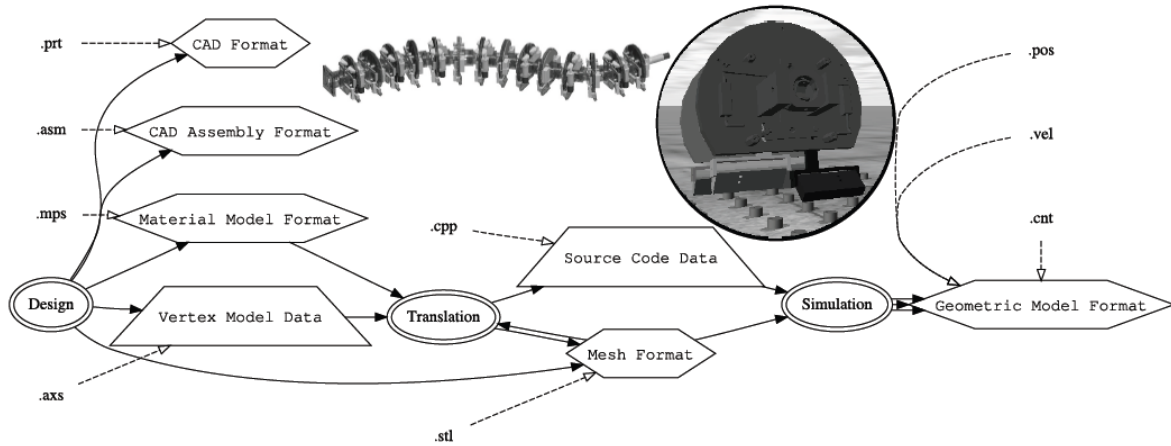


Workflow Example Encoded in OWL-S / RDF  
 Jordan Osecki  
 CS690 – Week 4



(c) Design and simulation workflow.

Source: “Archiving the Semantics of Digital Engineering Artifacts in CIBER-U”

```
<rdf:RDF>
<owl:Ontology rdf:about="">
  <owl:versionInfo>$Id: CIBER-U_Workflow.owl,v 1.0 2009/07/14 16:25:00 martin Exp
  $</owl:versionInfo>

  <rdfs:comment>OWL-S Process Model for CIBER-U Workflow</rdfs:comment>

  <owl:imports rdf:resource="http://www.daml.org/services/owl-s/1.0/Service.owl"/>
  <owl:imports rdf:resource="http://www.daml.org/services/owl-s/1.0/Process.owl"/>
  <owl:imports rdf:resource="http://www.daml.org/services/owl-s/1.0/Profile.owl"/>
  <owl:imports rdf:resource="http://www.daml.org/services/owl-s/1.0/Concepts.owl"/>
</owl:Ontology>

<!-- Instance Definition of CIBER-U Workflow Process Model -->

<process:ProcessModel rdf:ID="CIBER-U_Workflow_ProcessModel">
<process:hasProcess rdf:resource="#CIBER-U_Workflow_Process"/>
<service:describes rdf:resource="http://www.daml.org/services/owl-s/1.0/CIBER-U_Workflow.owl#CIBER-
U_Workflow"/>
</process:ProcessModel>

<!-- CIBER-U is a composite process. - It is composed of a sequence whose components are 3
composite processes, Design, Translation, and Simulation. -->

<process:CompositeProcess rdf:ID="CIBER-U_Workflow_Process">
  <rdfs:label> This is the top level process for CIBER-U </rdfs:label>
  <process:composedOf>
    <process:Sequence>
      <process:components rdf:parseType="Collection">
```

```

        <process:CompositeProcess rdf:about="#Design"/>
        <process:CompositeProcess rdf:about="#Translation"/>
        <process:CompositeProcess rdf:about="#Simulation"/>
    </process:components>
</process:Sequence>
</process:composedOf>
</process:CompositeProcess>

<!-- The next three are break-downs of the composite processes listed in the sequence above. -->

<process:CompositeProcess rdf:ID="Design">
    <rdfs:label> This is the top level process for CIBER-U Design </rdfs:label>
    <process:composedOf>
        <process:Split>
            <process:components rdf:parseType="Collection">
                <process:AtomicProcess rdf:about="#CAD_Format"/>
                <process:AtomicProcess rdf:about="#CAD_Assembly_Format"/>
                <process:AtomicProcess rdf:about="#Material_Model_Format"/>
                <process:AtomicProcess rdf:about="#Vertex_Model_Data"/>
                <process:AtomicProcess rdf:about="#Mesh_Format"/>
            </process:components>
        </process:Split>
    </process:composedOf>
</process:CompositeProcess>

<process:CompositeProcess rdf:ID="Translation">
    <rdfs:label> This is the top level process for CIBER-U Translation </rdfs:label>
    <process:composedOf>
        <process:Split>
            <process:components rdf:parseType="Collection">
                <process:AtomicProcess rdf:about="#Source_Code_Data"/>
                <process:AtomicProcess rdf:about="#Mesh_Format"/>
            </process:components>
        </process:Split>
    </process:composedOf>
</process:CompositeProcess>

<process:CompositeProcess rdf:ID="Simulation">
    <rdfs:label> This is the top level process for CIBER-U Simulation </rdfs:label>
    <process:composedOf>
        <process:Split>
            <process:components rdf:parseType="Collection">
                <process:AtomicProcess rdf:about="#Geometric Model Format"/>
            </process:components>
        </process:Split>
    </process:composedOf>
</process:CompositeProcess>

<!-- INSERT ATOMIC PROCESS DESCRIPTIONS HERE -->

</rdf:RDF>

```