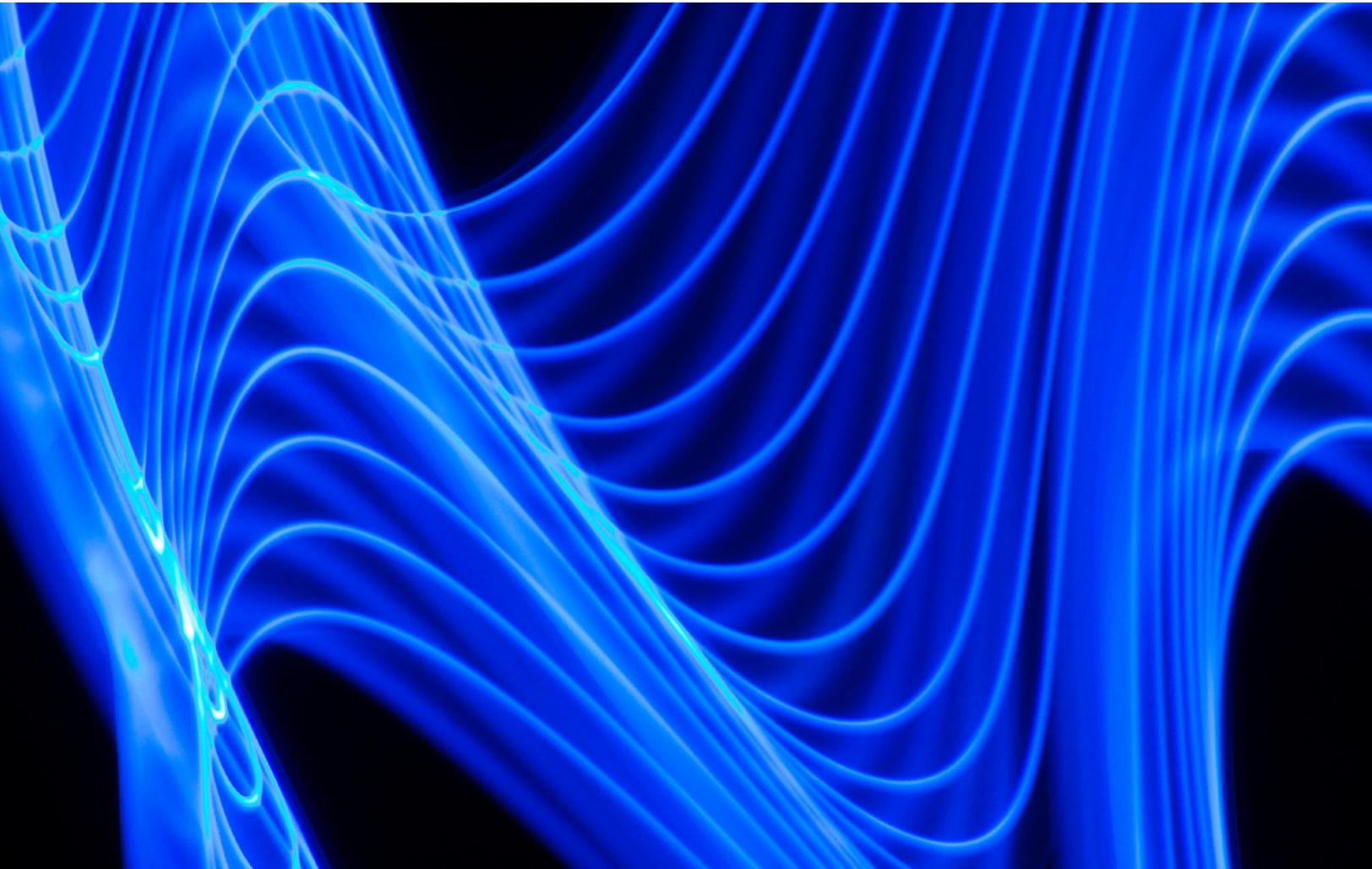




Terraform Automation for F5 BIG-IP

F5 and HashiCorp work together to create validated, cloud-independent solutions to automate and manage application workloads across private, public, and hybrid cloud environments.



KEY BENEFITS

Deployment and management at scale

Rapidly deploy, manage, and scale your F5 infrastructure.

Integrated performance and security

Integrate performance and security within CI/CD pipelines.

Easy-to-use workflows

Use standard workflows to manage network and security across multiple regions and clouds.

Self-service and compliance

Enable self-service and compliance of infrastructure on-demand with a library of approved modules.

Increased automation and innovation

Automate and innovate with increased cross-functional collaboration.

KEY FEATURES

Abstracted provisioning

Provision BIG-IP infrastructure in major public clouds with just a few lines of code.

Multi-cloud management

Manage any BIG-IP infrastructure with one workflow.

End-to-end support

Obtain full support for the BIG-IP provisioning modules and the BIG-IP provider for Terraform.

Automate Application Delivery

Organizations rely on applications to provide great customer experiences for their products and services. Multi-cloud environments offer greater scale and agility for application deployments. Yet with that comes increased complexity of managing cloud-specific services such as the security and performance that these applications rely on. Organizations need cloud-independent infrastructure and services—and the tools to provision and manage them in a repeatable way. Together F5 and HashiCorp can help to automate and manage application workloads across multiple cloud environments.

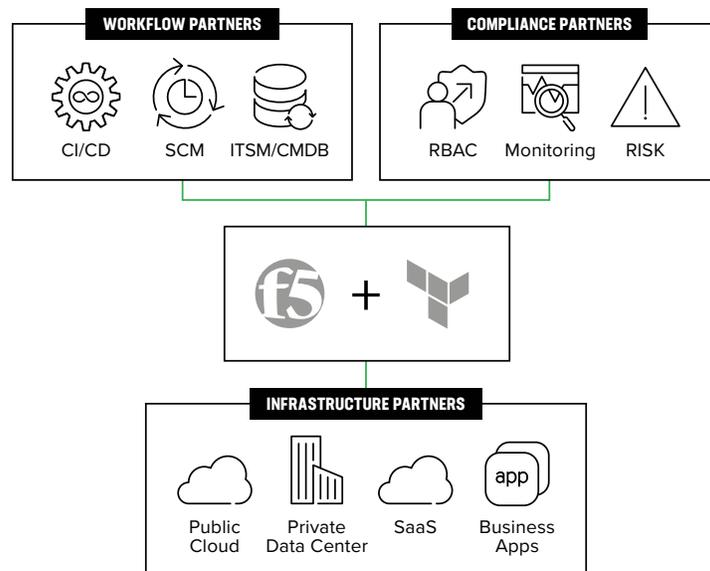


Figure 1: F5 and HashiCorp Terraform ecosystem for platform agnostic, end-to-end application lifecycle management.

F5 BIG-IP and HashiCorp Terraform

F5 BIG-IP has been pivotal for organizations needing to rapidly and reliably secure, scale, and deliver enterprise-ready applications. Leveraging the BIG-IP provisioning modules and the F5 BIG-IP provider, customers can use Terraform to provision and manage BIG-IP infrastructure and application services as code. Operators configure the desired state of their BIG-IP device in a configuration file and then submit that file to Terraform via the command line or user interface. Terraform interprets the configuration and makes the required API calls to F5 BIG-IP to construct the state. As changes are made, Terraform checks against existing configurations and only makes the necessary changes. These configuration files can be shared across organizations, making it easier to deploy at scale.

LEVERAGING THE BIG-IP PROVISIONING MODULES AND THE F5 BIG-IP PROVIDER, CUSTOMERS CAN USE TERRAFORM TO PROVISION AND MANAGE BIG-IP INFRASTRUCTURE AND APPLICATION SERVICES AS CODE.

How It Works

Terraform communicates with F5 BIG-IP through an F5 API (Automation Toolchain for declarative API and iControl REST for imperative API) and supports resources validated with BIG-IP v13.0 and above. Operators can use Terraform to manage the BIG-IP lifecycle, including provisioning, onboarding, and configuration expressed as code. These configurations are sent from Terraform to the user’s BIG-IP devices, and the corresponding changes are made. Operators can also version these changes in the version control system of their choice to enable better collaboration among team members.

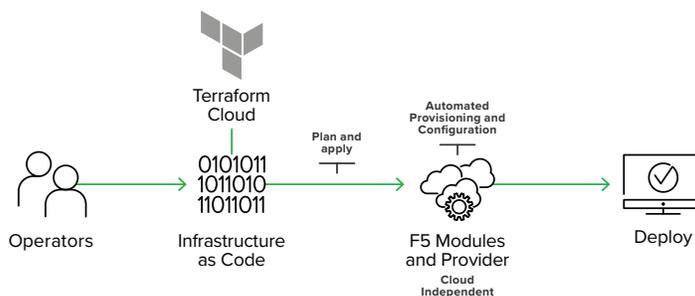


Figure 2: Configure F5 BIG-IP as using the BIG-IP provider.

Conclusion

F5 BIG-IP has been pivotal for organizations needing to rapidly and reliably secure and deliver applications. Terraform automation for BIG-IP, coupled with infrastructure as code practices, can greatly simplify application lifecycle management.

To learn more, visit our [HashiCorp technology alliance webpage](#).

