


From: Narciso Martí Oliet narciso@ucm.es 
Subject: Fwd: examples with CVC4 and Yices
Date: 23 October 2018 15:41
To: Christiano Braga cbraga@ic.uff.br



Inicio del mensaje reenviado:

De: LUIS MANUEL AGUIRRE GARCIA <luisaqui@ucm.es>
Asunto: Re: examples with CVC4 and Yices
Fecha: 4 de diciembre de 2017, 15:15:45 GMT-2
Para: Dorel Lucanu <dlucanu@info.uaic.ro>
Cc: Narciso Martí Oliet <narciso@ucm.es>, Carolyn Talcott <carolyn.talcott@gmail.com>, Miguel Palomino Tarjuelo <miguelot@ucm.es>, Isabel Pita Andreu <ipandreu@ucm.es>

Hello, Dorel.

No, that I know. I think that Steven has implemented only what was needed to remove arithmetic conditions from the rewrite engine, feeding them to the SMT solver, and I cannot think of anyway to use the current implementation to solve problems involving uninterpreted

In fact, one of the limitations in our narrowing calculus, as in Camilo Rocha's SMT search, is that you cannot have a non SMT function whose image is any SMT sort, i.e, if you need to use $\max(x,y)$ then you have to define a sort Max, an operator $[_]$: Integer \rightarrow Max, ar $\max(x,y)$, so only known interpreted functions are allowed.

Regards,
Luis

2017-12-04 13:50 GMT+01:00 Dorel Lucanu <dlucanu@info.uaic.ro>:

Thanks a lot, your info is very useful.
Do you know if it is possible to send an uninterpreted function to the SMT solver?
Thanks again.
Best regards,
Dorel

On 27/11/2017 19:39, LUIS MANUEL AGUIRRE GARCIA wrote:

Hi, Dorel.

I have attached a zip with several versions of two prototypes and some examples for each prototype that we are still developing and testing. The all run from files exampleToasts.maude and exampleToastsRedux.maude just by changing the name of the version of names run with exampleToastsTedux.maude. Both CVC4 and Yices give the same number of states and rewrites, but Yices is much faster. Also, the include version of CVC in alpha 115, and old one I think, seems to have a memory leak.

You need smtlogic.maude, toasts.maude, the chosen prototype, crmsmt*.maude or crmRedux*.maude, and the correspondig example*.maude to run any example.

I have also attached a technical report, where the running example is the module toasts.maude in the zip file, so you can find there the explanation for the module, and another pdf, work in progress so apologies for the things that are still wrong or missing, where

If there is anything that it is not clear to you, please don't hesitate in asking me.

Regards
Luis

2017-11-27 16:51 GMT+01:00 Narciso Martí Oliet <narciso@ucm.es>:

Inicio del mensaje reenviado:

De: Carolyn Talcott <carolyn.talcott@gmail.com>
Asunto: Re: examples with CVC4 and Yices
Fecha: 27 de noviembre de 2017, 16:50:03 CET
Para: Dorel Lucanu <dlucanu@info.uaic.ro>
Cc: Narciso Martí Oliet <narciso@esi.ucm.es>

Hi Dorel,

Vivek Nigam and I are using SMT with Maude to analyze time sensitive security protocols. The paper at <https://arxiv.org/pdf/1605.08563> describes our framework and some case studies. You can find the code for the case studies at

<https://github.com/SRI-CSL/VCPublic/tree/master/TimedIntruder2016July>

Best,
Carolyn

On Nov 26, 2017, at 11:57 PM, Dorel Lucanu <dlucanu@info.uaic.ro> wrote:

Dear Carolyn,
Dear Narciso,

Steve told me that you have some real examples using the SMT solver from Maude.
I would appreciate you can send me such examples or point out where I can find them.
Thanks.
Best regards,
Dorel

----- Forwarded Message -----

Subject:Re: examples with CVC4 and Yices
Date:Sun, 26 Nov 2017 18:48:50 -0800
From:Steven Eker <eker@cs1.sri.com>
To:Dorel Lucanu <dlucanu@info.uaic.ro>

Hi Dorel,

I'm out of town at the moment. I don't have any SMT examples other than the artificial ones I made for the test suite and release notes. I recommend you contact Narciso and Carolyn – They o Steven

Sent from my iPad

> On Nov 26, 2017, at 10:35 AM, Dorel Lucanu <dlucanu@info.uaic.ro> wrote:
>
> Dear Steve,
>
> I would like to discuss with my students about the use of a SMT together with Maude.
> I would appreciate if you can tell me where I could find some examples showing the use of CVC4 and Yices.
> Thank you very much.
> Dorel