

OSMC PLANNING – WHITE DECEMBER

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Date: 2010-12-13, Adrian Pop update, Peter F update, Peter A update

1 Goal

The goal for the White December milestone is to focus work on these issues:

- Media
- Fluid to some extent (Streams one-to-one)
- Certain speedup of the compiler by non-expanding arrays
- Easier maintenance via Front-end/Back-end separation
- Better profiling tools

This should be performed in a way that

- Minimizes risks of secondary effects on the compiler
- Minimizes the risk of not meeting the deadline 2011-01-28 (changed from 2010-12-20)!

In order to accomplish this, issues meeting these criteria's have been selected. Furthermore, when possible their time consumption has been roughly estimated. Based on this priorities has been set, and the tickets should be taken care of in the order of priority. If you encounter that an issue is possibly more complicated, risky, or has less impact than expected, then this should be discussed with the group to see if we need to re-priorities. Any issues outside the milestone should only be done if they are considered to be critical by Peter Fritzson.

2 Media

In the table below 1 indicates the lowest impact, risk, and priority respectively.

Description	Impact	Risk	Priority	Effort/Days (superman)	Status	Code Beamer	Comment
Implement a preprocessing phase from SCode to SCode that simplifies instantiation (Media)	5	2	5	3/40	Per	1336	2010-12-13: 25 days left
Do dependency analysis in instElementList (Media)	5	2	4	3/5	Adrian	1334	2010-12-09: 5 days left, requires 1336 above
Redeclare record doesn't work correctly (Media)	4	2	4	3/5	Adrian	1332	2010-12-09: 5 days left
Rewrite Cevalfunc to use the instantiated DAE instead of SCode (Media)	5	1	4	3/10	Per	1333	DONE, speedup of approx factor 2 from this!
Total days				30	Per, Adrian		2010-12-09: Total 17 days left

3 Some Fluid (one-to-one stream connectors)

In the table below 1 indicates the lowest impact, risk, and priority respectively.

Description	Impact	Risk	Priority	Effort/Days (superman)	Status	Code Beamer	Comment
Streams (Fluid)	3	1	3	3/5	Per	1269	2010-12-09: DONE (full impl.)Spent 10? days
Total days				5	Per		2010-12-09: DONE

4 Non-expanding arrays

In the table below 1 indicates the lowest impact, risk, and priority respectively.

Description	Impact	Risk	Priority	Effort/Days (superman)	Status	Code Beamer	Comment
Merging of non-expanded branch	5	2	4	3/5	Alexey, Per		DONE
Passing non-expanded array equations through the front-end	4	2	4	3/10	Kristian		How much left??
Handling non-expanded array declarations and array equations in the back-end	5	1	3	3/15	Kristian		How much left??
Total days				30	Alexey, Kristian, Per	1348	How much left??

5 Front-end/ Back-end separation

In the table below 1 indicates the lowest impact, risk, and priority respectively.

Description	Impact	Risk	Priority	Effort/Days (superman)	Status	Code Beamer	Comment
Separate files into different folders	5	3	5	3/2	Adrian		2010-12-09: DONE, spent 5 days.
Duplicate the DAE we have now in the front-end to have it also in the back-end	3	4	1	3/1	Adrian		
Write a translation phase from the front- end DAE to the back-end DAE so they can evolve separately	4	3	1	3/1	Adrian		
Split files so that parts of them end up into either the front-end or the back-end	5	4	1	3/5	Adrian		

Total days					Peter A, Adrian	1344	2010-12-09:7 days left
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6 Better profiling tools

In the table below 1 indicates the lowest impact, risk, and priority respectively.

Description	Impact	Risk	Priority	Effort/Days (superman)	Status	Code Beamer	Comment
Finish the MetaModelica profiling framework	4	4	3	3/5	Adrian		2010-12-09:5 days left.
Total days				5	Adrian		2010-12-09:5 days left