

Re: How does ECLiPSe solve reified constraints?

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Linda wrote:

I know that ECLiPSe was implemented in Prolog and which and many other constraint solvers can solve reified constraints. In my mind, reified constraints are made up of both boolean and numerical variables, then how to solve the constraints that mix them together, namely how reified constraints are solved?

I will be very thankful if someone can give me some points.

You seem to think that because there are booleans and numerics involved, it should suddenly become much more difficult. It isn't - at least not in principle. I will try to explain it with attributed variables - syntax of no particular system intended - take:

```
X + Y = 1 <=> B
```

this could result in adding the following attributes to

```
X: if I get instantiated, check whether it can be decided that X+Y=1
    and set B accordingly
Y: same
B: if I change to true, post the constraint X+Y = 1
    if I change to false, post the constraint X+Y != 1
```

One more thing: one can implement booleans just as numeric values with a domain [0,1].

Now, as to your original question "How does ECLiPSe solve it" - we'll have to wait for ECLiPSe people of course :-)

Re: How does ECLIPSe solve reified constraints?

Cheers

Bart Demoen

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