

Simplified Use of Policy Abstractions: Charter

IETF 94
Yokohama

SUPA

SUPA: "consuming large amount
of distilled beverages"

In Swedish

SUPA: High Level Goal

“thus, a common way for expressing and describing policies that is uniform and consistent regardless of the nature of the networking environment is likely to facilitate the overall service delivery procedure and operation.”

“The SUPA (Simplified Use of Policy Abstractions) working group defines a data model, to be used to represent high-level, possibly network-wide policies, which can be input to a network management function (within a controller, an orchestrator, or a network element)”

SUPA and other WGs/Timing

Practically, SUPA defines base YANG data models to encode policy, which will point to device-, technology-, and service-specific YANG models developed in other working groups.

“The working group will have succeeded when the SUPA policy constructs are re-used in future IETF specifications (and ideally specifications from other SDOs) ...”

“In the mean time, other working groups should not delay their deliverables waiting for SUPA to complete its work.”

SUPA

“SUPA focuses on a single management domain, and is designed to work with device, protocol, network, and service data models.”

If the working group finds it necessary to work on an information model before the data model, to help provide guidance and derive the data models, it may do so. The

SUPA: Out of Scope

Processing that input most probably results in network configuration changes. SUPA however does not deal with the definition of the specific network configuration changes but with how the configuration changes are applied (e.g. who is allowed to set policies, when and how the policies are activated, changed or de-activated).

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.

SUPA: Out of Scope

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).

“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.”

Deliverables

- 1) An explanation of the scope of the policy-based management framework and how it relates to existing work of the IETF.
- 2) If the working group considers it necessary, a generic information model composed of policy concepts and vocabulary.
- 3) A set of YANG data models consisting of a base policy model for representing policy management concepts independent of the type or structure of a policy, plus an extension for defining policy rules according to the event-condition-action paradigm.
- 4) An applicability document providing a few examples that demonstrate how the YANG policy data models can be used to express policies that are relevant for network operators. The examples may tie into configuration models or network service models developed by other working groups.

- Any Questions, Clarifications, Feedback, Tomatoes?
- If not, time to work...