

ecl-machine-icompat^{0,22}

$\forall i:\text{Id}, ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, da:k:\text{Knd} \text{ fp} \rightarrow \text{Type}, A:\text{ecl}(ds;da), snd:\text{msg-spec}(ds;da),$
 $upd:\text{update-spec}(ds;da).$

$\text{msg-spec-loc}(snd;i)$

$\Rightarrow \text{update-spec-decl}(upd;ds)$

$\Rightarrow \neg \text{"ecl"} \in \text{dom}(ds)$

$\Rightarrow \text{R-Feasible}(\text{ecl-machine at } i \text{ with state ecl}$

A

state variables ds

actions da

sends snd

updates upd)

$\Rightarrow (\forall B:\text{Realizer}.$

$\text{R-Feasible}(B)$

$\Rightarrow (\forall k \in \text{ecl-kinds}(A) \text{ @ } \text{fpf-domain}(da).$

$\text{isrcv}(k)$

$\Rightarrow (\text{source}(\text{lnk}(k)) = i \in \text{Id}$

$\Rightarrow \text{Valtype}(da;k) \subseteq \rho \text{ R-da}(B;\text{destination}(\text{lnk}(k)))(k)?\text{Top}$

$\& (\text{destination}(\text{lnk}(k)) = i \in \text{Id}$

$\Rightarrow \text{R-da}(B;\text{source}(\text{lnk}(k)))(k)?\text{Void} \subseteq \rho da(k)?\text{Void})$

$\Rightarrow \text{R-icompat}(\text{ecl-machine at } i \text{ with state ecl}$

A

state variables ds

actions da

sends snd

updates $upd;B$)