

Agile Cache

Optimized streaming and content caching

Agile Cache, a product in the Agile Delivery suite, is a cache and streaming server based on proven Edgeware-technology, designed for broadcasters, telcos, cable providers and TV content owners who want to control their own TV delivery networks.

What it does

Agile Cache distributes TV delivery closer to the viewer, meaning content caching and streaming are delivered from the edge for the best possible viewing experience and to offload network and peering points. It is optimized for video content and video sessions which have a different character compared to general web content, especially when streaming big popular live events.

Supporting a variety of deployment models from bare metal to Docker containers in the cloud, Agile Cache offers a highly scalable and flexible hybrid CDN solution.

With support for tiered caching and optimization of how content is cached inside the servers between RAM, SSD and HDD, lifetime and cost of storage is optimized.

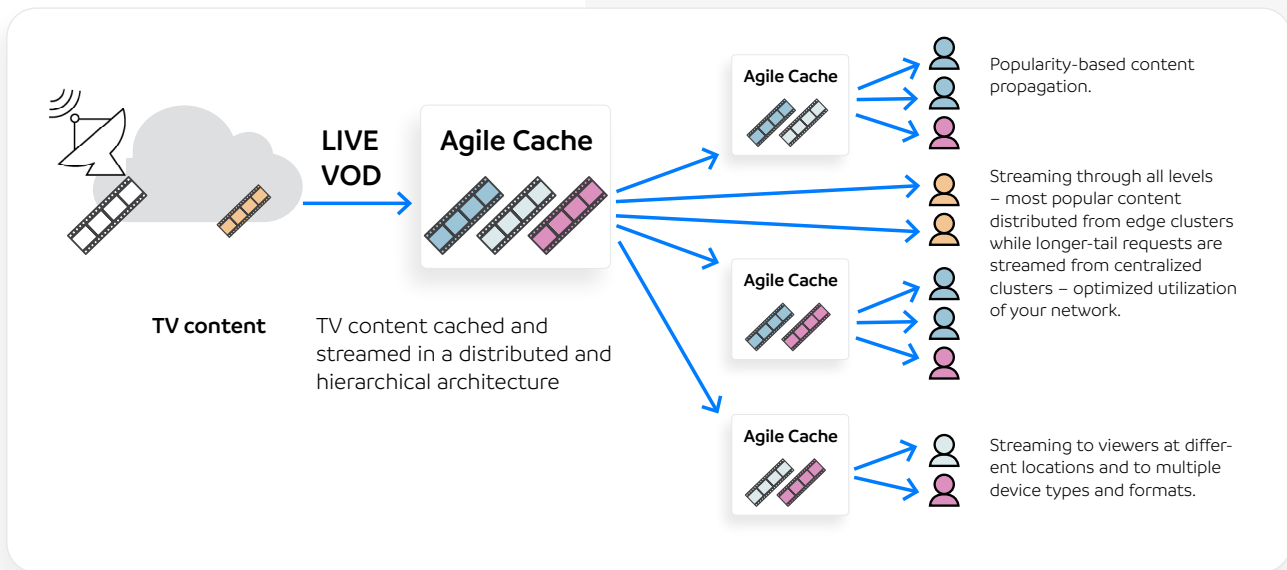
Owning your own CDN allows greater control over the viewing quality, reducing buffering, delays and glitches, gives you better control of your cost and reliability of video delivery. The Agile Cache software is easily deployed and configured on COTS HW to temporarily boost streaming capacity for peak traffic demands.

How it works

- ① Streaming sessions are allocated to Agile Cache by Agile Director or another load balancer
- ② Session is authenticated using tokens
- ③ Video segments are requested from the Agile Cache in bitrates according to the ABR manager in the player
- ④ Video segments are being delivered to the player
- ⑤ If segments are not available in the cache, the cache will request those segments as cache fills from mid-tier cache or origin managed by the backend selector
- ⑥ Segments will be cached in the optimal storage in the cache based on popularity

Features & benefits

- ✓ Dynamic edge cache optimized for distributed TV delivery holding popular content closer to the viewer
- ✓ Streaming platform for both Live and VOD HTTP streaming TV supporting VOD, live and time-shift services
- ✓ Supporting all ABR formats HLS, DASH, MSS
- ✓ Content propagation in hierarchical cache architectures minimizing storage need
- ✓ Enforcing session security policies to block unauthorized access
- ✓ Supporting TS2HLS and HLS2TS features enabling one single copy – either HLS or TS format – to be played on both IPTV and OTT clients which saves up to 50% storage
- ✓ Can be configured for Edge as well as Central mid-tier cache deployments



How to deploy

The Agile Cache software offers multiple deployment options for various deployment scenarios and customer preferences. Deployments can be made on standard computing platforms (COTS), on Agile Appliance hardware or in the cloud.

Technical specifications

SW FEATURES		SYSTEM HW / SW
OTT TV (HTTP/S)	Precalculated bandwidth sessions	Linux RHEL 7
Multiple certifications and hosts	Configurable bandwidth allocation to avoid overload	COTS, cloud, Agile Appliance
Immediate streaming	CORS/Chromecast	HTTP/TCP, RTSP/UDP, HTTPS
SD, HD, 4K, Virtual Reality TV	Apple TV	FTP, IPTABLES, SNMP, SSH, TLS 1.0/1.1/1.2
Live, VOD, time-shift TV	Popularity-based content propagation and caching	
Ingest content	Content-aware clustering with configurable performance vs redundancy	
Session handling with token security	External origin support	
Backend selector (load balancing, cache partitioning and advanced failover)	HLS, MPEG-DASH, MSS	
Security and redundancy	Storage Tiering optimizing utilization of SSD/HDD	
IPv4, IPv6 and IGMPv3		