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## 5.218 leq\_cst

## DESCRIPTION LINKS

Origin Arithmetic.

Constraint leq\_cst(VAR1, VAR2, CST2)

Arguments VAR1 : dvar

VAR2 : dvar CST2 : int

Purpose Enforce the fact that the first variable is less than or equal to the sum of the second

variable and the constant.

Example (5,2,4)

The leq\_cst constraint holds since 5 is less than or equal to 2+4.

Typical  $CST2 \neq 0$ 

 $\mathtt{VAR1} < \mathtt{VAR2} + \mathtt{CST2}$ 

• Arguments are permutable w.r.t. permutation (VAR1) (VAR2, CST2).

• VAR1 can be replaced by any value  $\leq$  VAR2 + CST2.

• VAR2 can be replaced by any value  $\geq$  VAR1 - CST2.

• CST2 can be replaced by any value  $\geq$  VAR1 - VAR2.

See also common keyword: geq\_cst (binary constraint, arithmetic constraint).

implied by: distance, eq\_cst.

specialisation: leq(constant set to 0).

Keywords constraint arguments: binary constraint.

constraint type: predefined constraint, arithmetic constraint.

**filtering:** arc-consistency. **modelling exercises:** metro.

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