

Accelerate Development and Application Delivery with F5 and Red Hat

KEY BENEFITS

- Easy to integrate and scales to the needs of the enterprise.
- Software support through predictable subscription models.
- Simplified provisioning of F5 LBaaS services on the Red Hat platform.

F5 has partnered with Red Hat to implement integrated, certified solutions for enterprises, telcos, and service providers. This partnership enables customers to deploy advanced application delivery services in an open cloud environment. It also provides seamless interoperability for F5[®] BIG-IP[®] products in Red Hat OpenStack Infrastructure as a Service (IaaS) environments, as well as Red Hat OpenShift Platform as a Service (PaaS) environments.

The first open-source software company to reach over \$1B in revenues, Red Hat delivers open software packages that provide customers with predictable cost models. Since 2013, our partnership has accelerated large-scale open deployments of private cloud infrastructures, improved time to market, and boosted customer satisfaction. F5 and Red Hat technical teams are actively deployed to continually update our joint certifications, deepening our solution integration and partnership.

F5 and Red Hat-Certified OpenStack Solutions for Enterprises

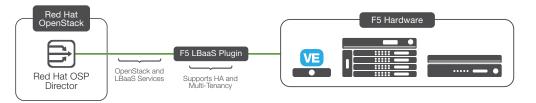
F5 and Red Hat have partnered to certify integrations with the OpenStack platform. Red Hat has certified the F5 Load Balancing as a Service (LBaaS) plugin on OpenStack, which assures that enterprises have a solution that is simple to integrate and scale to their needs. As the premier open-source software vendor, Red Hat is uniquely positioned to support customers in developing OpenStack clouds. Red Hat provides customers open software support through predictable subscription models.

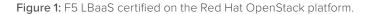
A combination of the Red Hat OpenStack platform and F5 BIG-IP virtual editions (VEs) or hardware appliances simplifies a "full stack" private cloud deployment for enterprises. By using the OpenStack Horizon UI, organizations can provision and deploy BIG-IP products by LBaaS or F5 advanced services using HEAT orchestration. F5 integration with OpenStack supports BIG-IP VEs, appliances, and the F5 VIPRION® modular chassis.

F5's further integration with <u>Red Hat OpenStack Platform (OSP) Director</u> equips enterprises with a simplified method to implement LBaaS services on the Red Hat platform, for a repeatable provisioning process.

KEY BENEFITS

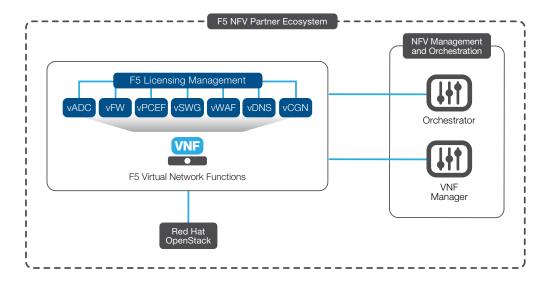
- Certification ensures the highest level of satisfaction for service providers, enabling simplified deployment and scalable, integrated NFV solutions.
- Implementing F5 technology with the Red Hat OSP Director platform ensures repeatable, supported, and stable private cloud deployments.
- F5 BIG-IP products easily integrate with service providers' orchestration environments and their chosen VNF management tools.
- F5 VNFs address use cases including DNS services (vDNS), application delivery (vADC), firewalling (vFW), CGNAT (vCGN), web application firewall (vWAF), policy enforcement (vPCEF), and virtual secure web gateway (vSWG).

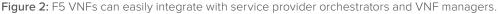




F5 and Red Hat-Certified NFV Solutions for Telcos/Service Providers

F5 offers solutions for the deployment of high performance, scalable network functions virtualization (NFV) infrastructure. <u>F5 NFV solutions</u> have undergone rigorous certification to ensure that telcos and service providers enjoy simple and scalable deployment. Organizations can implement F5 virtual network functions (VNFs) in combination with Red Hat OpenStack for their service provider clouds. F5 BIG-IP products are available as VNFs that can connect to 40 Gbps per instance. In addition, the F5 BIG-IP platform is highly programmable—allowing BIG-IP products to easily integrate with NFV orchestration products.





KEY BENEFITS

- BIG-IP LTM with OpenShift PaaS allows advanced application delivery.
- BIG-IP integration with OpenShift standardizes VEs and hardware apps.
- Applications can be tested for scale, performance, and security.

F5 and OpenShift PaaS Integration

Red Hat's OpenShift Platform as a Service enables provisioning and deployment of application infrastructure to support development architectures. Through validated solutions integration, BIG-IP® Local Traffic Manager™ (LTM) can be seamlessly plugged into an OpenShift PaaS environment, allowing for advanced application delivery. OpenShift is a key platform for development of code. BIG-IP LTM integrates into the OpenShift platform and replaces HA proxy in the PaaS infrastructure. This allows customers to integrate BIG-IP LTM's advanced ADC functions into an OpenShift PaaS environment.

Integrating BIG-IP LTM with an OpenShift PaaS ensures that development and test environments have the ability to standardize on BIG-IP virtual editions and hardware appliances. This allows applications to be tested for scale, performance, and security.

The F5 and Red Hat partnership offers certified solutions for programming, delivery, and deployment of applications. F5 large-scale cloud infrastructure coupled with Red Hat opensource software provides seamless solutions that meet the demands of enterprises, telcos, and service providers. These solutions are simple for organizations to integrate and scale, with predictable costs. Continuously updated certification ensures that our combined solutions are easy to integrate and completely interoperable.

For more information about the F5 and Red Hat partnership and solution integration, visit <u>f5.com/redhat</u>.



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