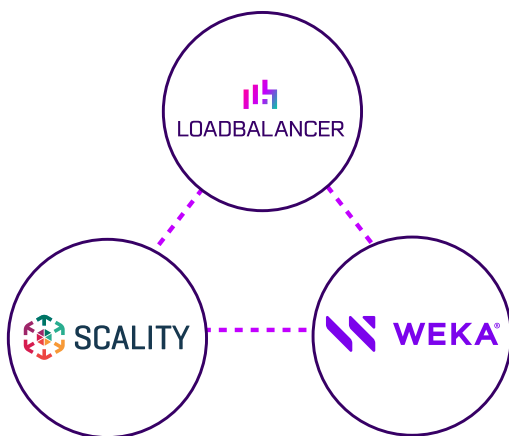


Integrating Weka with Loadbalancer.org and Scality RING for turbocharged WEKA clusters

For compute-intensive workloads such as Artificial Intelligence, Machine Learning, and High-Performance Computing, combining Scality RING and Loadbalancer into WEKA infrastructure significantly boosts WEKA processing power, uptime, and scalability.



Tackling the challenge of hybrid storage architectures

Creating a unified system that can leverage the blistering speed of flash for real-time applications while seamlessly using the cost-effective scalability of object storage for long-term data management and large-scale parallel processing is a huge challenge.

Without integrating the two different storage architectures, it's not possible to fully harness the power of Weka clusters for AI, ML, and HPC workloads.

KEY BENEFITS



Optimized performance

Load balancing Scality RING efficiently distributes incoming traffic across all available object storage nodes, preventing a single node becoming overwhelmed by requests, leading to bottlenecks and poor performance.

The integration of this optimized object storage with Weka allows the cluster to function as intended.



Resilience

A load balancer runs intelligent health checks on Scality RING nodes, ensuring Weka requests are only sent to healthy nodes so Weka jobs can be effectively stored.

Similarly, the load balancer can facilitate the quick recall of objects for Weka processing when training AI workloads.



Simplified scalability

The number of Weka outputs or Scality RING object requests will only increase over time.

To meet growing storage demands, new Weka or Scality RING nodes can be easily added. The integrated load balancer will automatically detect these new nodes and begin distributing traffic to them, which greatly simplifies scalability.



Leveraging the power of Weka for demanding workflows

The rise of more demanding, high-performance computing environments has significantly increased the need for integrated storage solutions that can keep up. These workloads involve petabytes of data and require thousands of parallel compute threads.

Weka's ability to scale performance linearly with the number of nodes makes it a natural fit for these environments, as it can handle the simultaneous reads and writes from a large number of GPUs and CPUs.

When integrated with a high-performance object storage, Weka can handle the simultaneous, parallel processing demands of high-performance workflows without creating a storage bottleneck.

Maximize Weka's potential with Scalify RING and Loadbalancer.org

Integrating Weka with a load-balanced Scalify RING cluster creates a high-performance, hybrid storage architecture. This setup allows Weka to use its internal flash storage for high-speed, active data, while offloading less-used data to the massive, cost-effective Scalify object store.

Load balancing the Scalify RING nodes with a Loadbalancer.org appliance provides a highly available storage endpoint. The load balancer distributes Weka workloads across the Scalify nodes and automatically takes any that fail a health check out of service, ensuring continuous uptime.

The result is a supercharged, resilient, and scalable storage solution that seamlessly supports demanding Weka workloads.

Next steps

Loadbalancer is the engineers' choice for smarter load balancing. Our intuitive ADC is designed to save time and money with a clever, not complex, WebUI, reducing complexity for a difference you can see in just minutes.

Find out how our products can help you to scale your AI workloads, with powerful, user-friendly application delivery solutions from the load balancing experts.

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