

## iseg-es-hist<sup>11,40</sup>

$$\begin{aligned} & \forall ds:\text{fpf}(\text{Id}; x.\text{Type}), da:\text{fpf}(\text{Knd}; k.\text{Type}), i:\text{Id}, es:\text{event\_system}\{i:l\}. \\ & (\forall x:\text{Id}. \text{subtype\_rel}(\text{es\_vartype}(es; i; x); \text{fpf\_cap}(ds; \text{id-deq}; x; \text{top}))) \\ \Rightarrow & (\forall e:\text{es-E}(es). \\ & (\text{loc}(e) = i) \\ & \Rightarrow \text{subtype\_rel}(\text{es\_valtype}(es; e); \text{fpf\_cap}(da; \text{Kind-deq}; \text{es-kind}(es; e); \text{top}))) \\ \Rightarrow & (\forall e_1, e_2:\text{es-E}(es), L:(\text{event-info}(ds; da) \text{ List}). \\ & (\text{loc}(e_1) = i) \\ & \Rightarrow (\text{loc}(e_2) = i) \\ & \Rightarrow (\neg(L = [])) \\ & \Rightarrow \text{iseg}(\text{event-info}(ds; da); L; \text{es-hist}\{i:l\}(es; e_1; e_2)) \\ & \Rightarrow \exists e \in [e_1, e_2]. L = \text{es-hist}\{i:l\}(es; e_1; e)) \end{aligned}$$