1 Configuration

The SHAPE Toolsuite comes with installed and configured version of the CIMFlex tool. In order to be on sure that CIMFlex plug-in is properly delivered, please follow the steps below:

Step 1. Run the SHAPE tool suite (see Section **Error! Reference source not found.**)

Step 2. Open the new wizard either from the project explorer tree or from File ► New ► Other…

Step 3. See if the section “CIMFlex” is present containing different diagram types of the CIMFlex tool (See Figure 1). If you see at least this section with wizards for different views, then the plug-in is configured correctly.

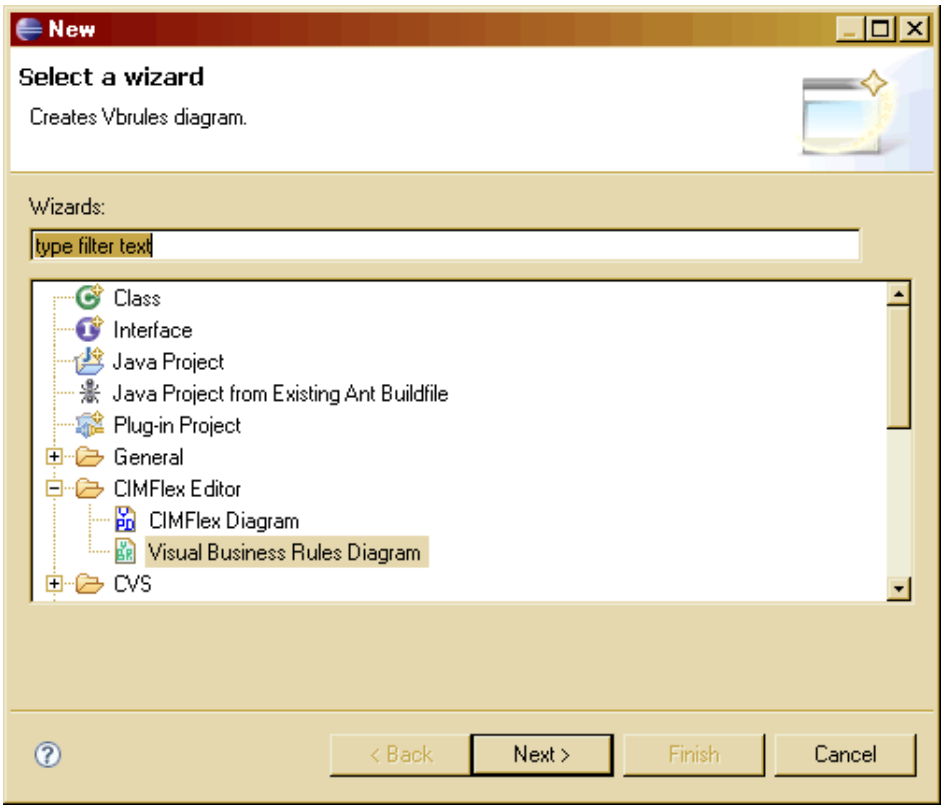

Figure 1. CIMFlex diagrams

The following diagrams are present and can be modelled in the current SHAPE tool suite bundle:

- **CIMFlex Diagram** – a process view diagram containing both BPMN and EPC notation for processs modelling
- **Visual Business Rules Diagram** – a view that is allowing for modelling business rules and introduces constraints for the process views

2 Creating business rule views

In this section a business rule model diagram is being created. Before that, there has to exist a general project. So, in the first step, we have to crteate a new project.

Step 1. Create a project File ► New ► Project… ► General ► Project. In this guide we name it **CIMFlex**.

Step 2. Next, create a business rule diagram like follows: in the newly created project **CIMFlex** right-click on the project an choose New ► CIMFlex Editor ► Visual Business Rules Diagram. Let's name it **Data.Check.**

Step 3. In the business rule diagram editor, add the following objects from the business rule palette (see Figure 2): a business rule container **Process Choice**, a keyword **IF,** a condition **Well temperature rises**, a keyword **THEN,** a term **Start Statoil**, a keyword **THEN** and a term **Start Saarstahl** inside it.

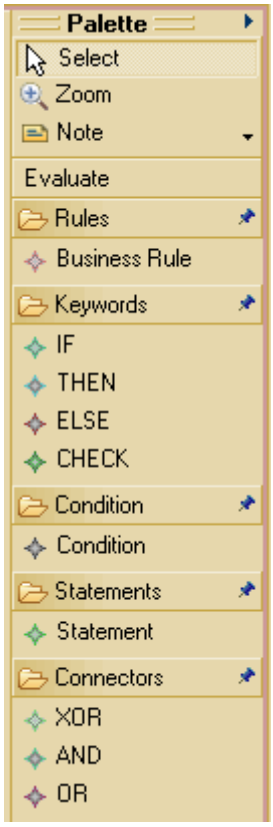

Figure 2. Business rule view palette

Step 4. After modelling is finished the rule model may look like in Figure 3. Three views are now complete – data, organization and business rule. The process model itself is the next step.

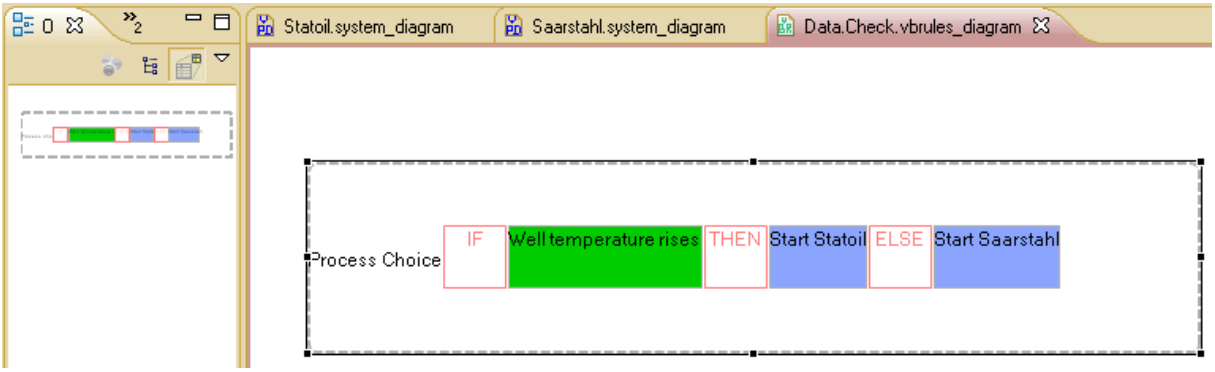

Figure 3. Business rule view simple rule model

3 Creating process views

In this step a process model diagram is being created. We assume the first way of creating a diagram, namely from scratch through New menu in project tree has been used. First, a pool objects is created in order to represent a process flow and then other two objects representing different kinds of notation are added to the process view.

Step 1. First, create a **CIMFlex Diagram** like the following: in the newly created project **CIMFlex** right-click on the project and choose New ► CIMFlex Editor ► CIMFlex Diagram. Let's name it **Statoil**.

Step 2. Next step is to create a pool object. For that you will need to choose the pool element from the process view palette (see Figure 4) and click-and-drag draw the pool on the diagram canvas. You can change the pool's name by double-clicking on its label and entering a new name, for example **Statoil Product Optimization**.

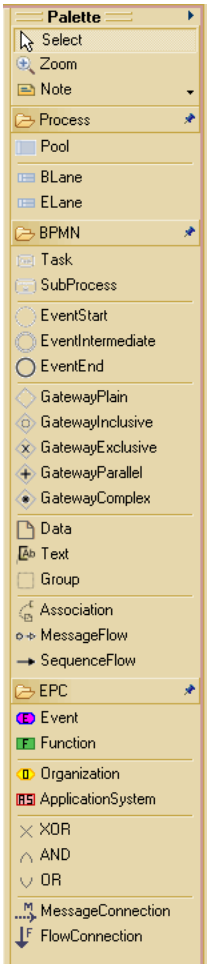

Figure 4. Process view palette

Step 3. You can model the processes only if you add a lane to the pool in the CIMFlex modelling suite, so please click on the **ELane** representing EPC modelling container and add it to the newly created pool. We name this container **EPC Product Optimization** for this guide.

Step 4. Repeat the step 3 for **BLane**.and name it **BPMN Product Optimization**.

Step 5. After modelling the use case for Statoil from the deliverable 1.1 you may get the model to look like in the Figure 5. The next steps in this guide are dealing with this model exclusively.

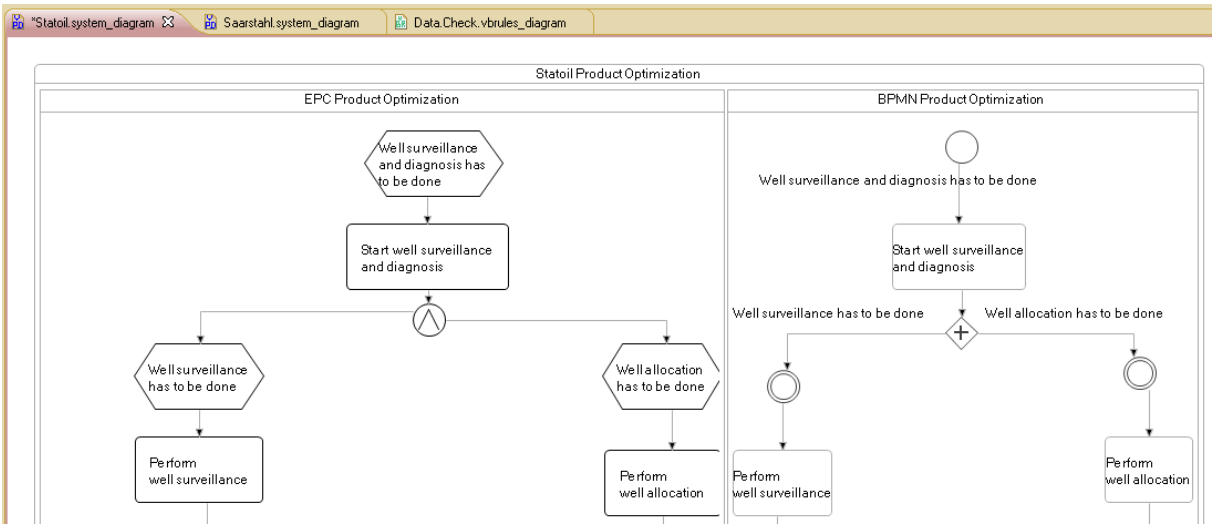

Figure 5. Statoil use case modelled

Step 6. The next important feature in CIMFlex besides being able of modeling in two different notations is mapping between EPC and BPMN constructs. In this guide, we demonstrate it in the Statoil example. Firstly, click on the EPC lane and take a look at its properties (see Figure 6).

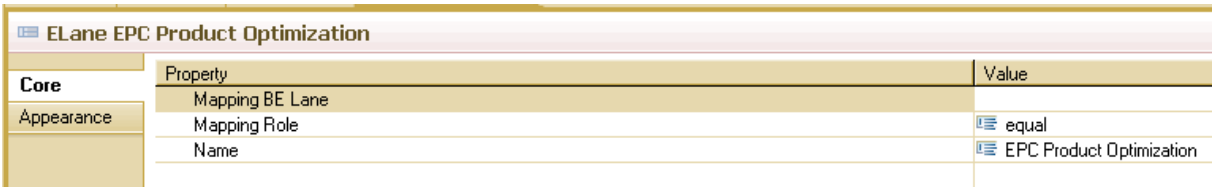

Figure 6. Statoil EPC lane properties

Step 7. As you can see, there is a mapping feature **BE Lane** (meaning mapping of BLane to the current ELane) for this type of lanes providing for semantic comparison between model objects. To perform the mapping, you have to click on the choose button in the value field of the Mapping BE Lane feature. You should see the following then in

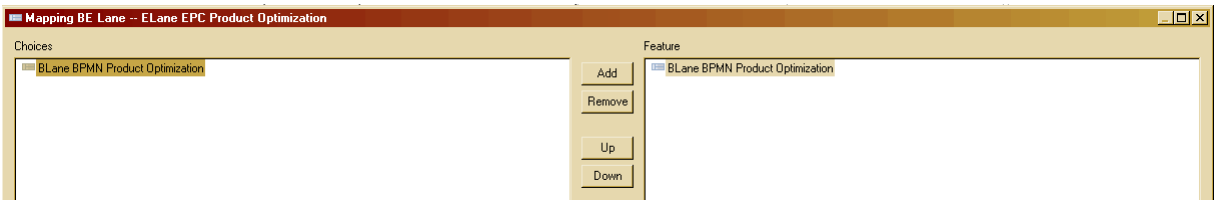

Figure 7. Statoil BLane mapping

Step 8. After choosing the mapping object you can also set the appropriate mapping type from the list of available types represented in the CIMFlex metamodel. This can be done by choosing the type from the drop-down list in the **Mapping Role** feature (see Figure 8).

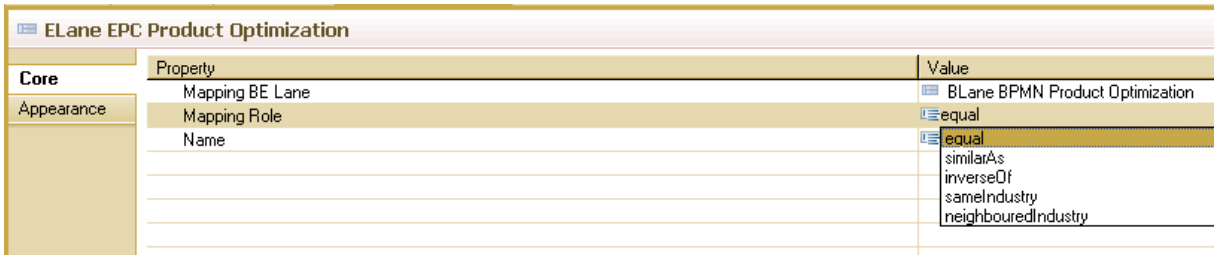

Figure 8. Statoil mapping types