LOADBALANCER

Change Healthcare simplifies management of vast load balancer estate with Loadbalancer's ADC solutions

With more than 300 F5 BIG-IPs at hospital sites across North America and Europe, Change Healthcare was struggling to manage the complexity of these dispersed appliances, and patching of frequent vulnerabilities.

Loadbalancer.org understood the challenge and worked collaboratively with its new partner to build a cost-effective and intuitive solution that improved the resilience of Change Healthcare's PACS solution, and improved the security, resilience and value for money for their customers.

CHANGE
HEALTHCARE

Challenges
- Managing 300+ load balancers
- Frequent F5 BIG-IP vulnerabilities and slow implementation of security patches
- Cost and complexity of F5 BIG-IP i2600 solution
- Complex capital and maintenance pricing

Solutions
- The Loadbalancer ADC Portal
- Loadbalancer Enterprise VA Max ADCs

Benefits of ADC Portal
- Improved resilience for PACS solutions
- Time, cost, and security benefits of centralized ADC management
- Visibility of all 3rd-party load balancers
- Ability to backup and update load balancers remotely
- Quicker load balancer deployments

Benefits of Enterprise ADC
- More cost-effective and standard pricing allows Change to ALWAYS deploy HA Pairs
- Unlimited throughput of Enterprise VA Max ADCs, resulting in significant cost savings

Benefits of working with Loadbalancer.org
- All in one, affordable subscription model, including licenses and support, means always able to deploy most up to date versions
- A tailored solution and flexible commercials
- Great documentation

> *Loadbalancer.org was focused on our unique challenges from the get-go, and designed a new solution from the ground up, to serve our needs.*"

Dirk De keersmaecker,
Principal Product Manager,
Change Healthcare

Challenges

Change Healthcare *(now owned by UnitedHealth Group's Optum)* is a leading supplier of medical imaging solutions to prominent healthcare providers worldwide. The company's portfolio of products includes a picture archiving and communication system (PACS) solution for radiology and cardiology clinicians. This needs to be underpinned with load balancing technology to ensure high availability and uninterrupted patient care.

The pain of onsite patching

The organization used to recommend and install load balancers from F5 and had more than 300 F5 installations at hospitals and clinics across North America alone.

As soon as an F5 BIG-IP security vulnerability was published, engineers at Change Healthcare would have to start planning and scheduling customer downtime to implement the required security patches.

> *It took engineers 2 hours per site to patch our F5s. They would spend six months patching the first half of the estate, before F5 would release another vulnerability and we'd have to start the process all over again.*

Clearly, onsite patching of such a large estate was not sustainable.

The cost and complexity of F5 BIG-IPs

F5 BIG-IPs are notoriously complex, requiring certified engineers to make changes or deploy updates to reduce the risk of inadvertently introducing new vulnerabilities. Their priority is not ease of use, maintenance, or a smooth user experience.

> *Loadbalancer.org is a great company to partner with, with their customer focus, expert knowledge, and great but simple and reliable products.*

Furthermore, the cost of each F5 BIG-IP appliance and its throughput restrictions mean they are some of the most expensive ADCs on the market.

Solutions

The ADC Portal: remote, centralized management

After meeting representatives from Loadbalancer at an industry event, technicians from Change Healthcare decided to pick up the phone and see if Loadbalancer could provide a way of centrally managing its vast estate of load balancers. This call sparked what has since become a comprehensive and successful partnership between the two companies.

Responding to Change Healthcare's challenges, Loadbalancer built a remote, vendor-agnostic, centralized management platform called the Loadbalancer Application Delivery Control (ADC) Portal.

Loadbalancer Enterprise ADC: More intuitive

Change Healthcare also decided to install Loadbalancer's own high-performance Enterprise VA Max load balancers with any new PACS deployments, beginning to migrate away from their F5 infrastructure.

Benefits

Enhanced visibility and control of their ADCs

Change Healthcare became the first company to deploy the ADC Portal and is now using this system to remotely manage a growing number of Loadbalancer appliances. This centralized, vendor-agnostic platform with remote access allows Change Healthcare to backup, update and deploy individual ADCs, providing comprehensive visibility and control of their entire load balancer estate, regardless of location.

> *The ADC Portal gives us instant visibility and remote control of our ADCs, saving us huge amounts of time and money, as well as keeping our appliances more secure.*

Being able to schedule mass actions across 300+ appliances in such a short space of time means that they can immediately patch any vulnerabilities, keeping their customers' devices much more secure.

The ADC Portal facilitates updates that can be rolled out if and when needed by Change across some or all of their appliances, with the added piece of mind of advanced roll-back capabilities and integrated pipelines, enabling a linear update process.

And, as more Change Healthcare customers start to also gradually transition from F5 BIG-IPs to Loadbalancer Enterprise VA Max appliances, the time and cost savings will continue to accrue.

Cost savings and simplified operations

Loadbalancer's Enterprise VA Max appliance is significantly easier to manage than Change Healthcare's F5 BIG-IPs. This single product also fits all sizes of deployments which has meant Change's sales team no longer have to concern themselves with sizing each solution, removing the possibility of deploying the wrong product.

Furthermore, Loadbalancer has not had a CVE in 5 years which significantly reduces the number of patches required!

The Enterprise VA Max offers much better value for money. It has no throughput limitation, and there is no limit to the amount of virtual machine resource that can be allocated to it. There are also no restrictions on the number of virtual or real IPs (VIPs/RIPs) that can be provisioned within the appliance.

As such, Change Healthcare now recommends it to all new customers installing their PACS solution. They also encourage existing customers to migrate to Loadbalancer appliances when their F5s go end-of-life, or their licenses expire.

Initial feedback from Change Healthcare's customer support and services team has been very positive, with many remarking on how intuitive the Loadbalancer appliances are. They are also significantly more cost effective than F5 ADCs, which lowers the total investment required in PACS solutions.

Loadbalancer.org differentiators

Change Healthcare also appreciates Loadbalancer's commercial flexibility and collaborative approach. Loadbalancer.org tailored its standard load balancer solution specifically for Change Healthcare's PACS application, with unrestricted licensing, custom documentation and tierless 24/7 support.

Loadbalancer provided product training and worked with Change to standardize deployment models, resulting in easy and reliable installs. They also agreed simplified commercial terms to help Change Healthcare sell load balancers more easily, with a shorter sales cycle.