

Use Cases for Autonomic Networking

Chairs:

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***You are deemed to have read and understood the “Note Well”
page and the rules it refers to.***

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and Approach)

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anima: an individual's true inner self

Agenda (overview)

1. Bash agenda. Appoint scribe & jabber scribe.
2. Overview of autonomic networking (AN):
Definitions, gap analysis, criteria for use cases
(Michael Behringer, Sheng Jiang, 20 min)
3. What operators want from AN (Diego Lopez, 10 min.)
4. Seven use cases (35 min.)
5. Approaches to solution space
 1. Discovery + negotiation (Sheng Jiang, 5 min)
 2. Autonomic Control Plane and Bootstrap (Toerless Eckert, 5 min)
6. Discussion & next steps (40 min)

Agenda (use cases)

1. Homenet (draft-carpenter-nmrg-homenet-an-use-case)
2. Large network address management (draft-jiang-auto-addr-management)
3. Securely bootstrapping new devices (draft-behringer-autonomic-bootstrap)
4. Autonomic control plane (draft-behringer-autonomic-control-plane)
5. Distributed detection of SLA violations (draft-irtf-nmrg-autonomic-sla-violation-detection)
6. Mobile backhaul (draft-bogdanovic-nmrg-mobile-backhaul-use-case)
7. Risk aware routing (draft-TBD).

Reminder: Criteria for use cases

- A function is a good candidate for autonomic work at the IETF if:
 - There is operator interest
 - Distribution
 - The function cannot be completely centralised, or
 - There are advantages with distribution
 - Sharing infrastructure
 - There are other functions that require similar functionality or benefit from the proposed function
 - Abstraction
 - There is an easy way to describe the function, high-level, network wide
 - Simplicity to implement
 - Makes it easier to get started

Possible next steps

- Identify other use cases
- Consolidate use cases
- Extract requirements to identify IETF design work, covering topics such as:
 - identity of nodes
 - common security model
 - discovery model
 - negotiation model
 - communication method
 - policy model
 - management model (since humans remain in the picture)

Possible questions

- Is this work useful?
- Which use cases are most helpful? Any more?
- Are requirements clear enough to proceed to design?
- Who is willing to contribute to this work?
- Should we draft a proposed WG charter?