

CDNI Use Case

draft-zhou-cdni-use-case-01

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Abstract

- Based on the CDNI services/scenarios, four new use cases are provided.
 - CDN authorization areas
 - Content Constraints (area, time period, ...)
 - Content Adaptation
 - Content Priority
- Based on these use cases, new requirements for CDNI may be derived

Cases 1,2: CDN Service Area

- dCDN is authorized to serve particular area for content from uCDN
 - Initial CDN selection from CSP
 - uCDN selects proper dCDN
- The content providers puts a constraint on service area and service period
- Author will distill the unique aspects from these use cases in next version.

Case 3: Content Adaptation

- Content Adaptation right now is a very attractive value added service
 - Within a CDN, maintain a single copy of content (high quality) and achieve high storage/distribution efficiency
 - Between CDN and End User, deliver the best content experience that is associated with the end user capability and network bandwidth
 - This kind of use case can be found in the ETSI CDNI document (ETSI TS 102 990)

Case 4: Content Priority

- Content Priority mechanism may provide enhanced services
 - Between CDNs: Content with higher priority may be delivered first (at a higher price)
 - CDN to End User: switch the content delivered automatically according to the content priority
 - if two pieces of content are assigned to be delivered at the same time, the content with higher priority is delivered first; afterward, continue the lower priority content

Proposal and Next Steps

- Author will clarify Use Cases 1 and 2
- Do use cases 3 and 4 make sense to include?
- Requirements to be extracted from acceptable use cases
- Relevant metadata to be created in the CDNI interface/protocols