

d-feasible-fair-fifo^{0,22}

$\forall D:\text{Dsys}, \text{sched}:(\text{Id} \rightarrow (\mathbb{N} \rightarrow (\text{IdLnk} + \text{Id}) + \text{Unit})), v:(i:\text{Id} \rightarrow \text{M}(i).\text{state}),$
 $\text{dec}:(j,b:\text{Id} \rightarrow \text{M}(j).\text{state} \rightarrow (\text{M}(j).\text{da}(\text{locl}(b)) + \text{Unit})).$

Feasible(D)

$\Rightarrow (\forall i:\text{Id}.$

$(\forall l:\text{IdLnk}.$

$\text{destination}(l) = i$

$\Rightarrow \text{M}(\text{source}(l))$ sends on link l

$\Rightarrow \text{isl}(\text{sched}(i))$

$\& (\forall t:\mathbb{N}. \exists t':\mathbb{N}. t \leq t' \& \text{isl}(\text{outl}(\text{sched}(i))(t')) \& \text{outl}(\text{outl}(\text{sched}(i))(t')) = l)$

$\& (\forall a:\text{Id}.$

a in $\text{dom}(\text{M}(i).\text{pre})$

$\Rightarrow \text{isl}(\text{sched}(i))$

$\& (\forall t:\mathbb{N}.$

$\exists t':\mathbb{N}. t \leq t' \& \neg_2 \text{isl}(\text{outl}(\text{sched}(i))(t')) \& \text{outr}(\text{outl}(\text{sched}(i))(t')) = a))$

$\Rightarrow \text{FairFifo}$