

CDNI Capabilities Interface

draft-ma-cdni-capabilities-01

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Capabilities Interface

- RESTful HTTP-based API (XML or JSON payload?)
 - name of capability (defined by capability name registry)
 - list of supported values for that capability (defined by capability-specific capability value registry)
 - optional override of default footprint
 - well known formats (IP address range, country code, etc.)
 - opaque footprint identifier (defined outside of CDNI, possibly exchanged via CDNI Metadata location object)
 - incremental updates to default capabilities/footprints, pre-advertised during bootstrap or defined out-of-band
 - no quality metrics for capabilities or footprints
 - only full footprint override, no partial exclusions

FCI Design Decisions

- Capabilities with Footprint Restrictions vs. Footprints with Capability Attributes?
 - if capabilities are static and well-defined, overriding the footprint for a given capability makes sense
 - assuming that capabilities advertised with no footprint are assigned the default footprint
 - assuming that a footprint advertised with no capabilities becomes the default footprint
 - dynamic footprint quality metrics should not be considered capabilities
 - advertisement of static capabilities is still required in recursive request routing scenarios

Next Steps

- Feedback on this draft:
 - draft-ma-cdni-capabilities-01
- Feedback wrt other drafts:
 - draft-previdi-cdni-footprint-advertisement-02
 - draft-seedorf-cdni-request-routing-alto-03
 - draft-bertrand-cdni-footprint-discovery-01
 - draft-song-cdni-slr-based-footprint-02
 - draft-stephan-cdni-alto-session-ext-02
- Should CDNI select a single protocol, or should CDNI support multiple protocols for the FCI?