

draft-stephan-cdni-control-operations-00
IETF85 – Atlanta
WG CDNi

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Rational

- Clarify the positioning of the control interface

[I-D.ietf-cdni-framework] defines the role of the CDNI control interface as encompassing "the operations to discover, initialize, and parameterize the other CDNI interfaces, as well as operations to pre-position, revalidate, and purge both metadata and content."

[RFC6707] indicates that the "exact inter-CDN control functionality required to be supported by the CDNI Control interface is less well defined than the other three CDNI interfaces"

[I-D.ietf-cdni-framework] says "There is some ambiguity as to the line between the set of trigger-based operations in the CDNI Control interface and the Metadata interface".

- There is not any draft specifying the the control operations for CDNI

Overview

- What it does
 - Clarify the role of the CDNI control interface;
 - Proposes a framework for control operations;
 - Specify the parameters that should be exchanged;
- What it does not
 - Make assumption about the protocol implementation;
 - it may be either manual or automated

Role of the CDNI control interface

In scope

- bootstrapping the other CDNI interfaces,
- updating or deleting instances of the other CDNI interfaces.

Out of Scope

- Operations related to content management are handle on the metadata interface:
 - So trigger-based operations are the responsibility of the metadata interface
 - pre-position, revalidate, and purge both metadata and content.

Framework

Service Agreement

A Service Agreement includes all information required to set up the CDN interconnection. It can be specified with a hierarchical datamodel

```
+-----+
|Service Agreement |
| +-----+ |
| |Delivery Service| | +-----+ | | | | | | |
| +-----+ | |Delivery Service |
| |Delivery Service| | | +-----+ |
| +-----+ | | |Class-of-requests| |
| +-----+ | | +-----+ | +-----+ |
| |uCDN identifier | | | |Class-of-requests| | |Class-of requests|
| +-----+ | | +-----+ | | +-----+ |
| |dCDN identifier | | | |Class-of-requests| | |footprint | |
| +-----+ | | +-----+ | | +-----+ |
| +-----+ | | +-----+ | | +-----+ |
| |Parameters | | | |Parameters | | |properties | |
| +-----+ | | +-----+ | | +-----+ |
+-----+ +-----+ +-----+
```


CDNI Control Operations

Service Agreement Parameters

- Connectivity and security control parameters
- Redirection parameters

Delivery Service Parameters

- CDNI Logging parameters
- CDNI Delivery Requirements parameters

class-of-requests

- class-of-requests identifier
- footprint
- Content request common properties

That's it.