A Quick Reminder

3 additive revisions of draft-ietf-cdni-ci-triggers-rfc8007bis:
  ○ 06: An overall coherency check & alignment
  ○ 07: Splitting the “Trigger” and “Cancel” commands objects
  ○ 08: Resource path based “Cancel” command

Discussion
  ○ Q&A
  ○ Selection of the draft for Working Group Last Call.
  ○ WG Last Call
Reminder - RFC 8007: CDNI Control Interface / Triggers

- Content/Metadata management
  - Preposition
  - Invalidation
  - Purge
Reminder - CDNI Control Interface / Triggers 2nd Edition

● Main Modifications (Rev v04 of the draft)
  ○ New Trigger Object structure
    ▪ Flexibility
    ▪ Extendability
  ○ Cascaded CDNs Error Propagation

● No change in actual protocol
Reminder -
New Trigger.v2 Object Properties

- Type (e.g. preposition)
  - metadata.urls
  - content.urls
  - content.ccid
  - metadata.patterns
  - content.patterns
  - content.regexes
  - content.playlists
  - cdn-path

- Action
- Trigger Specs
- Trigger Extensions
- cdn-path

“What”: What to do (e.g. preposition)

“Whom”: Targets to be executed on

“How”: Execution special instructions
Reminder: trigger type → trigger action

- The “What”
  - Preposition
  - Invalidation
  - Purge
  - Future…
Reminder - Generic “Spec” Object

● The “Whom”
  ○ Specify targets to execute the trigger on
  ○ Generic “spec” defining the selection methods
    • urls / ccids / UriPatterns / UrlRegexes / ContentPlaylists
    • Future …
  ○ Apply to a specified Trigger-Subject
    • Metadata, Content, Future …
  ○ dCDN to advertise via FCI supported scopes
    (<action, subject, specs, extensions> tuples)
Generic “Extension” Object

● The “How”
  ○ Add instructions for finer control over the trigger execution
  ○ Generic - flexible and extendable
    • LocationPolicy, TimePolicy, Future …
Status.v2 / Error.v2 Object

- Aligned to hold a “Trigger.v2” internal object
So Far v04 Recap
• An overall coherency check & alignment
• Eliminating loose ends
• Request new IANA Registries
  – "CDNI CI/T Trigger Specs"
  – "CDNI CI/T Trigger Subjects"
  – "CDNI CI/T Trigger Extensions"

• NOTE
  – NO "CDNI CI/T Trigger Actions" IANA Registry. Keep using "CDNI CI/T Trigger Types" from RFC 8007
Generic “Spec” Object - Changes

- **NEW @DRAFT (v06 vs. v04)**
  - Designated IANA Registries
    - "CDNI CI/T Trigger Specs"
    - "CDNI CI/T Trigger Subjects"
  - New Error Codes
    - espec
      Indicating the trigger includes an unsupported trigger spec, or a failure while parsing a trigger spec
    - esubject
      Indicating the trigger includes an unsupported subjects
Generic “Extension” Object - Changes

- **NEW @DRAFT (v06 vs. v04):**
  An IANA Registry was added to list the extensions: "CDNI CI/T Trigger Extensions"
Status.v2 Object - Changes

• **New @Draft (v06 vs. v04):**
  – Status object “status reason” property:
    • Human readable
    • non-mandatory
    • E.g. “pending due to time-policy extension”
Versions Clarification

NEW @DRAFT (v06 vs. v04)

- CI/T 2nd edition preserves the RFC 8007 protocol structure
  ⇒ Not versioning of the APIs, but versioning of the objects

- All interface changes are reflected through the usage of
  “v2” high level objects (that include a trigger.v2 object)
  - ci-trigger-command.v2
  - ci-trigger-status.v2

- Properties names do not include the “v2” suffix

FCI Capability Object: “CI/T Objects Versions” (section 9.1)
Versioned Objects

NEW @DRAFT (v06 vs. v04)

• Versioning only Part of the High Level/MIME Objects
• Versioned objects can now be paired by version
  – Trigger creation “command” version implies the monitored “status” resource version
  – `ci-trigger-command.v2 ⇒ ci-trigger-status.v2`
  – `ci-trigger-command ⇒ ci-trigger-status`
  – Etc. (future…)
• Objects that are not dependant on versioning:
  • `ci-trigger-collection`
    – may list paths to trigger status resources of different versions
NEW @DRAFT (v07 vs. v06)
  - Splitting the “Trigger” and “Cancel” commands objects
The Command Object

• RFC 8007 single ci-trigger-command Object
  – POSTed on the trigger collection path
  – Properties Mixture:

<table>
<thead>
<tr>
<th>Property</th>
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<tbody>
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<td>trigger creation</td>
</tr>
<tr>
<td>cancel</td>
<td>List of existing triggers status resources paths</td>
<td>triggers cancellation</td>
</tr>
<tr>
<td>cdn-path</td>
<td>list of CDN PIDs</td>
<td>loop detection/avoidance</td>
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Trigger Creation Command

NEW @DRAFT (v07 vs. v06)

- Object ci-trigger-command.trigger.v2:
  - Used for creating a “v2” trigger
    ⇒ Matching a ci-trigger-status.v2 object
  - I.e. this is a version specific object
  - POSTed on the trigger collection path
    E.g. https://dcdn.example.com/triggers/uCDN-A

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Trigger Cancellation Command
NEW @DRAFT (v07 vs. v06)

- Object ci-trigger-command.cancel:
  - Used for canceling a trigger
  - Not version specific - cancel trigger of any version
  - POSTed on the trigger collection path

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- **TO DISCUSS:** Is “cdn-path” needed?
The trigger to be cancel already exists and was checked for loop
• **NEW @DRAFT (v08 vs v07)**
  – Resource path based “Cancel” command
Trigger Cancellation - Standardization
New @DRAFT (v08 vs. v07)

• Object ci-trigger-command.cancel:
  – Canceling a trigger of any version
  – **POSTed on the specific trigger resource path**
    E.g. https://dcdn.example.com/triggers/uCDN-A/123
  – Object has no properties
  – **TO DISCUSS:**
    • More standard
    • No bulk trigger cancellation
      – Is it even needed?
      – Moving the responsibility dCDN ↔ uCDN
OK. So?

- Questions?
- Selection of a draft (v06, v07 or v08) for Working Group Last Call.
- WG Last Call