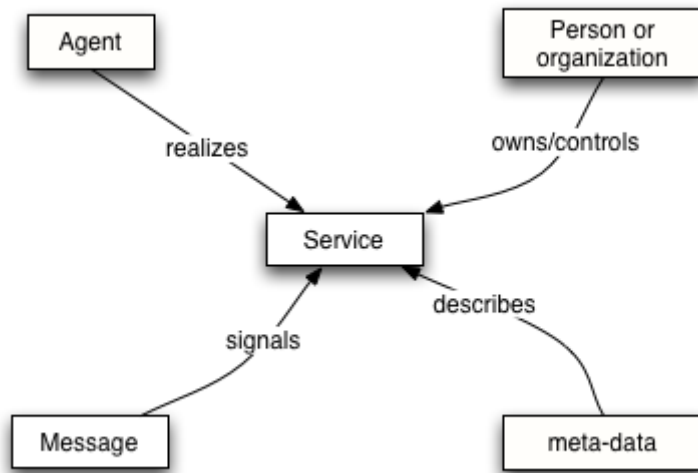


Mapping of W3C Web Service Architecture work to SOA RM work

The following figures and sections were allocated for reference.

**Figure 2-4 *Simplified Service Oriented Model***



There are 5 basic concepts:

Service – this is fundamentally the same concept for the SOA RM as described in the MacKenzie Nickull Position Paper (MNPP)

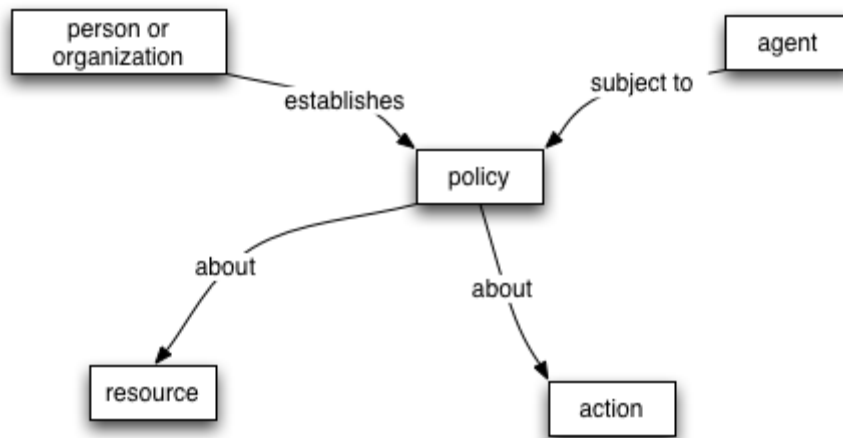
Agent – this is a role of delegation that happens during implementation – out of scope for a RM but likely to exist in some concrete architectures.

Person/Organization – not relevant to the RM but some aspects of this may be linked to the concept of “Contract”. What does it mean to consume this service?

Metadata – this is captured in the Service Description component of the MacKenzie-Nickull Position Paper (MNPP). It is all the attributes of a service.

Message – the concept is present in the MNPP as “Data Model”, a more abstract concept relating to the fact that there are “things” that may go in and out of services.

**Figure 2-6. *Simplified Policy Model***



Most of this is not relevant since it is implementation specific however the gist of “policy” is captured in the MNPP concept of “contract”.

The concept of “policy” in the WSA is described as “*A policy description is a machine-processable description of a policy or set of policies.*” Since not all policies may necessarily be explicit, they cannot all be machine processable for the RM.

Note: “Contract” may not be the best word since a contract is defined in common terms as some sort of agreement to two parties. It is really a “contract offer” or “contract offer terms” prior to it being agreed to. If the consumer examines it but doesn’t agree to it, it technically is not a contract. “Policy” may be a better word to use than contract.

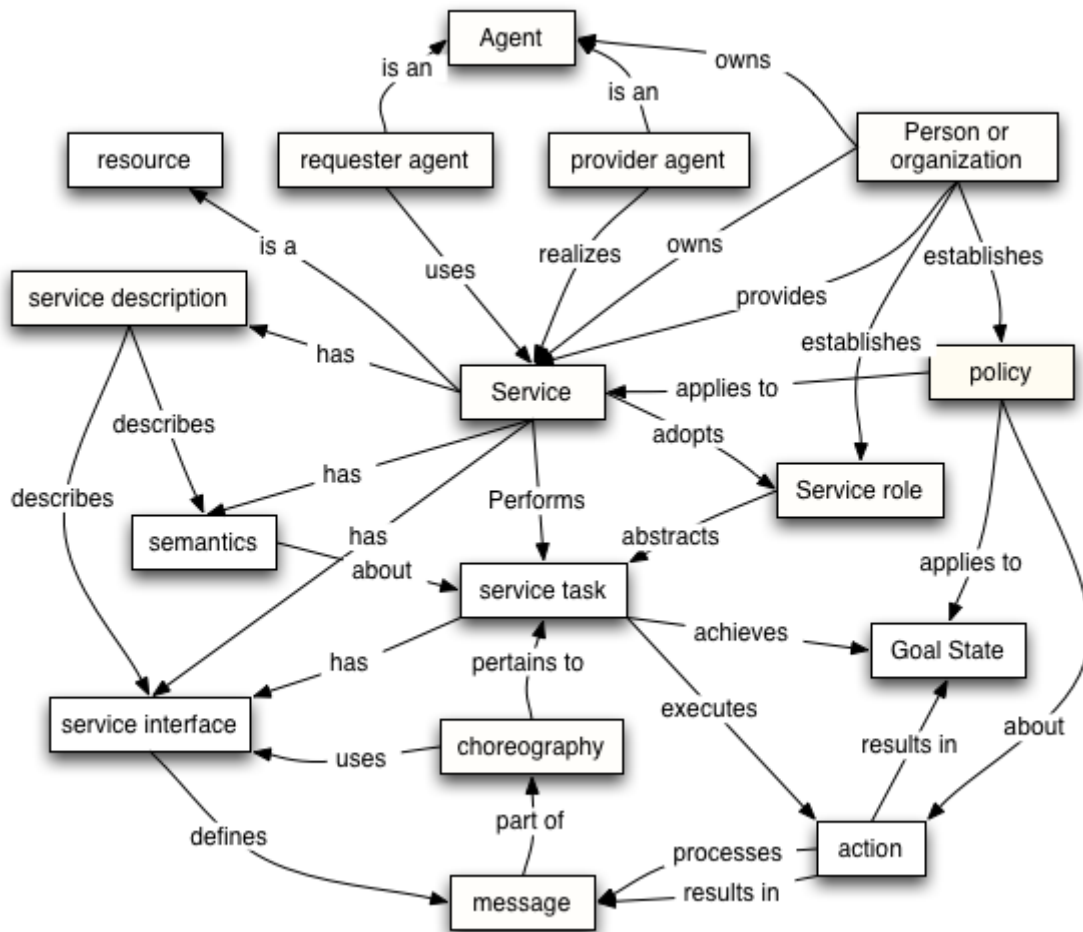
If we adopt “policy” this may also be the place to explain where the notion of a “security” policy may be implied within the RM.

**Figure 2-7. Message Oriented Model**

Is likely out of scope for the RM. There is a relevant sentence that states “2.3.1.3.3 Explanation - A message represents the data structure passed from its sender to its recipients. The structure of a message is defined in a service description.”

This equates the concept loosely to the Reference Model concepts of Data Model and Service Description within the MNPP.

**2.3.2 The Service Oriented Model**



This is difficult to characterize in terms of the RM since many of these things are of mixed types. Fundamentally however, many of the items can be correlated.

1. Service (as per above)
2. Service Interface, Message, Semantics – aspects of the Data Model
3. All state related items (action, task, goal state, choreography) are specifically out of scope for the RM since the a conceptual service should not care that it is part of something larger when invoked or consumed in all SOA's.
4. Service agents, roles are likewise irrelevant for a RM.
5. Policy is a good candidate for what we referred to as Contract
6. There is no need to generalize a service as a resource. It may be relevant to note that awareness of the resource is a core concept (advertising).
7. Service Description is similar to the MNPP concept of service description. It is interesting to note that “semantics” are part of both the service description and also the data model.

Discovery and Advertising:

IT is defined as:

“Discovery is the act of locating a machine-processable description of a Web service-related resource that may have been previously unknown and that meets certain functional criteria. It involves matching a set of functional and other criteria with a set of resource descriptions. The goal is to find an appropriate Web service-related resource.”

DN – I disagree with using this definition for the RM since not all service descriptions may be in machine processable formats. I think this is the W3C advocating using WSDL, which is a good choice for architecture but not an abstract RM.

#### 2.3.3.1.2 Relationships to other elements

Discovery is

the act of locating a [resource description](#)

Discovery involves

matching a set of functional and other criteria with a set of resource descriptions.

Discovery may be [performed](#)

by an [agent](#), or by an end-user

Discovery may be [realized](#)

using a [discovery service](#)

DN – discovery service is the concept of advertising.