

es-interface-local-state-cases^{11,40}

$\forall es:ES, A, T:\text{Type}, X:\text{AbsInterface}(A), base:T, f:(T \rightarrow A \rightarrow T), e:E.$
local-state($f;base;X;e$)
=
if $e \in_b X$
 then $f(\text{if } e \in_b \text{prior}(X) \text{ then local-state}(f;base;X;\text{prior}(X)(e)) \text{ else } base \text{ fi}, X(e))$
if $e \in_b \text{prior}(X)$ then local-state($f;base;X;\text{prior}(X)(e)$) else $base \text{ fi}$
 $\in T$