pre-init1-p[11,40]

pre-init1-p(es;i;x;X;x_0;a;p;P)
$\equiv_{\text{def}}$ $((\uparrow(P(x_0))) \Rightarrow (\exists e{:}\text{E}.\ (\text{loc}(e) = i)))$
& ((vartype(i;x) $\subseteq$r X)
c$\wedge$ ($\forall e@i.\ (\text{kind}(e) = \text{locl}(a)) \Rightarrow ((\text{valtype}(e) \subseteq\text{r Outcome})$ c$\wedge$ $(\uparrow(P(x$ when $e))))$
& $\forall e@i.\ \exists e' \geq e.(\text{kind}(e') = \text{locl}(a)) \vee (\neg(\uparrow(P((x$ after $e'))))))))$
& $@i\ x$ initially $x_0{:}X$

clarification:

pre-init1-p(es;i;x;X;x_0;a;p;P)
$\equiv_{\text{def}}$ $((\uparrow(P(x_0))) \Rightarrow (\exists e{:}\text{es-E}(es).\ (\text{es-loc}(es;\ e) = i \in \text{Id})))$
& ((es-vartype(es; i; x) $\subseteq$r X)
c$\wedge$ (alle-at(es;i;e.(es-kind(es; e) = locl(a) $\in$ Knd)
$\Rightarrow$ ((es-valtype(es; e) $\subseteq$r p-outcome(p)) c$\wedge$ $(\uparrow(P(\text{es-when}(es;\ x;\ e))))))$
& alle-at(es;i;e.existse-ge(es;e;e'.(es-kind(es; e') = locl(a) $\in$ Knd)
$\vee$ $(\neg(\uparrow(P(\text{es-after}(es;\ x;\ e'))))))))$
& init-p(es; i; X; x; x_0)

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http://www.nuprl.org/FDLcontent/p0_963683_/p88_183780_{pre-init1-p}.html