

Catalogue of Advanced Use Cases for Content Delivery Network Interconnection

draft-fmn-cdni-advanced-use-cases-00

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Motivation

- CDN interconnection is a common aspect of research in a group of EU FP7 projects collaborating in the Future Media Networks cluster
- Several interesting CDNi use cases beyond the shorter-term goals of the CDNi WG (draft-ietf-cdni-use-cases-00)
- Aim of the draft is to catalogue these advanced use cases which could:
 - drive future work in the WG
 - possibly influence WG re-chartering, once the present goals have been reached
 - indicate where architectural choices and protocol options might be left open to accommodate future expansion

List of advanced CDNi use cases

- Caching-CDN interconnection
 - Relationship of CDNs with transparent in-network caching
- CDN-CDN interconnections at large scale
 - Interconnection of >2 CDNs, potential scope of WG re-chartering
- Dynamic adaptive streaming over HTTP in multi-CDNs
 - Delivering streamed content between CDNs and to end-users
- Dynamic expansion of CDN capacity and geographical reach
 - Use of ISP-provided resources under the control of the CDN provider
- Relationship between CDNi and Information-Centric Networking

Future plans

- We encourage discussion of advanced use cases on the mailing list
- Plan to refine and prioritise the advanced use cases following suggestions for which are most promising for further elaboration
- Maintain catalogue in a *separate stand-alone accompanying draft*, to avoid complicating or distracting from the prioritised work of the WG
- Identify those specific aspects which fit the current charter and feed these into WG drafts (requirements, use-cases, metadata, etc.) as appropriate.