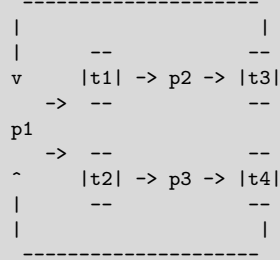


A 4-bound Petri Net



$Places \triangleq \{ "p1", "p2", "p3" \}$ Define the net.

$Transitions \triangleq \{ "t1", "t2", "t3", "t4" \}$

$Arcs \triangleq [$
 $p1 \mapsto \{ "t1", "t2" \},$
 $p2 \mapsto \{ "t3" \},$
 $p3 \mapsto \{ "t4" \},$

 $t1 \mapsto \{ "p2" \},$
 $t2 \mapsto \{ "p3" \},$
 $t3 \mapsto \{ "p1" \},$
 $t4 \mapsto \{ "p1" \}$
 $]$

$ArcWeights \triangleq \langle \rangle$ Unspecified arc weights default to 1.

$InitialMarking \triangleq [p2 \mapsto 2, p3 \mapsto 2]$

VARIABLE *Marking*

$PN \triangleq \text{INSTANCE } PetriNet$ Instantiate it within a namespace.

$Spec \triangleq PN!Spec$ Make *Spec* and *Invariants* available for the config file.

$Invariants \triangleq PN!Invariants$

Properties

Petri Net is 4-bound. Asserting 3-bound would fail.

$BoundFour \triangleq PN!Bound(4)$