



agile content

**CATEGORY:** INNOVATION/TECHNOLOGY

**Product:** Agile CDN Director – Unified Multi-CDN and Private CDN Session Control Layer

**Architectural evolution of Agile CDN Director:**

Agile CDN Director introduces enhanced features for future-proofing, robustness, CDN selection, flexibility, integration ease, and speed. Its generic engine and plugin architecture ensure adaptability, while separation of layers enhances scalability. With support for diverse caches and standalone instances, reliability is bolstered. Dynamic CDN selection optimizes delivery, and flexible rules and modular design ensure adaptability. Easy integration via APIs and new analytics tech stack streamline operations. Optimizing internal nodes communication to boost speed to spikes over 15,000 req/s, ensuring swift and scalable performance.

**What it does:**

Some of the key challenges for broadcasters, content owners, telcos, and OTT providers involve figuring out how to offer high-quality programming over the Internet to a massive number of locations and devices, while ensuring high network efficiency, user experience, cost-effectiveness, and security. That is why we launched Agile CDN Director, an integrated private CDN and Multi-CDN session control layer and load balancer. This control layer for delivering video using single or multi-vendor CDN brings significant efficiencies in operations and enables cost optimization, utilizing existing investments as well as a mix of private and public CDNs. It also safeguards the content delivery infrastructure against unauthorized access and piracy attempts through advanced security features.

**Key benefits include:**

- Optimization of prior investments by reusing existing caches.
- Seamless “in-stream” switching: offloading peak traffic to third-party CDNs and seamlessly switching ongoing sessions between third party or private CDNs, caches, or PoPs.
- Real-time server-side QoE monitoring, enabling operators to boost peak performance, and keep services running smoothly even during high demand.
- Cache agnostic: managing private, cloud, and hybrid CDNs independent of vendor and optimizing them for high-quality video delivery.
- Adaptable routing logic and user-friendly APIs enable seamless integration with external systems. It supports redirection via HTTP or DNS and can function as a Content Steering router.

- Highest security: using Common Access Tokens and session security to safeguard against unauthorized access by non-customers, disallowed VPNs, and users attempting to forward streams to P2P networks.

As an example of how this translates into business benefits, Telenor Sweden implemented the Agile CDN Director to drive efficiencies and better manage the utilization of its CDN. This enabled them to combine their CDN with Telenor Norway's, ensuring cross-border redundancy in case of the loss of a site. Telenor Sweden can now optimize its own CDN peak performance capacity and seamlessly offload streaming capacity as well as automatically scale its services using available capacity in Telenor Norway's networks, or in a public network where needed. No matter the demands on either CDN, customers won't ever experience any disruption to their services.

Another key benefit that Telenor Sweden has found to be surprisingly effective is the ability to keep pirates out and only stream to authorized users. Agile CDN Director provides enhanced visibility of everything going on in the CDN at any given time, including the use of common access tokens which show that customer requests are coming from Telenor's own backend, and not from outside agents, including pirates trying to access a network. This also frees up capacity and ultimately provides better network speeds for audiences viewing TV services. The operator now stops over 10 million piracy attempts monthly, safeguarding content, revenue, and preventing spoofing attacks. Illegal streaming services are a growing problem not just for operators but for society at large. Only in Sweden the estimated pirate video turnover is €49 million, with profits going to organized crime. Parks Associates forecasts streaming services in the US could lose \$113 billion to piracy by end of 2027.

