

# SUPA Policy-based Management Framework

(SUPA: Simplified Use of Policy Abstractions)

draft-ietf-sup-a-policy-based-management-framework-01

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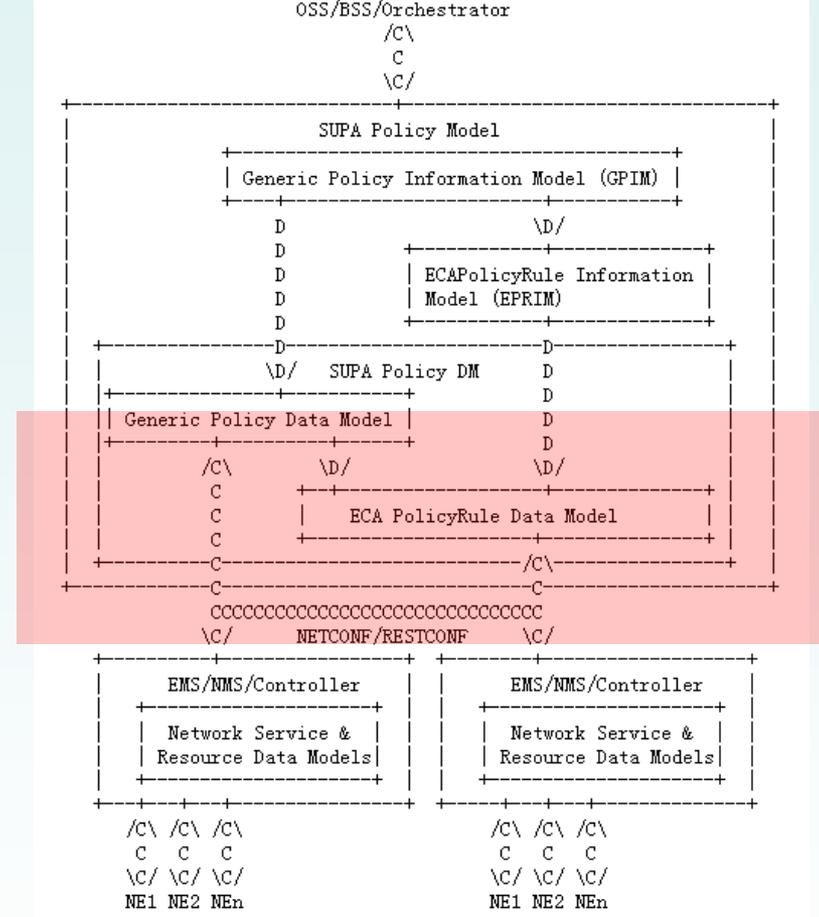
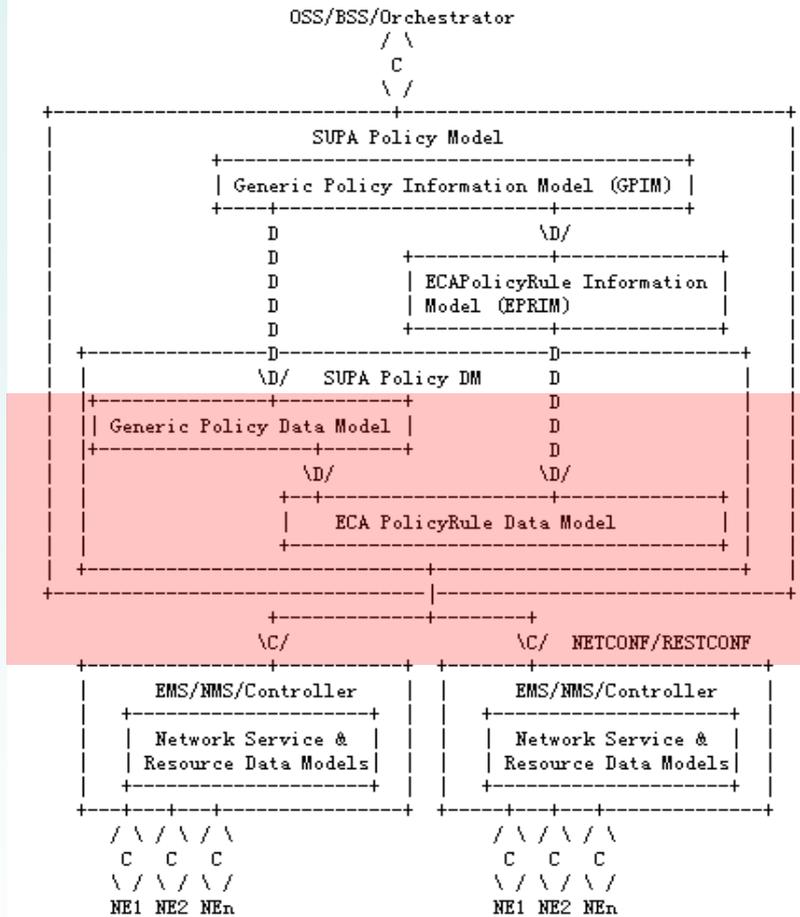
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# History

## ■ History

- draft-liu-sup-a-policy-based-management-framework-00 , Apr 2016
  - Replaced first two and modified according to charter and discussion
  - Taken out of value-proposition and added detailed content to make a new standalone draft
- draft-liu-sup-a-policy-based-management-framework-01, Jul 2016
  - A figure explaining the relationship between policy – service – resource added
- draft-liu-sup-a-policy-based-management-framework-02, Jul 2016,
  - addressed comments, sent to reviewers for another round of review
- Adopted by SUPA WG after Berlin IETF meeting,  
draft-ietf-sup-a-policy-based-management-framework-00, Aug 2016
- Now -01 version is under updating and reviewing, and will submitted soon after the consensus from all the co-authors
  - transferred the -0 editable version into xml for future convenience,
  - addressed most comments from the list and off-list

# SUPA Policy Model creating and distributing- updated



Updated:

1. added C arrow from GPDM and EPDM to controllers
2. changed the sentence explaining D arrow

Under discussion: 1. whether we should show all the cases in charter:

2. whether we should split the design time and running time in this figure

**We are still updating this figure, comments are welcome.**

# Relationship between Policy-Service-Resource - updated

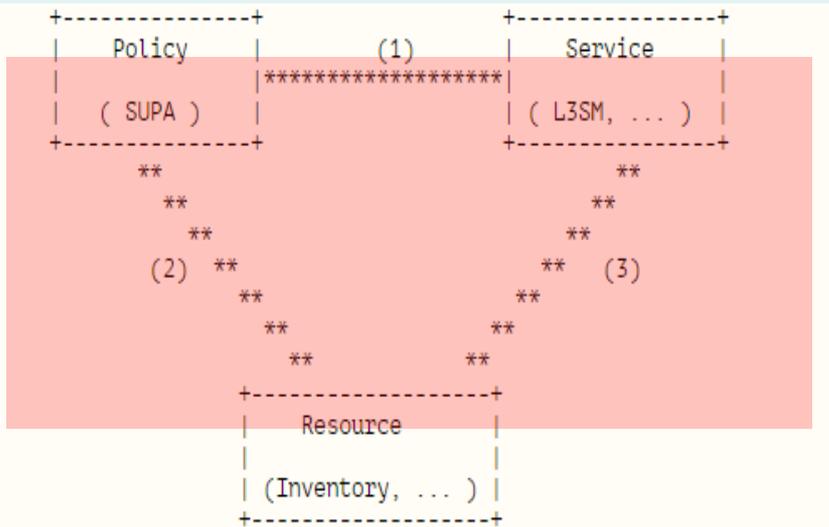


Figure 3 Relationship among Policy, Service and Resource

In Figure 3:

- (1) policy manages and can adjust service behavior as necessary
- (2) policy manages and can adjust resource behavior as necessary
- (3) resource hosts service; changing resources may change service behavior as necessary

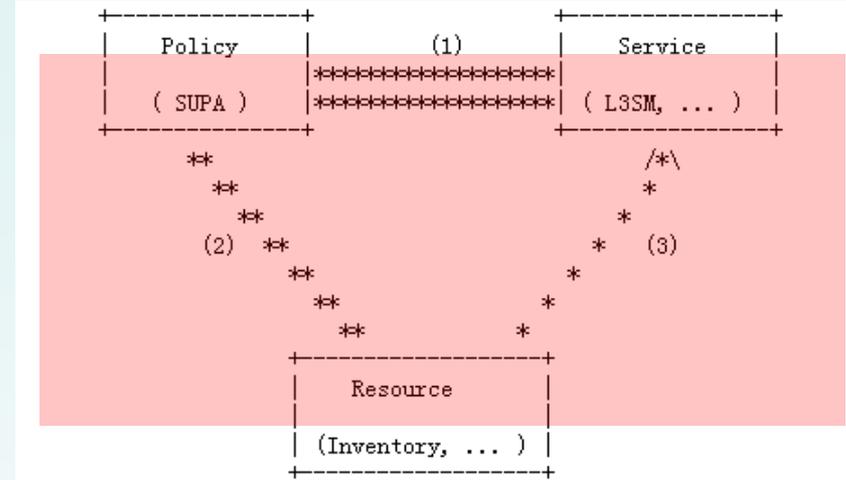
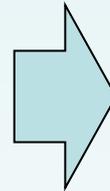


Figure 3: Relationship among Policy, Service and Resource models

In Figure 3:

- (1) policy manages and can adjust service behavior as necessary  
**0..n : 0..n**
- (2) policy manages and can adjust resource behavior as necessary  
**0..n : 0..n**
- (3) resource hosts service; changing resources may change service behavior as necessary

Policies are used to control the management of resources and services, while data from resources and services are used to select and/or modify policies during runtime.

Lines (1)&(2) connecting policy to resource and policy to service are both navigable in both directions, while Line (3) connecting resource to service is different as it's navigable only from resource to service

# Comments and next step

- Thanks to many reviewers, **especially to Jonathan Hansford for his very detailed review**, comments received on the following aspects
  - Comments to figure 2 & 3 **//done**
  - Structure of section 2.3 issue **//done**
  - Explanation on the term snippet **//done**
  - Typos , editorial issue **//done**
- Open questions for the group
  - Figure 2 to reflect below two points?
    - “SUPA... be input to a network management function (within **a controller, an orchestrator, or a network element**)” in the charter
    - running time and design times
- Next step
  - Submit a new version with above comments addressed

# Interested in review or contribution? Questions?



Google Images "SUPA" 😊

# Event & Action in ECA policy use case

ECA policy use case	Event	Action
Traffic optimization	Link threshold alarm Link traffic polling	TrafficSteering (controller, RESTful API inf)  Redirect/ block/ split (NE)
Address management	Address pool threshold alarm Address pool utilization polling	Address pool allocation/reclaim

# Those should be kept in mind...

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- Out of scope of this working group are:
  - The specification of a new policy protocol or a new data modeling language.
  - Design of protocol-specific policies and specific design for embedded policies in network elements (which are usually interpreted in isolation, and often at timescales that require optimization for specific purposes).
  - Specific handling of policies (although the application document will provide some examples). Therefore the specification of a policy engine that maps a specific policy instance to actual configuration snippets is also out of scope.
- Declarative policies that specify the goals to achieve but not how to achieve those goals (also called "intent-based" policies) are out of scope for the initial phase of SUPA but may be considered in future phases of SUPA.