

CDNI Working Group (CDN Interconnect)

Francois Le Faucheur

Daryl Malas

Welcome to CDNI

- IETF-93 Meeting Chairs:
 - Francois Le Faucheur
 - Daryl Malas
- One session
 - Monday, July 20, 2015, 13:00-15:00, Karlin I/II
- Remote attendance via Meetecho
- Minute takers?
- Blue sheets

Note Well

This summary is only meant to point you in the right direction, and doesn't have all the nuances. The IETF's IPR Policy is set forth in BCP 79; please read it carefully.

The brief summary:

- ❖ **By participating with the IETF, you agree to follow IETF processes.**
- ❖ **If you are aware that a contribution of yours (something you write, say, or discuss in any IETF context) is covered by patents or patent applications, you need to disclose that fact.**
- ❖ **You understand that meetings might be recorded, broadcast, and publicly archived.**

For further information, talk to a chair, ask an Area Director, or review the following:

BCP 9 (on the Internet Standards Process)

BCP 25 (on the Working Group processes)

BCP 78 (on the IETF Trust)

BCP 79 (on Intellectual Property Rights in the IETF)

Agenda (1/2)

- **Opening**
 - Agenda bashing & introduction: Chairs (5 mins)
 - Document status update: Chairs (10 mins)
- **CDNI Logging**
 - CDNI Logging, draft-ierf-cdni-logging-19: Luniana Oprescu (10 mins)
- **CDNI Metadata**
 - CDNI Metadata, draft-ietf-cdni-metadata-10: Ben Niven-Jenkins (10 mins)
- **CDNI Footprint & Capabilities Advertisement interface** Jan Seedorf (10 mins)
 - Footprint & Capabilities Semantics , draft-ietf-cdni-footprint-capabilities-06
 - CDNI Footprint & Capabilities Advertisement Interface , draft-ma-cdni-capabilities-07
 - CDNI Footprint and Capabilities Advertisement using ALTO , draft-seedorf-cdni-request-routing-alto-06
- **CDNI Request Routing Redirection interface**
 - Request Routing Redirection for CDN Interconnection, draft-ietf-cdni-redirection-10: Ray van Brandenburg (10 mins)

Agenda (2/2)

- **CDNI Control interface**
 - CDNI Control - Triggers, draft-ietf-cdni-control-triggers-08: Rob Murray (10 mins)
- **CDNI URI Signing**
 - URI Signing for CDNI , draft-ietf-cdni-uri-signing-04 : Ray van Brandenburg (10 mins)
- **HTTPS and delegation of encrypted traffic between interconnected CDNs**
 - HTTPS and delegation of encrypted traffic between interconnected CDNs, draft-fieau-https-delivery-delegation-00: Iuniana Oprescu (10 mins)
 - Approaches to HTTPS-based Request Routing and Delegation, draft-slovetskiy-cdni-https-delegation-approaches-00: Sergey Slovetzky (10 mins)
 - Open discussion on problem, approaches and next steps (5-10 mins)
- **Closing**
 - Conclusions and next steps: Chairs (5 mins)

Working Group Milestones: Published RFCs

- RFC 6707: CDNI Problem Statement (Informational)
- RFC 6707: CDNI Use Cases (Informational)
- RFC 6983 : Models for HTTP-Adaptive-Streaming-Aware CDNI (Informational/Independent Submission)
- RFC 7336: Framework for Content Distribution Network Interconnection (Informational)
- RFC 7337: Content Distribution Network Interconnection (CDNI) Requirements (Informational)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
- CDNI Framework: Done (Informational)
- CDNI Logging interface : Oct 2014 (PS)
- IESG review conducted, still addressing IESG comments
- CDNI Control Interface (Triggers) : Apr 2015 (PS)
- CDNI Footprint & Capabilities Adv Iface: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
 - CDNI Framework: Done (Informational)
 - CDNI Logging interface : Oct 2014 (PS)
 - CDNI Metadata interface: Apr 2015 (PS)
- Ready for WG Last Call, once the MIME type discussion is resolved and JSON expert review comments are addressed
- URI Signing for CDNI: Aug 2015 (PS)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
- CDNI Framework: Done (Informational)
- Security text aligned
- Privacy discussion added ?
- Ready to move to IESG review ?
- CDNI Redirection interface: Aug 2015 (PS)
- CDNI Control interface (Triggers) : Apr 2015 (PS)
- CDNI Footprint & Capabilities Adv Iface: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
- As agreed in Dallas:
 - Addressed JSON Expert Review
 - Aligned TLS text
 - Added Privacy Text
- Ready to move to IESG Review ?
- CDNI Control interface (Triggers) : Apr 2015 (PS)
- CDNI Footprint & Capabilities Adv Iface: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
- CDNI Framework: Done (Informational)
- CDNI Logging interface : Oct 2014 (PS)
- CDNI Metadata interface: Apr 2015 (PS)
- Semantics I-D ready for WG Last Call once MIME Type discussion is resolved
- CDNI Footprint & Capabilities Adv Iface: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Working Group

Remaining Milestones

- CDNI Requirements : Done (Informational)
- CDNI Framework: Done (Informational)
- WG made a decision in Dallas to include support for segmented content in same I-D
- Liaison was sent to MPEG to notify them of that decision (and respond to their earlier Liaison)
- As announced by Ray, an IPR statement has been issued (<http://datatracker.ietf.org/ipr/2603/>) that needs to be discussed by WG
- CDNI Capabilities Adv. track: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Beyond Working Group Milestones

- CDNI Rate Pacing

CDNI Rate Pacing IETF 91

- No progress since IETF 91, waiting on interface drafts to solidify to fine-tune

Beyond Working Group Milestones

- CDNI Rate Pacing
- CDNI handling of HTTPS Delegation

- Problem raised and discussed in Dallas
- 2 Internet-Drafts submitted for IETF-93 that will be discussed today

<http://datatracker.ietf.org/ipr/2603/>

'IV'. IETF Document or Other Contribution to Which this IPR Disclosure Relates

Internet-Draft draft-ietf-cdni-uri-signing ("URI Signing for CDN Interconnection (CDNI)")
Revisions: Revision: 04

'VI'. Licensing Declaration

The Patent Holder states that its position with respect to licensing any patent claims contained in the patent(s) or patent application(s) disclosed above that would necessarily be infringed by implementation of the technology required by the relevant IETF specification ("Necessary Patent Claims"), for the purpose of implementing such specification, is as follows(select one licensing declaration option only):

Licensing	Reasonable and Non-Discriminatory License to All Implementers with Possible Royalty/Fee
Licensing	(No information submitted)
information,	
comments, notes, or	
URL for further	
information	

What are our Options ?

- Option 1: Don't change the plan
 - Retain extensions for segmented content covered by IPR in draft-ietf-cdni-uri-signing
- Option 2: Split in two documents
 - Move extensions for segmented content covered by IPR in a separate non-WG document
- Option 3: Change the solution
 - Define another solution for segmented content not covered by IPR in draft-ietf-cdni-uri-signing
- Option 4: Drop segmented content
 - Remove extensions for segmented content covered by IPR from draft-ietf-cdni-uri-signing and don't worry (for now) about segmented content
- Another Option ?

Agenda (1/2)

- **Opening**
 - Agenda bashing & introduction: Chairs (5 mins)
 - Document status update: Chairs (10 mins)
- **CDNI Logging**
 - CDNI Logging, draft-ierf-cdni-logging-19: Luniana Oprescu (10 mins)
- **CDNI Metadata**
 - CDNI Metadata, draft-ietf-cdni-metadata-10: Ben Niven-Jenkins (10 mins)
- **CDNI Footprint & Capabilities Advertisement interface** Jan Seedorf (10 mins)
 - Footprint & Capabilities Semantics , draft-ietf-cdni-footprint-capabilities-06
 - CDNI Footprint & Capabilities Advertisement Interface , draft-ma-cdni-capabilities-07
 - CDNI Footprint and Capabilities Advertisement using ALTO , draft-seedorf-cdni-request-routing-alto-06
- **CDNI Request Routing Redirection interface**
 - Request Routing Redirection for CDN Interconnection, draft-ietf-cdni-redirection-10: Ray van Brandenburg (10 mins)

Agenda (2/2)

- **CDNI Control interface**
 - CDNI Control - Triggers, draft-ietf-cdni-control-triggers-08: Rob Murray (10 mins)
- **CDNI URI Signing**
 - URI Signing for CDNI , draft-ietf-cdni-uri-signing-04 : Ray van Brandenburg (10 mins)
- **HTTPS and delegation of encrypted traffic between interconnected CDNs**
 - HTTPS and delegation of encrypted traffic between interconnected CDNs, draft-fieau-https-delivery-delegation-00: Iuniana Oprescu (10 mins)
 - Approaches to HTTPS-based Request Routing and Delegation, draft-slovetskiy-cdni-https-delegation-approaches-00: Sergey Slovetzky (10 mins)
 - Open discussion on problem, approaches and next steps (5-10 mins)
- **Closing**
 - Conclusions and next steps: Chairs (5 mins)

Back-up Slides

Working Group

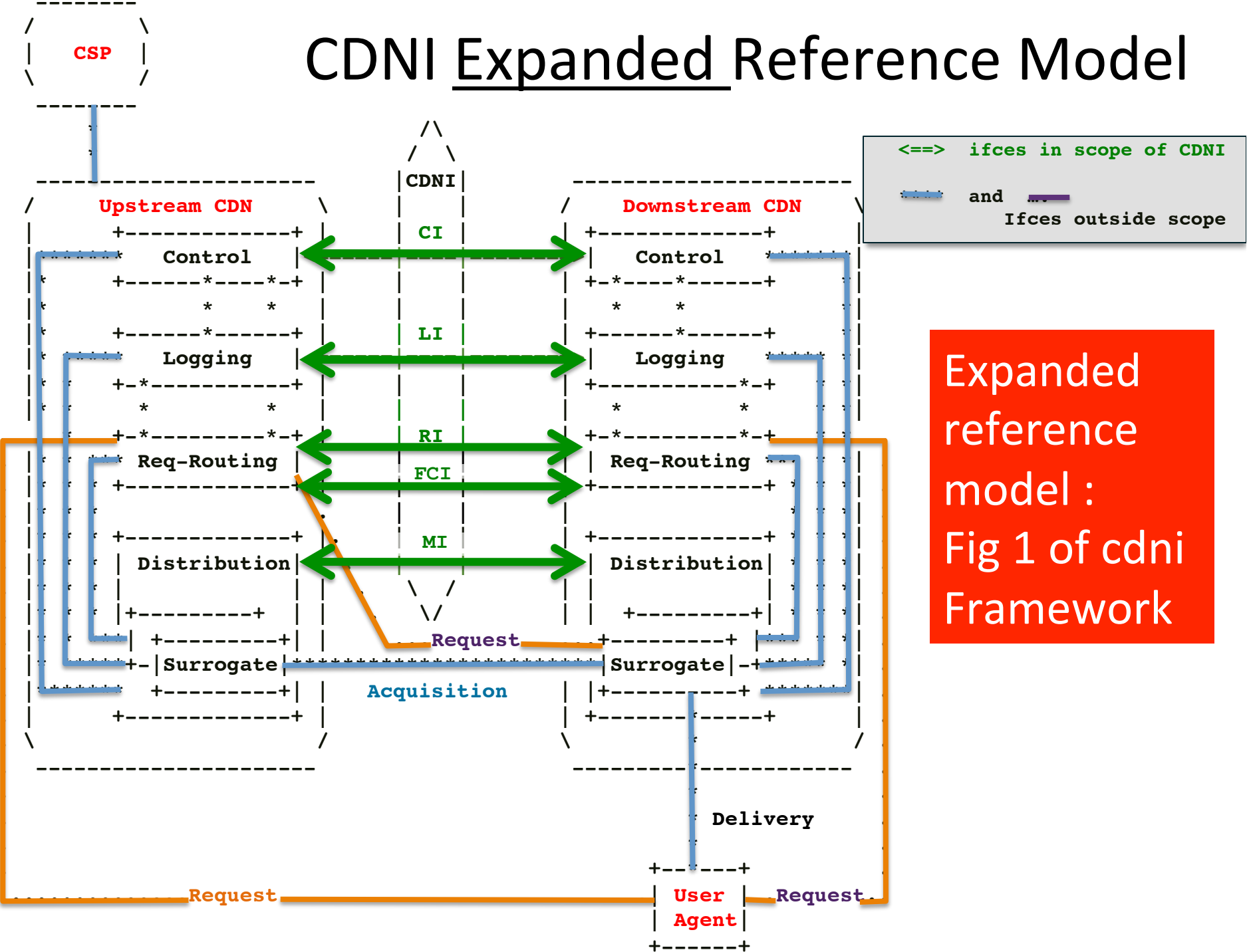
Milestones Dates updated

- CDNI Requirements : Done (Informational)
- CDNI Framework: Done (Informational)
- CDNI Logging interface : Oct 2014 (PS)
- CDNI Metadata interface: Apr 2015 (PS)
- CDNI Redirection interface: Aug 2015 (PS)
- CDNI Control interface (Triggers) : Apr 2015 (PS)
- CDNI Footprint & Capabilities Adv Iface: Dec 2015 (PS)
- URI Signing for CDNI: Aug 2015 (PS)

Final Interface Names

- **CI:** CDNI Control interface
- **MI:** CDNI Metadata interface
- **LI:** CDNI Logging interface
- **RI:** CDNI Request Routing Redirection interface
- **FCI:** CDNI Footprint & Capabilities Advertisement interface

CDNI Expanded Reference Model



Expanded reference model :
Fig 1 of cdni Framework