

**Some thoughts on an ANIMA
autonomic ecosystem and
draft-carpenter-anima-asa-guidelines**

Brian Carpenter

**IETF 106
November 2019**

Recent changes to draft-carpenter-anima-asa-guidelines

- None
- Very little feedback
- That's why we need to discuss the ecosystem

Why do we need an ecosystem?

- A deployable autonomic network needs more than an ACP and GRASP:
- It must achieve management goals that the NOC cannot achieve manually
 - Requires a library of ASAs (and of GRASP objective definitions)
 - Requires tools to deploy and oversee ASAs

We have some documents...

- **RFC7575 (Autonomic Networking: Definitions and Design Goals)**
- **draft-ietf-anima-reference-model (RFC queue)**
- **draft-ietf-anima-grasp-api**
- **draft-carpenter-anima-asa-guidelines**
- **draft-ciavaglia-anima-coordination**
- **draft-peloso-anima-autonomic-function**
- **RFC8368 (ACP for Stable Connectivity of OAM)**

...but no clear WG goals

- What ecosystem issues can the IETF tackle?
 - Missing standards?
 - Operational guidance
 - Implementation guidance?
- What ecosystem issues are out of scope for the IETF?
 - And who should be encouraged to deal with them?

Other IETF Work

- NETCONF and YANG in an AN?
 - NETCONF over ACP?
 - NETCONF over GRASP?
- Use MUDs for authorization in an AN?
- Concrete examples:
 - draft-ietf-opsawg-model-automation-framework
 - draft-claise-opsawg-service-assurance-architecture

Discussion + next steps

- Comments? Questions?

