

Anubis - Feature #17

Allow the definition of aliases of types.

09/21/2007 10:27 PM - Alain Prouté

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:	Alain Prouté	% Done:	0%
Category:	Compiler	Estimated time:	0.00 hour
Target version:	1.x	Triage Stage:	
Platform:			
Resolution:			
Description			
Allow the definition of aliases of types.			

History

#1 - 07/21/2008 01:49 PM - Anonymous

Can we have a little more explanations about this enhancement, please?

How should it works? What is the benefit compaired to a form like :

```
define [[ChildType]]:
  child_type(ParentType).
```

#2 - 07/21/2008 02:04 PM - Alain Prouté

If you write:

```
type [[ChildType]]:
  child_type(ParentType).
```

what you get is a 'clone' of [[ParentType]] which is **distinct** from [[ParentType]]. On the contrary an alias is just another name for the **same** type.

Of course, this is an important distinction since the compiler determines one and only one type for each term.

#3 - 07/21/2008 02:22 PM - Anonymous

Alright, but what are the benefits ?

In my mind, a great enhancement can be *performances*, but only if a clone can't be used in place of the original (in other words, they are different types with same definition).

Example. With the form

```
define [[ChildType]]:
  child_type(ParentType).
```

the use of `[[ChildType]]` will create some (useless) overload because to access to the value, we need to extract the parent type. If the compiler known this is a clone, It will be able to do some optimisation and make value access as efficient as the parent (or original) type because their are exactly the same in memory.

#4 - 07/21/2008 02:34 PM - Alain Prouté

The optimization is another problem (not yet solved). I spoke only about semantics. The 'feature' of aliases is that we may use a simple short name instead of a complicated schema applied to several types which may themselves be schemas applied to etc... This is just for comfort, readability, and maybe also a conceptual enhancement. This is still to be discussed. Anyway, aliases are not implemented yet.