

# The MTASC compiler

...the Open Source Harmony

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# MTASC ?

- What is MTASC ?  
An AS2 commandline compiler
- What is it doing ?  
...compiling
- What is it not doing ?  
...help you to be rich



# Past

- Before : SWF decompiler, obfuscator
- December 2003 : ASML
- April 2004 : Motion Types
- October 2004 : MTASC
- Give back to the community



# RoadMap

- Started on 20 October 2004
- Beta 1 on 25 October 2004
- Version 1.0 on 26 January 2005
- (more versions following)
- Version 1.10 on 14 Sept 2005



# During this time...

The FAME platform :

use MTASC together with Eclipse...  
a Full Featured IDE

May 2005 : OSFlash.org !!!

an OS community for Flash



# A sample Using MTASC

- c:\work\Test.as :

```
class Test {  
    static function main( mc : MovieClip ) {  
        mc.createTextField("tf",0,0,300,300);  
        mc.tf.text = "Hello World !";  
    }  
}
```

- Compile using :

```
mtasc -swf test.swf -main -cp c:\work Test.as
```

# MTASC -trace Feature

- Redirect trace() calls in your application

```
mtasc -trace my.Class.myTrace ...
```

- Add debug informations :

```
trace("something") =>
```

```
my.Class.myTrace
```

```
("something", "Test::foo", "Test.as", 4);
```

- Remove traces easily

```
mtasc -trace no ...
```



# The Present

- MTASC is stable : try it !
- The fastest AS2 compiler out there
- Make your everyday life Better
- 1.11 might be last version ?





# The Future

- New Challenges :
  - ActionScript 3 ?
  - AVM2 : new better virtual machine
- Why MTASC is successful ?
- It's all about innovation



# The haXe Programming Language

- A programming language for the web

web : HTML/CSS/JS/Flash/PHP/Perl/SQL...

- What is haXe ?

a programming language with a commandline  
compiler

powerful features

- The Future... right now ?

<http://haxe.org>

# haXe is Multi-Platform

- Target Flash / SWF :  
you can use haXe for doing your Flash work
- Target JavaScript :  
you can use haXe to work with Browser DHTML/AJAX
- Target Neko :  
you can use haXe to generate Dynamic Webpages  
...and much more

# haXe is Powerful

- Has Classes

All the OO stuff you like

And new great things such as Generics, Iterators

- Has Type Inference

Don't write types, still your code is strictly typed !

- Has Dynamics

When you want to do untyped things, just say it !

# haXe Generics

```
native class Array<T> {  
    function new() : Void;  
    function get( index : Int ) : T;  
    function set( index : Int, value : T) : Void;  
    //...  
}  
//...  
var a : Array<String> = "a:b:c:d".split(":");
```

# haXe Type Inference

```
var x = new MyClass (p1 ,p2 ,p3) ;
```

```
var x = o.someFunction() ;
```

```
function isempty(x) {  
    return ( x == "" ) ;  
}
```

# haXe and Flash

- haXe can compile to SWF

For Flash Player 6, 7, 8

Later : for Flash Player 8.5 / AVM2

- It means you can use it (almost) right now !  
no need to wait for the Player being installed by users
- haXe can use all Flash APIs

# haXe an JavaScript

- haXe can « generate » to JavaScript
- It helps you writing portable JS code
- You can access DHTML Browser APIs  
and they're strictly typed !



# haXe and Neko

- Neko ?

A dynamicly typed intermediate language

With a fast embeddable Virtual Machine : NekoVM

- Can run on Apache (mod\_neko)
- Can run using commandline
- Can be embedded into your EXE

# haXe and Neko

- haXe can generate to Neko
- You can power your websites using haXe
- You can use all Neko APIs
  - MySQL
  - System (files, directories, ...)
  - Regexp...

# haXe : all Together

- haXe is providing a Common way to do things

You don't have to change language all the time

You can reuse your code... everywhere

- The haXe Standard library **IS** standard

The same for Flash/JS/Neko

- Then there is specific APIs for each platform

# haXe current Status

- Alpha 1  
lexer, parser, typer : more than half of the work  
only started a few days ago
- Will soon target Flash Player
- Look at <http://haxe.org>

# haXe Community

- How can I help ?

Try to use haXe, give feedback, bug reports

Blog and talk about it

Write libraries

- The haXe community process

You can submit features / libraries for approval

They might be integrated in the haXe distribution



Questions ?