CP-Steering: CDN- and Protocol-Aware Content Steering Solution for HTTP Adaptive Video Streaming

Reza Farahani, Abdelhak Bentaleb , Mohammad Shojafar, and Hermann Hellwagner

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reza.farahani@aau.at | https://athena.itec.aau.at/ | https://www.rezafarahani.me

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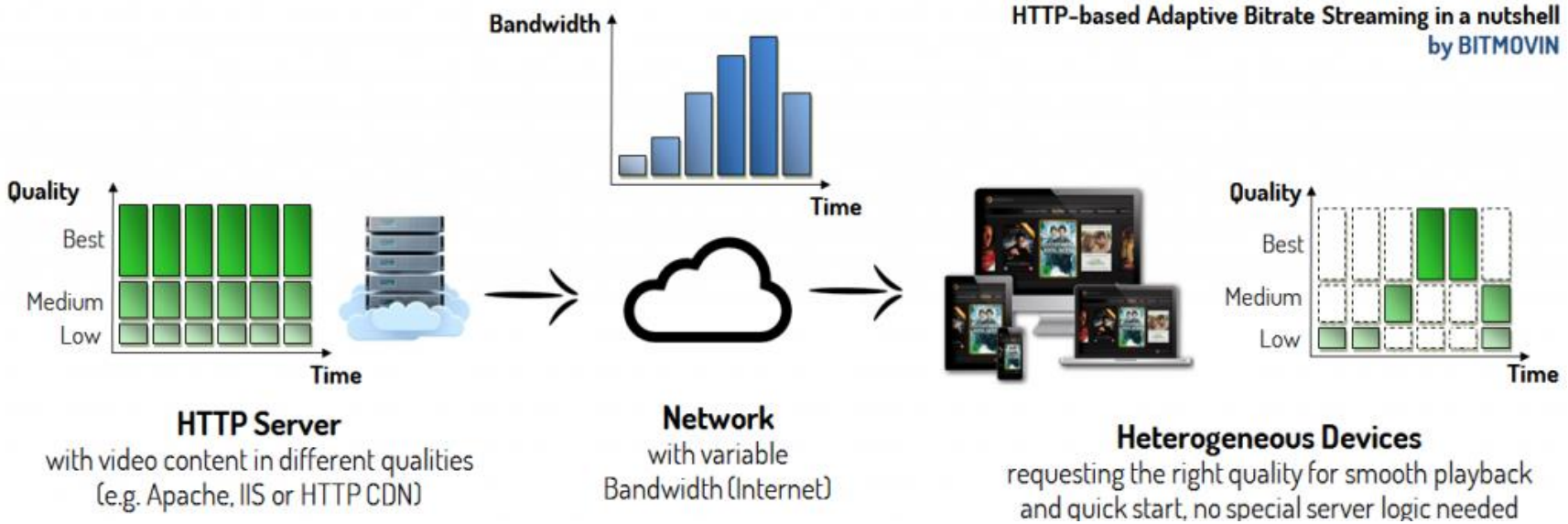
  - HAS
  - QUIC
  - Content Steering
- CP-Steering
  - Motivation
  - Workflow
  - CP-Steering in a heterogeneous environment
- Conclusion and Future Work

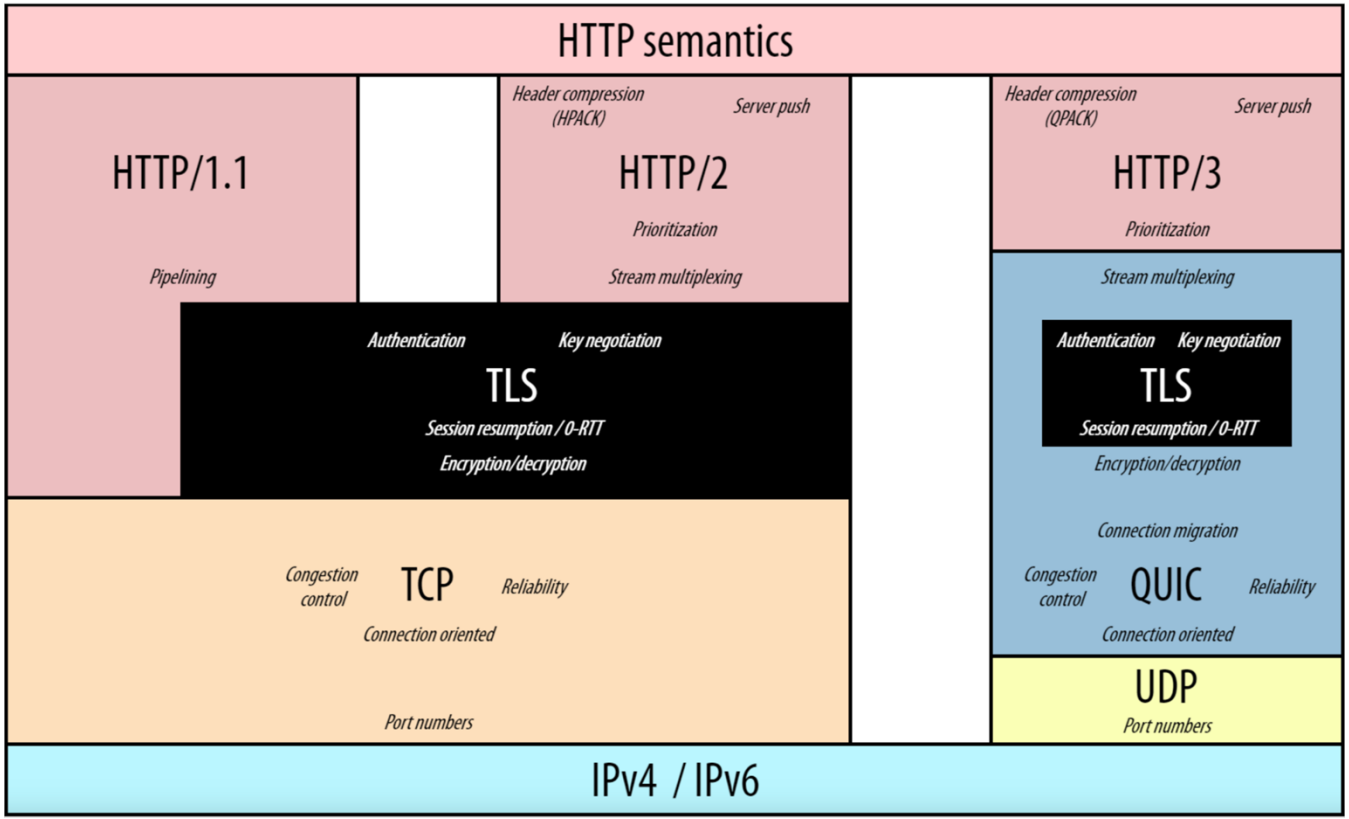
Introduction

Introduction- HAS



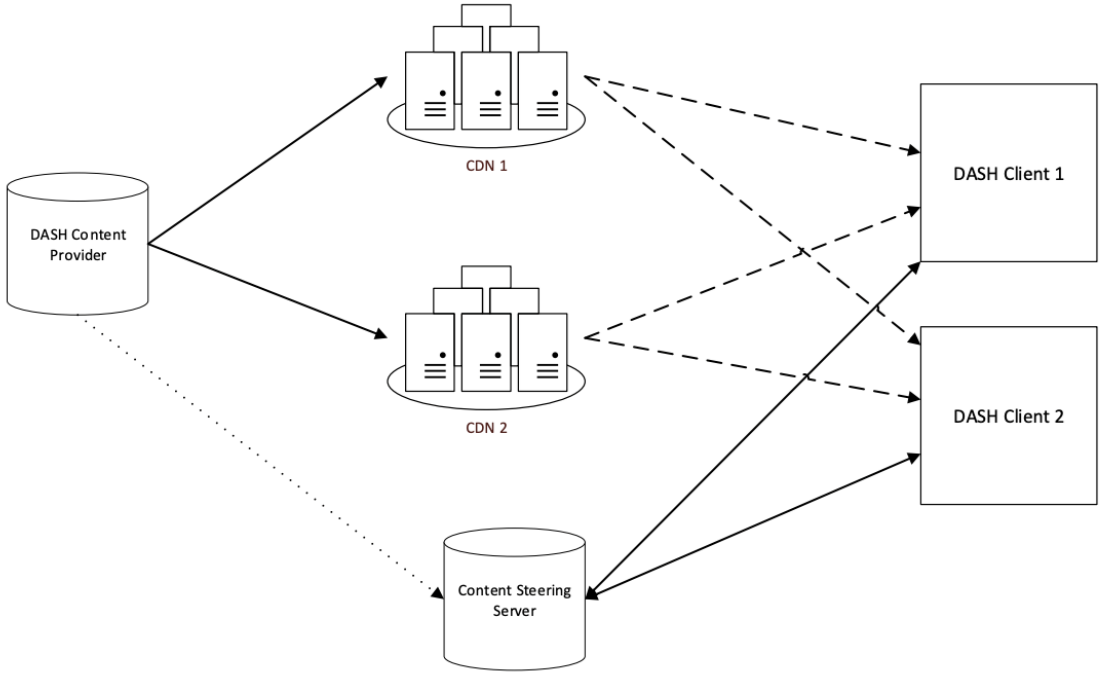
https://bitmovin.com/dynamic-adaptive-streaming-http-mpeg-dash/

Introduction-- QUIC



https://github.com/rmarx/h3-protocol-stack

Introduction-- Content Steering



https://dashif.org/docs/DASH-IF-CTS-00XX-Content-Steering-Community-Review.pdf

CP-Steering

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CP-Steering-- Motivation

How can we augment the **current content steering solutions** with a **multi-protocol** stacks, including **QUIC** and **TCP**, to satisfy all users with **different network** connections (e.g., lossy or stable) in acceptable **QoE** and **latency**?

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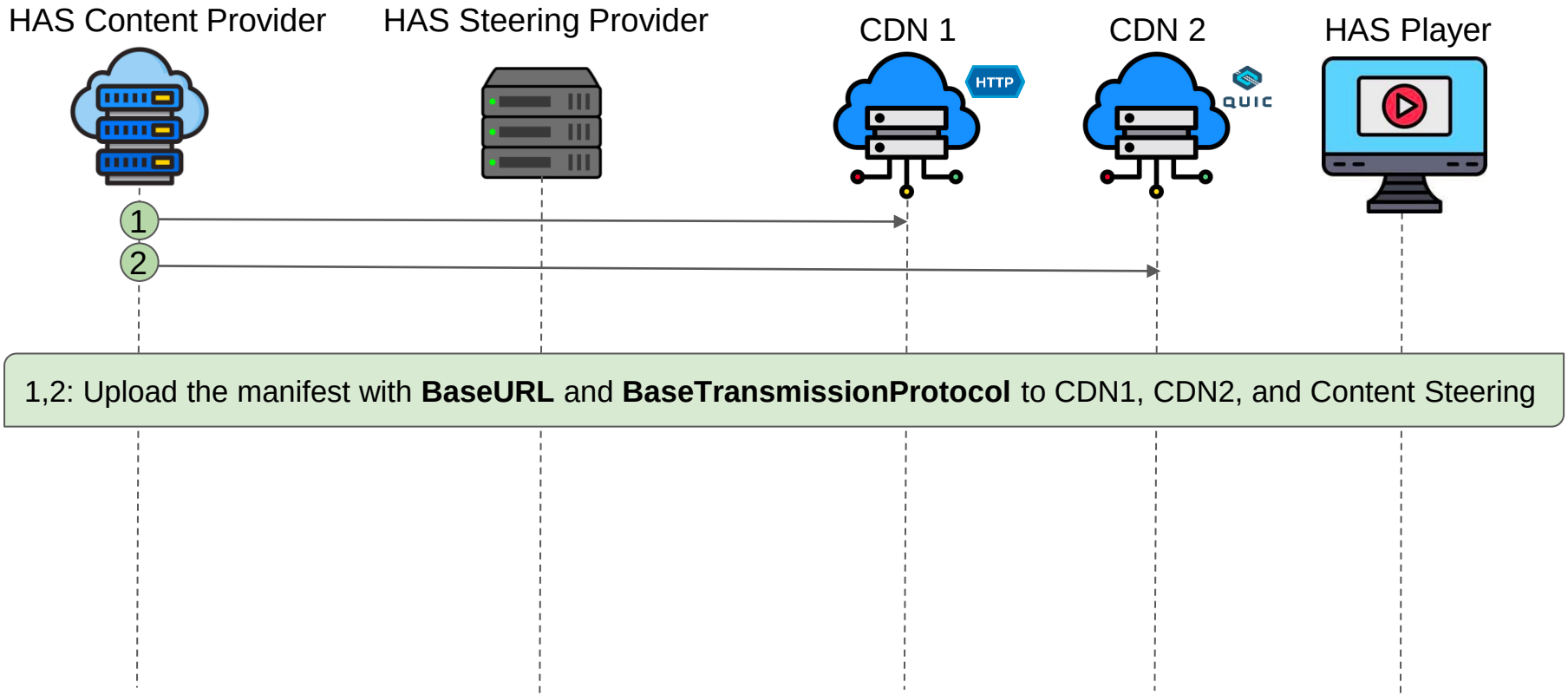
CP-Steering-- Workflow



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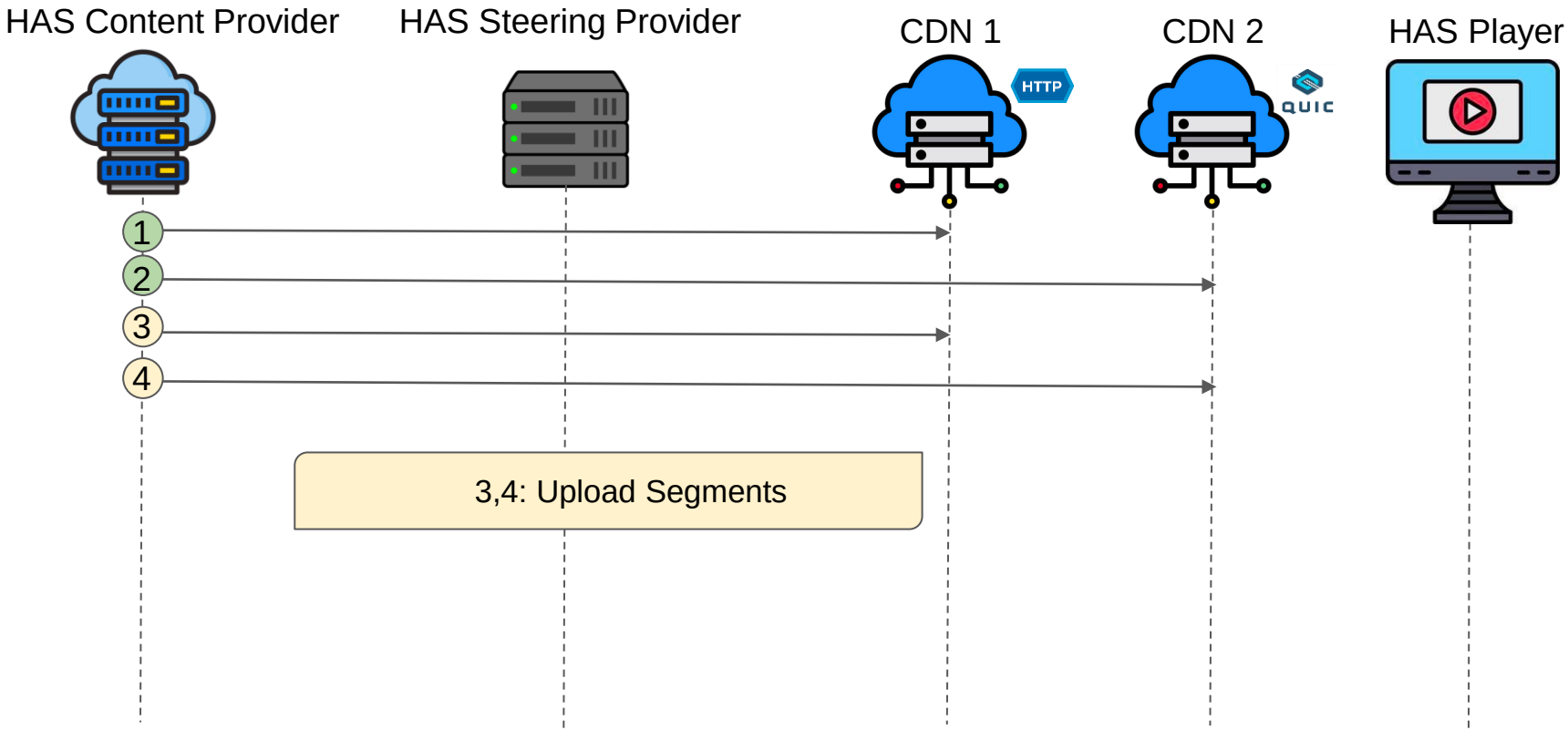

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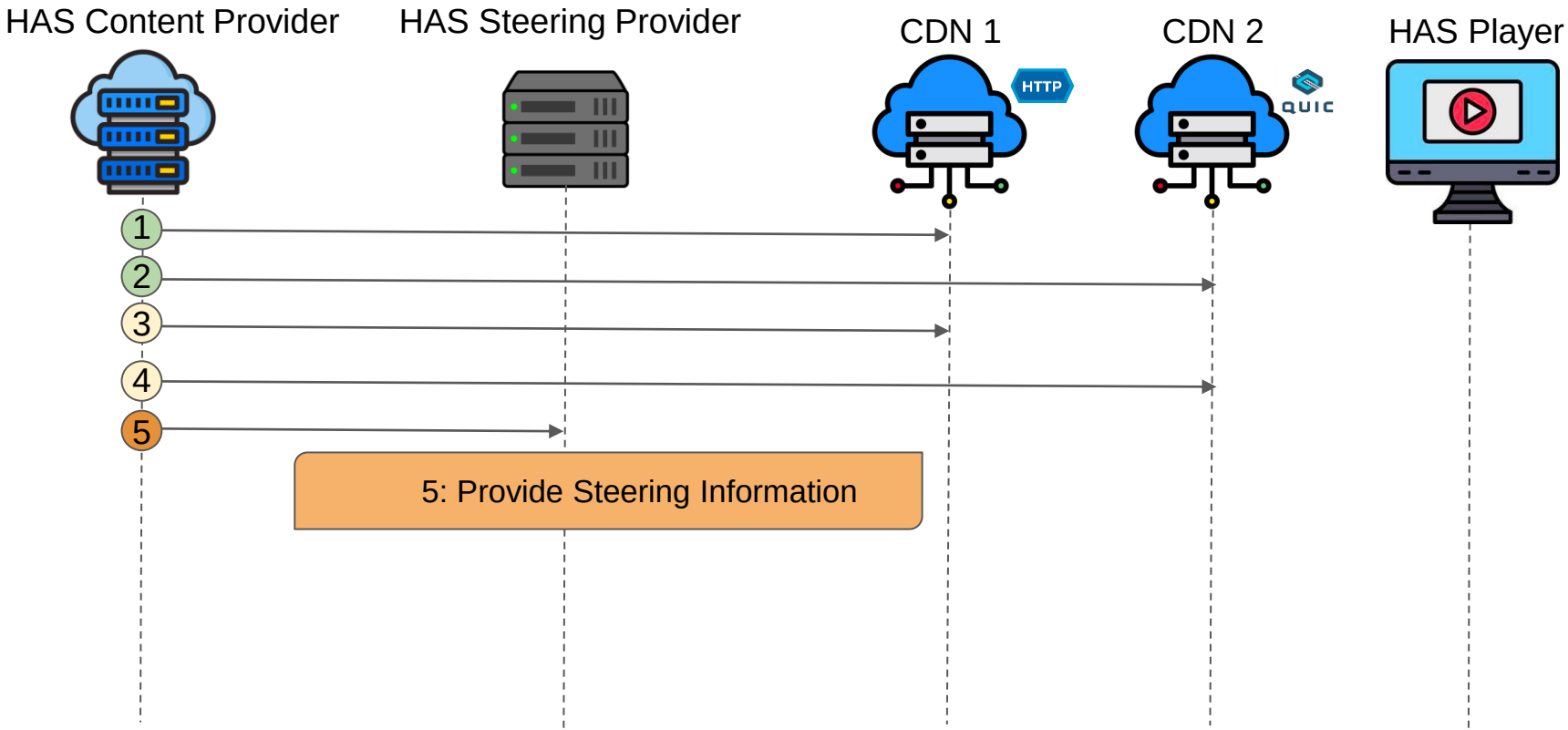

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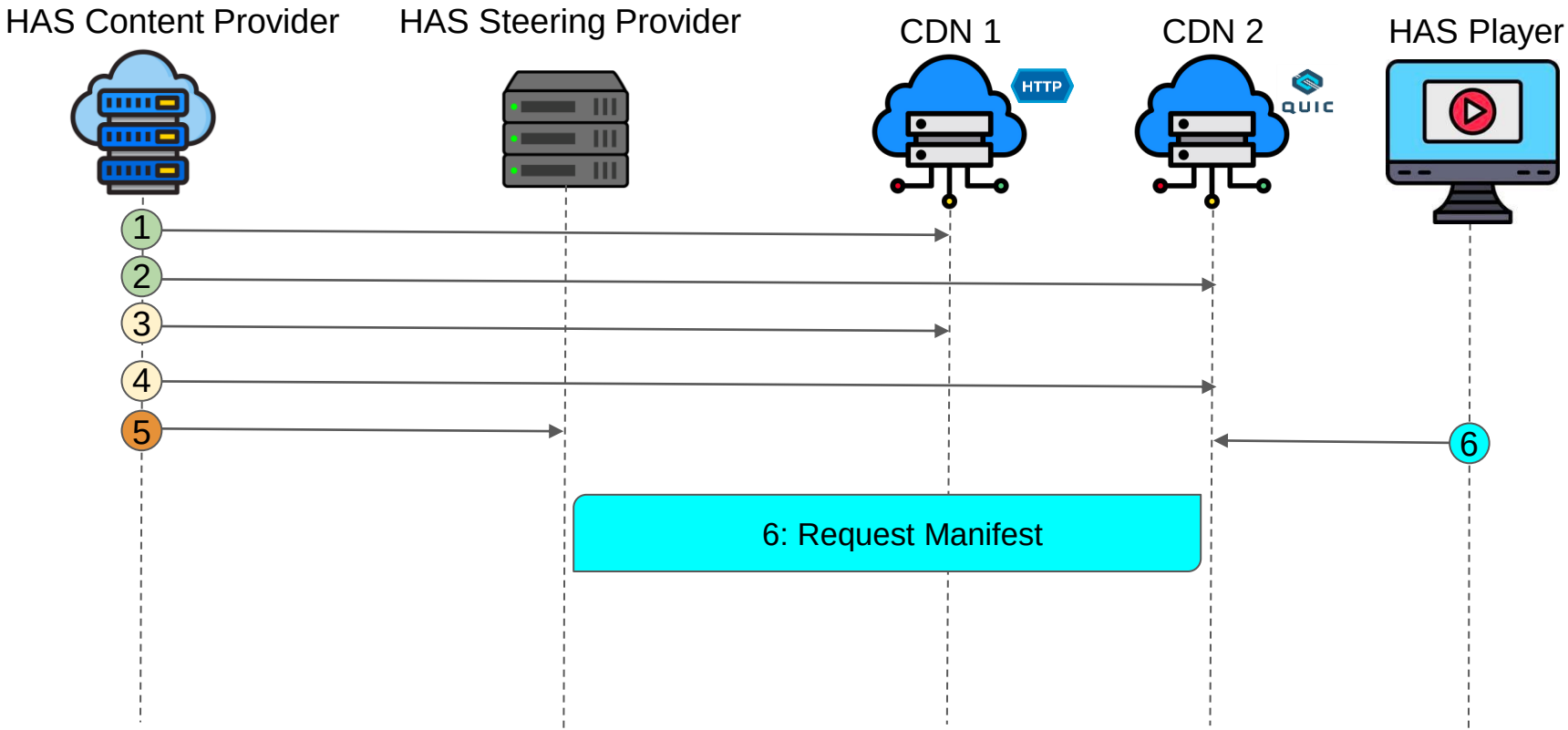

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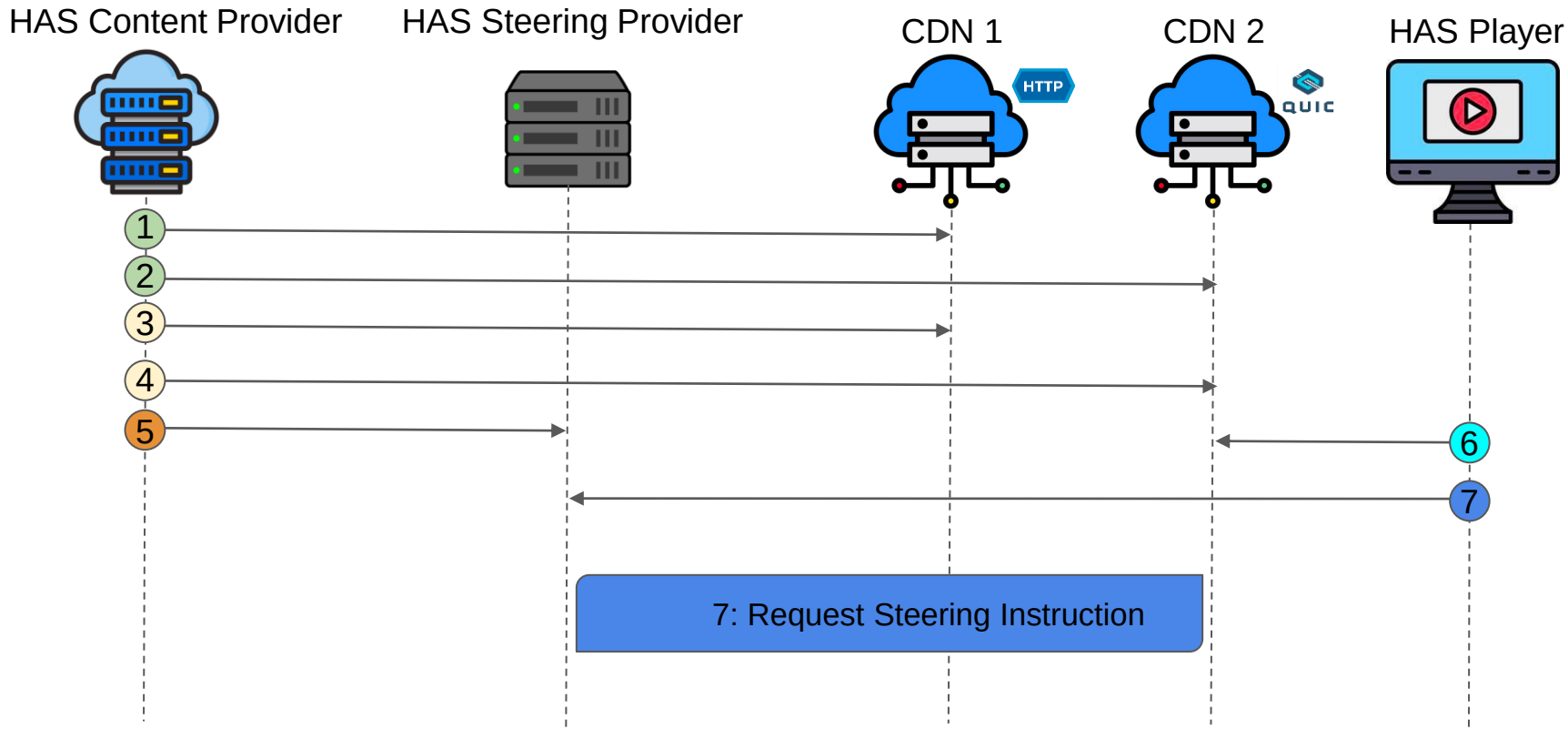

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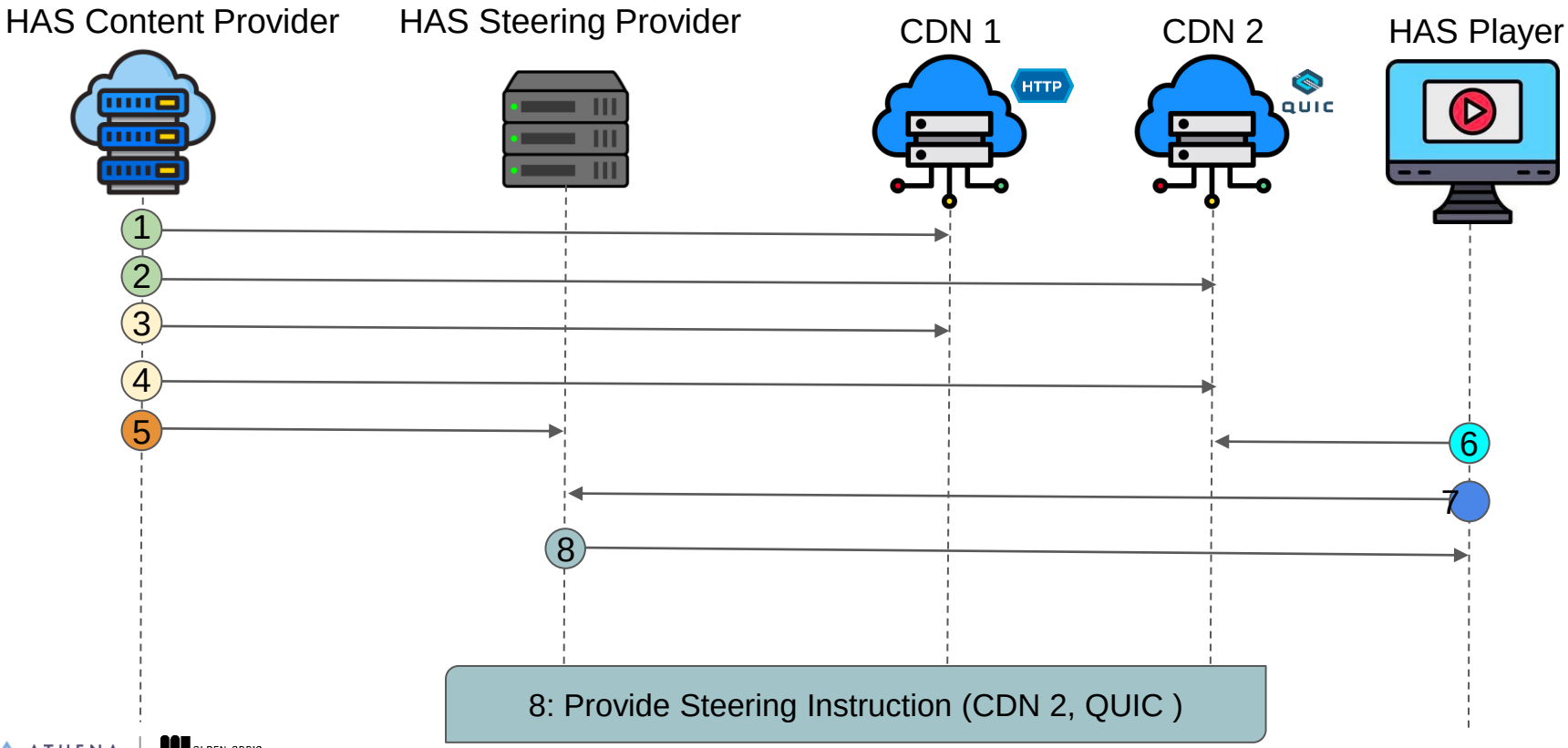
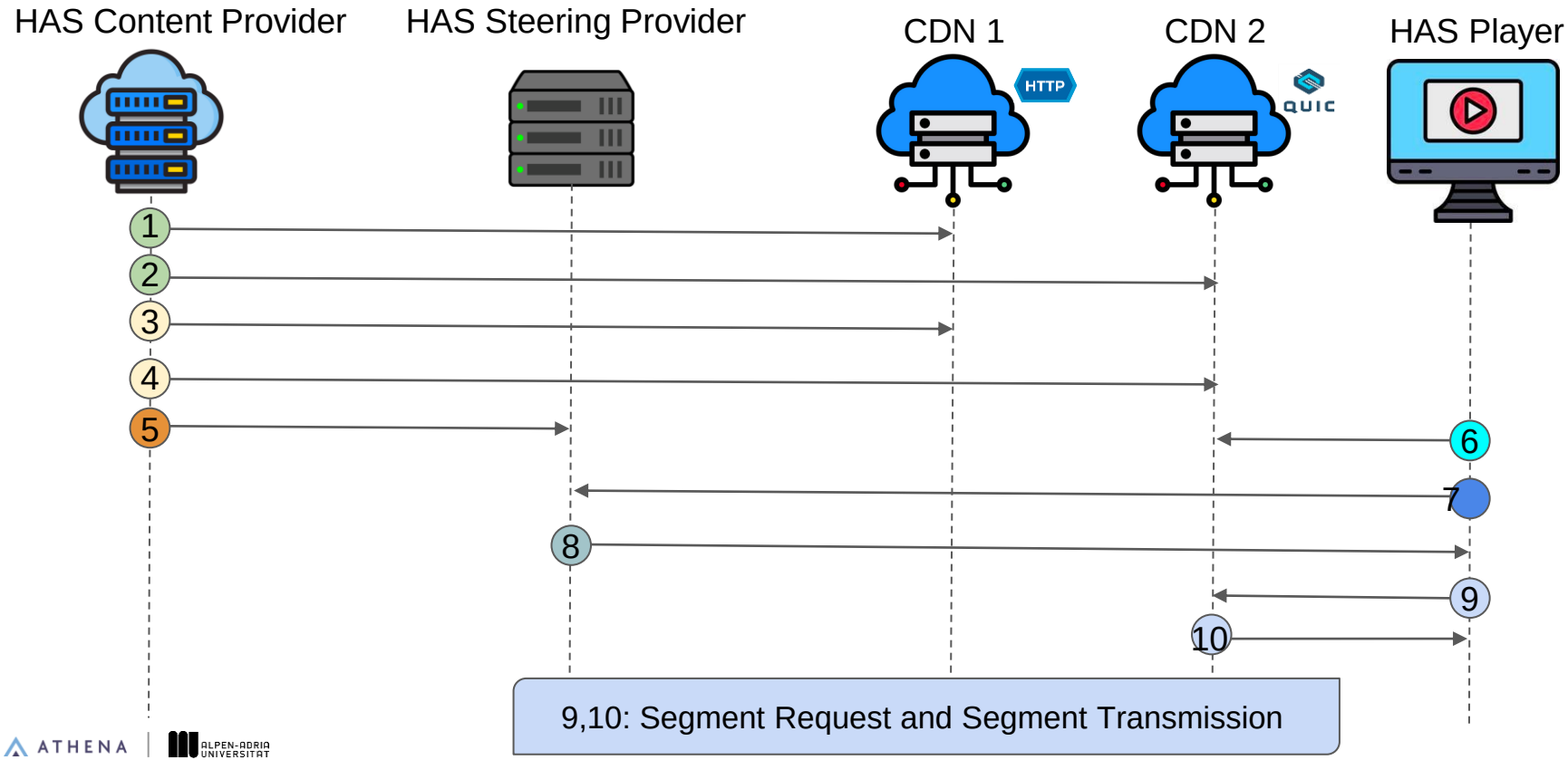


CP-Steering-- Workflow



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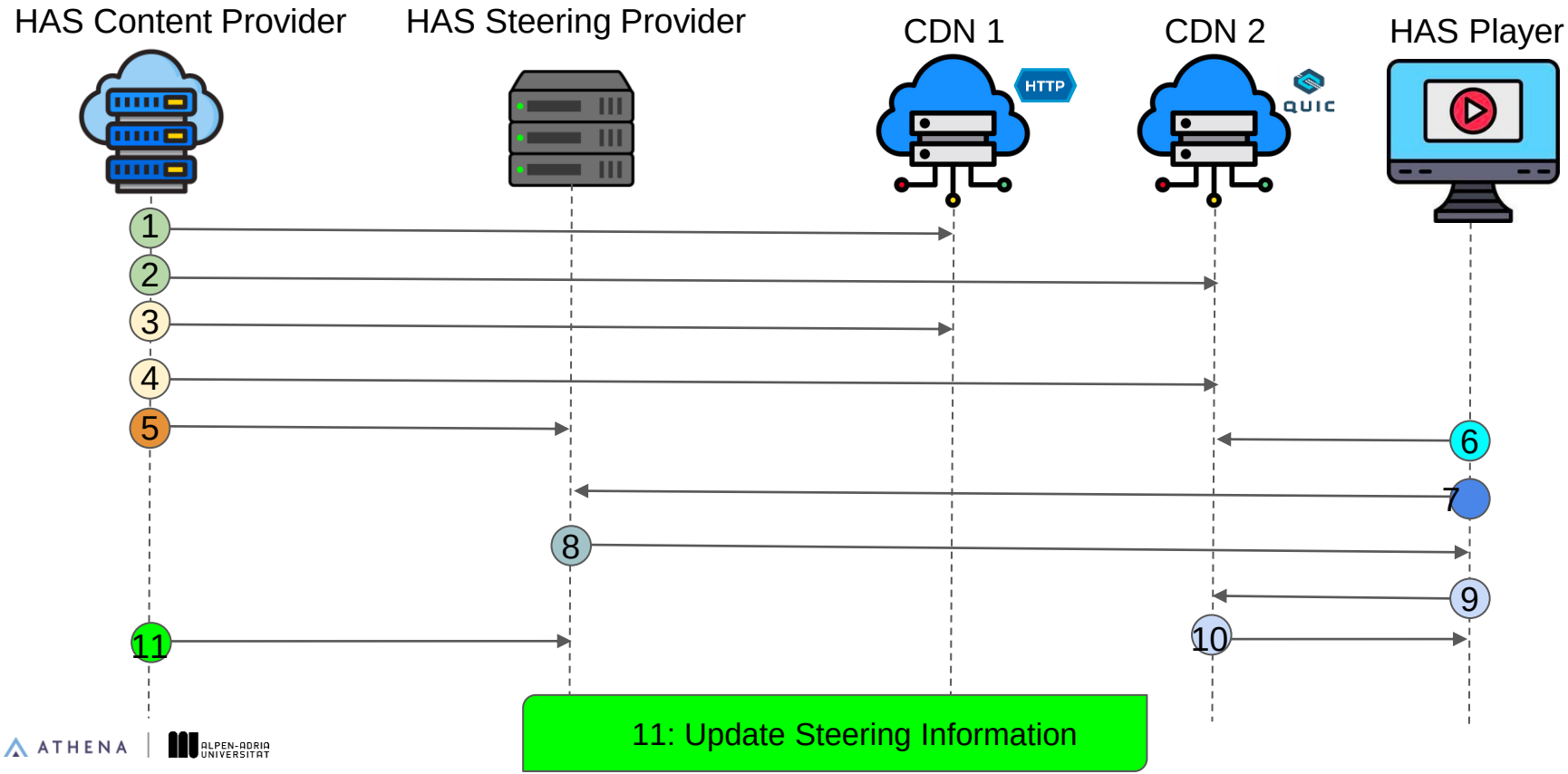

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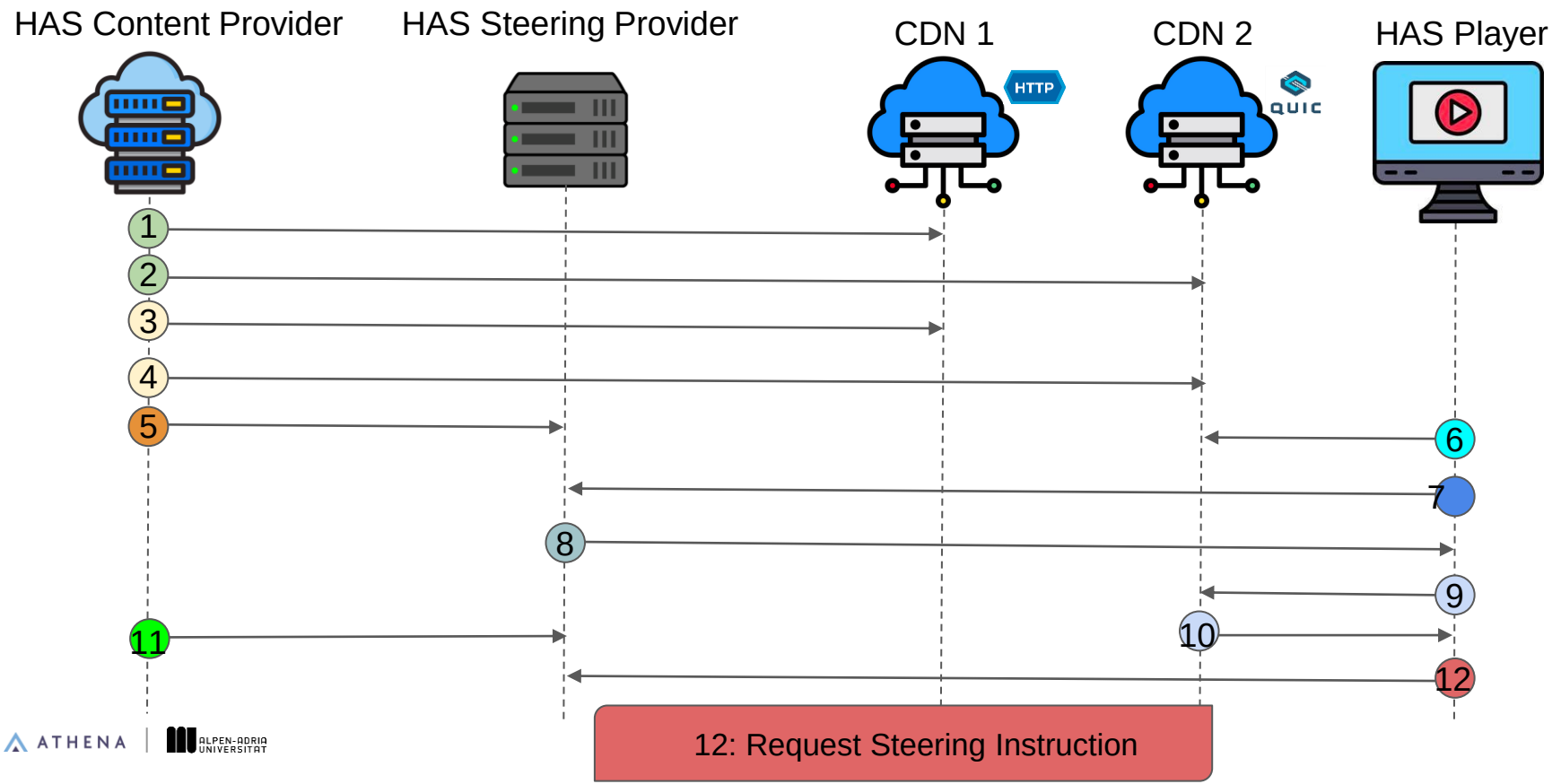

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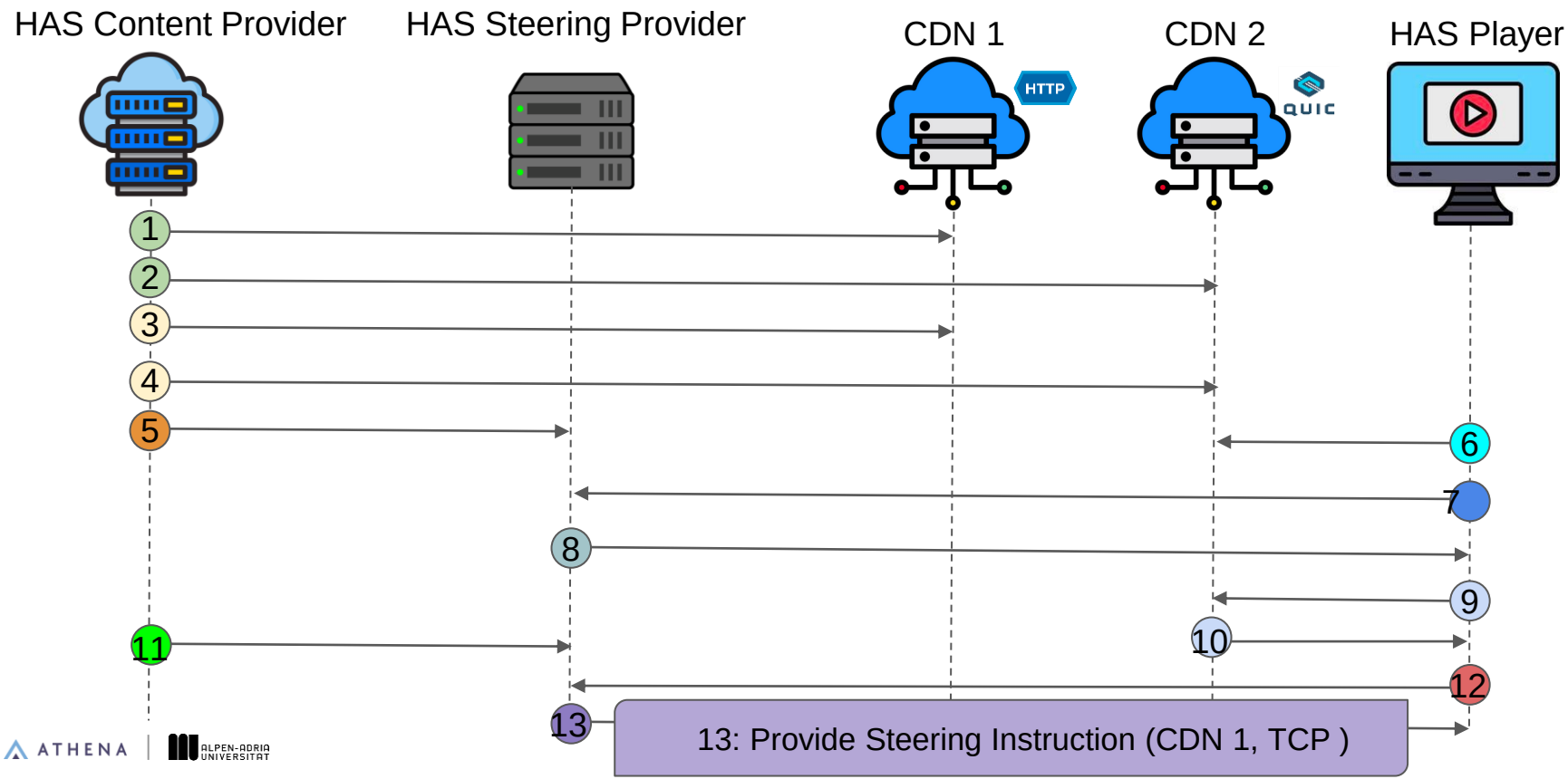

CP-Steering in a heterogeneous environment

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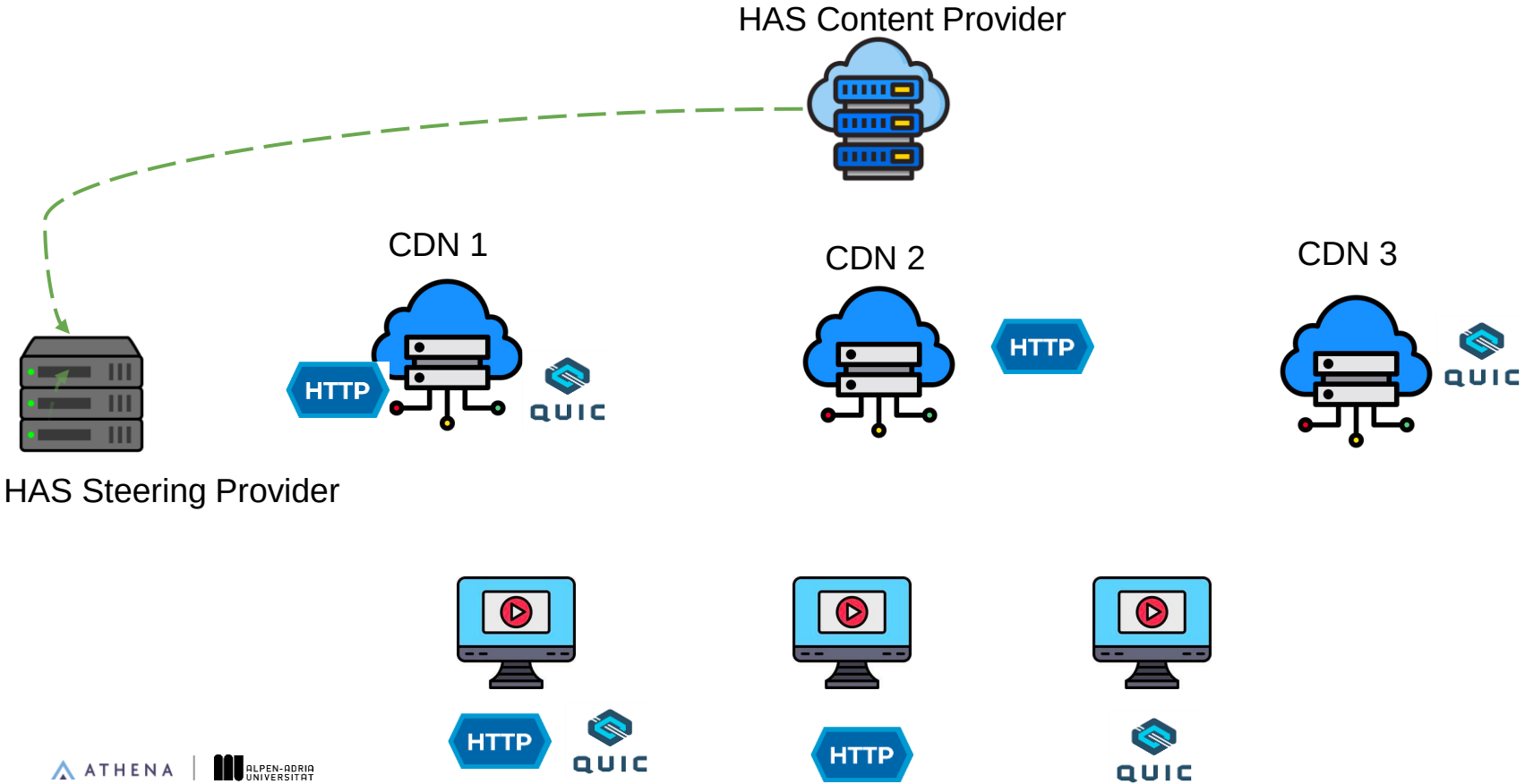

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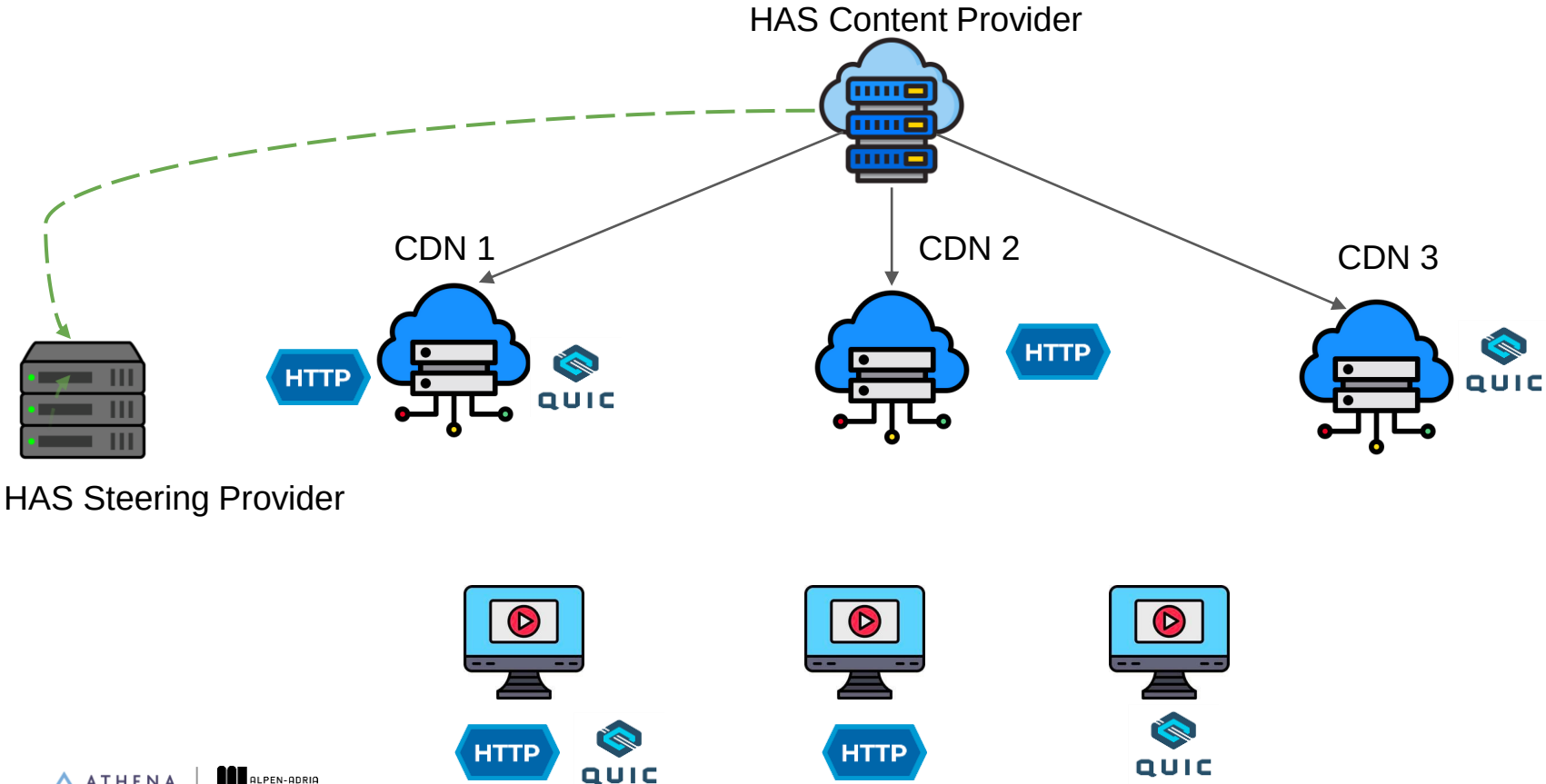

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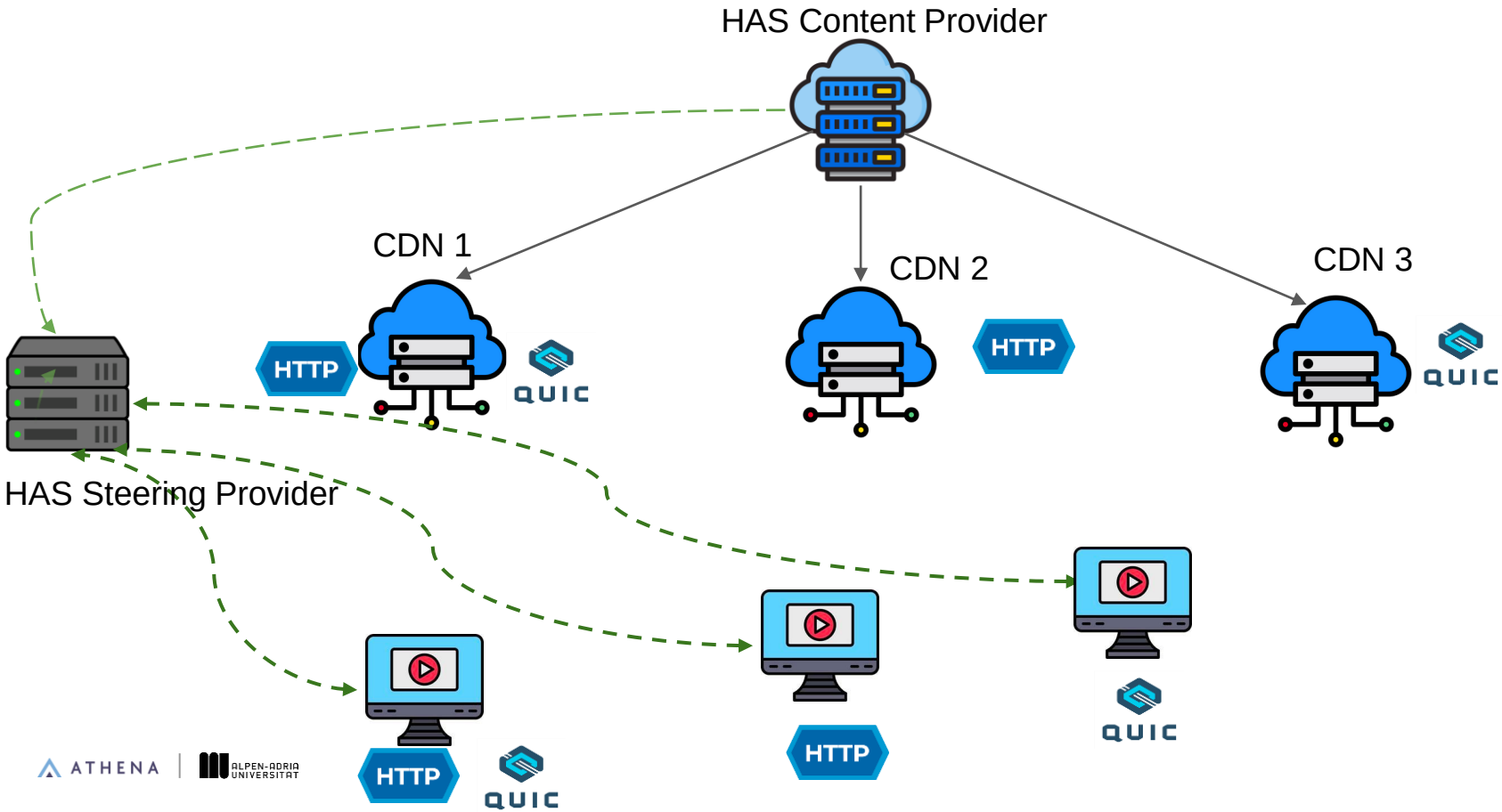

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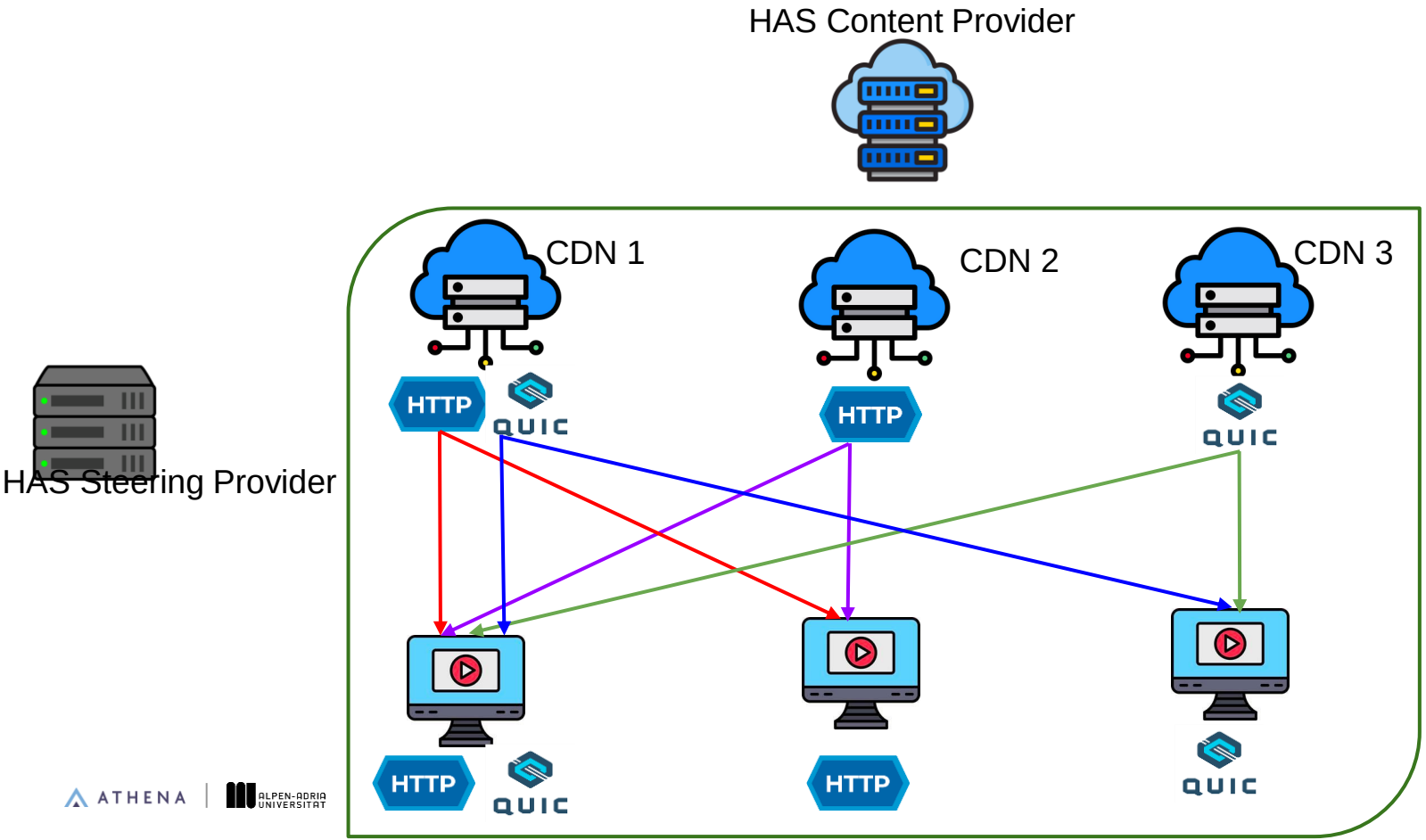

Conclusion and Future Work

Conclusion and Future Work

- Propose a content steering solution
  - multi-protocol
  - multi-CDN

- Integrate the CP-Steering strategy with dash.js
- Evaluate its performance on a real-world testbed

Thank you for your attention

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