es-update-iff[0,22]

$$
\begin{array}{l}
\text{es-update-iff}(es;i;x;ds;e.P(e);s.f(s)) \\
\equiv_{\text{def}}\ (\forall x{:}\text{Id. vartype}(i;x) \subseteq \rho\ ds(x)?\text{Top}) \\
\quad \&\ \forall e@i. \\
\qquad (P(e) \Rightarrow (x \text{ after } e) = f((\text{state when } e))) \ \&\ (\neg P(e) \Rightarrow (x \text{ after } e) = (x \text{ when } e))
\end{array}
$$

clarification:

$$
\begin{array}{l}
\text{es-update-iff}(es;i;x;ds;e.P(e);s.f(s)) \\
\equiv_{\text{def}}\ (\forall x{:}\text{Id. es-vartype}(es;\ i;\ x) \subseteq \rho\ \text{fpf-cap}(ds;\text{IdDeq};x;\text{Top})) \\
\quad \&\ \text{alle-at}(es;i;e.(P(e) \\
\qquad\qquad\qquad \Rightarrow \text{es-after}(es;\ x;\ e) \\
\qquad\qquad\qquad\quad = \\
\qquad\qquad\qquad\quad f(\text{es-state-when}(es;e)) \\
\qquad\qquad\qquad\quad \in \text{fpf-cap}(ds;\text{IdDeq};x;\text{Top})) \\
\qquad \&\ (\neg P(e) \Rightarrow \text{es-after}(es;\ x;\ e) = \text{es-when}(es;\ x;\ e) \in \text{fpf-cap}(ds;\text{IdDeq};x;\text{Top})))
\end{array}
$$

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http://www.cs.cornell.edu/Info/Projects/NuPrl/FDLcontent/p0_286125_/p28_65973_{es-update-iff}.html