# Scale and Secure your Applications in VMware® vCloud® Air™ with F5 BIG-IP LTM and BIG-IP ASM
Protect against Layer 7 attacks with enterprise-ready application-aware products

**VMware vCloud® Air ™** is a secure, dedicated hybrid cloud service operated by VMware, built on the trusted foundation of VMware vSphere®. The service supports existing workloads and third party applications as well as new application development, giving IT a common platform for seamlessly extending its data center into the cloud.

**F5® BIG-IP® Local Traffic Manager™ (LTM)**

**F5® BIG-IP® Application Security Manager™ (ASM)**

## Protecting Applications in the Cloud

Many enterprises are considering migrating their application workloads to the public cloud, but the need for a stable cloud platform and reliable network security components have been a barrier to adoption. Threats to applications such as cross-site scripting, brute force attacks, and DDoS attacks are prevalent and can expose an enterprise to outages, data theft, and lost customers. Before enterprises can trust a cloud deployment model, they need to ensure that their applications will be fast, secure, and available. Reliable, enterprise-ready application delivery components are essential to ensuring the success of cloud deployments.

Now, enterprises that run application workloads in vCloud Air can get the web application protection they need by deploying F5 BIG-IP Local Traffic Manager (LTM) and BIG-IP Application Security Manager (ASM) in front of their vulnerable web applications. Extending these capabilities to vCloud Air provides customers with a known platform for deploying and securing their application deployments, and it can ease the migration of workloads to vCloud Air.

## A Solid Foundation for Security

BIG-IP LTM ensures application performance and high availability by providing advanced application health monitoring, adaptive compression, and SSL offloading. It delivers industry-leading SSL performance, so you can cost-effectively protect the entire user experience by encrypting all communication between the client and the server. BIG-IP LTM also protects against potentially crippling DDoS attacks. All of this provides a stable foundation for security. If you need to add firewall protection, application security, and access control, you can add modules to further secure your infrastructure—all with centralized visibility and control.

## Secure vCloud Air Application Deployments

BIG-IP LTM works in concert with BIG-IP ASM, which secures the applications your business relies on by providing consistent policy-based web application security. 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. With leading Layer 7 DDoS defenses, detection and mitigation techniques, and granular attack visibility, BIG-IP ASM identifies highly sophisticated cyber threats and stops attacks even before they reach servers. ASM also offers comprehensive protection against automated bot attacks and combined with LTM provides an agile and scalable platform for customers. With BIG-IP ASM, organizations

worldwide can secure their applications, ensure that application vulnerabilities are quickly mitigated, and maintain compliance without making extensive changes to the network.

## Rely on a Validated Joint Solution

F5 provides the leading Application Delivery Controller (ADC) for Layers 4 through 7, which enables the delivery of advanced application services via a single platform. F5 has extended this capability into the VMware cloud. Working closely with VMware's vCloud Air team, the F5 solutions have been validated in vCloud Air for core application delivery, disaster recovery and application security to ensure seamless scalability and performance in the VMware cloud.

## How it Works

The BIG-IP Virtual Edition (VE), a full proxy architecture, is deployed as a VMware image in vCloud Air. BIG-IP VE sits in front of your application server pools and monitors application traffic, ensuring high availability and securing applications against attacks like cross-site scripting, SQL injection, and brute force attacks.
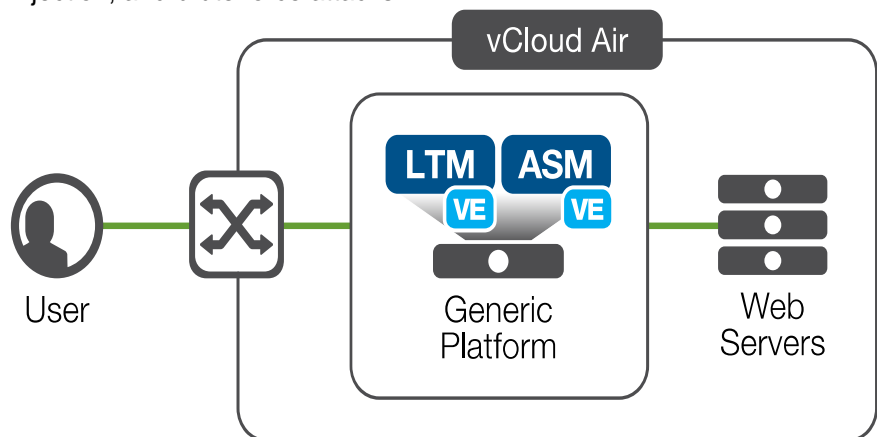


Figure 1: BIG-IP LTM and BIG-IP ASM protect your web servers and applications from attack

## Ease Migration of Applications to vCloud Air

As licensable modules on the same BIG-IP VE platform, BIG-IP Local Traffic Manager, and BIG-IP Application Security Manager, and BIG-IP Global Traffic Manager (GTM) work together to provide DNS redirection, application availability, and application security. The combination of these three technologies enables enterprise users to access applications either on premises or in the cloud from any device while maintaining crucial security.

## Enhance Application Availability Everywhere

Take Advantage of F5's Solution Trial:

- To learn more about how F5 solutions and vCloud Air enhance application availability and security, visit F5 on the vCloud Air Marketplace.

- To get a free 30 day trial license for F5 BIG-IP Local Traffic Manager and BIG-IP Application Security Manager, send an email to vchstrial@f5.com.

- If you are currently using BIG-IP Local Traffic Manager or Application Security Manager on premises, you can Bring Your Own License to vCloud Air.

- If you are a new customer, you can purchase a new license from channel partners or directly from F5.

To learn about joint F5 and VMware solutions visit https://f5.com/vmware or contact your F5 or VMware partner or sales representative for purchasing information.