

## SCALE YOUR OTT SERVICE FOR PEAK VIEWING

**Deliver low-latency and broadcast-quality content, even during high viewing periods.**

NEA-CDN® enables operators to build their own CDN within their existing network infrastructure. It is designed specifically for video streaming, and dramatically reduces load on the network by acting as a shield to protect origin servers from multiple requests. Combining a NEA-CDN with an Ateme origin server such as NEA-LIVE® or NEA-DVR® makes video delivery more efficient, especially for live and near-live TV.

NEA-CDN optimizes network bandwidth requirements by efficiently routing and caching user requests and content thanks to advanced algorithms, for example with content awareness. It can be distributed geographically to cover multiple territories and can be positioned close to end users at the edge of the network, in a Point-of-Presence, thereby improving customer quality of experience.

When coupled with chunk-sharing technology between Live and Cloud DVR services, NEA-CDN enhances content delivery performance, and optimises network usage by up to 30%, saving you money.

NEA-CDN is a cloud-native CDN that can be deployed on any infrastructure, whether on-premise or in the cloud. It leverages container orchestration to offer true scalability. This means you can adapt CDN capacity to real traffic variations, so you save money by avoiding permanent overprovisioning to accommodate traffic peaks.

NEA-CDN uses PILOT Manager, Ateme's centralized orchestration and management application, to provide a global CDN-aware topology. You can then define a CDN-wide delivery strategy from a single point, and tailor your content delivery to your business rules.

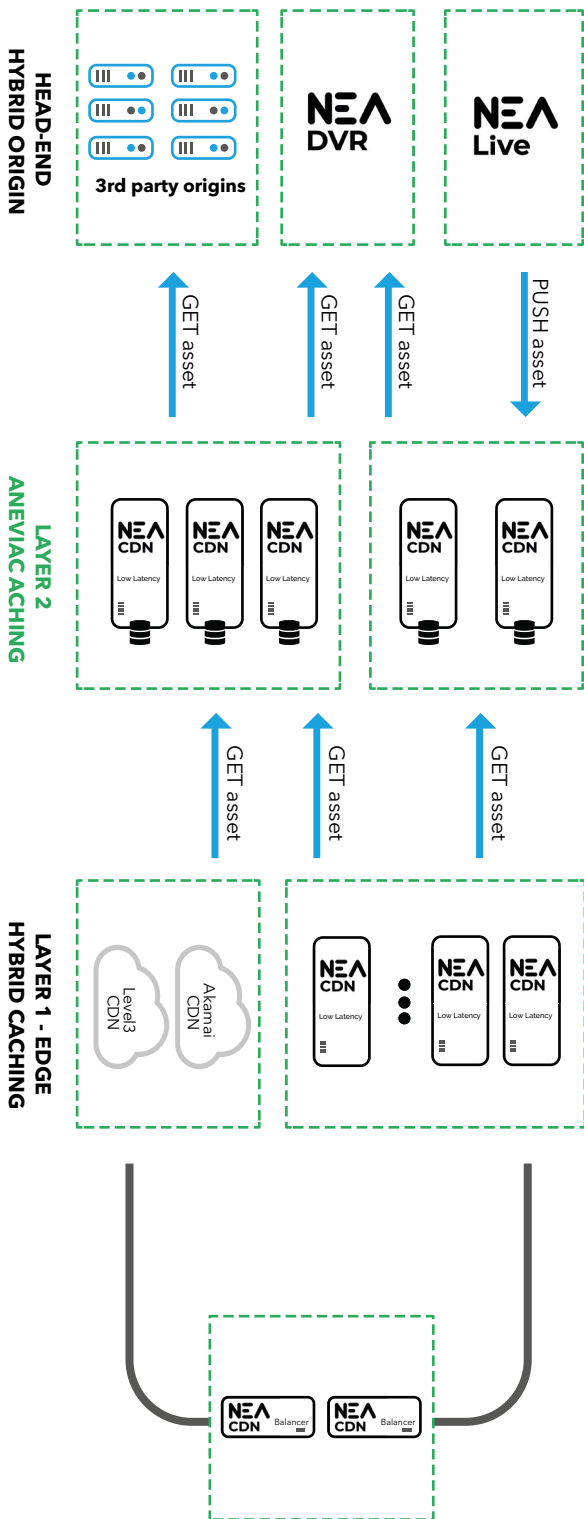
### Applications

- Video-oriented content delivery
- Request routing
- Content caching

### Features and Benefits

- Low-latency live OTT delivery
- Cloud-native CDN
- Highly scalable and elastic CDN
- Centralized CDN orchestration and management
- Highly customizable business rules
- HTTP adaptive streaming protocol: MPEG-DASH, HLS, Smooth Streaming
- Content-aware routing and caching
- Device-aware routing and caching
- Location-aware routing and caching
- Content-popularity based caching

# System Architecture



# Technical Specifications

## Supported Services

Live, Pause TV, Start-over TV, VoD, Catch-up, Cloud DVR

## Content acquisition

- Pull from origin
- Push from origin to CDN for low-latency content
- Optimized to work with Ateme origin server
- Compatible with third-party origin servers

## Caching methods

- Reverse proxy cache
- RAM and/or SSD cache storage
- Round robin capabilities
- Caching multi-origin source management

## Request routing algorithms

- Requested content
- Request location
- Sources workload
- Requesting device
- Sources capabilities

## Request processing

- URL transformation - Request filtering
- QoS tagging
- Request filtering

## Security

- SSL
- Token authentication
- Layer 7 firewall

## Management & orchestration

- Web-based GUI
- Centralised CDN topology management
- Centralised CDN nodes deployment
- REST API

## Performance

- Up to 140,000 req/s on request router
- Up to 20,000 resq/s and 40 Gbps output on cache
- Recommended hardware for above performances:

- 2 x Xeon Gold 5218 CPU
- 256 GB of RAM
- 4 x or 8 x 400 GB SSD
- 4 x 10Gb NIC interface

## Scalability and redundancy

- Clustering behind virtual IP
- Redundant paths through CDN topology
- High-availability service via Kubernetes