

s-pre-rule0^{0,22}

$\forall i, a:\text{Id}, T:\text{Type}, P:(T \rightarrow \text{Prop})$.

@i: (with ds: action $a:T$ precondition $a(v)$ is $\lambda s, v. P(v) \text{ s } v$) $\in \text{Dsys}$

& ($\forall D:\text{Dsys}$.

 @i: (with ds: action $a:T$ precondition $a(v)$ is $\lambda s, v. P(v) \text{ s } v$) $\subseteq D$

$\Rightarrow D$

 realizes es .

 ($\forall e:\mathbf{E}. \text{loc}(e) = i \in \text{Id} \Rightarrow \text{kind}(e) = \text{locl}(a) \in \text{Knd} \Rightarrow \text{valtype}(e) \subseteq \rho T$)

 & ($\forall e:\mathbf{E}$.

$\text{loc}(e) = i \in \text{Id}$

$\Rightarrow (\text{kind}(e) = \text{locl}(a) \in \text{Knd} \Rightarrow P(\text{val}(e)))$

 & ($\exists e':\mathbf{E}$.

$(e <_{\text{loc}} e') \vee e = e' \in \mathbf{E} \ \& \ \text{kind}(e') = \text{locl}(a) \in \text{Knd} \vee (\forall v:T. \neg P(v))))$)