

chain-path-query^{13,45}

$\forall es:ES, Cmd:Type, In:AbsInterface(Cmd), isupdate:(Cmd \rightarrow \mathbb{B}), Sys, Out:AbsInterface(Top).$
 $(E(In) \subseteq_r E(Sys))$
 $\Rightarrow (\forall f:sys\text{-antecedent}(es;Sys).$
 $(\forall e:E(In). f(e) = e \in E)$
 $\Rightarrow (\forall chain:(E(Sys) \rightarrow (Id\ List)).$
 $chain\text{-consistent}(f;chain)$
 $\Rightarrow (\forall e, e':E(Sys).$
 $e \text{ is } f*(e')$
 $\Rightarrow (\uparrow(e \in_b In))$
 $\Rightarrow (\neg(\uparrow(isupdate(In(e))))))$
 $\Rightarrow (loc(e) = loc(e') \in Id))))$