

chain-config^{13,45}

chain-config($es; Sys; chain$)

$$\begin{aligned} \equiv_{\text{def}} & (\forall e: \mathbb{E}(Sys). \text{no_repeats}(\text{Id}; chain(e)) \ \& \ (0 < \|chain(e)\|) \ \& \ (\text{loc}(e) \in chain(e))) \\ & \ \& \ (\forall e, e': \mathbb{E}(Sys). chain(e) \subseteq chain(e') \vee chain(e') \subseteq chain(e)) \\ & \ \& \ (\forall e, e': \mathbb{E}(Sys). (e < \text{loc } e') \Rightarrow chain(e') \subseteq chain(e)) \end{aligned}$$

clarification:

chain-config($es; Sys; chain$)

$$\begin{aligned} \equiv_{\text{def}} & (\forall e: \text{es-E-interface}(es; Sys). \\ & \ \text{no_repeats}(\text{Id}; chain(e)) \ \& \ (0 < \|chain(e)\|) \ \& \ (\text{es-loc}(es; e) \in chain(e) \in \text{Id})) \\ & \ \& \ (\forall e: \text{es-E-interface}(es; Sys), e': \text{es-E-interface}(es; Sys). \\ & \ \ \ \ \ \text{sublist}(\text{Id}; (chain(e)); (chain(e'))) \vee \text{sublist}(\text{Id}; (chain(e')); (chain(e)))) \\ & \ \& \ (\forall e: \text{es-E-interface}(es; Sys), e': \text{es-E-interface}(es; Sys). \\ & \ \ \ \ \ \text{es-locl}(es; e; e') \Rightarrow \text{sublist}(\text{Id}; (chain(e')); (chain(e)))) \end{aligned}$$