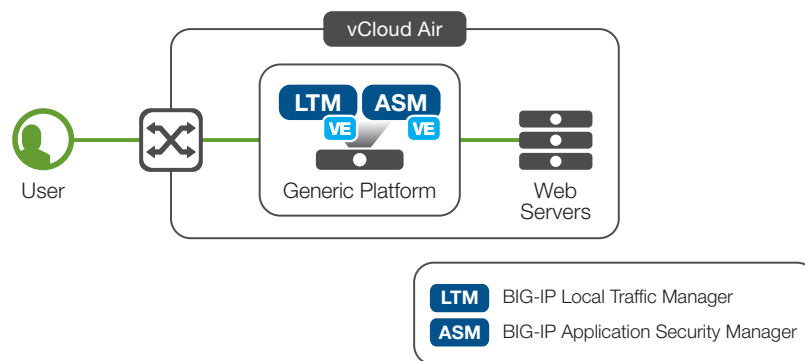
- Scalable application delivery for reduced downtime.
- Improved application performance and high availability with advanced application health monitoring, adaptive compression, and SSL offload.
- Protection against SQL injection, cross-site scripting, and DDoS attacks—with centralized visibility and control.
- The same level of security in vCloud Air as in the data center.

## Challenges

Potential issues of a hybrid cloud environment include inconsistent application availability and poor application performance that negatively impacts business. Organizations also face threats to applications including exposure to outages, data theft, and lost customers.

## Scale and Secure Applications in a Hybrid Cloud

Ensure application performance and high availability by providing advanced application health monitoring, adaptive compression, and SSL offloading. F5 secures the applications that organizations rely on by providing consistent, policy-based web application security. BIG-IP® Application Security Manager™ (ASM) secures all data center applications against OWASP top 10 threats such as cross-site scripting and SQL injection, as well as zero-day attacks. BIG-IP ASM provides granular attack visibility with leading layer 7 DDoS defense, detection, and mitigation techniques—identifying sophisticated cyber threats and stopping attacks before they impact the data center.



F5 and vCloud Air protect applications in the cloud.

# F5 for Cloud Management

## Key benefits:

- Streamline the provision of BIG-IP services in minutes.
- Add, modify, and delete local and global load balancing.
- Automate server maintenance and reduce accidental misconfiguration.
- Provision and scale services automatically and dynamically.
- Visualize application performance with the vRealize Log Insight content pack.

## Challenges

When managing hybrid ADCs, orchestration can be repetitive and time-consuming. Orchestration tasks often must be performed by specialist teams rather than application administrators. In addition, organizations may face capacity or configuration issues, which are common.

## Provision, Orchestrate, and Manage Hybrid Application Delivery Services

Organizations require full visibility into their virtualized infrastructure including their Application Delivery Controllers (ADCs). They also require the ability to automate the provisioning of VMs and integration through the VMware vRealize Suite. F5 provides multiple key integrations with the vRealize Suite to provide application visibility and automate the management of F5 virtual editions.

Learn more about F5 and VMware joint solutions at [f5.com/vmware](https://f5.com/vmware).