An Auto-deployment Mechanism for Resource-based Network Services
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• The core goal of this draft is to establish a set of automatic negotiation mechanism to achieve the negotiation and distribution of network resources in the domain network between the service client and the network.

The target of the draft:
❖ Ensure the QoS requirements for service.
❖ Multiple rounds of negotiations improves the success rate of service deployment.
❖ The network resources can be used more efficiently.
Major Changes from IETF113 season

• The draft add ASCII pictures to express the process of resource negotiation.
• Add a GRASP Object example usecase in section 6.1
• In Section 7, some comparisons with other technologies are added, which will be updated later
• Editorial changes to make the text more organized.
Auto-deployment Process

**Requesting ResourceManager ASA**

- **Discovery stage**
- **Negotiation stage**
  - decide at each round how large resource need to offer

**Providing ResourceManager ASA**

- **Discovery**
- **M_RESPONSE**
  - Multiple rounds of negotiations by using “ResourceManager” GRASP Objectives.
  - responses how large resource they can offer

- **After Negotiation**
  - Removed the acceptable resource from its resource pool and Reserved negotiation resources hop-by-hop.

- **Synchronize to other ASAs**
- **Send packets**
Compatibility with Other Technologies

❖ Support multi-round negotiation mechanism.
❖ Supports multiple types of resource negotiation.

❖ This mechanism supports the negotiation of resources such as queues reserved for DetNet resources, and can be considered as a distributed solution of DetNet resource demand negotiation.
Security Considerations

❖ This draft does not want to introduce additional problems for ANIMA and security is not the focus of this draft.
❖ This draft hopes to complete the autonomic mechanism for resource-based network services deployment in the domain under the condition of complying with the security measures of ANIMA.
Next Step

• Further rework the draft
  • Updated Autonomic Resource Management Objectives
  • Consider more unexpected scenarios

• Circulate outcome on the mailing list for further discussion
• Welcome to comment, contribute or co-author it!