

# 我愛Cocoa: 秘技與必備招

My Favorite Cocoa Features, and Some Must-Have's

CocoaHead.tw Talk

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# In this talk...

Some [self introduction];

Why Cocoa?

What I use everyday

NSTableView: an example of Cocoa perks

Some must-have 3rd party modules

# [self introduction];

An “accidental” Mac developer



OpenVanilla since 2004



ObjectiveFlickr

Consultant work

<http://lukhnos.org>

# Why Cocoa?

It rocks

It's natural

Objective-C is not difficult at all

- Objective-C++ rocks even more

And well... you don't have many choices

- May be seen as negative though :p

# Things I Use Everyday

(reads: my job depends on them)

# Kind of a bacon earner

Distributed Objects (DO)

NSThread and `-performSelector*`:

NSTask

NSAttributedString (Cocoa text system)

And numerous design features

- Informal protocol
- Delegate

# Distributed Objects (DO)

# Objective-C DO

OpenVanilla uses it

- Every candidate window action is a DO call

Transparent

- Proxy object as if it's living on your side

Simple

- Usually less than 10 lines, server+client
- `NSConnection` does it all

Very popular in Cocoa apps

# How to do it

## Vend your object from server side:

```
- (void)someServerInit
{
    NSConnection *connection = [NSConnection defaultConnection];
    [connection setRootObject:self];
    if (![connection registerName:@"Foobar"]) return NO;
}
```

## From client side:

```
id serverObject =
    [[NSConnection rootProxyForConnectionWithRegisteredName:
     @"Foobar" host:nil] retain];
if (serverObject)
    [serverObject setProtocolForProxy:@protocol(FoobarProtocol)];
[serverObject doStuff]; // do the work
```

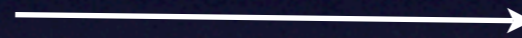
## client side

```
id result = [serverObject doThis:@"blah"];
```



serverObject

packaged message



packaged result

## server side



vended object

```
- (NSString*)doThis:(id)blah  
{  
    // ...  
    return aString;  
}
```

# NSThread and -perform\*:

GUI apps can't resist multithreading

- Fact of life

NSThread simplifies the task

-performSelector\*: make life easier

- Simplifies communication overhead
- Still, caveat programmer

Eventually things like @synchronized get in

- Time to study multithreading

# NSTask

Making system calls easy

Leverage OS X's UNIX perks

- Pass data processing to Perl, Ruby or Python
- sips for simple image processing
- rsync to sync data

Reads status with pipe

Can waitUntilExit or just let it do the job

# NSAttributedString

The least you should know for Cocoa text

As simple as NSString, plus attributes

CJKV handling is not stellar though

- Use <your favorite Unicode library> here

# NSTableView: Example of Patterns

# NSTableView example

Sends user operations to the delegate

Fetches data from dataSource

Writes data on dataSource if writable

“Informal protocol” saves implementation headache

Two methods later and you’re up running

Some Must-Have's

# Making My Life Easier

ObjectiveFlickr

NSExtensions

BSJSONAdditions

Base64 Additions from Colloquy

# ObjectiveFlickr

Because I wrote it

- <http://lukhnos.org/objectiveflickr/blog>

Simplifies making HTTP requests

- OFHTTPRequest
- Specialized OFPOSTRequest

Flickr in the Objective-C way

On Flickr API library list

Used by many, e.g. FlickrBooth



# NSExtensions

Side project of OpenVanilla

- <http://rt.openfoundry.org/Foundry/Project/index.html?Queue=447>

I need to update it

Some NSString categories

# BSJSONAdditions

I love JSON

- XML can be hideous

Makes life easier

- Turns JSON string into property list

Fetch the code from:

- <http://blakeseely.com/blog/archives/2006/04/25/bsjsonadditions-13/>

# Base64 Additions

## From Colloquy

- <http://colloquy.info/project/browser/trunk/Additions>

Decodes with an NSData class method

Cocoa people love categories



# For More Information

## Distributed Objects

- <http://developer.apple.com/documentation/Cocoa/Conceptual/DistrObjects/DistrObjects.html>

## Cocoa Text System

- <http://developer.apple.com/documentation/Cocoa/Conceptual/TextArchitecture/Concepts/TextSystemFeatures.html>

## Multithreading

- <http://developer.apple.com/documentation/Cocoa/Conceptual/Multithreading/articles/CocoaSafety.html>

# For More Information (cont'd)

## OpenVanilla

- <http://openvanilla.org>

## ObjectiveFlickr

- <http://lukhnos.org/objectiveflickr/blog>