

A Reference Model for Autonomic Networking

draft-behringer-anima-reference-model-00.txt

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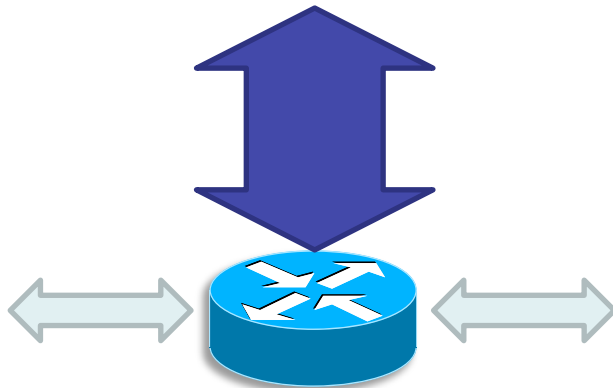
Toerless Eckert

Background

- **History**
 - **A Framework for Autonomic Networking** Jun 2012
draft-behringer-autonomic-network-framework-00.txt
 - **Bar Bof @ IETF (Berlin)** Jul 2013
 - **Autonomic Networking - Definitions and Design Goals** Dec 2013
draft-irtf-nmrg-autonomic-network-definitions-00.txt
- **Goal of this document:**
 - “Define how the various elements in an autonomic context work together, to describe their interfaces and relations.”

Traditional

- Configuration
- Monitoring
- Reporting

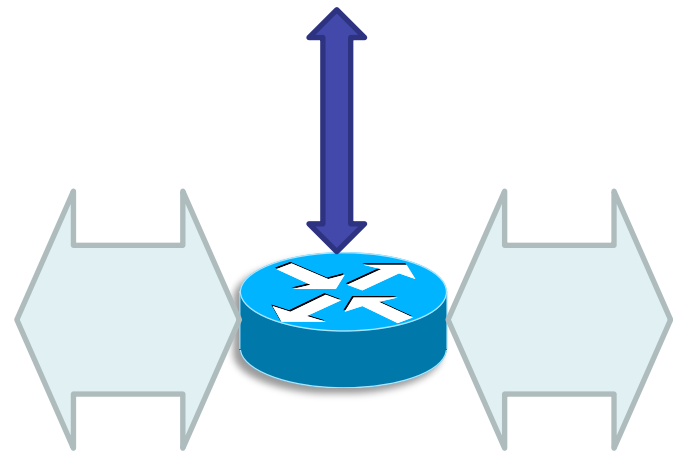


- Routing

Describe these interactions

Autonomic

- Policy and Service Orchestration
- Aggregated Reporting



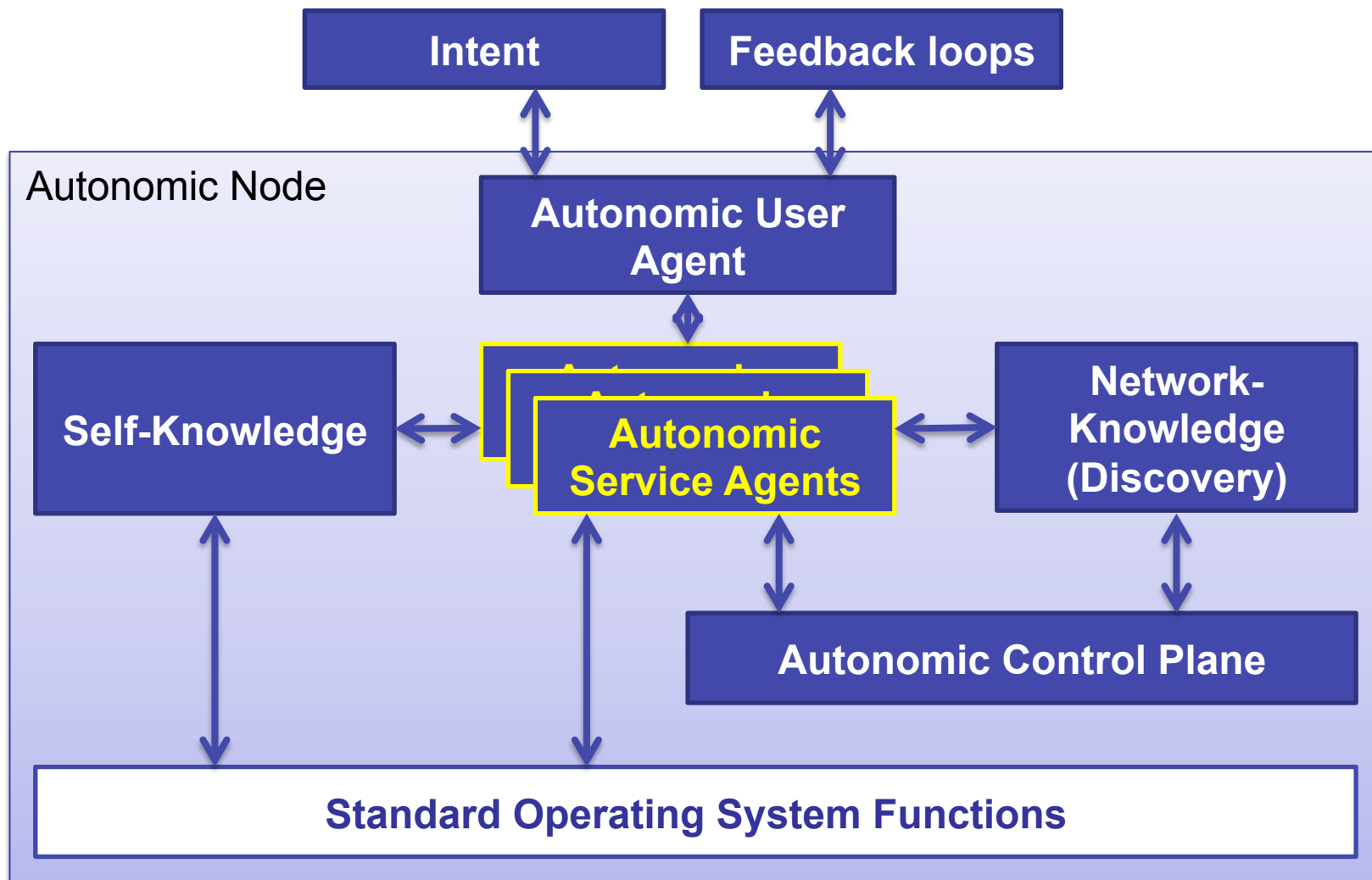
- Routing
- Discovery
- Autonomic interactions

Autonomic Networking means:

→ Minimize operator interventions

→ Minimize NMS dependencies


Reference Model of an Autonomic Node



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Relationship with Homenet

- **Homenet approach is essentially autonomic**
 - This document should also “work” for homenet!
 - **Tries to avoid a central server (“god box”)**
 - **Personal opinion:**
 - You need security, assert group membership
 - Domain certificate seems a good idea
 - This requires a trust anchor
 - **Protocols:**
 - HNCP limited to homenet
 - GDN doesn’t exist yet
 - **Options:**
 - Leave both approaches
 - HNCP++: make HNCP more scalable
 - Wait for GDN
-  **We should explore!**

Next Steps

- **Homenet: Does this reference model fit homenet?**
 - Please provide feedback!
- **Incorporate feedback**
- **Keep document as concise as possible**
- **Goal:**
 - Adoption as WG document
 - Informational RFC