Virtual desktop infrastructure (VDI) solutions, such as VMware View, can offer organizations a cost-effective way to manage user desktops. The success of virtual desktop deployments, however, hinges on delivering an acceptable user experience. In addition to availability, performance, and security, the ability to reduce desktop operating expenses is also important. F5® BIG-IP® Access Policy Manager™ for Local Traffic Manager™ Virtual Edition (BIG-IP APM for LTM VE) provides advanced traffic management and helps ensure the maximum performance, availability, and security along with an optimized user experience for a rewarding VMware View implementation.

**Desktop Virtualization**

VDI deployments virtualize user desktops by delivering them to distinctive endpoint devices over the network from a central location. Since users’ primary work tools are now located in a data center rather than on their own local machines, VDI can put a strain on network resources, and the user experience can be negatively affected. WAN latency can be especially noticeable, and organizations might have to provision more bandwidth to account for the additional network traffic. VMware has also introduced the PC-over-IP (PCoIP) communications display protocol. Many remote access devices are incapable of correctly handling this distinctive protocol, leading to possible deterioration in the user experience.

Keeping mobile users connected to their own unique, individual environments can also pose a challenge. When users are moving from one network to another, their sessions could be dropped, requiring them to re-connect, re-authenticate, and navigate to where they were prior to the interruption.

Secure access and access control are always concerns when deploying any system, and virtual desktops are no different. Users are still accessing sensitive corporate information, so enforcing strong authentication and security policies and ensuring that the client is compliant are still important for VDI deployments.

Lastly, IT must make sure that the virtual systems themselves are available and can scale when needed to realize all the benefits from both a virtual server and virtual desktop deployment.

**Solution**

The inclusion of BIG-IP APM fine-grained access control with BIG-IP LTM VE offers a very powerful enhancement to optimize, secure, and deliver a VMware View virtual desktop infrastructure. This is a 100-percent virtual remote access solution for VMware View 4.5 VDI products. BIG-IP APM for LTM VE will run as a virtual machine in a VMware hypervisor environment, so IT can easily add it to the existing infrastructure. As the number of users

**Key features**

- **Pre-Login Endpoint Device Checks**—Provides enhanced security and access control
- **Flexibility to Encrypt End-to-End**—Encryption of all VMware View transport protocols without compromising performance
- **High Performance PCoIP**—DTLS provides secure access without affecting PCoIP performance
- **Convenient Single Sign-On**—Users log in once, and stay logged in

**Key benefits**

- **Application Performance and Availability**—Load balancing, health monitoring, and SSL offload for VMware View, resulting in higher system availability and greater scalability
- **Simplified Authentication**—A broad range of authentication mechanisms, including two-factor schemes
- **Reduced Bandwidth Usage**—Save while maintaining or improving user experience
- **Enhanced User Experience**—PCoIP traffic receives priority over other traffic on the network
- **Global Availability and Business Continuity**—Use BIG-IP® Global Traffic Manager™ for availability, disaster recovery, scale, and business continuity
on virtual desktops grows, organizations can easily transition from BIG-IP LTM Virtual Edition to a BIG-IP LTM physical appliance.

BIG-IP LTM VE provides important load balancing, health monitoring, and SSL offload for VMware View deployments for greater system availability and scalability. Network and protocol optimizations help organizations manage bandwidth efficiently while maintaining and improving the user experience. BIG-IP APM for LTM VE also overcomes the PCoIP challenge with the Datagram Transport Layer Security (DTLS) feature. This transport protocol is uniquely capable of providing all the desired security for transporting PCoIP communications, but without the degradation in performance. Users no longer have to use remote desktop protocol (RDP) to access their virtual desktops but can now connect directly with PCoIP. Or, organizations can plan a phased user migration to PCoIP.

BIG-IP APM for LTM VE comes with powerful security controls to keep the entire environment secure. Pre-login host checks will inspect the requesting client and determine if it meets certain secure access criteria. The solution offers a wide range of authentication mechanisms, including two-factor, to protect corporate resources. BIG-IP APM enables convenient single sign-on, and once a session is established, all traffic, including PCoIP, is encrypted to protect the data. Session persistence helps users reconnect quickly without having to re-authenticate. BIG-IP APM for LTM VE simplifies deployment of authentication and session management for VMware View enterprise virtual desktop management.

Learn more

For more information about VMware View with BIG-IP APM for LTM VE solutions, please see the following resources or use the search function on f5.com.

Solution pages

F5 Solutions for VMware View

White papers

Application Delivery and Load Balancing for VMware View Desktop Infrastructure
Deploying F5 Application Ready Solutions with VMware View 4.5
Optimizing VMware View VDI Deployments
Enabling Long Distance Live Migration with F5 and VMware vMotion
Global Distributed Service in the Cloud with F5 and VMware