Validation Strategy

- the rights service is only accessible over the backend
- association with (change) object-attribute-operations rights cannot be changed
- association without (change) object-attribute-operations rights cannot get this rights

Create Objekt in Backend and create Rights in Graph

Existing Nodes

- PC (Policy Class)
- UA#1 (Node of Company)

Creating Nodes

- OA#1 (Order Attribute, which store the accessible properties of the backend object)
- O#1 (Object Node--> should be a classType property inside?)

Parts of creation and validation

1. Create Nodes
    1. O#1
        1. No Validation by creating O#1 Node (possible check if classType property is in it?)
    2. OA#1
        1. Validate if OA#1 node have read and writeProperties property in it
2. Create Connections
    1. Fixed order (Have to check every time)
        1. Create association form UA#1 node to OA#1 node with (read, write) object-operations and (change) object-attribute-operations on it
        2. Create assignment from OA#1 to PC and O to OA#1 node
            1. Cannot be done when there is no ingoing association on OA#1 node
            2.

UA#1 share rights on object 0#1 to company UA#2

Existing Nodes

- PC (Policy Class)
- UA#1 (Node of Company, which has rights)
- UA#2 (Node of Company, which get rights)
- OA#1 (Order Attribute)
- O#1 (Object Node)

Creating Nodes

- OA#2 (Order Attribute)

Parts of creation and validation

1. Create nodes
    1. OA#2
        1. Validate if OA#2 node have read and writeProperties property in it
2. Create Connections
    1. Fixes order (Have to check every time)
        1. Create RightsConnection from OA#2 to OA#1
            1. Validate if read and writeProperties are not more then in parent node
                1. Check if the exists no other outgoing RightsConnection from OA#2
        2. Create association UA#1 to OA#2
            1. Validate the edge has only (change) object-attribute-operations rights
                1. Cannot check if RightsConnection has been created
        3. Create Association UA#2 to OA#2
            1. Validate the edge has no (change) object-attribute-operations rights, other rights automatically checked by OA#2 node properties
                1. Can check if there exists another association on OA#2. Then validation above
        4. Create Assigment OA#2 to PC
            1. Always possible
        5. Create Assigment O#1 to OA#2
            1. When there is an outgoing assignment form 0#1 then have to be a RightsConnection have to be exists outgoing from OA#2

UA#1 change rights on object 0#1 to company UA#2

- only OA nodes can be change?
- only associations can be change?

Existing Nodes

- PC (Policy Class)
- UA#1 (Node of Company, which has rights)
- UA#2 (Node of Company, which get rights)
- OA#1 (Order Attribute)
- O#1 (Object Node)
- OA#2 (Order Attribute)

Changing Nodes and Connections

- OA#2
- UA#2 to OA#2 (possible)

Parts of creation and validation

1. Change node

    1. Find OA#2 over intersect access nodes from UA#1 and UA#2
    2. Check if UA#1 has (change) object-attribute-operations rights on OA#2

3. Find the super-parent node on which OA#1 has access
    1. have to check that this node are not a node where UA#1 has no connected association
4. Calculate intersection of properties, so that UA#2 get no more access then UA#1 on O#1
5. Possible: Change Association from UA#2 to OA#2 when there is a changing in read and write properties

2. Change Connections

    1. Find OA#2 over intersect access nodes from UA#1 and UA#2
    2. Check if UA#1 has (change) object-attribute-operations rights on OA#2
    3. Find the super-parent node on which OA#1 has access
        1. have to check that this node are not a node where UA#1 has no connected association
    4. Calculate intersection of object-operations rights, so that UA#2 get no more access then UA#1 on O#1