Manage Telecommunication equipment using web services

Classe T3

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1 Web Service concepts

How is a node addressed?

The MileGate itself is addressed using WS-Addressing.

The ressourece/node is addressed using WS-Management.

The 'mf' and 'property' are addressed with selectors from the WS-Management concept.

The action (get, set, ..) is defined trough WS-Transfer

Which node is active? (units, ports, ..)

WSDM/MUWS

can manage the lifecycle of a ressource.

is discovering, identifying and using the capabilities of a managable ressource.

There are different techniques for discovering a Web Service. Two of the in the OASIS committee draft described possibilities are imaginable for our problem:

- Discovery using relationships
- Advertisement (notification on creation of manageable resource)
- WS-Discovery responsed by MileGate
- · WS-Notification generated by MileGate

What are the properties of a node? (which node can what?)

WS-RP (Ressource Properties)

Each manageable resource exposes a resource properties **document** containing all the properties of the manageable ressource.

How is the costumer informed?

- The costumer is informed by a event notification (e.g. 'ManagementEvent' (Management Using Web Services)) transported according to WS-Notification as first child of the SOAP body.
- A additional Web Service responds queries (single or complete set of possible endpoints)
- The MileGate forwards the notifications in the format of WS-Notification

2 Coordination of project (Framework ↔ Description)

2.1 Versions

- Decision for use of WDSL 1.1 or 2.0 is not needed YET for the service description (just few brackets to change)
- SOAP version does not influence the description

2.2 Needed support

- WS-Addressing with EndpointReference concept
- WS-Management for addressing the management functions
- WS-Transfer actions

Discovery of tree and available functions

- WS-DistributedManagement (MUWS)
 - WS-ResourceProperties (additional file)
 - WS-Notification, MUWS:OperationalStatus or MUWS:CreationNotification
 - ev. Metadata, WS-Topics, MUWS:Relationships