

es-hist-last^{11,40}

$$\begin{aligned} & \forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), es:\text{event_system}\{i:l\}, i:\text{Id}, e_1, e_2:\{e:\text{es-E}(es) \mid \\ & \qquad \qquad \qquad \text{loc}(e) = i\} . \\ & (\forall x:\text{Id}. \text{subtype_rel}(\text{es-variantype}(es; i; x); \text{fpf-cap}(ds; \text{id-deq}; x; \text{top}))) \\ \Rightarrow & (\forall e:\text{es-E}(es). \\ & \quad (\text{loc}(e) = i) \\ & \quad \Rightarrow \text{subtype_rel}(\text{es-valtype}(es; e); \text{fpf-cap}(da; \text{Kind-deq}; \text{es-kind}(es; e); \text{top}))) \\ \Rightarrow & \text{es-locl}(es; e_1; e_2) \\ \Rightarrow & (\text{es-hist}\{i:l\}(es; e_1; e_2) \\ & = \\ & \text{append}(\text{es-hist}\{i:l\}(es; e_1; \text{es-pred}(es; e_2)); \text{cons}(\text{es-info}(es; e_2); [])) \\ & \in (\text{event-info}(ds; da) \text{ List})) \end{aligned}$$