```
@prefix xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#>...
                                                                              @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
                                                                              @prefix schema: <a href="http://schema.org/">http://schema.org/>...
                                                                              @prefix dct: <http://purl.org/dc/terms/> .
                                                                              /Agreements/Contracts/> .
                                                                              @prefix dcat: <a href="http://www.w3.org/ns/dcat#">http://www.w3.org/ns/dcat#>...
                                                                              @prefix prov: <http://www.w3.org/ns/prov#>.
                                                                              @prefix dpv: <http://www.w3.org/ns/dpv#> .
                                              Graph
                                                                              @prefix dc: <http://purl.org/dc/elements/1.1/> .
                                            database
                                                                              @prefix sh: <http://www.w3.org/ns/shacl#> .
                                                                              @prefix ex: <http://example.com/ns#> .
                                             SPÄRQL
CCV module
                                                                              base:contractType base:Written;
                                                                             base:forPurpose "data sharing between Tim and Alice";
                         1
                                  Extracted data (via Contract
   CCV scenarios
                                                                              base:hasContractStatus base:statusExpired;
                                          compliance)
                                            2
                                                                              base:hasStates base:stateInvalid;
       5
                                  Passing data to CCV helper
                                  class via validation function
                                                                              base:hasConsentState "empty" .
      send back
                                            3
                                                                              schema:CCV1stScenarioShape a sh:NodeShape;
                                       Generate data graph
                                                                              sh:targetClass base:CCV1st;
                                          using RDFLib
                                                                              sh:and (
                                                                                   [a sh:NodeShape;
                                                                                    sh:property [
                                              Input
                                                                                        sh:path base:hasContractCategory;
                                                                                        sh:in (base:categoryBusinessToBusiness)
                        output
                                Data validation using pySHACL
  Validation report
                                           processor
                                                                                    [a sh:NodeShape;
                                          4
                                                                                    sh:property [
                                                                                        sh:path base:hasConsentState;
                                              Input
                                                                                        sh:in ("empty")
                                              SHACL
                                              shapes
                                                                              sh:sparql [
                                                (.ttl)
                                                                              a sh:SPARQLConstraint;
                                                                              sh:select "
                                                                                SELECT $this
                                                                                WHERE {
                                                                                 $this base:hasStates ?state .
                                                                                 $this base:hasEndDate ?edate .
                                                                                 $this base:currentDateTime ?cdate .
                                                                                 $this base:hasContractStatus?cstatus.
                                                                              base:statusPending)))
```

```
@prefix fibo-fnd-agr-ctr: <a href="https://spec.edmcouncil.org/fibo/ontology/FND-">https://spec.edmcouncil.org/fibo/ontology/FND-</a>
@prefix rdf: <a href="mailto:rdf">http://www.w3.org/1999/02/22-rdf-syntax-ns#></a> .
base:contb2b bfcff2dc-2ed3-11ed-be7d-3f8589292a29 a base:CCV1st;
base:hasContractCategory base:categoryBusinessToBusiness;
base:hasEndDate "2023-09-07T17:14:32"^^xsd:dateTime;
fibo-fnd-agr-ctr:hasEffectiveDate "2022-09-07T17:14:32"^^xsd:dateTime;
fibo-fnd-agr-ctr:hasExecutionDate "2022-09-07T17:14:32"^^xsd:dateTime;
base:currentDateTime "2023-02-27T11:12:17"^^xsd:dateTime;
sh:message "Violation occure the end date already passed.";
  FILTER ((?state=base:statePending) && (?cdate > ?edate) &&
  (?cstatus IN (base:statusCreated, base:statusUpdated,
```

@prefix base:<http://ontologies.atb-bremen.de/smashHitCore#> .