

PLATINA

Benefits for Application & Content Acceleration

What Does Platina Do?

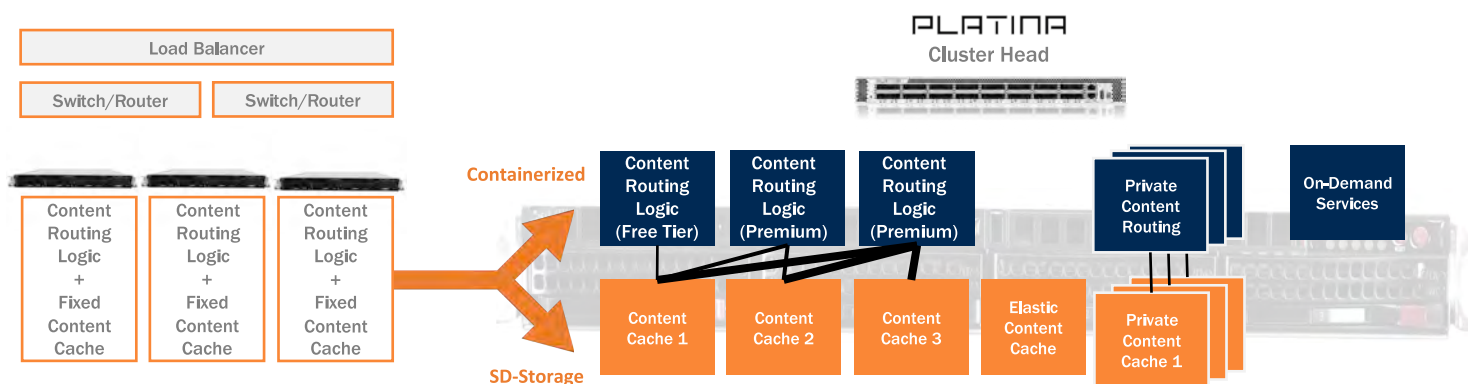
Platina Systems provides solutions to ease the deployment and operations of clusters implemented with traditional siloed compute, storage and networking infrastructure. In doing so, Platina customers can focus on application development and minimize the operational efforts to manage the clusters hosting those applications, enjoying modern infrastructure such as bare metal, Kubernetes and software defined storage within their own private cloud environment. Platina's solution consists of a scalable, centralized management system which orchestrates cluster resources, and a hardware appliance that serves as the central coordination point for compute and storage resources in the cluster.

Application Acceleration

A modern architecture can lower costs while improving performance for application acceleration. Today's CDNs represent legacy architectures where a collection of servers host a monolithic application pairing high performance processing & delivery (ie., content routing) with fast storage. Disaggregating these existing functions and orchestrating them independently decouples performance & scale from capex and opex costs.

The first step is migrating to micro-services; for CDNs this is the content routing logic. Different service policies can be applied to containers, while Platina provides the framework to deploy and manage these containers. Next, content is distributed using Software-Defined Storage, where Platina manages storage policy, avoiding replication of assets on expensive storage across every server. Each block of the application scales independently and horizontally, resulting in an efficient pairing of resources.

Modern Application Acceleration Migration



Benefits



Lowest marginal cost structure

By decoupling content delivery from storage across multiple elements, physical infrastructure costs can be reduced by using lower cost delivery servers and HDD-based storage. These are optimized to perform a single function at a low cost, rather than multiple functions within a single server with high performance and cost, while sharing resources rather than independently replicating them across every server. This can lead to savings of 60% or more.

Simpler, automated operations

By eliminating redundant storage within each cluster and extending software-defined storage across sites, storage can be collapsed into a single flat tier. For CDNs, this means that all content management operations (add/modify/purge) need only be performed once.

Reduction of internal bandwidth utilization

Flattening the existing tiered structure eliminates significant costs for building and maintaining costly, excess infrastructure. The single tier also reduces costly CDN related bandwidth charges for cache warming, cache misses and content updates.

Easily differentiate services

As CDNs become increasingly commoditized, duplicating infrastructure for different services is cost prohibitive, even though different customers have incongruent needs. Combining these customers results in suboptimal resource utilization and poor user experience. Decoupling storage from delivery eliminates resource contention while simultaneously associating different policies and customers to specific resources. CDNs can simultaneously serve as Edge Computing sites for new, performance-sensitive applications.

Investment protection and seamless integration

Traditional CDN architectures migrate very easily to this modern architecture. Content routing logic continues to operate during a migration and preserves infrastructure investments and setup, while expansion enjoys the benefit of a lower cost, more efficient and more easily managed CDN.