

# IETF-98 (Chicago) ANIMA WG Meeting (Autonomic Networking Integrated Model and Approach)

Monday, 13:00-15:00, Zurich A,  
Afternoon session I

Friday, 9:00-11:00, Zurich A, Morning  
session I

Last update: March. 30<sup>th</sup>, 2017

# Note Well

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# Before begin the meeting

- Hope you noted the Note Well
- Blue sheets
- Need Jabber scribe(s)
- Need minutes takers
  
- Remote participation
  - <https://www.ietf.org/meeting/98/remote-participation.html>
- Slides
  - <https://datatracker.ietf.org/meeting/98/materials.html#anima>



# Before begin the meeting

- Mailing List:
  - [anima@ietf.org](mailto:anima@ietf.org)
  - <https://www.ietf.org/mailman/listinfo/aniam>
- WG co-chairs:
  - Sheng Jiang
  - Toerless Eckert
- WG web page:
  - <https://datatracker.ietf.org/wg/anima>

# Meeting Agenda

- Monday (March 27<sup>th</sup>, 2017) 2-hour session:  
13:00-15:00, Zurich A, Afternoon session I
  1. WG Dash - 5 min  
13:00 - 13:05, by co-chairs
  2. ANIMA Generic Signaling (Design team) - 15 min  
13:05 - 13:20, by Brian Carpenter, [draft-ietf-anima-grasp](#)
  3. ANIMA Auto Bootstrapping (Design team) - 30 min  
13:20 - 13:50, by Michael Richardson, [draft-ietf-anima-bootstrapping-keyinfra](#)
  4. ANIMA Voucher Profile - 10 min  
13:20 - 13:50, by Michael Richardson, [draft-ietf-anima-voucher](#)
  5. Autonomic Control Plane - 20 min  
13:50 - 14:10, by Toerless Eckert, [draft-ietf-anima-autonomic-control-plane](#)
  6. AN Reference Model - 30 min  
14:10 - 14:50, by Michael Behringer, [draft-ietf-anima-reference-model](#)
  7. Prefix Management in Large-scale Network - 10 min  
14:50 - 15:00, by Brian Carpenter, [draft-ietf-anima-prefix-management](#)

# Meeting Agenda (Cont.)

- Friday (March 31<sup>st</sup>, 2017) 2-hour session:  
9:00-11:00, Zurich A, Morning session I
- 1. Open Discussion Towards ANIMA Phase 2 - 40 min  
9:00 - 9:40, by Leading by WG chairs & Laurent Ciavaglia
- 2. \* ANIMA Intent - 15 min  
9:40 - 9:55, by Laurent Ciavaglia, [draft-du-anima-an-intent](#)
- 3. \* GRASP API - 20 min  
9:55 - 10:15, by Brian Carpenter, [draft-liu-anima-grasp-distribution](#), [draft-liu-anima-grasp-api](#)
- 4. \* Guidelines for Autonomic Service Agents - 15 min  
10:15 - 10:30, by Brian Carpenter, [draft-carpenter-anima-asa-guidelines](#)
- 5. \* Autonomic Slice Networking - Requirements and Reference Model - 25 min  
10:30 - 10:55, by Alex Galis, [draft-galis-anima-autonomic-slice-networking](#)
- 6. Summary & ANIMA future activities - 5 min  
10:55 - 11:00, by co-chairs
- \* mean the non-chartered work items.

# ANIMA Hackathon @ IETF98, Chicago



- Inter-operation test on GRASP
  - Saturday (March 25<sup>th</sup>) & Monday (March 27<sup>th</sup>)
- Inter-operation test on Voucher & Bootstrap
  - Saturday (March 25<sup>th</sup>)

# WG Milestone Status



- WG Documents

- [draft-ietf-anima-gdn-protocol\\_04](#) (Adopted Aug 2015)  
Next Milestone: Apr. 2016, Submit discovery and negotiation protocol(s) to IESG  
Submitted to IESG for public, Feb. 2017
- [draft-ietf-bootstrapping-keyinfrastructures\\_02](#) (Adopted Aug 2015)  
Next Milestone: Apr 2016, Submit bootstrap a trust infrastructure solution to IESG  
Submitted to IESG for public, May. 2017, Doc Shepherd assigned
- [draft-ietf-anima-voucher](#) (Adopted Jan 2017)  
Submitted to IESG for public, May. 2017, Doc Shepherd assigned
- [draft-ietf-anima-autonomic-control-plane\\_02](#) (Adopted Aug 2015)  
Next Milestone: Sep 2016, Submit autonomic control plane solution to IESG  
Submitted to IESG for public, Apr. 2017, Doc Shepherd assigned



# WG Milestone Status (2)

- Documents adopted since last meeting
  - [draft-ietf-anima-stable-connectivity](#) (Adopted Dec 2015)  
Next milestone: Sep 2016, Submit the two validation drafts to IESG (Informational)  
Submitted to IESG for public, Apr. 2017, Doc Shepherd assigned
  - [draft-ietf-anima-prefix-management](#) (Adopted Dec 2015)  
Next milestone: Sep 2016, Submit the two validation drafts to IESG (Informational)  
Submitted to IESG for public, Apr. 2017, Doc Shepherd assigned
  - [draft-ietf-anima-reference-model](#) (Adopted Dec 2015)  
Next milestone: Dec 2016, Submit reference model to IESG (Informational)  
Submitted to IESG for public, Jun. 2017

# Reading List

- Background
  - RFC7575, Autonomic Networking: Definitions and Design Goals
  - RFC7576, General Gap Analysis for Autonomic Networking
- WG Documents
  - draft-ietf-anima-grasp
  - draft-ietf-anima-bootstrapping-keyinfra
  - draft-ietf-anima-autonomic-control-plane
  - draft-ietf-anima-stable-connectivity
  - draft-ietf-anima-prefix-management
  - draft-ietf-anima-reference-model
  - Draft-ietf-anima-voucher

# Individual documents

- [draft-carpenter-anima-ani-objectives-01](#)
- [draft-carpenter-anima-asa-guidelines](#)
- [draft-du-anima-an-intent](#)
- [draft-galis-anima-autonomic-slice-networking](#)
- [draft-liu-anima-grasp-api](#)
- [draft-liu-anima-grasp-distribution](#)
- [draft-richardson-anima-6join-discovery](#)

# Potential Recharter

- In current charter, as milestone:
  - Dec 2016, recharter to refocus scope, or close
  - Likely to recharter around IETF99, Prague
- We have been running second sessions as a forum for potential future work items
  - AN Intent, distribution, GRASP API, coordination, exchanging, ASA guidance, network slicing ...
  - Autonomic Service Agents
- Calling for more potential work items

# Other Relevant Work

- Self-organizing Control & Management Planes (work item #2) in ETSI NGP ISG
  - Next Generation Protocol Industry Specification Group
  - Self-organizing Control & Management Planes (work item)
  - <https://portal.etsi.org/tb.aspx?tbid=844&SubTB=844>
- Intelligence-Defined Network
  - Intelligence for autonomic decision
  - Work item #6 in ETSI NGP ISG
  - idnet mail list in IETF
  - <https://www.ietf.org/mailman/listinfo/idnet>
- Network Management Research Group