

Objective-C ==> RubyMotion
A fly in the ointment

Oleksandr Dodatko
Dnepropetrovsk, Ukraine
2013



RubyMotion is a Buzzword



Marc Lainez @mlainez

Yesterday: Xcode => nothing
good came out of it.

Today: Rubymotion => almost
finished an app.



After years of iOS work,
RubyMotion seems like a
thousand kittens playing the
piano while sliding down a
double-rainbow.

Johannes Fahrenkrug
Founder, Springenwerk

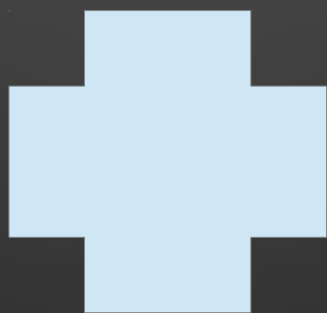


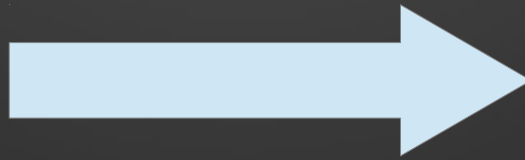
Matt Brewer @macfanatic

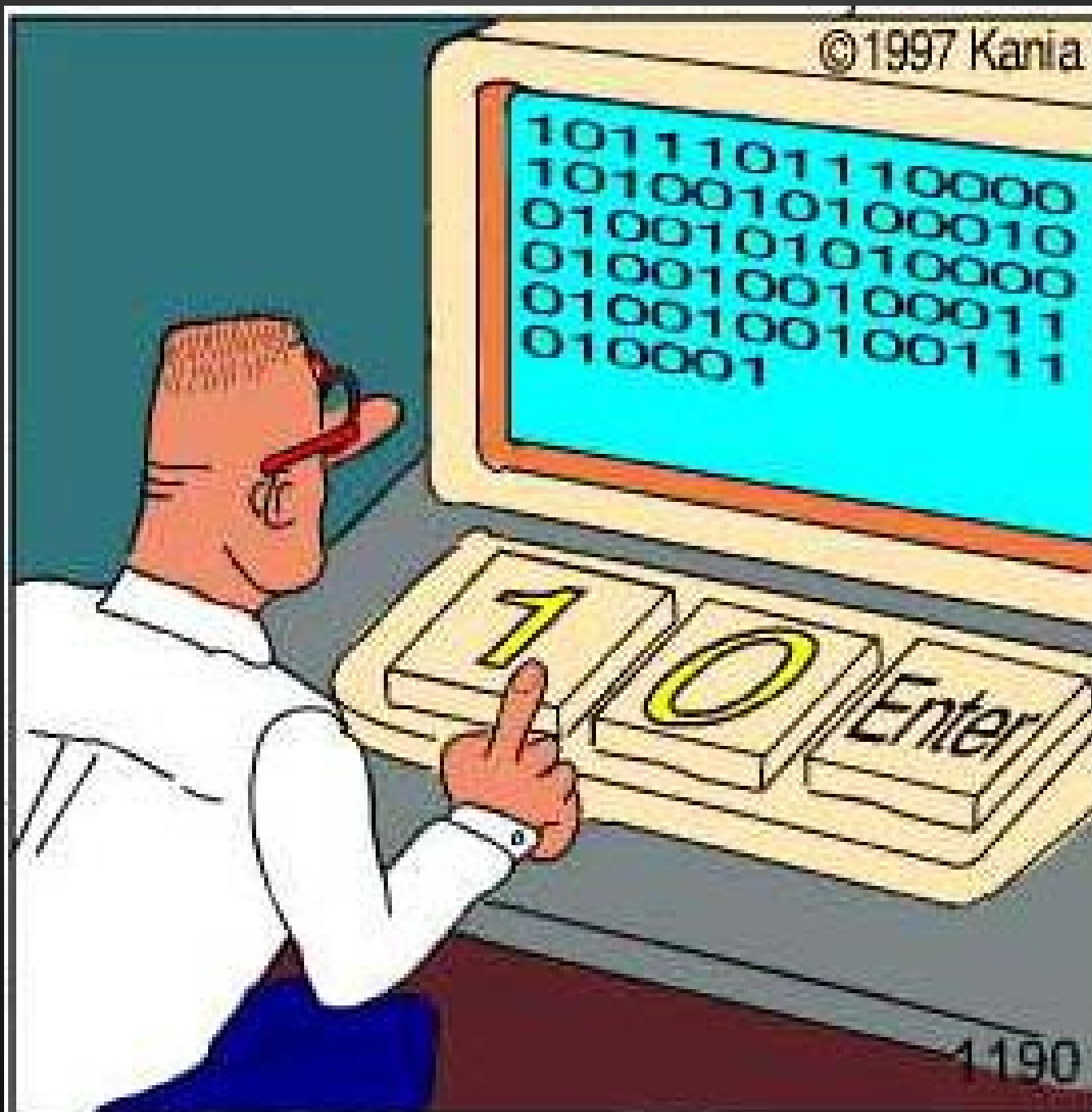
@RubyMotion Love,
absolutely needed.



Introducing RubyMotion I had
3 goals in mind







Real programmers code in binary.

Preconditions



Sitecore MobileSDK



Choose a template for your new project



iOS

Application

Framework & Library

Other



OS X

Application

Framework & Library

Application Plug-in

System Plug-in

Other



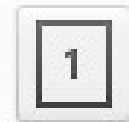
Master-Detail
Application



OpenGL Game



Page-Based
Application



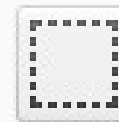
Single View
Application



Tabbed Application



Utility Application



Empty Application



Master-Detail Application

This template provides a starting point for a master-detail application. It provides a user interface configured with a navigation controller to display a list of items and also a split view on iPad.

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Problem #1 : Memory leaks



Object cycles, when two or more objects refer to each other, are currently not handled by the runtime, but will be in future releases.

Ruby

MyController

+model():MyModel*

MyModel

+delegate():WeakRef*

Native

WeakRef

+target():id

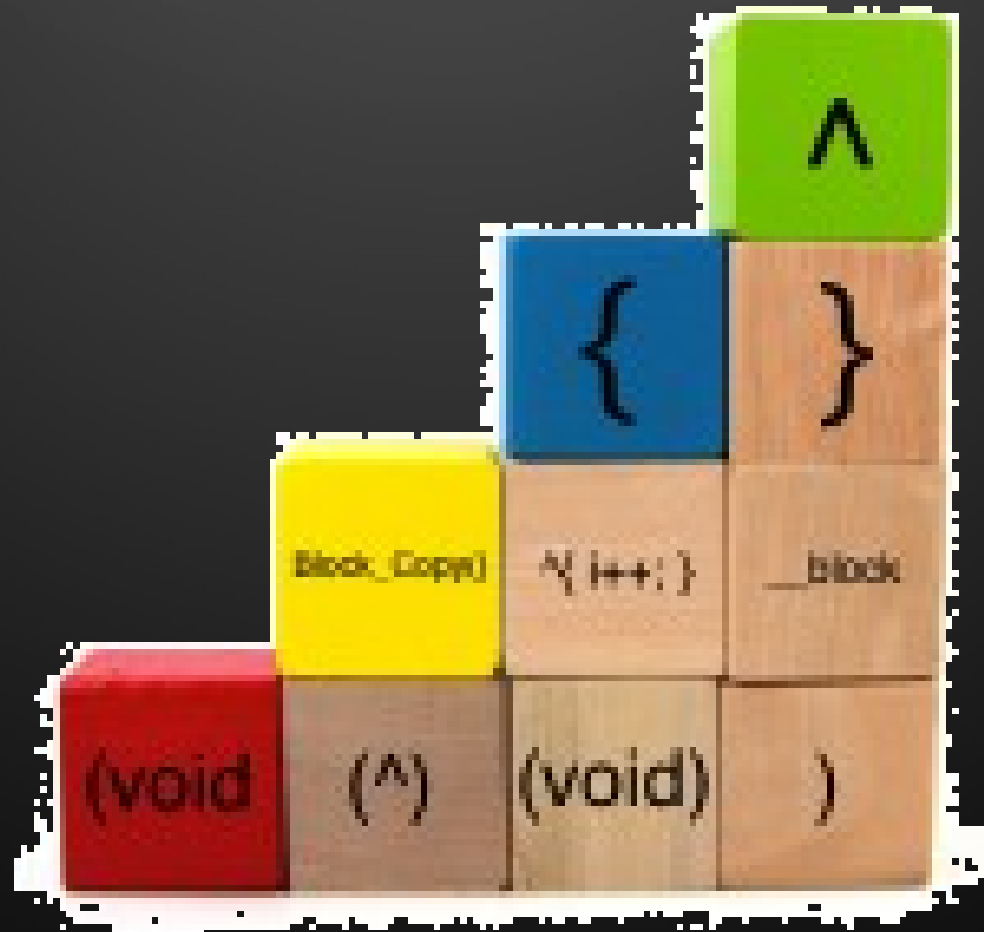


Farcaller/motion-memorymanagement
Dodikk/MotionBlocks

SOLD

Problem #2 :

Block API do not compile



```
typedef void (^BBAsyncOpResult)(id result, NSError  
*error);  
typedef void (^BBAsyncOp)(BBAsyncOpResult handler);
```

```
@interface BlockBuilder : NSObject
```

```
-(BBAsyncOp)itemsReader;  
-(BBAsyncOpResult)itemsReaderCallback;
```

```
@end
```

Objective-C stub for message
`itemsReader' type `@?
`@(angry)' not precompiled.

Make sure you properly link
with the framework or library
that defines this message.

RM-9 Cannot override an Objective-C method accepting C-block as argument(s)

0 ↑

Issue is visible to: All Users

Currently the static compiler is not able to handle the definition of Objective-C selectors accepting C-level blocks as arguments.

There are at the time of this bug report no protocol methods in the iOS SDK that accept a C-level block, but this is the case for 3rd-party libraries such as AFNetworking

```
- (AFHTTPRequestOperation *)HTTPRequestOperationWithRequest:(NSURLRequest *)urlRequest success:(void (^)(AFHTTPRequestOperation *operation,
```

Trying to override this method in RubyMotion will result in this error at runtime:

```
2012-12-12 17:56:42.444 ruby[19319:f0b] unrecognized compile type '<@v@>' to Ruby (TypeError)unrecognized compile type '<@v@>' to Ruby (Ty,
```

Comments (2)

History

Linked Issues (0)



● guest

27 Feb 2013 18:05

4 weeks ago

I'm getting a similar error when adding a cocoapod to my Rakefile:

#

```
pod 'LTUpdate', '~>0.0.1'
```

That's the only thing I added and when i bundle && rake I get:

```
2013-02-27 10:58:51.178 ruby[99206:f0b] unrecognized compile type '<@vB@>' to Ruby (TypeError)
unrecognized compile type '<@vB@>' to Ruby (TypeError)
rake aborted!
```

Removing the pod builds correctly.

[edit](#) | [delete](#)



● Laurent Sansonetti

03 Mar 2013 01:20

4 weeks ago

Moving priority to "Expected" as many users have been requesting this.

#

Related Changes

Priority

Important → Expected

Add Comment

You can use [wiki markup](#) in description

[hipbyte.myjetbrains.com/youtrack/
issue/RM-9](http://hipbyte.myjetbrains.com/youtrack/issue/RM-9)

Use **id** instead of block
typedefs

```
typedef void (^BBAsyncOpResult)(id result, NSError  
*error);
```

```
typedef void (^BBAsyncOp)(id handler);
```

```
@interface BlockBuilder : NSObject
```

```
-(id)itemsReader;
```

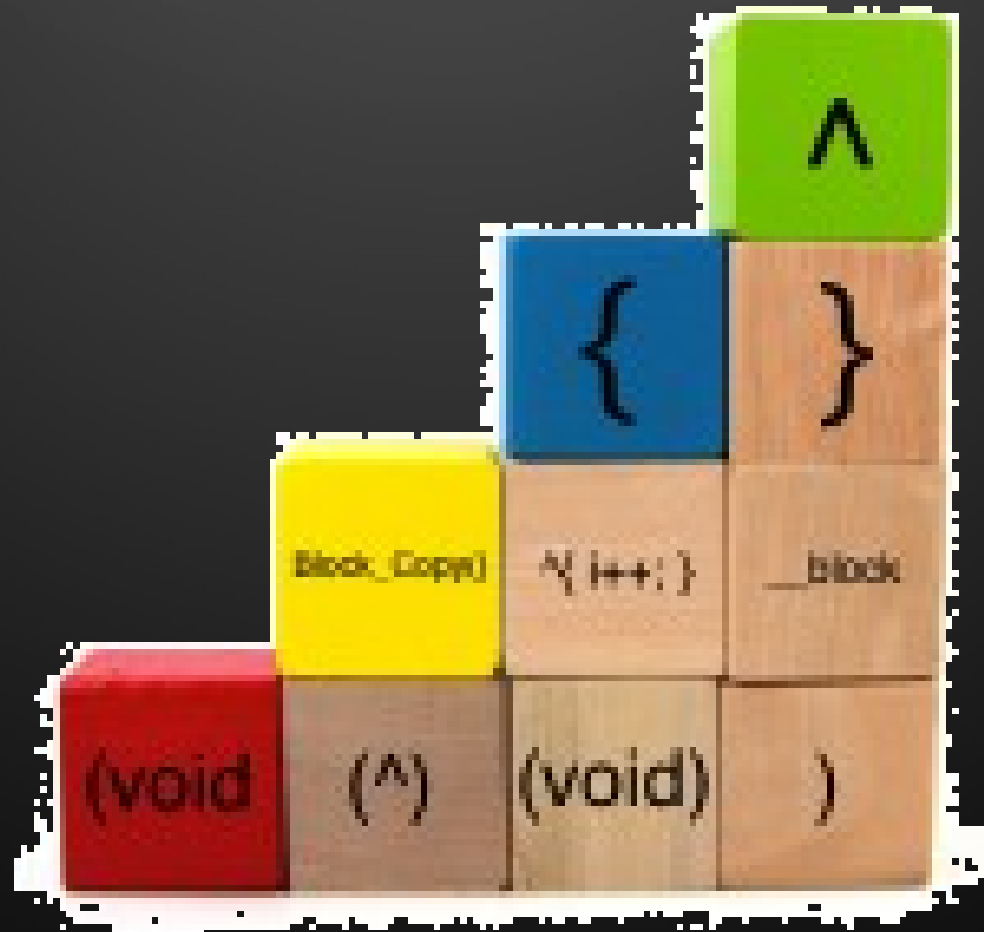
```
-(id)itemsReaderCallback;
```

```
@end
```

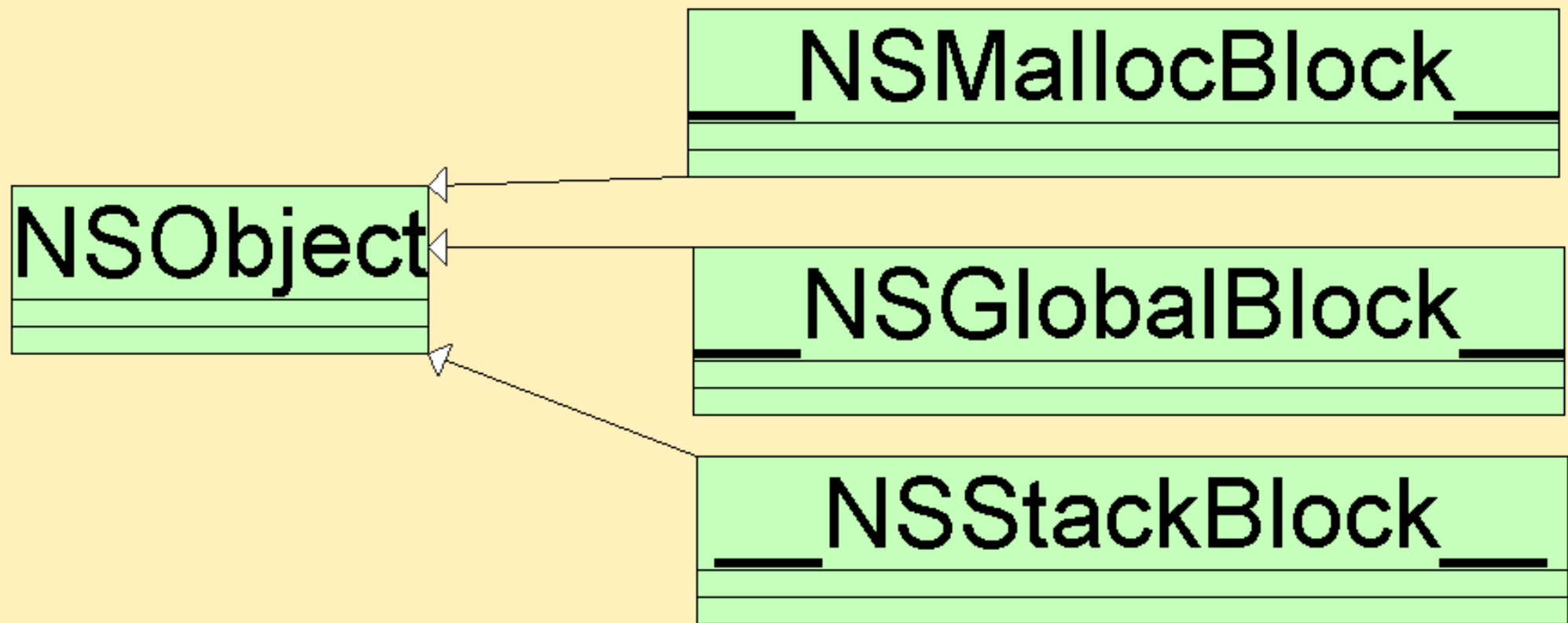
SOLD

Problem #3 :

How to Invoke an ObjC Block?



Foundation



BLACKJACK



AND HOOKERS

@implementation NSObject (BlockForRuby)

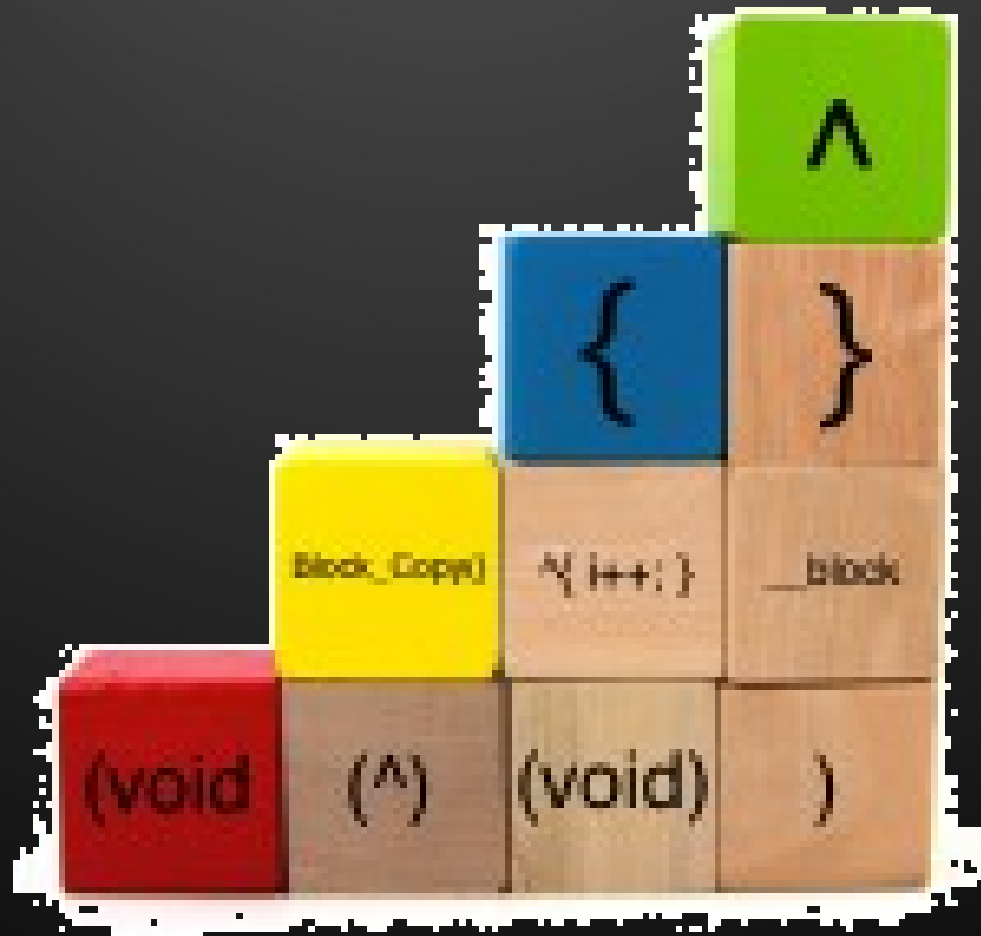
```
-(id)objc_BlockSend1:( id )arg_  
{  
    typedef id(^Block1)( id arg_ );  
  
    Block1 block_ = (Block1)self;  
    return block_( arg_ );  
}
```

```
-(id)objc_BlockSend:( NSArray* )args_{  
    switch ( [ args_ count ] ){  
        case 0:  
            return [ self objc_BlockSend0 ];  
            break;  
        case 1:  
            return [ self objc_BlockSend1: args_[0] ];  
            break;  
        default: //TODO : add as many as you want  
            break;  
    }  
    return nil;  
}
```


SOLD

Problem #4 :

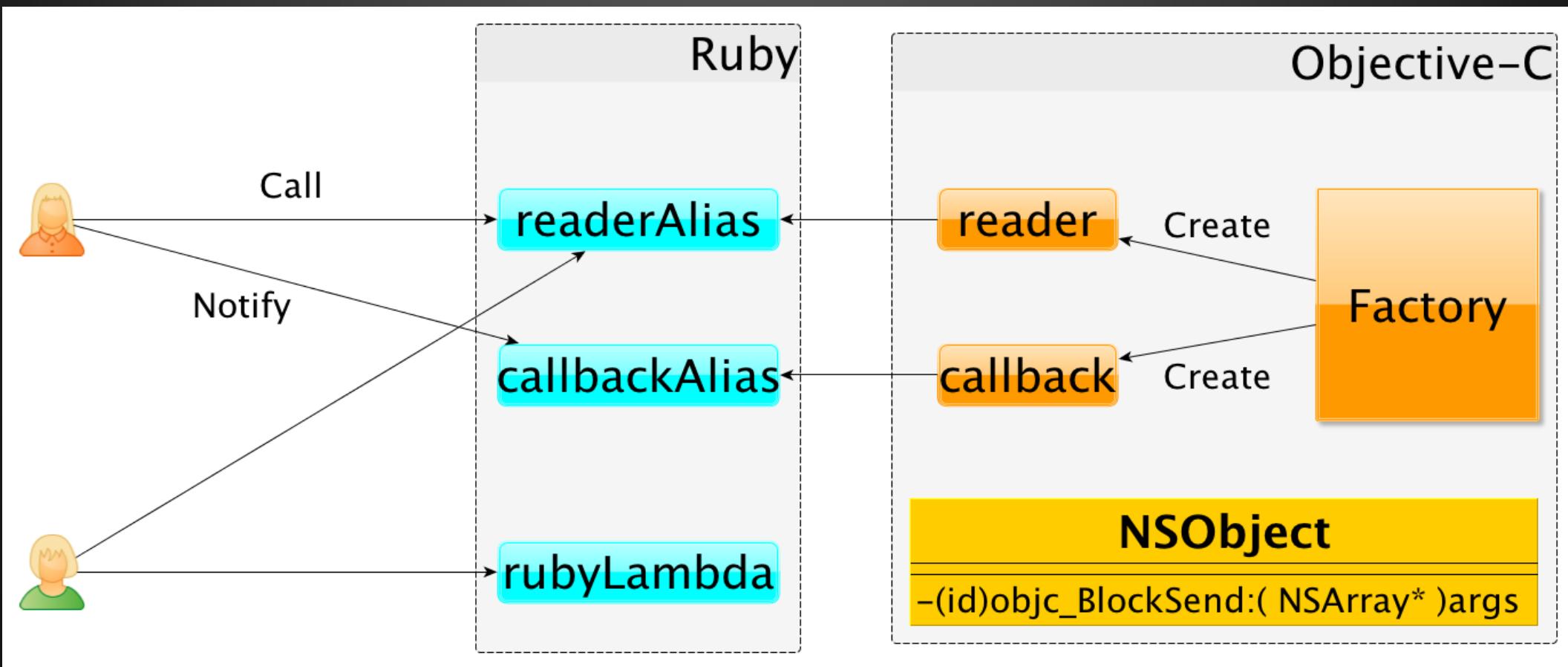
ObjC blocks crash



```
reader =  
blockBuilder.itemsReaderWithRequest()
```

```
callback =  
blockBuilder.itemsReaderCallback()
```

```
reader.objc_BlockSend( [ callback ] )
```



Demo

Being Processed since last 56 days 7 hrs

#511 Lambda callbacks are not received from the native code. The application crashes.



Alexander Dodatko

reported 2 months ago

Reply

Mark ticket as closed

Add people

Environment: OSX 10.8.2, RubyMotion 1.32, Xcode 4.6

I have an operation that uses ObjC block callback to notify about its result.
When attempting to pass the ruby block it just does not get called back. The application crashes.

reader.class : *NSGlobalBlock*

callback.class : *NSGlobalBlock*

2013-02-05 12:35:26.840 HelloMotion[6711:1d903] objc_BlockSend -=== switch 1

2013-02-05 12:35:26.841 HelloMotion[6711:1d903] [EXECUTED] itemsReaderWithRequest

2013-02-05 12:35:26.842 HelloMotion[6711:1d903] handler : #<Proc:0xdb42020 (lambda)>

2013-02-05 12:35:26.842 HelloMotion[6711:1d903] handler class : Proc

2013-02-05 12:35:26.843 HelloMotion[6711:1d903] Ruby block passed. Invoking call...

(main)> * simulator session ended with error: Error Domain=DTiPhoneSimulatorErrorDomain Code=1

"The simulated application quit." UserInfo=0x100507940 {NSLocalizedString=The simulated application quit., DTiPhoneSimulatorUnderlyingErrorCodeKey=-1}

rake aborted!

<https://github.com/Igor-Khomich/RubyMotionTestApp/>

<https://groups.google.com/forum/#!topic/rubymotion/ohzpbgCqOPM>

Created on Tue, Feb 5 at 1:19 PM
Agent: Laurent Sansonetti

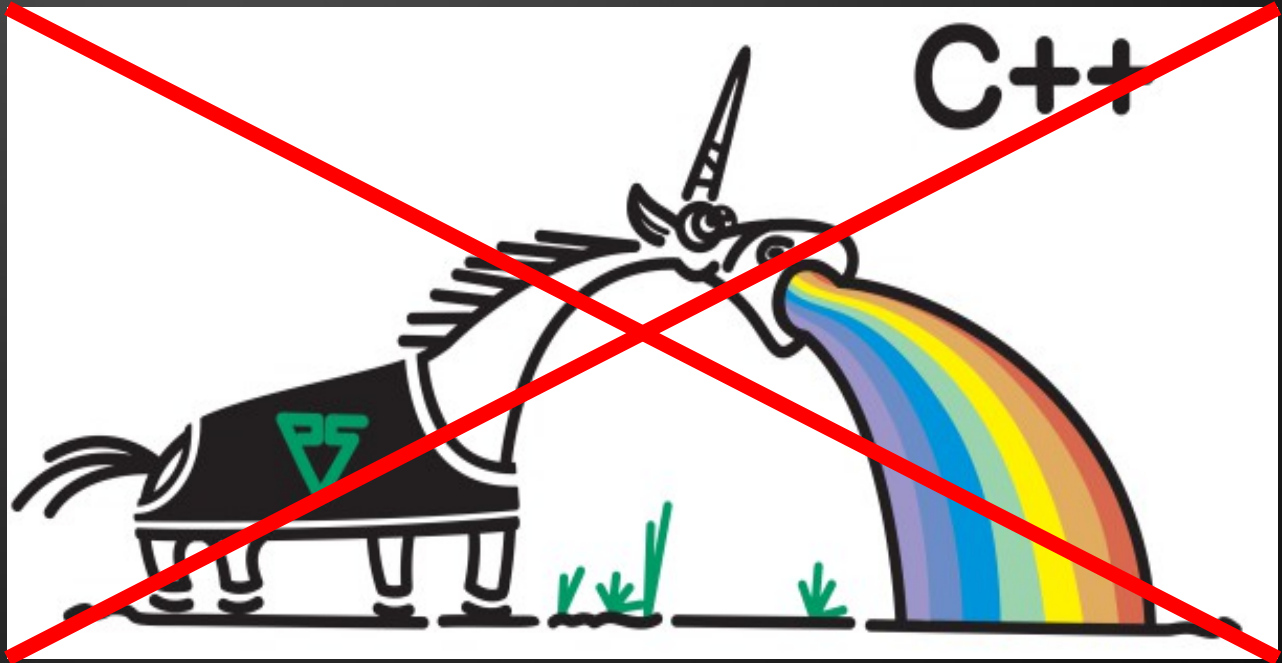
Just in case you need the log

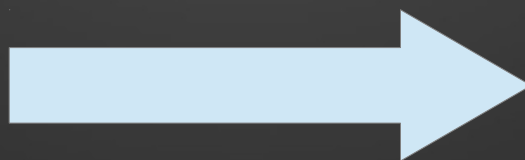
```
reader.class : __NSGlobalBlock__
callback.class : __NSGlobalBlock__
2013-03-07 12:35:43.985 HelloMotion[1250:1d903] [EXECUTED]
itemsReaderWithRequest
2013-03-07 12:35:43.986 HelloMotion[1250:1d903] handler :
<__NSGlobalBlock__: 0x14b500>
2013-03-07 12:35:43.987 HelloMotion[1250:1d903] handler class :
__NSGlobalBlock__
2013-03-07 12:35:43.987 HelloMotion[1250:1d903] [EXECUTED]
itemsReaderCallback
2013-03-07 12:35:43.988 HelloMotion[1250:1d903] result : ololo
((null))> rake aborted!
Command failed with status (1):
[DYLD_FRAMEWORK_PATH="/Applications/Xcode.a...]
```


GAME
OVER



One More Thing...







TestingWithFrank/PublicAutomation

Unstable. Did not make it work.

RM-83 Various behaviors for UI specs results

0 ↑

Issue is visible to: [All Users](#)

Using this project : <https://github.com/clayallsopp/MotionTest>

All tests pass for some users, and fail for some.

First, analysis showed it could be related to some accessibility setting. But tweaking various settings didn't get any result.

See this google group for more informations : <https://groups.google.com/d/topic/rubymotion/Sv9p3o4aVSs/discussion>

Comments (2)

History

Linked Issues (0)



● Shizuo Fujita

01 Apr 2013 04:48

1 day and 17 hours ago

What difference do this have with <http://hipbyte.myjetbrains.com/youtrack/issue/RM-66> ?



● Joffrey Jaffeux

01 Apr 2013 12:17

1 day and 9 hours ago

No difference mistake from me. I deleted the other one.

[hipbyte.myjetbrains.com/youtrack/
issue/RM-83](http://hipbyte.myjetbrains.com/youtrack/issue/RM-83)



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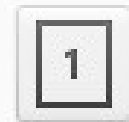
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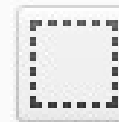
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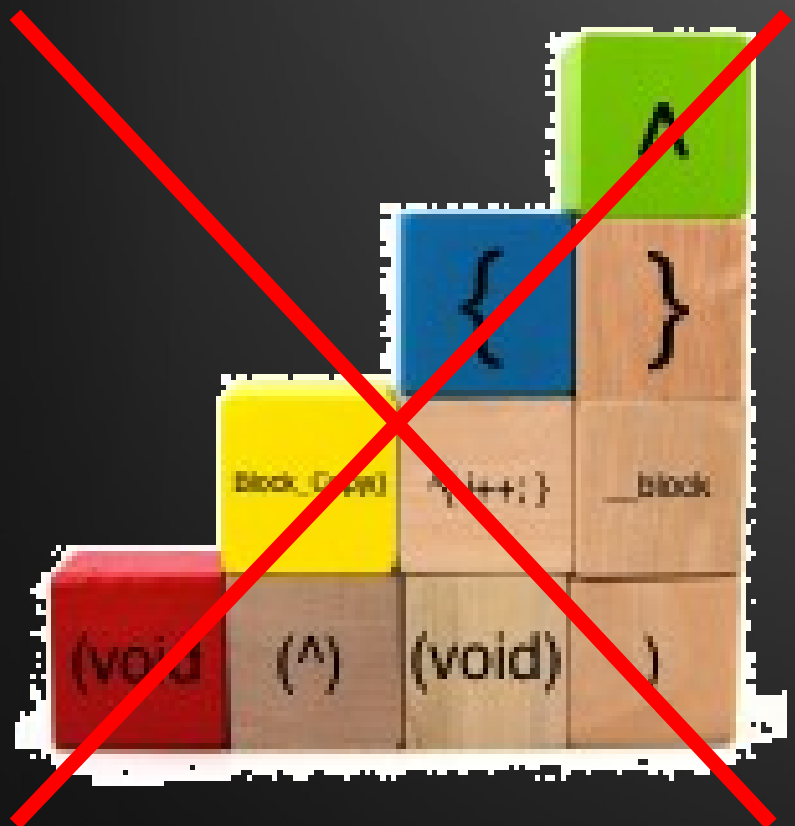
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Stay Native





Oleksandr Dodatko



dodikk88.tutor@gmail.com



alexander.dodatko.work



@dodikk88



github.com/dodikk

