OVERVIEW | F5 and Ansible

Business requirements are driving the need for organizations to deploy critical applications on shorter and shorter timelines. With many organizations operating in agile DevOps environments, development teams can release and refine applications continuously. To add to the complexity, the explosion of public and private cloud technology means that enterprises often deploy applications in hybrid environments. However, no matter where applications are deployed, businesses understand that they must still provide application delivery services such as identity and access management, web application firewalls, TCP optimization, and more to ensure that their applications remain fast, secure and available in production environments.

To respond to the demands of the dynamic marketplace, organizations are investing in programmable and automatable infrastructure. As market leaders in application delivery services and automation respectively, F5 and Ansible have partnered to provide a compelling solution that helps you quickly and reliably deploy secure applications in today’s multi-modal infrastructures.

F5 and Ansible: better together

F5 supports modern applications by delivering the automation and orchestration capabilities that businesses demand through its fully programmable, API-enabled platforms. Collaboration with strategic partners such as Ansible enables F5 to create solutions that meet the industry’s evolving business needs.

Ansible is an open-source Python-based tool that simplifies orchestration and configuration management of network devices across private and public cloud environments. And unlike other automation tools, Ansible makes it quick and easy to manage configurations on the F5 BIG-IP platform, because its agentless architecture does not require any additional software to be installed on the BIG-IP device. All F5 devices—whether they are fixed-form-factor appliances, bladed chassis, or virtual editions—are built with rich programmable REST and SOAP APIs. Ansible modules use these APIs for integration and performing complex tasks on the BIG-IP platform. The modules can then be used as building blocks in Ansible playbooks to design best-practice workflows for provisioning and configuring F5 devices.

KEY BENEFITS

• End-to-end automation from provisioning to application deployment

• Reduced configuration time

• Improved consistency and automation speed

• No new software to install on your BIG-IP device

• Prebuilt Ansible F5 modules for best practices and continuous compliance

• Seamless integration of robust BIG-IP APIs and Ansible F5 modules

Automate your network with F5 and Ansible
Through this integration, Ansible allows F5 users to configure multiple BIG-IP devices and other network devices with ease and consistency. By cutting deployment times and significantly reducing the amount of resources required to manage modern infrastructures, F5 and Ansible enable IT to become more agile and better respond to business demands.

Figure 1: Ansible can manage F5 devices in both private and public clouds.

Boost agility with F5 and Ansible: use cases

Onboarding and networking

In an environment leveraging multiple BIG-IP devices, an Ansible playbook can obviate the need to have an on-premises F5 expert—and even replace cumbersome scripts that are typically used to get BIG-IP devices ready for application deployment. Organizations can use Ansible F5 modules to automate all initial BIG-IP configurations including hostname, NTP, DNS, self IPs, VLANs, route domains, and more.

Application deployment

Ansible comes with a library of modules that make it simple for users to control system resources such as services, packages, files, or commands. When deploying applications, these modules ensure both consistency and best practices. Using Ansible, F5 users can create and manage the BIG-IP objects—including virtual servers, pools, and nodes—that are required for typical application deployment.
BIG-IP DNS traffic management

During a maintenance window, Ansible also helps organizations manage BIG-IP DNS configurations and route user traffic. For example, for an application running across multiple data centers, an administrator can use Ansible to automate the BIG-IP DNS configuration that controls data center availability, and re-route all user traffic to a different data center.

By automating every stage of the deployment process—from licensing through application deployment—Ansible and F5 enable organizations to save time, reduce the burden of management, and reap the business benefits of true network automation.

To learn more about how F5 and Ansible can help your organization, visit ansible.com/ansible-f5.