

schema expansion tac

[/Reference manual/Z-related commands/In situ replacement commands](#)

The *schema expansion tac* command unfolds all visible schema operations as far as possible. It is applicable to any paragraph, predicate, expression or schema text that contains a visible expandable schema operation.

It performs *expansion* steps on the following notations:

- references to named schemas;
- generic instantiations of named schemas;
- theta expressions;
- renaming expressions;
- schema composition expressions;
- schema piping expressions;
- schema overriding expressions;

It performs *schema construction* steps on the following notations:

- schema negation expressions;
- schema precondition expressions;

- schema equivalence expressions;
- schema implication expressions;
- schema disjunction expressions;
- schema conjunction expressions;
- schema exclusive or expressions;
- schema projection expressions;
- schema universal quantification expressions;
- schema existential quantification expressions;
- schema unique existential quantification expressions;
- schema hiding expressions;
- schema undecoration expressions.

It also applies *predication* steps to schema predicates, performs the effects of *normalization* on declarations where it is necessary to do so, and uses *distribution* on schema inclusion declarations and schema decoration expressions.

It applies all these steps to their results until none of them are applicable, when all schemas will have been expanded.

Expansion is not done within invisible formulae, namely implicit instantiations, characteristic • parts, and *concealed* . . . formulae.

1. Tactic example

“schema expansion tac” p e

This example applies the *schema expansion tac* command to predicate *p* and expression *e*.

IT 16-Dec-1999