

**CDNI Request Routing:  
Footprint and Capabilities Semantics Draft  
(draft-ietf-cdni-footprint-capabilities-semantics-02)**

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# Background & Goals

- **Objectives of draft-ietf-cdni-footprint-capabilities-semantic**
  - Captures the semantics of the CDNI Request Routing FCI interface
    - i.e. the desired meaning and what "Footprint and Capabilities Advertisement" is expected to offer within CDNI
  - Defines mandatory types of footprint and capabilities to be supported by protocol solutions for the CDNI FCI
  - Defines IANA Registries and procedure for registering new (optional) types of footprint and capabilities in the future

# Updated IANA Considerations

- IANA registries are to be used for standard/mandatory and optional types of footprint and capabilities
- A new IANA registry is requested for the "CDNI Capabilities" namespace
  - The "standard" namespace partition is intended to contain mandatory to implement capabilities and conforms to the "IETF Review" policy as defined in [[RFC5226](#)]
  - The "optional" namespace partition conforms to the "Expert Review" policy as defined in [[RFC5226](#)]. The expert review is intended to prevent namespace hoarding and to prevent the definition of redundant capabilities. The “vendor defined” partition is split by vendor name

# Updated IANA Considerations

The following table defines the initial capabilities for the standard partition:

Capability	RFC	Version
Delivery Protocol	RFCthis	1
Acquisition Protocol	RFCthis	1
Redirection Mode	RFCthis	1

[Ed. Note: Need to add the CDNI Metadata Interface [[I-D.ietf-cdni-metadata](#)] and the CDNI Logging Interface [[I-D.ietf-cdni-logging](#)] capabilities to this table before publication, or remove this note if this ends up being handled in those documents directly.]

# Updated IANA Considerations

- Standard Capabilities defined in this RFC
  - Footprint
    - Uses footprint formats defined in the CDNI Metadata Protocols Registry created by the Metadata RFC
  - Delivery Protocol
    - Uses protocols defined in the CDNI Metadata Protocols Registry created by the Metadata RFC
  - Acquisition Protocol
    - Uses protocols defined in the CDNI Metadata Protocols Registry created by the Metadata RFC
  - Redirection Mode
    - Redirection Mode Registry defined in this RFC, with initial values: Iterative DNS, Recursive DNS, Iterative HTTP, Recursive HTTP

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