**OBACM - SPARQL QUERY  
Prefixes:**PREFIX OBACM: <http://ju.se/Ontology-BasedAccessControlModule#>

PREFIX odrl: <http://www.w3.org/ns/odrl/2/>

PREFIX prov: <http://www.w3.org/ns/prov#>

CQ1: What role is assigned to a user?

SELECT ?user ?role WHERE {

?user a OBACM:User ;

OBACM:hasRole ?role .

}

CQ2: What context is associated with a user?

SELECT ?user ?context WHERE {

?user a OBACM:User ;

OBACM:hasContext ?context .

}

CQ3: What is the role and context assigned policies?

SELECT ?policy ?role ?context WHERE {

?policy a OBACM:AccessControlPolicy ;

OBACM:assigneeRole ?role ;

OBACM:hasCondition ?context .

}

CQ4: Which access control policies are assigned to assets?

SELECT ?policy ?asset WHERE {

?policy a OBACM:AccessControlPolicy ;

odrl:permission ?permission .

?permission odrl:target ?asset .

}

CQ5: What permissions does a policy have?

SELECT ?policy ?permission WHERE {

?policy a OBACM:AccessControlPolicy ;

odrl:permission ?permission .

}

CQ6: What actions does a permission allow?

SELECT ?permission ?action WHERE {

?permission a odrl:Permission ;

odrl:action ?action .

}

CQ7: Which role is allowed to do what action to which asset?

SELECT ?role ?action ?asset WHERE {

?policy a OBACM:AccessControlPolicy ;

OBACM:assigneeRole ?role ;

odrl:permission ?permission .

?permission odrl:action ?action ;

odrl:target ?asset .

}

CQ8: What types of actions are modelled within OBACM?

SELECT DISTINCT ?action WHERE {

?permission odrl:action ?action .

}

CQ9: Who is the assignee of a specific policy?

SELECT ?policy ?assignee WHERE {

?policy a OBACM:AccessControlPolicy ;

odrl:assignee ?assignee .

}

CQ10: When does a request start?

SELECT ?request ?time WHERE {

?request a OBACM:UserRequestAction ;

prov:startedAtTime ?time .

}

CQ11: Which user is responsible for a user request action?

SELECT ?request ?user

WHERE {

?request OBACM:requestedBy ?user .

}

CQ12: Which roles are associated with policy permissions?

SELECT DISTINCT ?policy ?role

WHERE {

?policy OBACM:assigneeRole ?role .

}

CQ13: What assets are being requested in a user action?

SELECT DISTINCT ?request ?asset

WHERE {

?request OBACM:requestedAsset ?asset .

}

CQ14:Which users are affected by a given policy?

SELECT DISTINCT ?policy ?user

WHERE {

?policy OBACM:assigneeRole ?role .

?user OBACM:hasRole ?role .

}

CQ15:What was the outcome of a user request?

SELECT ?request ?decision

WHERE {

?request OBACM:generatedDecision ?decision .

}

CQ16:Which action and asset were part of the request?

SELECT ?request ?action ?asset

WHERE {

?request OBACM:requestedAction ?action ;

OBACM:requestedAsset ?asset .

}

CQ17:Which user request led to this decision?

SELECT ?request ?decision

WHERE {

?decision OBACM:generatedDecision ?request .

}

CQ:18Which asset is targeted by a permission?

SELECT ?permission ?asset

WHERE {

?permission odrl:target ?asset .

}

CQ19:What types of actions was requested by a user?

SELECT DISTINCT ?user ?role ?action

WHERE {

?policy odrl:assignee ?user .

?user OBACM:hasRole ?role.

?policy odrl:permission ?permission.

?permission odrl:action ?action .

}

CQ20:Which requests involve what action?

SELECT ?request ?action

WHERE {

?request OBACM:requestedAction ?action .

}

CQ21:What contextual credentials does a user possess?

SELECT ?user ?context

WHERE {

?user OBACM:hasContext ?context .

}