

5.155 `in_intervals`

| | DESCRIPTION | LINKS |
|---------------------|--|--------------|
| Origin | Domain definition. | |
| Constraint | <code>in_intervals(VAR, INTERVALS)</code> | |
| Synonym | <code>in</code> . | |
| Arguments | VAR : <code>dvar</code> INTERVALS : <code>collection(low-int, up-int)</code> | |
| Restrictions | <code>required(INTERVALS, [low, up])</code> <code>INTERVALS.low ≤ INTERVALS.up</code> <code> INTERVALS > 0</code> | |
| Purpose | Enforce the domain variable VAR to take a value within one of the intervals specified by the collection of intervals INTERVALS. | |
| Example | $\left(5, \left\langle \begin{array}{ll} \text{low} - 1 & \text{up} - 1, \\ \text{low} - 3 & \text{up} - 5, \\ \text{low} - 8 & \text{up} - 8 \end{array} \right\rangle \right)$ <p>The <code>in_intervals</code> constraint holds since its first argument <code>VAR = 5</code> belongs to the second intervals of the collection of intervals <code>INTERVALS</code>.</p> | |
| Typical | <code> INTERVALS > 1</code> | |
| Symmetries | <ul style="list-style-type: none"> • Items of <code>INTERVALS</code> are permutable. • <code>INTERVALS.low</code> can be decreased. • <code>INTERVALS.up</code> can be increased. • One and the same constant can be added to <code>VAR</code> as well as to the <code>low</code> and <code>up</code> attributes of all items of <code>INTERVALS</code>. | |
| Remark | Entailment occurs immediately after posting this constraint. | |
| Systems | <code>in</code> in JaCoP , <code>in</code> in SICStus . | |
| See also | specialisation: in_interval (<i>set of intervals replaced by single interval</i>). | |
| Keywords | constraint arguments: unary constraint. constraint type: value constraint, predefined constraint. filtering: arc-consistency. modelling: interval, domain definition. | |

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