

SUPA_CHARTER_from_Benoit_wrap.txt	SUPA_CHARTER_modified_with_milestone_wrap_818.txt
SUPA CHARTER PROPOSAL (2015-08-07)	SUPA CHARTER PROPOSAL (2015-08-18)
<p>Policy is an important configurable component in the delivery of services and the operation of networks. Operators want and need to be able to determine the policies that apply to their different customers and to the equipment that comprises their physical and virtual networks. As policy spans such a wide range of services and device types, it will be helpful if there is a common way of expressing and describing policies that is uniform and consistent in all environments. Such an approach will help to avoid configuration errors that arise from confusion between different systems, will enable easy understanding of policies that apply in different environments, will make the implementation of policy-based systems quicker and cheaper, and will facilitate the rapid development of standards-based data models that include policy elements.</p>	<p>Policies are a set of rules that define how services are designed, delivered and operated within an operator’s networking environment. As such, policies play a critical role in the automated service delivery and operational procedures. Operators want and need to be able to define the policies that apply to their different customers and to the equipment that comprises their physical and virtual networks. Policies usually span a wide range of services that are supported by various technologies: 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. Such an approach will minimize the risk of configuration errors that arise from confusion between different systems, will enable easy understanding of policies that apply in different environments, will make the implementation of policy-based systems quicker and cheaper, and will facilitate the rapid development of standards-based data models that include policy elements.</p>
<p>SUPA (Simplified Use of Policy Abstractions) defines a model to interface with a network management function (within a controller, an orchestrator, a network element) that takes high-level, possibly network-wide policies as input. SUPA will not define what the function does with that input but anticipates that it will ultimately result in network configuration changes.</p>	<p>SUPA (Simplified Use of Policy Abstractions) 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, a network element). We anticipate that processing that input will result in network configuration changes. SUPA however will 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)</p>
<p>Practically, SUPA will define generic YANG data models to encode policy, which can point to device-, technology-, and service-specific YANG models of other working groups.</p>	<p>Practically, SUPA will define base generic YANG data models to encode policy, which will point to device-, technology-, and service-specific YANG models developed in other working groups. The SUPA framework defines how to construct policy rules for Environment and Administrative layers within one or more Management domains, where Environment layer describes functional configuration policies for domain network elements (specific protocols, functions) and Administrative layer describes administrative non-functional access/management policies across domain network elements (user privileges, administrative states).</p>
<p>SUPA will be designed to work with device, protocol, network, and service data models.</p>	<p>SUPA will be designed to work with device, protocol, network, and service data models.</p>
<p>The SUPA working group will develop a model for expressing policy at different levels of abstraction. Specifically, three model fragments are envisioned: (i) a generic model that defines concepts and vocabulary needed by policy management independent of the form and content of the policy, (ii) a more specific model that refines the generic model to specify how to build policy rules of the event-condition-action paradigm, and (iii) the working group will investigate the practically of building</p>	<p>The SUPA working group will develop a model for expressing policy at different levels of abstraction. This model is not designed as an all-encompassing model. Specifically, three model fragments are envisioned:</p> <p>(i) a generic model that defines concepts and vocabulary needed by policy management independent of the form and content of the policy,</p> <p>(ii) a more specific model that refines the generic model to specify how to build policy rules of the event-condition-action paradigm, and</p> <p>(iii) the working group will investigate the practically of building</p>
<p>policy rules that declaratively specify what goals to achieve (this is often called “intent-based” policy) but not how to achieve those goals and may create a model accordingly.</p>	<p>policy rules that declaratively specify what goals to achieve (this is often called “intent-based” policy) but not how to achieve those goals and may create a model accordingly.</p>
<p>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 might do so. The working group will decide later whether the information model needs to be published as an RFC.</p>	<p>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 might do so. The working group will decide later whether the information model needs to be published as an RFC.</p>
<p>Out of scope of this working group is:</p> <ul style="list-style-type: none">– The specification of a new policy language. The YANG data models are to be used with protocols such as NETCONF/RESTCONF.– 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), and therefore the specification of a policy engine that maps a specific policy instance to actual configuration snippets.	<p>Out of scope of this working group is:</p> <ul style="list-style-type: none">– The specification of a new policy protocol.– 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), and therefore the specification of a policy engine that maps a specific policy instance to actual configuration snippets.
<p>List of work items:</p>	<p>List of work items:</p>
<p>1) A document that explains the scope of the policy-based management framework and how it relates to existing work of the IETF.</p>	<p>1) A document that explains the scope of the policy-based management framework and how it relates to existing work of the IETF.</p>
<p>2) If the working group considers it necessary, an information model composed of policy concepts and vocabulary.</p>	<p>2) If the working group considers it necessary, a generic information model composed of policy concepts and vocabulary.</p>
<p>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. Another extension for defining policy rules according to a declarative, or intent-based, paradigm, may be produced. These models will be designed to be generic and extensible.</p>	<p>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. Another extension for defining policy rules according to a declarative, or intent-based, paradigm, may be produced. These models will be designed to be generic and extensible, and may apply to one or to multiple management domains.</p>
<p>4) An applicability document providing a few examples that demonstrate how</p>	<p>4) An applicability document providing a few examples that demonstrate how</p>

<p>the generic policy 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.</p> <p>The working group will decide how the work items are best mapped into deliverables.</p> <p>This working group will be a success when the SUPA policy constructs are re-used in future IETF specifications (and, ideally, specifications from other SDOs), in a manner that will save development time and avoid inconsistencies between data models developed by different working groups. In the meantime, SUPA should not impede work in other working groups while waiting for SUPA to produce its deliverables.</p> <p>The working group will communicate with other SDOs (MEF, TMF, ETSI) that are working on related issues.</p>	<p>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.</p> <p>The working group will decide how the work items are best mapped into deliverables.</p> <p>This working group will be a success when the SUPA policy constructs are re-used in future IETF specifications (and, ideally, specifications from other SDOs), in a manner that will save development time and avoid inconsistencies between data models developed by different working groups. In the meantime, SUPA should not impede work in other working groups while waiting for SUPA to produce its deliverables.</p> <p>The working group will communicate with other SDOs (MEF, TMF, ETSI) that are working on related issues.</p> <p>Milestones:</p> <table><thead><tr><th>Date</th><th>Milestone</th></tr></thead><tbody><tr><td>Apr 2016</td><td>Submit to the IESG an Informational document specifying the scope of the policy-based management framework and how it relates to existing work of the IETF</td></tr><tr><td>Apr 2016</td><td>Informational document defining the generic information model composed of policy concepts and vocabulary</td></tr><tr><td>Jun 2016</td><td>Submit to the IESG a Standard Track document defining YANG data models consisting of a base policy model for representing policy management concepts,</td></tr><tr><td>Jun 2016</td><td>Submit to the IESG a Standard Track document defining a YANG data model for defining policy rules according to the event-condition-action paradigm</td></tr><tr><td>Aug 2016</td><td>Submit to the IESG an Informational document that describes SUPA applicability a few examples that demonstrate how the YANG policy data models can be used</td></tr><tr><td>Aug 2016</td><td>Discuss with the IESG possible re-chartering, including a YANG data model for defining policy rules according to a declarative, or intent-based, paradigm</td></tr></tbody></table>	Date	Milestone	Apr 2016	Submit to the IESG an Informational document specifying the scope of the policy-based management framework and how it relates to existing work of the IETF	Apr 2016	Informational document defining the generic information model composed of policy concepts and vocabulary	Jun 2016	Submit to the IESG a Standard Track document defining YANG data models consisting of a base policy model for representing policy management concepts,	Jun 2016	Submit to the IESG a Standard Track document defining a YANG data model for defining policy rules according to the event-condition-action paradigm	Aug 2016	Submit to the IESG an Informational document that describes SUPA applicability a few examples that demonstrate how the YANG policy data models can be used	Aug 2016	Discuss with the IESG possible re-chartering, including a YANG data model for defining policy rules according to a declarative, or intent-based, paradigm
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End of changes. 10 change blocks.															
35lines changed or deleted	50 lines changed or added														