CDNI Logging draft-ietf-cdni-logging-08 (Update from -05)

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Changes between -05 and -08

- Significant work done on cdni-logging since Berlin, basically "finished" the draft
- Held two "informal" meetings to gather input and feedback, close the open issues
- Published -06, -07 and -08 (with incremental diffs)
- Some items discussed on the list along the way

Changes between -05 and -08

- Mark Nottingham's review/comment on text discussing content encoding (compression) of CDNI Logging File (thanks!)
- Removed non-repudiation (TBD as standalone draft)
- Added a section on Denial of Service
- Tweaked the CDNI requirements compliance
- Current draft clearly states that logging:
 - is non real-time
 - applies only to content delivery (no routing events)
- Minor text changes about directives' occurrence (based on Kevin's comments)

Changes between -05 and -08: (re "Mandatory/Optional")

- Clean-up text to distinguish "mandatory/optional to implement" and "mandatory/optional to use"
- As discussed in Berlin, the general approach is to select a set of "Mandatory to implement" that will ensure easy and functional practical interoperability, and therefore facilitate deployment

facilitate deployment
(this is as opposed to an alternative approach of selecting the absolute minimum set that will only guarantee the bare minimum interoperability)

Changes between -05 and -08 (re "Mandatory/Optional")

Regarding CDNI Logging Fields:

- A given Logging Field whose occurrence is defined as "there MUST be one (or more) instance" (e.g. c-ip, time-taken) MUST be used in a given deployment
- A given Logging Field whose occurrence is defined as "there MUST be zero or one (or more) instance" (e.g. s-cached) MAY be used in a given deployment (upon agreement between uCDN and dCDN)

Changes between -05 and -08 (re "Mandatory/Optional")

Regarding CDNI Logging Fields (continued):

- dCDN implementations MAY support ability to include
 - c-ip-anonymizing
 - s-ccid
 - -s-sid
- dCDN implementations MUST support ability to include all of the other Logging Fields for cdni_http_request_v1 (e.g. c-ip, time-taken, scached)
- uCDN implementation MUST support ability to receive any Logging Field

Changes between -05 and -08 (re "Mandatory/Optional")

Regarding CDNI Logging Directives:

- uCDN and dCDN implementations MUST support all directives
- a given Directive whose occurrence is defined as "there MUST be one (or more) instance" (e.g. Version, UUID) MUST be used in a given deployment
- A given Logging Field whose occurrence is defined as "there MUST be zero or one (or more) instance" (e.g. Integrity-Hash) MAY be used in a given deployment (to be agreed between uCDN and dCDN)

Changes between -05 and -08

- David Mandelberg provided the correct MD5 value for the #Integrity-Hash directive of the example Logging File
- Clarified retention limits of logging files in the ATOM archive. Beyond the agreed timeframe, the server:
 - can refuse to serve the files (HTTP 403 or 401 status codes)
 - may be unable to serve (HTTP 404)
- Specified behaviour for compressed content. Both client and server:
 - MUST support logging files exchange without content encoding applied to the representation
 - SHOULD support gzip content encoding
- Removed s-uri-signing field (since this is going to cdni-signing document as announced by Kent on the list)
- removed former Appendix "A.2. Considerations on CDNI Logging Applicability" and moved the text still relevant into the appropriate part of the document

Next Steps

- Comments on latest version ?
- We propose to move to WG Last Call

Back-up Slides

Text related to Mandatory/Optional support of Logging Fields

A dCDN-side implementation of the CDNI Logging interface MUST support the ability to include valid values for the following Logging Fields in a CDNI Logging Record of Record-Type "cdni http request v1":

- o date
- o time-taken
- o c-ip

•••

o s-cached

A dCDN-side implementation of the CDNI Logging interface MAY support the ability to include valid values for the following Logging Fields in a CDNI Logging Record of Record-Type "cdni http request v1":

- o c-ip-anonimizing
- o s-ccid
- o s-sid

An uCDN-side implementation of the CDNI Logging interface MUST be able to accept CDNI Logging Files with CDNI Logging Records of Record-Type "cdni_http_request_v1" containing any CDNI Logging Field defined in Section 3.4.1 as long as the CDNI Logging Record and the CDNI Logging File are compliant with the present document.

The HTTP Request Logging Record is a CDNI Logging Record of Record-Type "cdni_http_request_v1". It contains the following CDNI Logging Fields, listed by their field name:

- o date:
 - * format: ...
 - * field value:...
 - * occurrence: there MUST be one and only one instance of this field.
- o s-cached:
 - * format: ...
 - * field value: ...
 - * occurrence: there MUST be zero or exactly one instance of this field.

Text related to Mandatory/Optional support of Directives

An implementation of the CDNI Logging interface MUST support all of the following directives, listed below by their directive name:

o Version:
 * format: ...
 * directive value: ...
 * occurrence: there MUST be one and only one instance of this directive per CDNI Logging File...
o UUID: