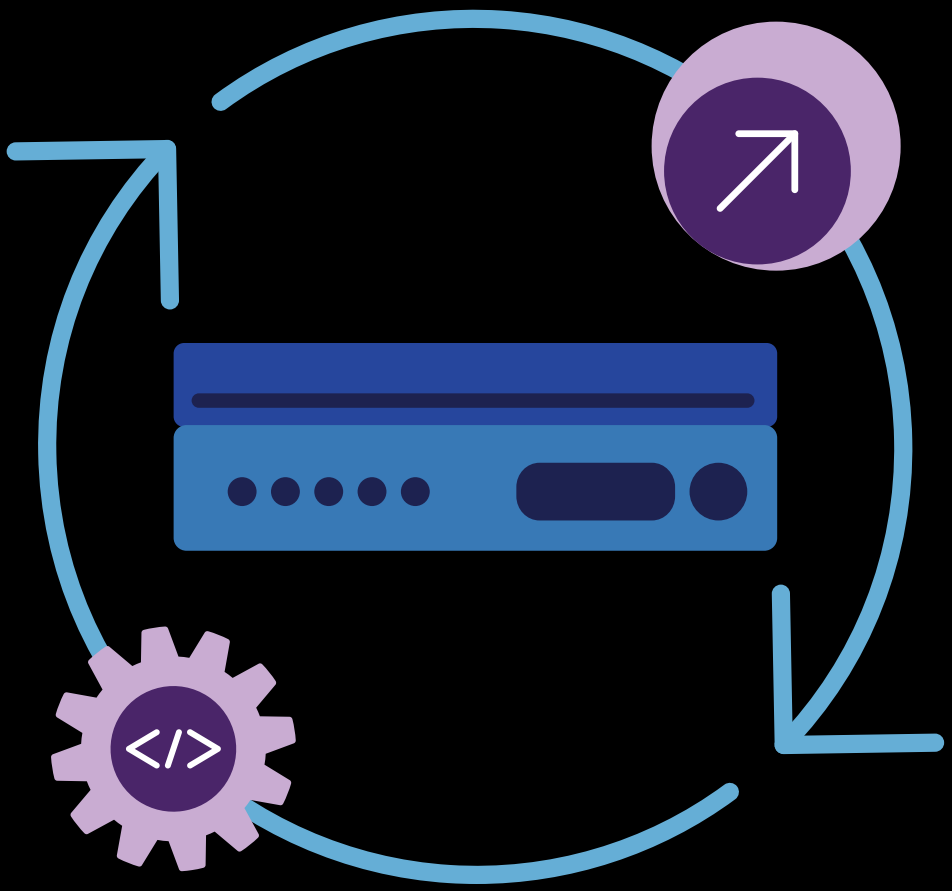
SOLUTION OVERVIEW

Simplify refresh to the latest F5 rSeries and VELOs solutions with Ansible Automation Platform

Seamlessly migrate data, apps, and services to modernized F5 hardware refresh, quickly and at scale.



Key benefits

Accelerate time to value
Reduce the migration effort to next-gen hardware from days, weeks, and months down to hours.

Scale upgrades consistently
Avoid tedious, error-prone, manual ClickOps processes when upgrading hundreds of appliances.

Minimize service interruptions
Maintain high-quality customer experiences and service responsiveness through the upgrade process.

Lessen the workload for busy IT teams
Adopt repeatable workflows and automation toolsets that drive efficiency across your technology stack.

Manual upgrades are slow, costly, and error-prone

For organizations considering an upgrade of their web and AI services infrastructure, the prospect of migrating all their data and applications can be daunting. Potential service disruption can impact revenue streams and user trust, slowing down your ROI. NetOps and SecOps teams also worry about carrying over finely tuned configuration settings from previous to new hardware. Depending on the scale of the upgrade and the different types of appliances involved, the migration effort can take days, weeks, or months, especially if the organization has yet to fully embrace automation.

Market forces are driving the need to accomplish more with fewer resources, to support more users and services, and to safeguard against increasingly sophisticated threats including bots and AI-enabled cyberattacks. When older systems approach their end of life (EOL), budget-conscious strategies of postponing necessary upgrades can expose companies to greater risk and liability as vendors withdraw official product support and cease regular security patches.

These factors leave organizations in an untenable situation: either take the time, effort, and expense to upgrade, or soak the additional risk and opportunity cost of waiting.

Significant speed, control, and resiliency improvements

Making the wise decision to refresh technology on a regular cadence means your security posture stays healthy and you reap the benefits of faster hardware. Next-generation appliances from F5 provide everything that organizations need to stay competitive in an evolving digital services landscape:

- F5® rSeries: Consolidate app and security services into a unified, high-performance platform. The rSeries was designed to support greater automation and complex API interconnections while enabling centralized control and reduced TCO.
- F5® VELOS®: Benefit from up to 6Tbps of low-latency throughput to handle AI-intensive workloads and data volumes. Modular configurations make it easy to rightsize hardware paired with dynamic resource allocation to optimize traffic flow.

Both solutions maximize the value you get from F5® BIG-IP® with the throughput to ensure fast application delivery, integrated security to protect hybrid multicloud environments from emerging threats, and simplified extensibility to connect more users, apps, and APIs while keeping overhead low.

Key features

Fast track upgrades
Use highly consumable F5 playbooks to jumpstart automation workflows in Ansible.

Maintain preferred settings
Preserve fine-tuned configuration settings as you carry them forward into new hardware setups.

Centralize migration management
Use the Ansible console to manage automation workflows on F5-enabled systems.

Get help when you need it
Implement upgrades internally or leverage Red Hat professional services for code-level management.

Automate your upgrade path with simplified toolsets

Accelerating the transfer of data and services to new hardware is the next critical step, and it's also the next best opportunity to shorten your time to value. Red Hat Ansible Automation Platform handles many tasks, including configuration management, workflow orchestration, and infrastructure provisioning. While the platform can be used to automate nearly anything, organizations can use Ansible to automate the migration of data and services from existing application delivery controllers to new rSeries and VELOS platforms quickly and easily. Ansible can reduce the typical migration effort from days, weeks, and months down to just a few hours.

F5 offers a set of playbooks to facilitate fast upgrades and avoid the tedious, inconsistent manual processes known as ClickOps. This approach offers high value for organizations that are looking to upgrade from smaller to larger or chassis-based appliances, or for organizations that want to automate the deployment of hundreds of BIG-IP devices. Not only can teams benefit from reduced downtime for essential services, but Ansible also preserves configuration settings from previous hardware to new platforms.

Available on GitHub, these playbooks are created to be highly consumable so teams can hit the ground running. Red Hat also offers professional services to manage code-level heavy lifting and ensure a smooth transition.

Staged transition with minimal manual intervention

Ansible's automated orchestration and provisioning capabilities repeat the multi-step migration process across any number of appliances:

- **Stage 1.0 – 3.0:** Back up configurations (master key, crypto key, system config) and unified computing system (UCS) to remote server
- **Stage 4.0:** Disable source BIG-IP, create VLANs and tenant OS
- **Stage 5.0 – 6.0:** Restore configuration (master key and crypto key) and UCS
- **Completed migration:** All apps and services are online

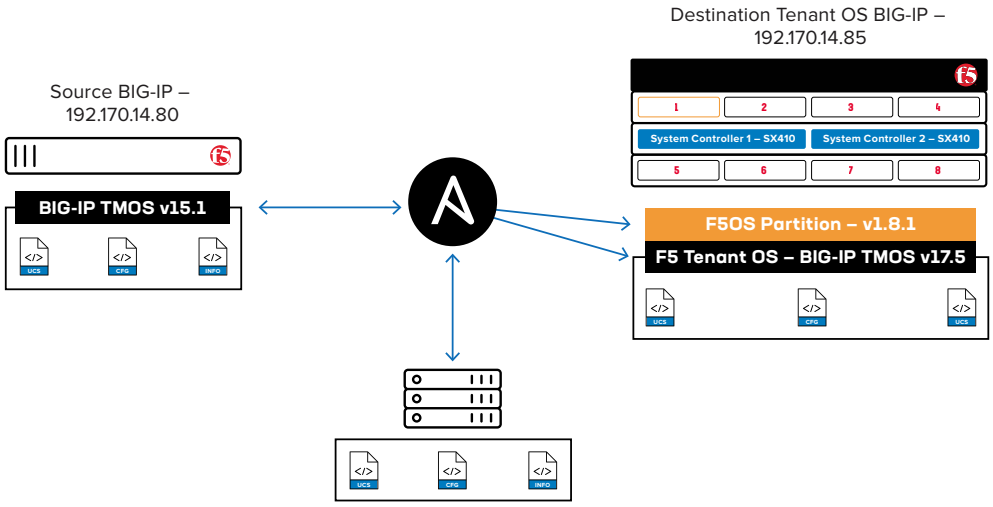


Figure 1: Ansible empowers you to seamlessly upgrade to rSeries and VELOS hardware.

Powerful tools for every step of your automation journey

Organizations can use Ansible to integrate automation into virtually any existing workflow. Ansible can accelerate resolution time for outages or security incidents by following pre-defined playbooks triggered by specific events. Tasks can include applying new configurations quickly and consistently, managing users, and investigating suspicious activity.

You can also benefit from Ansible's integration with BIG-IP to automate several NetOps and SecOps tasks, including operational state management, compliance and traceability logging, and threat hunting. Ansible can immediately respond to suspicious behaviors by updating security policies or blocking access in real time, adding an additional layer of protection that keeps up with bots and AI-powered threats.

Embrace automation with F5 and Ansible

F5 has nearly a decade of experience building and automating products with Ansible. Beyond speeding up refresh cycles, organizations can use Ansible with F5 solutions to deploy event-driven automation across their hybrid multicloud infrastructure, shortcutting manual processes and saving time.

Streamline workflows and free up your teams for more important tasks. Contact F5 to get started or learn more at f5.com/ansible.