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?