

## Ontology RDF Graphs

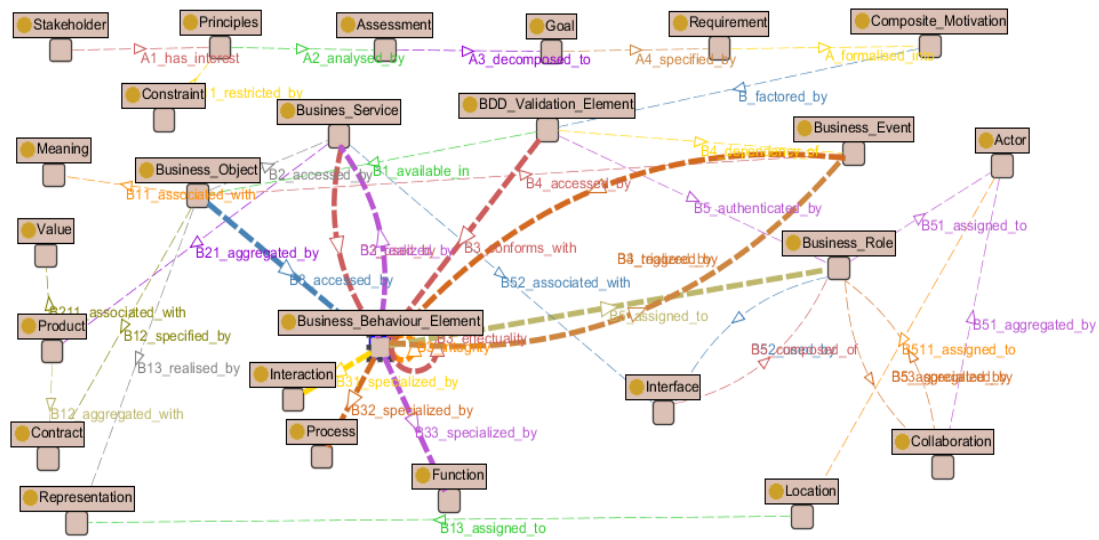


Figure 7-14: RDFS of the ontology showing exact representation of the Metamodel

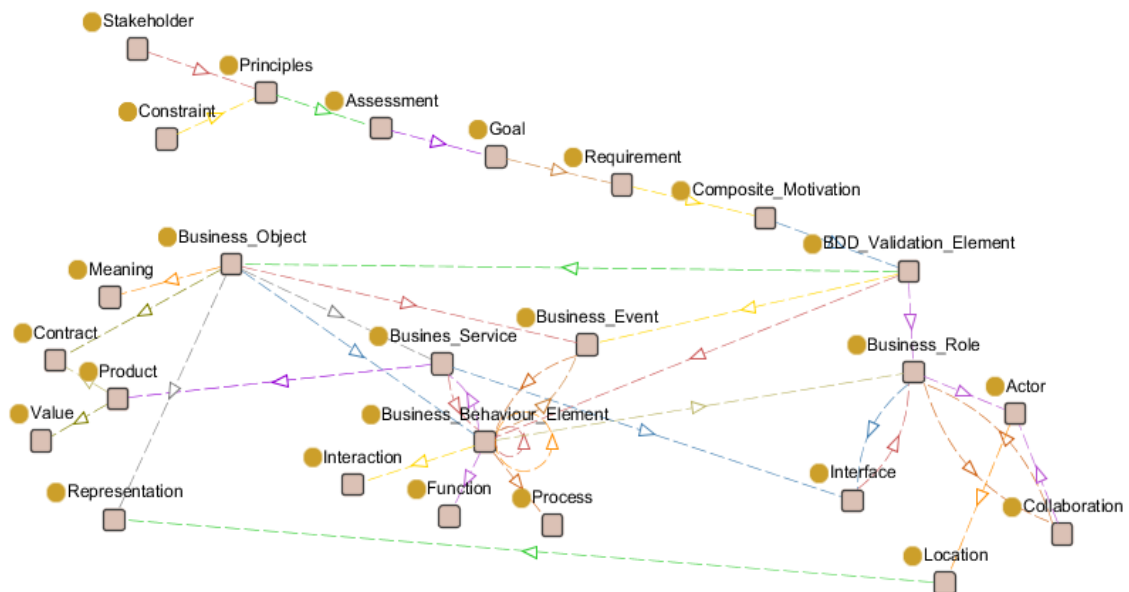


Figure 7-15: Schematic segregation of the RDF into motivation, information, behaviour and structure

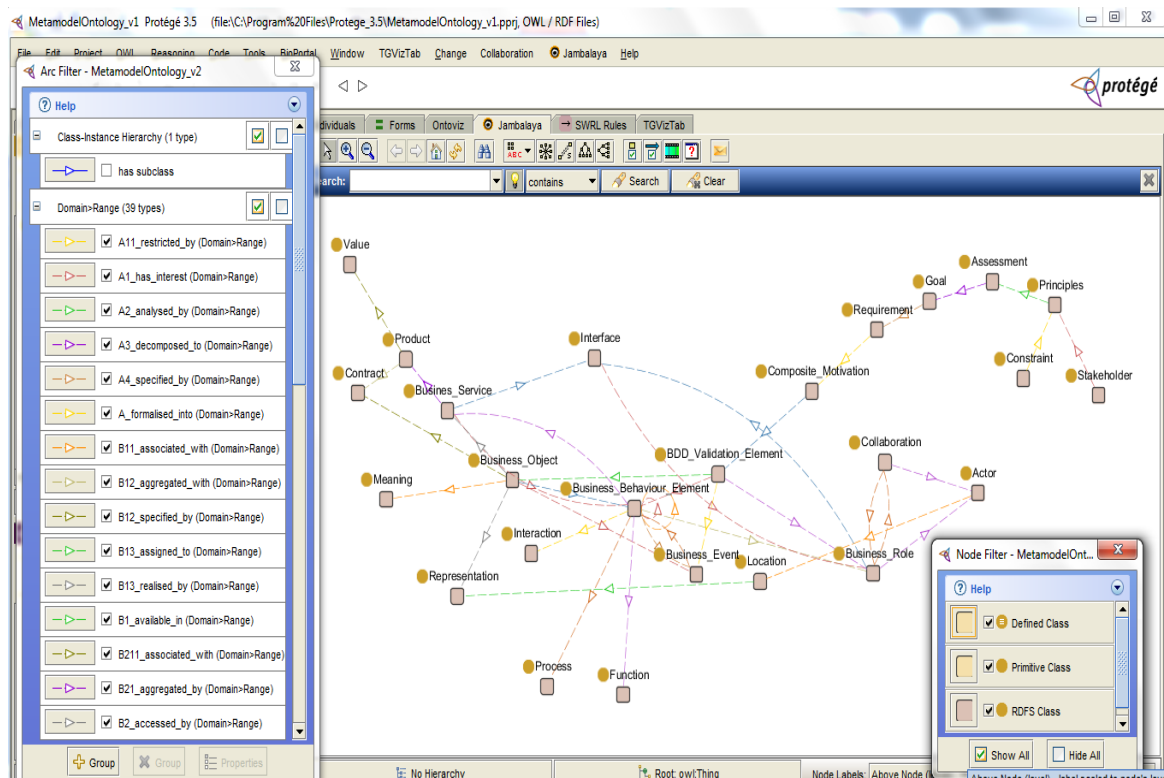


Figure 7-16: Querying the ontology using the Reasoner

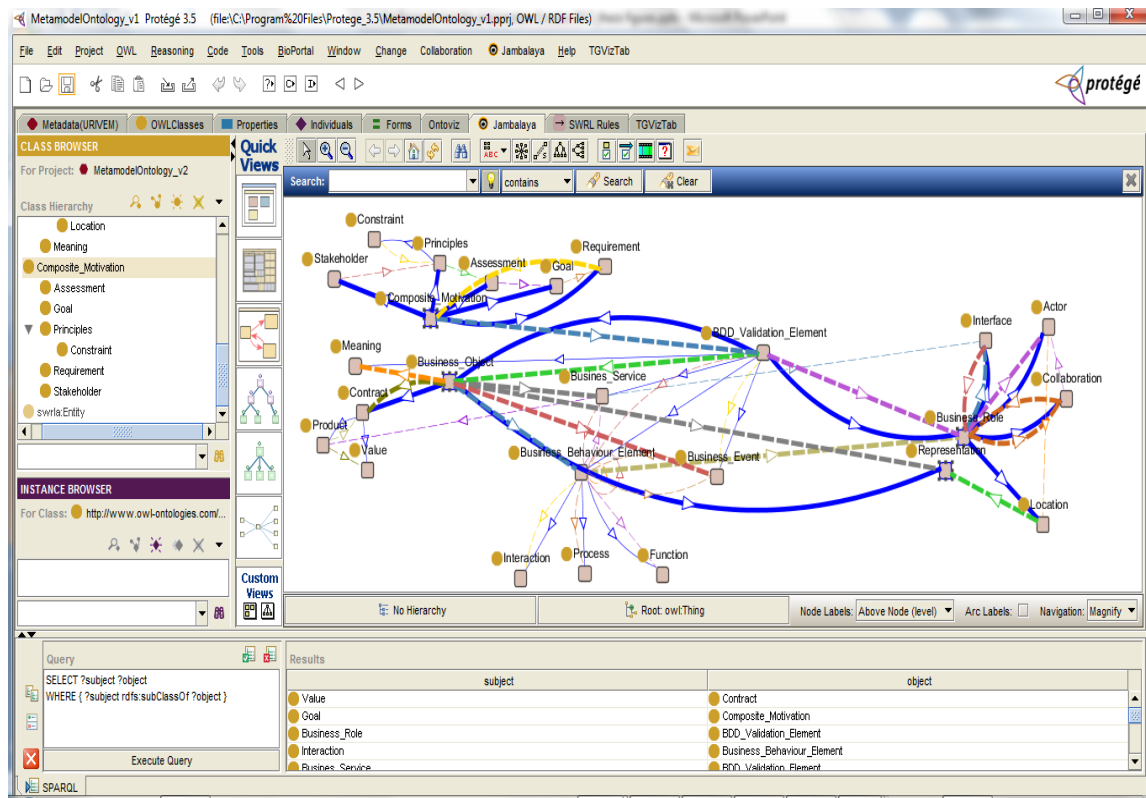


Figure 7-17: Traceability of class and relationships on ontology using SPARQL

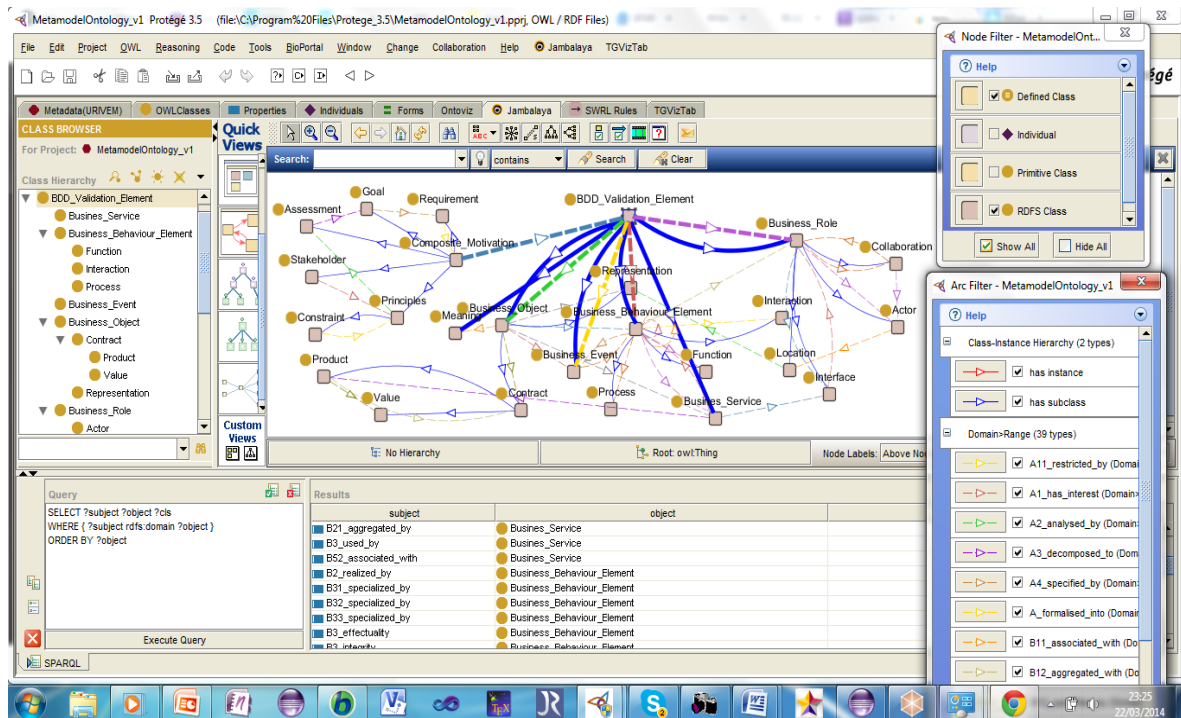


Figure 7-18: SPARQL Query combined with Filters, Cardinality, Artefact and Property

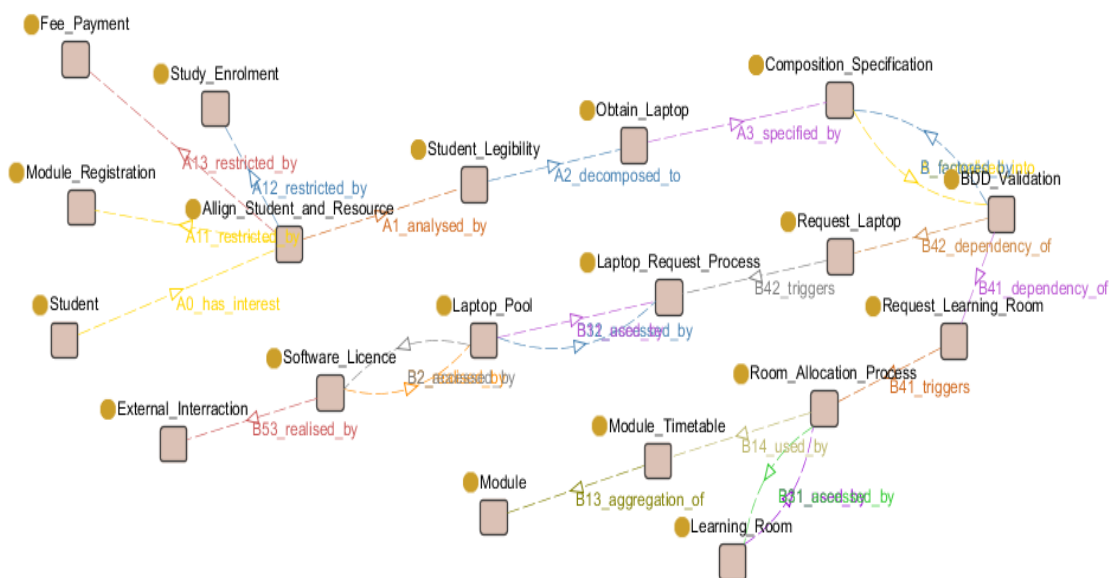


Figure 8-16: RDFS of the ontology showing slot transition of the UME-LLS

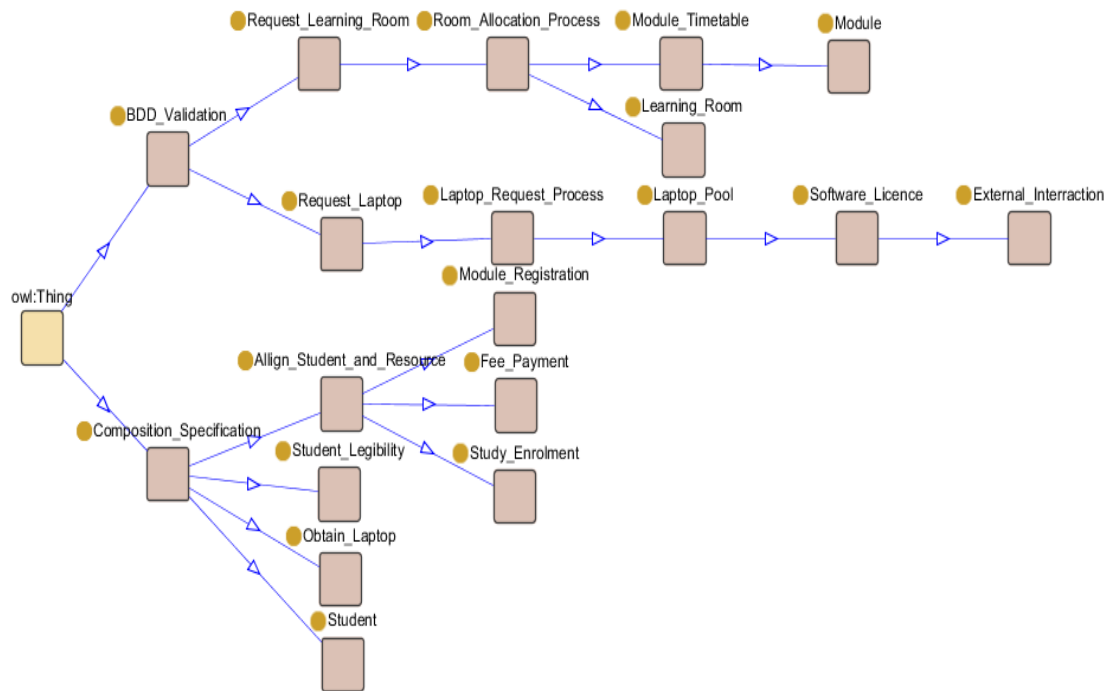


Figure 8-17: Schematic segregation of the UME-LLS showing the class hierarchy

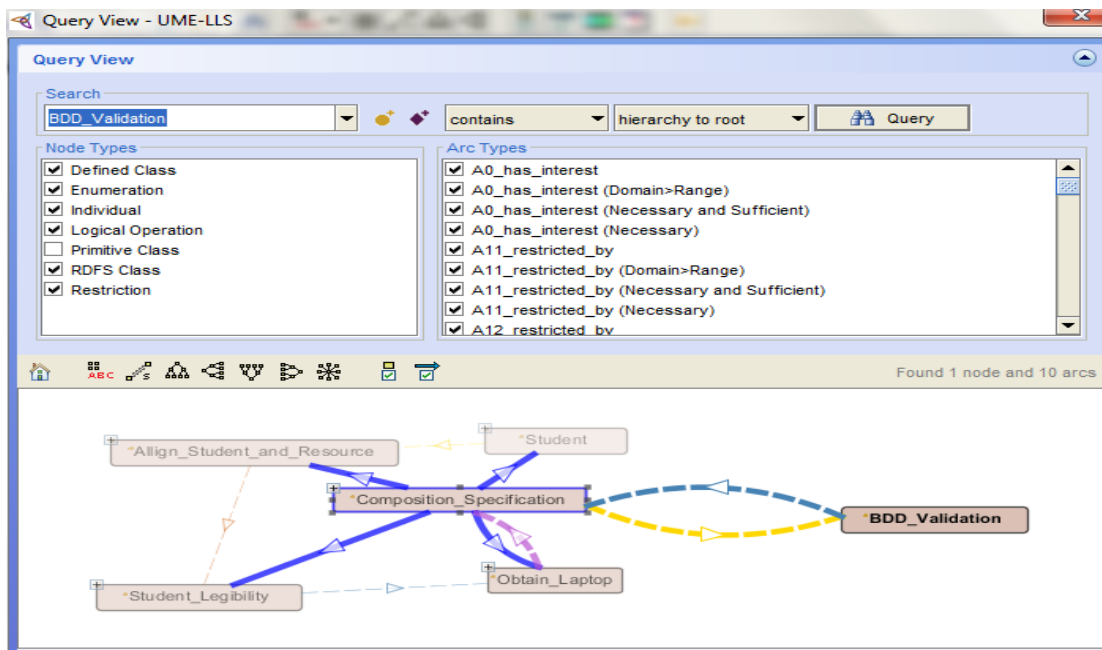


Figure 8-18: Querying the UME-LLS using the OWL Reasoner

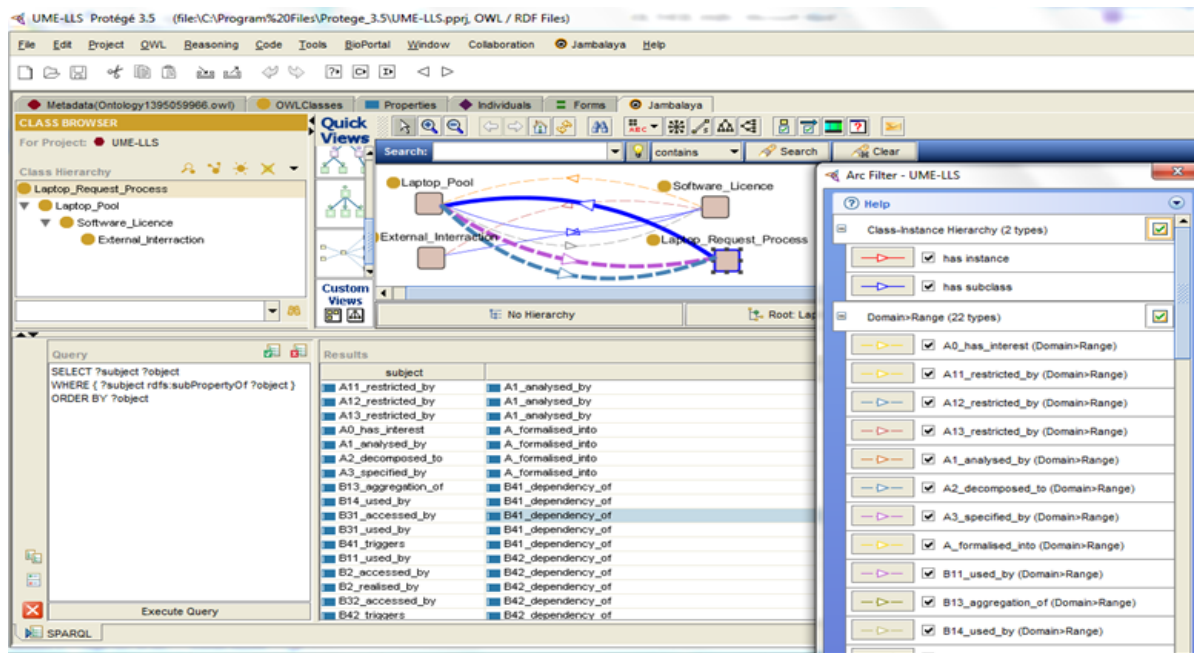


Figure 8-22: Querying the UME-LLS using SPARQL for Class and Superclass association

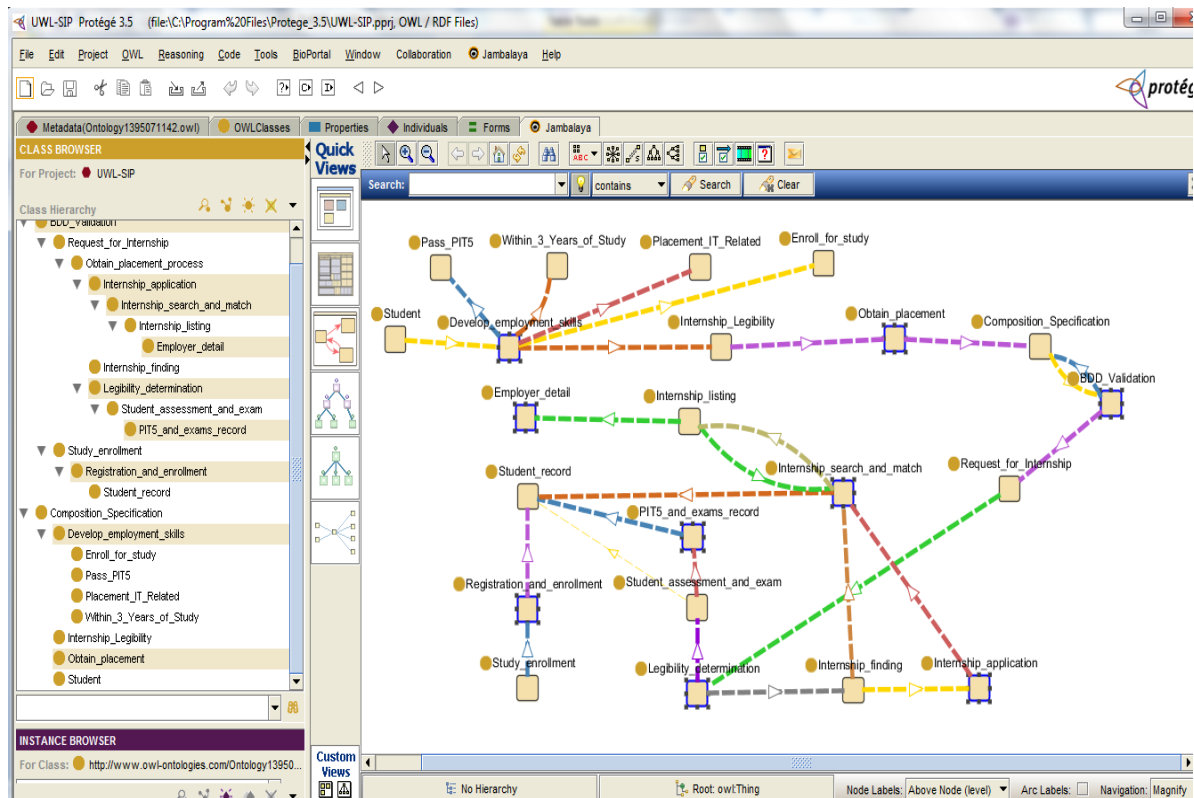


Figure 8-39: OWL implementation of UWL-SIP Classes

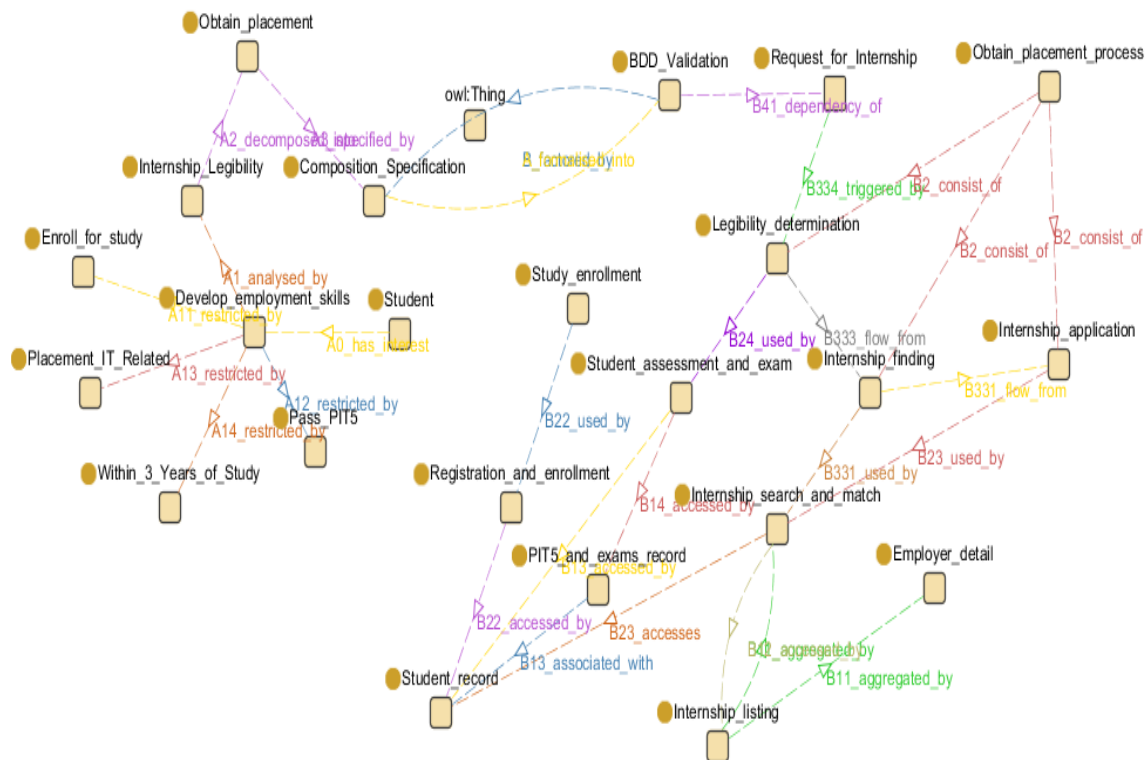


Figure 8-41: Visual Representation of the class, domain and range mappings for UWL-SIP

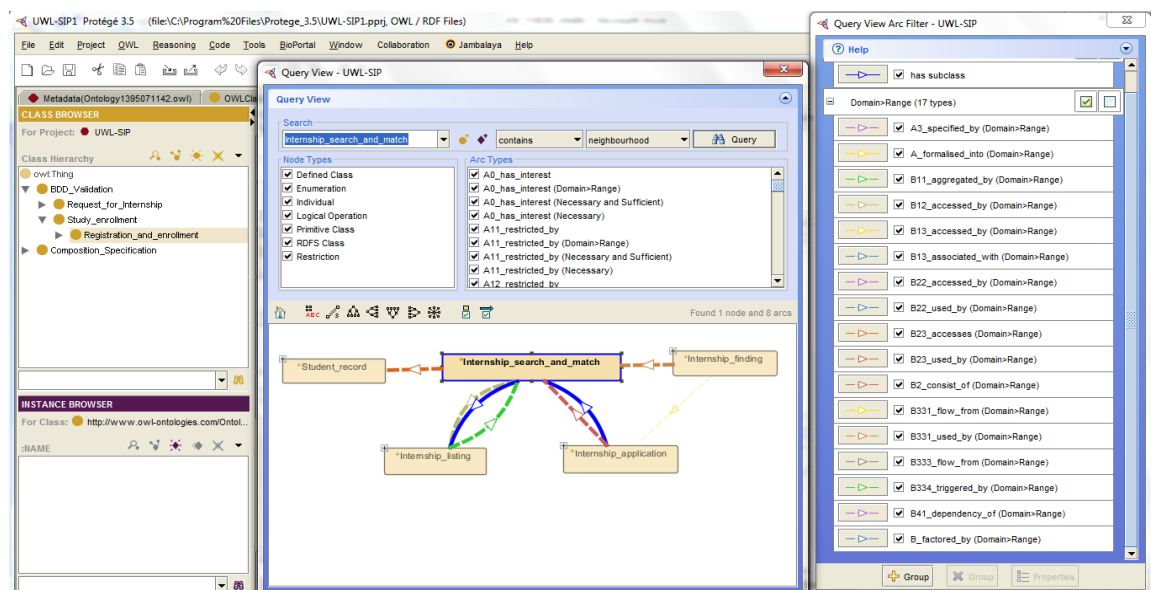


Figure 8-42: Querying the UWL-SIP using the OWL Reasoner