Blue Chip scales-out its IBM Cloud Object Storage (COS) system with Loadbalancer.org’s simple, cost-efficient solution

Blue Chip Customer Engineering Ltd. is a provider of mission-critical IT support and infrastructure solutions to many of the largest brands in the UK. The company was looking to optimize the performance of its internal IBM Cloud Object Storage (COS) system with a simple, easy to manage, and cost-effective load balancing appliance.

**Challenges**
- To scale-out the IBM COS system and achieve high availability

**Solution**
- 2x Loadbalancer.org VA 1G

**Benefits**
- High availability of the IBM COS system with a simple, easy-to-manage, cost-effective load balancing solution
- Scalability - if the client wants to add more servers in the future, our load balancers make this very easy to do
- Zero downtime - in case of offline or failed nodes
- Optimal use of the storage system with maximum throughput
- Excellent industry-leading consultation and support services by storage experts

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**CASE STUDY**

Load balancers facilitate optimal performance and ensure maximum application throughput, reliability, and guaranteed uptime – all things that make a storage system truly unbreakable.”
Challenges

IBM COS is a comprehensive object storage platform that offers scalability, stringent security, configurable reliability and streamlined management. As such, it helps enterprises effectively manage the exponential growth of IT infrastructure and allows them to store limitless amounts of unstructured data, with flexibility across private, dedicated, and public clouds.

Because of the integrated IBM Aspera® high-speed data transfer option embedded in it, transferring data to and from the IBM COS becomes extremely easy. Hence businesses commonly use this storage platform to archive and backup data for web and mobile applications – as scalable, persistent storage for analytics.

For high availability and scalability, IBM recommends using a load balancer to distribute client connections to the IBM Accessor node clusters.

Blue Chip was initially using an enterprise level application delivery controller to load balance its IBM COS system. However, the product was expensive and complex to manage. It also included a number of surplus features, and required specialist technical knowledge to use the product. As a result, Blue Chip sought an alternative solution – something simpler to deploy and easier to manage that delivered cost-efficient load balancing appliance to keep their storage system up and running 24/7 – with zero downtime.

Solution

Due to our deep experience, understanding, and storage solutions expertise, Loadbalancer.org was well equipped to help Blue Chip overcome its challenges. During consultations, our Solutions team was able to reassure them that they didn't need an expensive or complicated load balancer with high-tech features to deliver its object storage requirements a dedicated, cost-effective solution was more than enough to do the job efficiently.

Based on Blue Chip’s IT infrastructure and network architecture, we then offered them an easy, Layer 7 TCP (Transmission Control Protocol) mode load balancing solution with no persistence, which spreads connections equally among all servers.

Layer 7 load balancing ensures high performance and implementation flexibility, thus making it the optimal solution for any object storage environment. Moreover, no network changes are required and SSL termination can be implemented with it.

Results

Object storage systems are built on a low-balanced protocol such as HTTP, making them quite simple to load balance. Loadbalancer.org's appliances are a great fit for such deployments, and our virtual appliances are well-suited to optimize storage systems like IBM COS.

Our load balancers monitor and perform health checks on the nodes to ensure traffic is routed correctly to the healthy nodes. They stop offline or failed nodes from receiving traffic, preventing application downtime. This helps maintain system stability, improve performance and protect against failures in storage applications. The load balancer can be deployed as a single unit, although we recommend a clustered pair for maximum resilience and high availability.

Deploying a powerful load balancing solution makes a significant difference in data storage systems such as object storage. Running concurrently, in the same environment as the application resources, the load balancer helps eliminate downtime, and increase scalability, flexibility, redundancy, and data protection in object storage solutions.

Load balancers facilitate optimal performance and ensure maximum application throughput, reliability, and guaranteed uptime - all things that make a storage system truly unbreakable.

Loadbalancer.org has proven, easy-to-install, result-driven appliances that can be effectively integrated as part of the customer’s data storage infrastructure.