

[Powrót do samurai:start](#)


PLOC

- [Original rules](#)
- [ploc-rules.txt](#) - 49 rules

Model in CLIPS



- Model 1: [ploc-clips.clp](#)
- Rules: 31
- Uwagi:
 - It is necessary to use module mechanisms in order to avoid infinite recursion of rules that modify the facts that are also in their LHS.
 - In order to decrease number of rules, the predicates `member$` and `create$` were used for creation of multifield value (see here [member\\$](#))
 - It is necessary to set fact duplication to true in order to assert a number of the same insurance base charge modifiers ([set-fact-duplication TRUE](#))
 - It is not possible to express infinity (e.g. in case of declaring ranges of allowed values)

Model in Jess

- Model 1: [ploc-jess.clp](#)
- Rules: 31
- Uwagi:
 - Jess does not allow for using '(range)' construct within `slot` definition - the domain of slots can be set by using (`allowed-values`). However listing of all values from range e.g. [18, 120] is inefficient.
 - Jess does not allow for fact duplication 
Fact-duplication concept eliminated – fact duplication is never allowed. Fact list stored on a HashMap, not a Vector. ¹⁾
- Model 2: [ploc-jess-v2.clp](#)
- Rules: 32
- Uwagi:
 - The calculation rule uses `accumulate` CE and thus it is fired one instead of several times (for each `base-modifier` fact).

Model in Drools

- Model 1: [ploc.java ploc-drools.drl](#)
- Rules: 32
- Uwagi:
 - Drools does not support neither default value nor constraints for fact fields.
 - The list of allowed values `allowed-type` can be defined using JAVA enum types.

- Modules in Drools does not have to be defined explicitly - they are automatically defined while first rule assignment
-  Drools does not support any construct with the semantics of (pop-focus). However, this construct can be approximately simulated in drools using lock-on-active property which prevents rule, with this property set to true, from firing until their agenda-group will not loose a focus. In comparison to (pop-focus) this property does not remove focus from the current module and thus other rules can also be fired after rule having this property set to true.
-  The multifield values from clips and jess that are created using (create\$) function, can be represented using Java collections (sometimes such rules must be expressed in java dialect):
CLIPS:

```
(create$ 160 60 0 -10 -20 -30 -40 -40 -50 -50 -60)
```

Java:

```
List<Integer> modifiers = Arrays.asList(160, 60, 0, -10, -20, -30, -40, -40, -50, -50, -60);
```

- The management of focus stack in Drools can be distributed on DRL and JAVA files. Drools allows for set the focus stack in the same way as CLIPS or Jess:
CLIP/Jess

```
(focus base-charge bonus-malus base-charge-modifiers)
```

and corresponding code in Drools:

```
ksession.getAgenda().getAgendaGroup("base-charge-modifiers").setFocus();
ksession.getAgenda().getAgendaGroup("base-charge").setFocus();
ksession.getAgenda().getAgendaGroup("bonus-malus").setFocus();
ksession.getAgenda().getAgendaGroup("initial").setFocus();
```

Nevertheless, this can be done only within the Java file. In order to provide more more reliable translation from CLIPS/Jess to Drools the above setup of focus stack can be translated in the following way:

1. For each drools application, the java file push the first agenda-group (e.g. *initial*) on the focus stack.
2. Within this agenda-group only one rule is defined - LHS-less rule that asserts all the initial facts. Such rule corresponds to deffacts CLIPS/Jess construct.
3. In the RHS of this rule, the focus stack is defined e.g.

```
drools.setFocus("base-charge-modifiers");
drools.setFocus("base-charge");
drools.setFocus("bonus-malus");
```

the order of the agenda-group names must be reversed in comparison to the order of the

names within deffacts construct.

- Model 2: [ploc.java ploc-drools-v2.drl](#)
- Rules: 33
- Uwagi:
 - The calculation rule uses accumulate CE and thus it is fired one instead of several times (for each base-modifier fact).

Model in XTT2

- Model 1: [ploc-xtt.html](#)
- Rules: 57
- Uwagi:

¹⁾

<http://www.jessrules.com/doc/70/changes.html>

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