Fortune 500 Health Insurance Provider Makes F5 ADC Infrastructure Agile with AppViewX

Client Information

The customer is one of the largest providers of health insurance in the United States and is a Fortune 500 company. The customer uses F5's ADCs to manage their applications.

Business Objectives

With a rapidly-growing customer base of well over 50 million and thousands of internal and public-facing applications, the company's IT infrastructure team was a perpetually harrowed one. The demand on the infrastructure was rising faster than what the team could cope up with, and despite having one of the most powerful ADC infrastructures supporting their applications, the team found its core processes to be painfully manual, slow, and inefficient. Their existing ADC management software couldn't scale up to meet the demand, and the team realized the immediate need for a more comprehensive, scalable, automated solution that could catapult them into the digital world.

Key Technical Objectives

- To reduce troubleshooting time by minimizing human intervention
- To streamline ADC configuration management
- To automate LTM provisioning and Virtual IP lifecycle management
- To empower application and security teams with self-servicing capabilities

Business Challenges

The network and application teams were plagued by siloed, manual processes that prevented them from harnessing the full potential of their F5 ADC infrastructure.

- Every change request had to go through the network team, resulting in a long queue of tickets and subsequent service delays.
- Application teams had to wait long hours even for a simple enable/disable operation, which again had to be done manually and was therefore added to the queue.
- Backup, rollback, migration, and provisioning of device configurations were all manual and error-prone - it took up to 2 days to provision an LTM instance.

Industry

Health Insurance

Challenges

- Long change request queues
- Manual config migrations and software upgrades
- Error-prone incident management
- Long provisioning times

Benefits

- 99% reduction in provisioning times
- 90% reduction in change request tickets and software upgrades
- 70% reduction in software upgrade times
- An agile ADC infrastructure

- Software upgrades were manual and risky - the team had neither the technology nor the bandwidth to run adequate validation checks, causing production outages.
- Incident management was a highly specialized, subjective affair - only skilled network engineers could diagnose and remediate issues. They were therefore called upon at all hours in the night - 2 AM, 3AM, etc. - in the event of an incident.
- Most company-wide IT processes such as auditing and policy management were siloed and disconnected, requiring repeated calls to several teams to get them done.

The AppViewX solution

The closed-loop, context-driven network orchestration solution by AppViewX helped automate and stitch together fragmented processes, make the ADC infrastructure agile, and enable application owners to self-service application-centric changes to the ADCs.

Self-Servicing

Network engineers could create workflows with low-code for application-centric tasks - such as application enable/disable for rerouting traffic or spinning up virtual instances for testing - and share them with application owners using role-based access controls. Application teams could self-service these tasks without relying on network teams, leading to a significant drop in tickets.

Configuration Migrations

AppViewX fully automated the migration of configurations across devices. The Application Provisioning System (APS) module of the AUTOMATION+ solution generated templates of existing device configurations that could be updated with the required variables and automatically pushed to the new devices after the necessary checks (also automated). APS also supports bulk migrations this way, eliminating the need to type out configurations from scratch. These templates could also be self-serviced by the application teams, further saving time and effort.

Version Upgrades

Software version upgrades, too, could be easily accomplished with the APS templates. Configurations could be migrated to a new/unused instance where the upgrade could be applied and tested, and finally brought to production. AppViewX automated the whole gamut of pre- and post-validation checks, ensuring zero possibility of outages and other service disruptions.

Backup and Restore

AppViewX enabled engineers to take on-demand or scheduled backups of device configurations and attributes and store them in a centralized repository. It also facilitated easy rollbacks to the last working configuration in case of failure during migration.

VIP/WIP Lifecycle Management

It automated the lifecycle of VIP/WIP management on BIG-IP LTM and DNS - from creation, modification, deletion, and decommissioning. AppViewX integrates with IPAM solutions like Infoblox to reserve and fetch free IPs and maps them to the virtual server(s). It also automated the approval and validation processes involved in creating virtual IPs.

Incident management

It provided high visibility into the ADC environment and enabled network engineers to quickly detect issues and apply appropriate troubleshooting workflows. Integrations with change management tools such as ServiceNow streamlined incident management, drastically reducing MTTR and bringing down application outages.

Cross-Team Collaboration

The platform's integration with ChatOps solutions like Slack enabled stakeholders to get notified along every step of the automation process and also collaborate effectively with one another for cross-functional tasks.

Business Benefits

- 99% reduction in provisioning times for new devices/instances - the same LTM instance could now be provisioned in under half an hour.
- 90% reduction in ADC change requests, with application teams self-servicing most of them.
- 70% reduction in time taken for software upgrades.
- An infinitely agile F5 ADC Infrastructure, High application availability with almost zero outages

About AppViewX

AppViewX is revolutionizing the way DevSecOps and NetOps teams deliver services to enterprise IT. The AppViewX platform is a modular, low-code software application that enables the automation and orchestration of enterprise network infrastructure and certificate management using an intuitive, context-aware visual workflow. It is built to rapidly enable users to implement crypto-agility, enforce compliance, eliminate errors, and reduce cost. AppViewX is headquartered in New York City with additional offices in the US, UK, and India. To know more, visit **www.appviewx.com** or **info@appviewx.com**