

abstract-chain-replication-property^{13,45}

$\forall es:ES, Cmd, Rsp:Type, isupdate:(Cmd \rightarrow \mathbb{B}), Delta:((\{c:Cmd \mid \uparrow(isupdate(c))\} List) \rightarrow Rsp),$
 $Q:((\{c:Cmd \mid \uparrow(isupdate(c))\} List) \rightarrow \{c:Cmd \mid \neg(\uparrow(isupdate(c)))\} \rightarrow Rsp),$
 $In:AbsInterface(Cmd), Out:AbsInterface(Rsp), Sys:AbsInterface(Cmd List),$
 $f:sys\text{-}antecedent(es;Sys).$
abstract-chain-replication{i:l}
 $(es; Cmd; Rsp; isupdate; In; Out; Sys; f; Delta; Q)$
 $\Rightarrow approx_sm(es; In; Out; Cmd; isupdate; Rsp; Delta; Q)$