References


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HEALTHWATCHER. Available at http://www.comp.lancs.ac.uk/~greenwop/tao/. 2012.


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Appendix A

BNF TamDera Grammar

The BNF description uses the bold font to display terminal symbols and the first characters of non-terminal symbols are shown in upper-case format. The symbols \('[A]', '(A)+' and '(A)\*' respectively impose the cardinalities: optional (0 or 1); at least one; and zero or more to a the symbol A.

ConceptDeclaration ::= concept ConceptId [ConceptInheritance]
{ [ConceptMapping]
  [ThresholdVariableList]
  (AntiDriftRule)*
  (AssignmentThreshold)*
}
ConceptMapping ::= name: STRING
::= parent: STRING
AntiDriftRule ::= Metric Operator (Value | VariableId)
::= ConstraintSetId
Metric ::= LOC | CBO | LOCM | CC | DIT | ...
Operator ::= > | < | = | ≤ | ≥
AntiErosionRule ::= only ConceptList can-DependType ConceptList
::= ConceptList cannot- DependType ConceptList
::= ConceptList must-DependType ConceptList
CptList ::= ConceptId (, ConceptId)*
DependType ::= derive | invoke | depend | create | declare | handle
ConceptInheritance ::= extends ConceptId
ConstraintSetDecl ::= constraintset ConstraintSetId
{ (AntiDriftRule)+ }
CptList ::= ConceptId (, ConceptId)*
ThresholdVariableList ::= thresholds: VariableId (, VariableId)*
AssignmentThreshold ::= assign VariableId to VALUE
ConceptId ::= STRING
ConstraintSetId ::= STRING
VariableId ::= STRING
Value ::= NUMBER