



"QL and Mac are 25"
25th anniversary 2009

The Mac "died" nine years ago

Ruben Bakker
uncomplex gmbh, Sursee, Switzerland

A little bit about me

- Name: Ruben Bakker
- Living and working: Near Lucerne
- Programming: since September 1984 :)
- Today: writing and selling Mac Software

This talk is about

- The technology behind today's Mac...
- ... and iPhone
- The history of the modern Mac
- Mac and iPhone software development

1967



2000



Sinclair QL
QL forever!

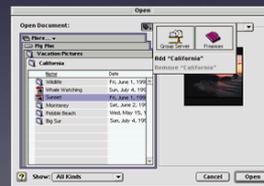
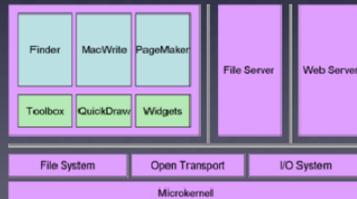
iMac

Sun

PC

What replaced it?

Mac OS Copland?



Gershwin?

Taligent?

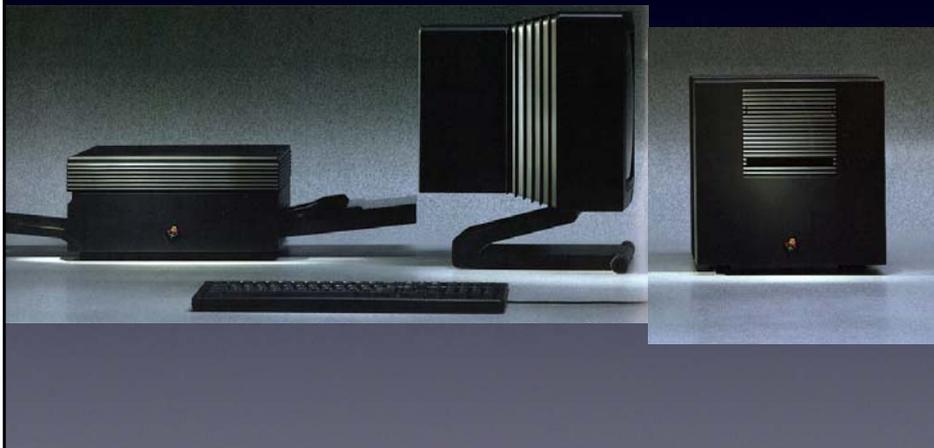
BeOS?



NeXT!



The "Cube"



improve individual productivity.
But that's just not enough anymore.

WHY THE WORLD NEEDS A NEW COMPUTER.

In the 1990s, competitive advantage
will come from improving the productivity
of entire groups, so they can stay ahead
of a world that's changing faster than ever.

The personal computer revolutionized
the way we worked in the 80s.

The next 15 pages may well change the
way we work in the 90s." *-Steven Jobs*



WHAT MAKES A NEXT COMPUTER A NEXT COMPUTER.



*You'll never search for
another switch again.
On a NEXT computer,
you control everything
from the keyboard,
including system power,
sound volume and
display brightness.*

*The right mouse button
can be enabled so when
pressed, the current
menu appears on screen
wherever you happen to
be. (A mouse button on
screens as big as ours.)
If you're a lefty, mouse
button functions can
easily be reversed.*

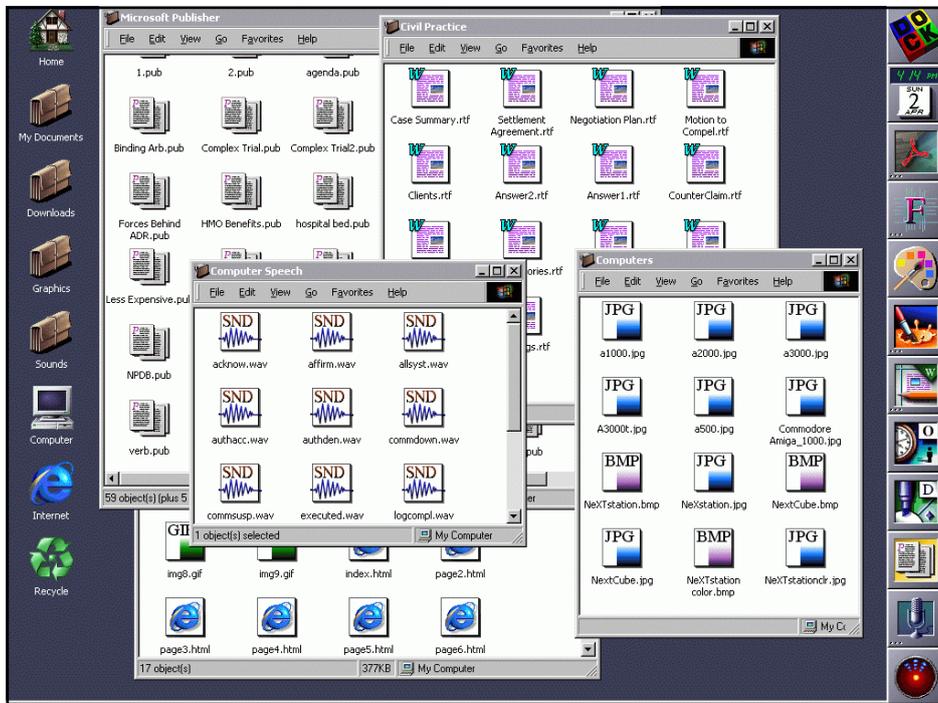
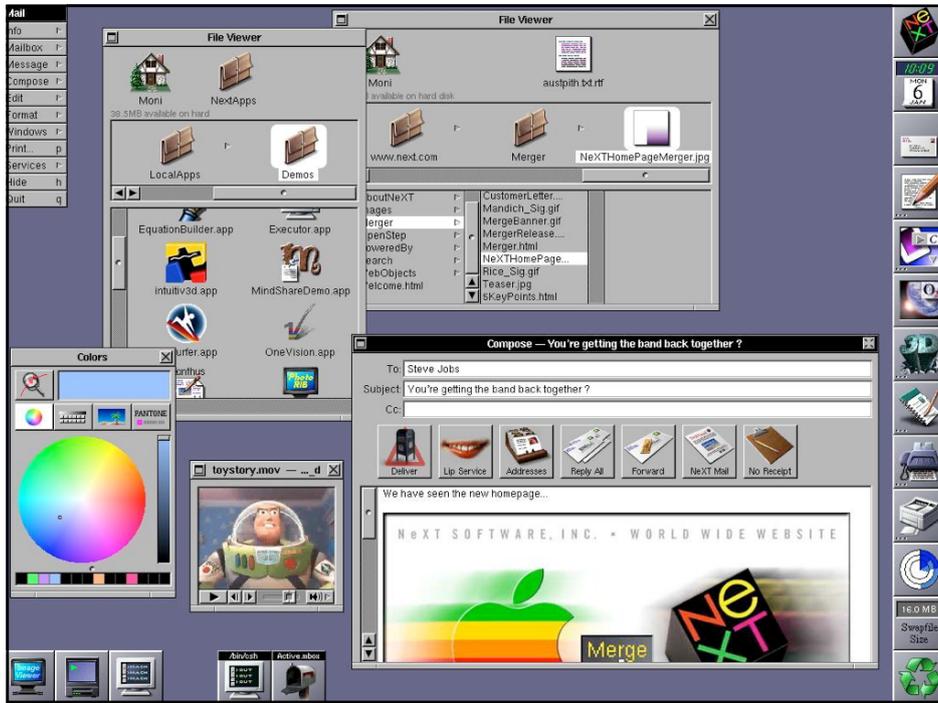


*Only NEXT makes a Digital Signal Processor
chip part of the basic computer architecture.
This chip's ability to crunch huge arrays of
numbers makes CD-quality sound possible.
It also helps in compressing data and sound
files so they can be more easily sent via
NEXTmail.*



*Though significantly slimmer, the NEXTstation has the same computing
power of the NEXTcube. But then, the NEXTcube has a few things to
offer, too. Like an optional optical drive that stores 256 megabytes on
a single disk, up to 2.5 gigabytes of hard disk storage, up to 64 megabytes
of RAM and three NEXTbus™ slots for worlds of new power.*





Mac is NeXT

iPhone is NeXT

NeXTstep yesterday and today

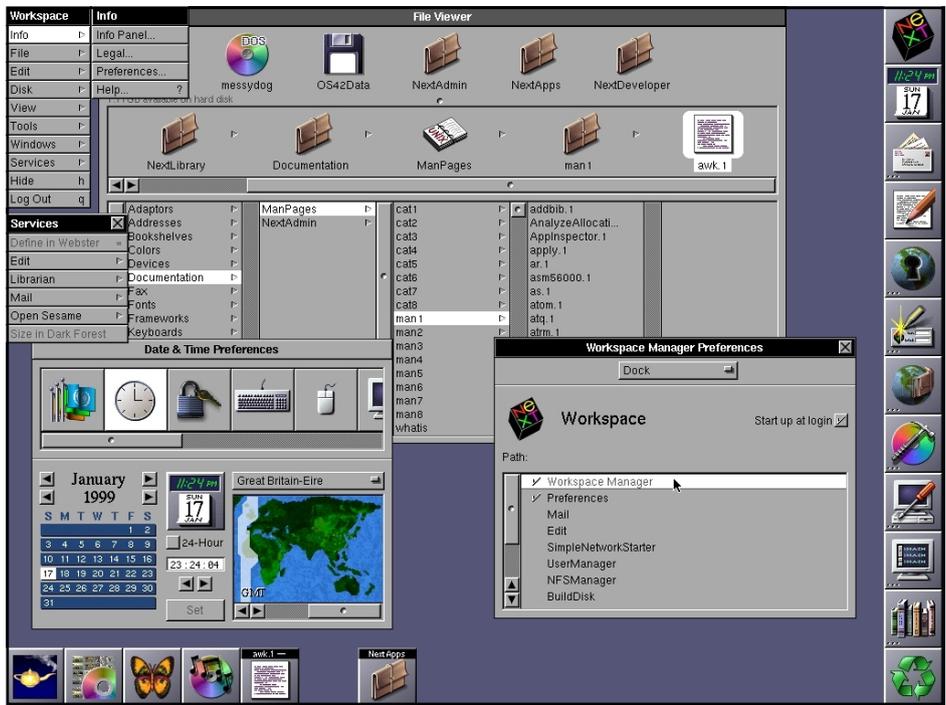
Mach Micro Kernel

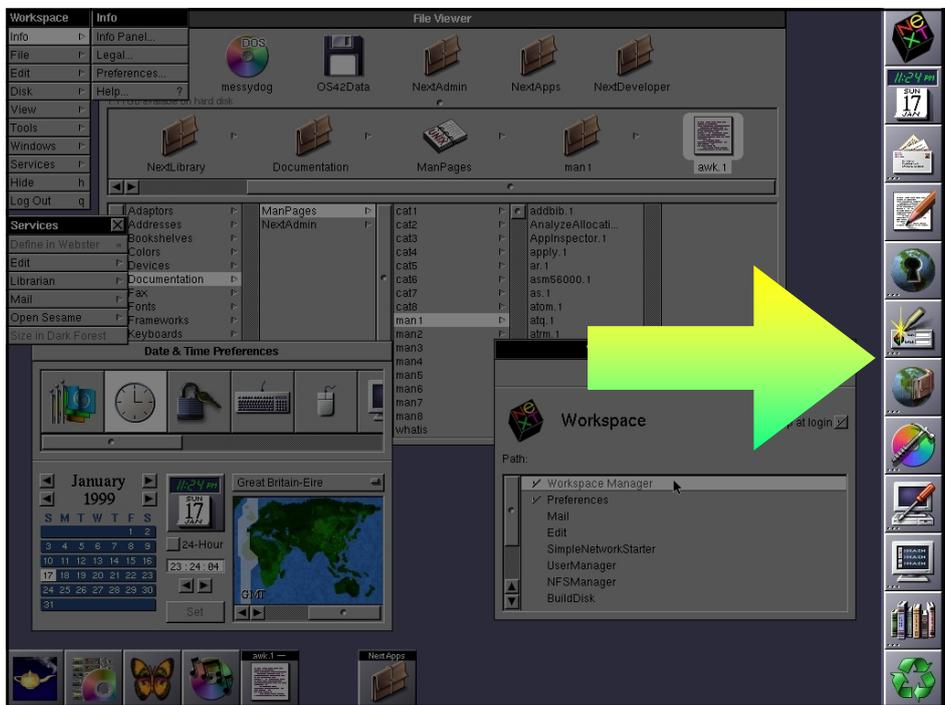
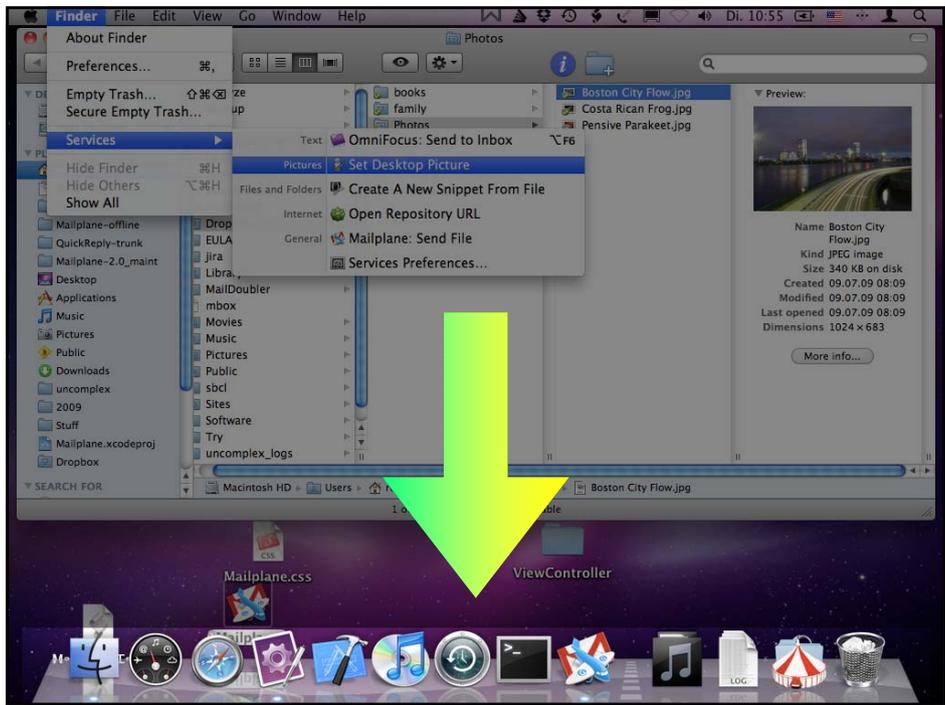
- 1985: started at Carnegie Mellon University
- Virtual Memory support
- Interprocess Communication
- Multiprocessors
- Unix-style APIs (BSD)
- Today: Lives on in the “Darwin” open source project

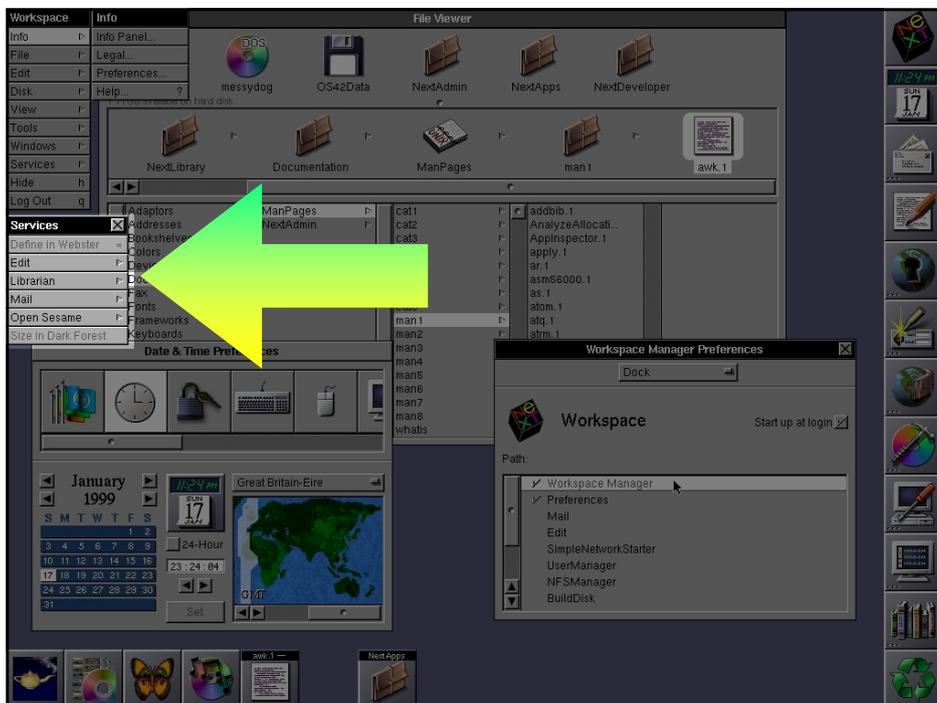
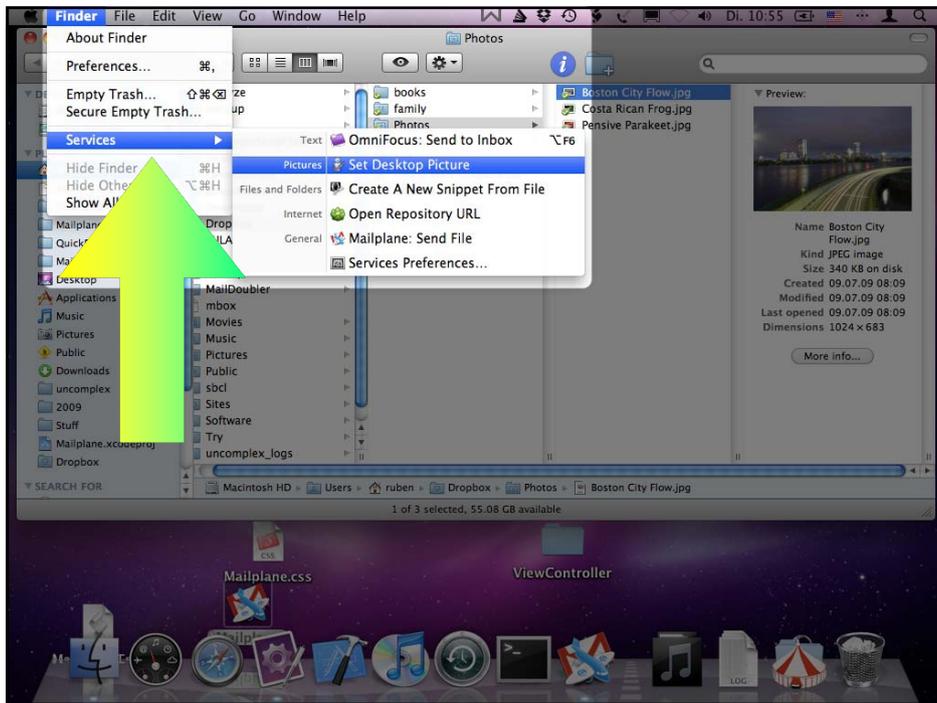
Mach on Mac OS X

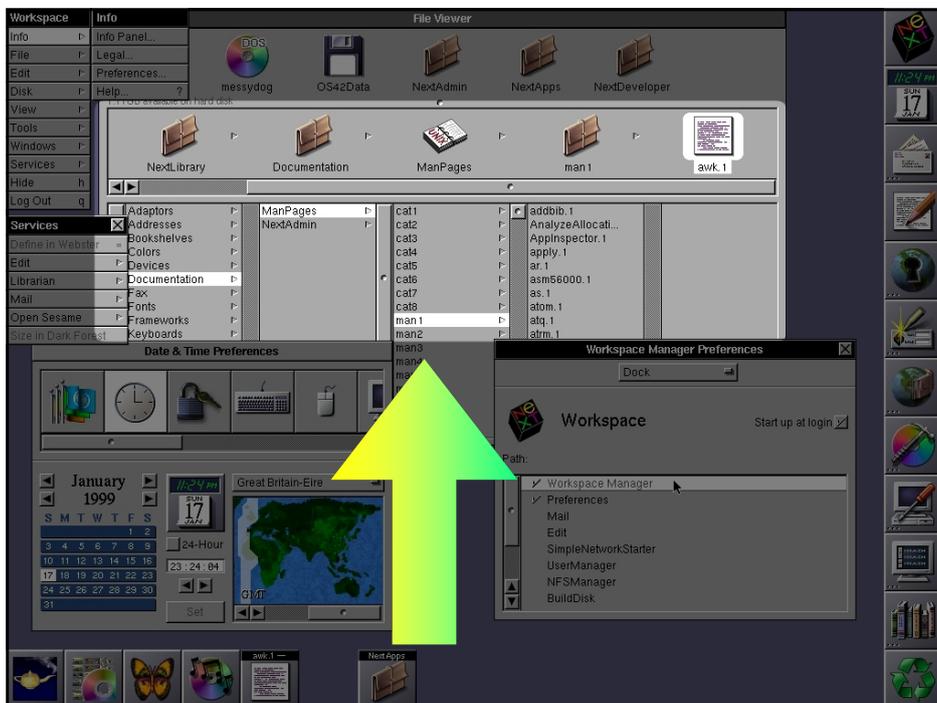
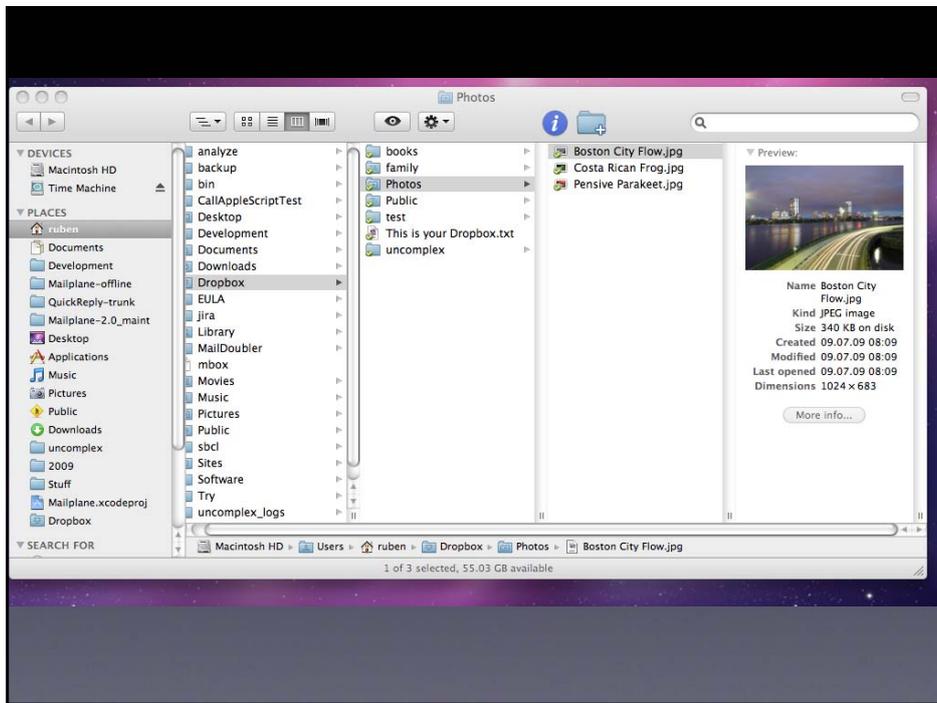
```
Ruben-MacBookPro:~ ruben$ ls -la /
total 37349
drwxrwxr-t 41 root  admin   1462 27 Okt 09:57 .
drwxrwxr-t 41 root  admin   1462 27 Okt 09:57 ..
-rw-rw-r--@ 1 root  admin  21508 27 Okt 10:38 .DS_Store
drwx----- 3 root  admin   102 20 Sep 2008 .Spotlight-V100
d-wx-wx-wt 2 root  admin    68 29 Aug 13:12 .Trashes
drwxrwxrwx 4 root  admin   136 12 Jun 09:36 .bzvol
... listing snipped ...
-rw-r--r--@ 1 root  wheel 18672224 1 Aug 07:49 mach_kernel
-rw----- 1 root  admin   50 23 Mai 2006 mds-crash-state
dr-xr-xr-x 2 root  wheel    1 26 Okt 09:38 net
drwxr-xr-x@ 5 root  wheel   170 5 Feb 2009 opt
drwxr-xr-x@ 6 root  wheel  204 29 Aug 13:03 private
drwxr-xr-x@ 64 root  wheel  2176 29 Aug 12:54 sbin
drwxr-xr-x@ 11 root  admin   374 17 Mai 2008 sw
lrwxr-xr-x@ 1 root  wheel   11 29 Aug 12:54 tmp -> private/tmp
drwxr-xr-x@ 14 root  wheel  476 29 Aug 16:17 usr
lrwxr-xr-x@ 1 root  wheel   11 29 Aug 12:54 var -> private/var
drwxr-xr-x@ 3 ruben admin   102 19 Okt 2008 workspace
Ruben-MacBookPro:~ ruben$
```

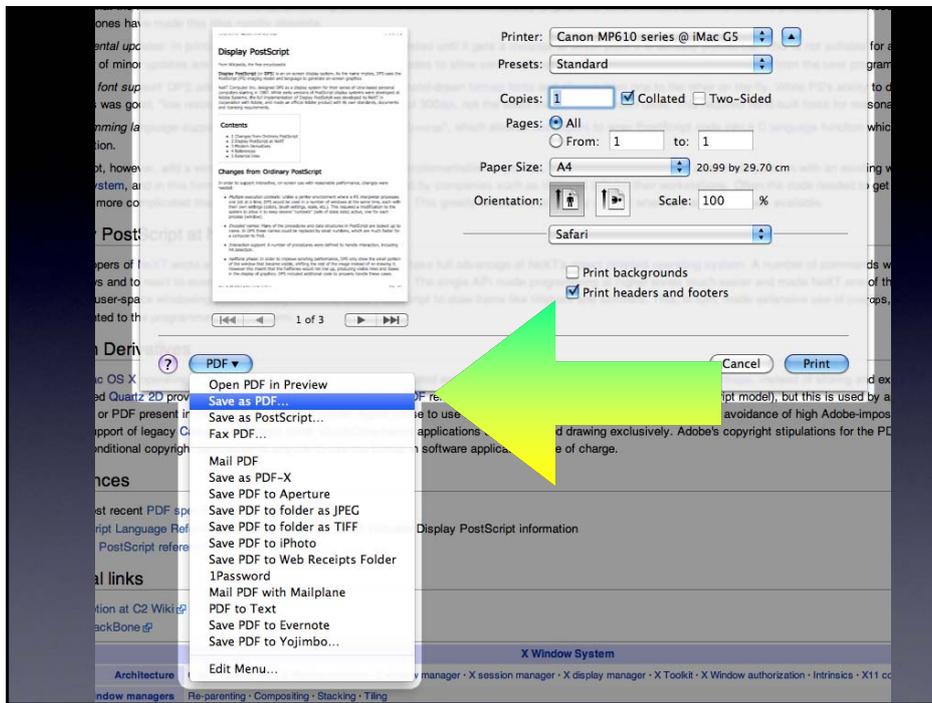
User Interface







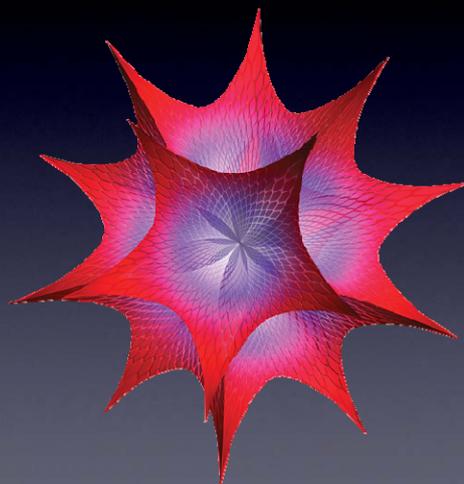




Software
Development
yesterday - today

Software created on
the NeXT

Mathematica



Lotus Improv

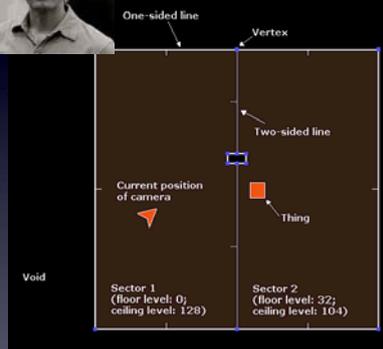
Worksheet1 - View1 - TextSVM.asp

		Année												Chiffres	
		Quantité												Mois	
		Janvier	Février	Mars	Avril	Mai	Jun	Juillet	Août	Septen	Octobr	Novem	Decem	Total	Annuel
Paul Dupont	Fruits	Banane	125	125	125	125	125	125	125	125	125	125	125	125	1500
		Pomme	165	165	165	165	165	165	165	165	165	165	165	165	1980
		Poire	159	159	159	159	159	159	159	159	159	159	159	159	1908
		Abricot	124	124	124	124	124	124	124	124	124	124	124	124	1488
		Orange	124	124	124	124	124	124	124	124	124	124	124	124	1488
	Total	697	697	697	697	697	697	697	697	697	697	697	697	8394	
Pierre Martin	Fruits	Banane	145	145	145	145	145	145	145	145	145	145	145	145	1740
		Pomme	154	154	154	154	154	154	154	154	154	154	154	154	1848
		Poire	165	165	165	165	165	165	165	165	165	165	165	165	1980
		Abricot	125	125	125	125	125	125	125	125	125	125	125	125	1500
		Orange	147	147	147	147	147	147	147	147	147	147	147	147	1764
	Total	736	736	736	736	736	736	736	736	736	736	736	736	8832	
Marc Durand	Fruits	Banane	165	165	165	165	165	165	165	165	165	165	165	165	1980
		Pomme	135	135	135	135	135	135	135	135	135	135	135	135	1620
		Poire	132	132	132	132	132	132	132	132	132	132	132	132	1584
		Abricot	124	124	124	124	124	124	124	124	124	124	124	124	1488
		Orange	159	159	159	159	159	159	159	159	159	159	159	159	1908
	Total	715	715	715	715	715	715	715	715	715	715	715	715	8580	

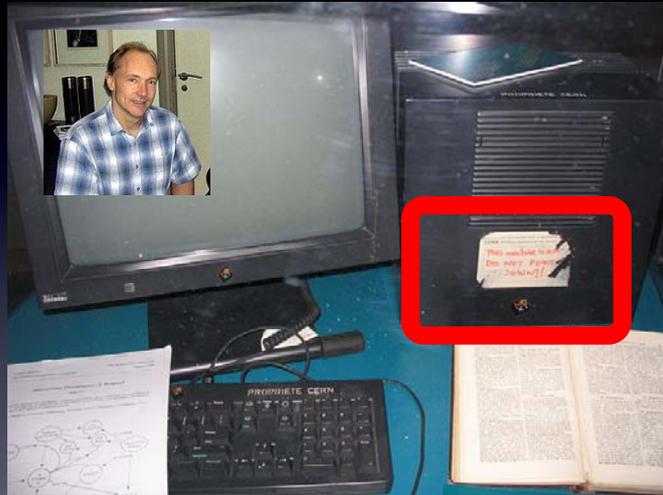
Formulas:

- Chiffre d'Affaire = Quantité * Prix SK-IP Chiffre d'Affaire-Fruits.Total, Total Annuel-Paul Dupont.Chiffre d'Affaire-Banane - Total Annuel-Marc Durand.Chiffre d'Affaire-Orange
- Prime = Chiffre d'Affaire * Pourcentage SK-IP Prime-Fruits.Total, Total Annuel-Paul DupontPrime-Banane - Total Annuel-Marc DurandPrime-Orange
- Fruits Total = groupsum(Fruits) SK-IP Total Annuel>Total
- Année.Total Annuel = groupsum(Année)

Doom & Wolfenstein



Tim Bernes-Lee invited the web on a NeXT



This NeXT runs "CERN HTTPd"

Why on the NeXT?



Objective-C

- 1980s: Brad Cox
- C language extension
- Very efficient and small
- Influenced by Smalltalk-80
- More dynamic than C++

Fraction.h

```
#import <Foundation/NSObject.h>
```

```
@interface Fraction: NSObject {
```

```
}
```

```
@end
```

Fraction.h

```
#import <Foundation/NSObject.h>
```

```
@interface Fraction: NSObject {
```

```
    int numerator;
```

```
    int denominator;
```

```
}
```

```
@end
```

Fraction.h

```
#import <Foundation/NSObject.h>

@interface Fraction: NSObject {
    int numerator;
    int denominator;
}

-(void)print;
-(void)setNumerator: (int)n;
-(void)setDenominator: (int)d;
-(int)numerator;
-(int)denominator;
@end
```

Fraction.m

```
#import "Fraction.h"
#import <stdio.h>

@implementation

@end
```

Fraction.m

```
#import "Fraction.h"
#import <stdio.h>

@implementation

void          "%i/%i"

void          int

void          int

int
return

int
return

@end
```



main.m

```
#import <stdio.h>
#import "Fraction.h"

int          int          const char
```

```
}
```

main.m

```
#import <stdio.h>
#import "Fraction.h"

int    int    const char
// create a new instance
```

main.m

```
#import <stdio.h>
#import "Fraction.h"

int    int    const char
// create a new instance
```

```
// set the values
```

```
    1
    3
```

```
}
```

main.m

```
#import <stdio.h>
#import "Fraction.h"

int      int      const char
// create a new instance

// set the values
                1
                3

// print it
    "The fraction is: "
    "\n"

}
```

main.m

```
#import <stdio.h>
#import "Fraction.h"

int      int      const char
// create a new instance

// set the values
                1
                3

// print it
    "The fraction is: "
    "\n"

// free memory

return 0
}
```

Categories

```
@implementation  
  
BOOL  
  
if self  
    return NO  
  
return self
```

Objective-C Classes

NSResponder NSObject
 NSString NSView
 NSDictionary NSArray
 NSText
NSCell NSMutableString
 NSButton

Objective-C today

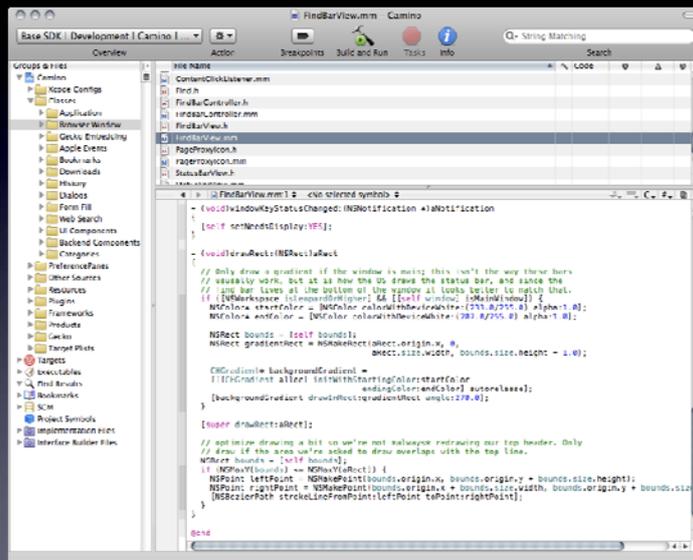
- Unchanged until Mac OS X **Leopard**
- New features:
 - Garbage Collection
 - Properties
 - Blocks (Snow Leopard)
 - New 64bit Runtime

Project Builder and Interface Builder

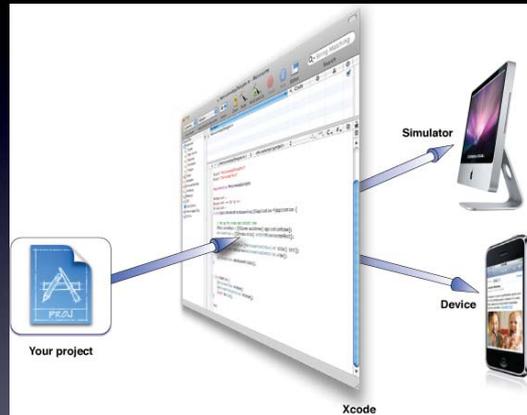
Project Builder



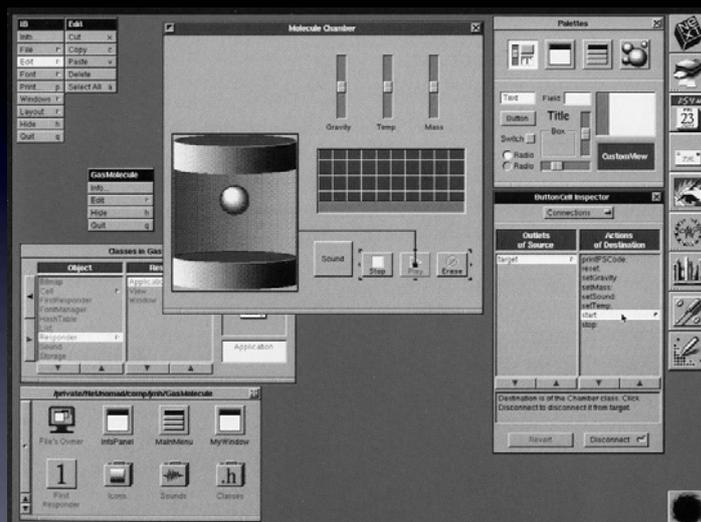
Today: XCode



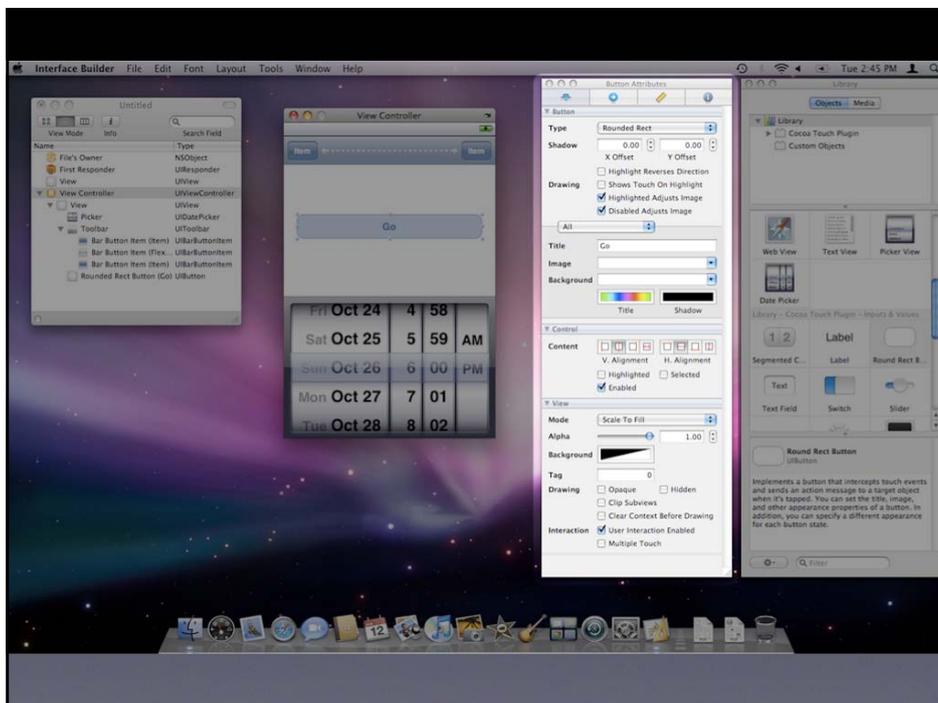
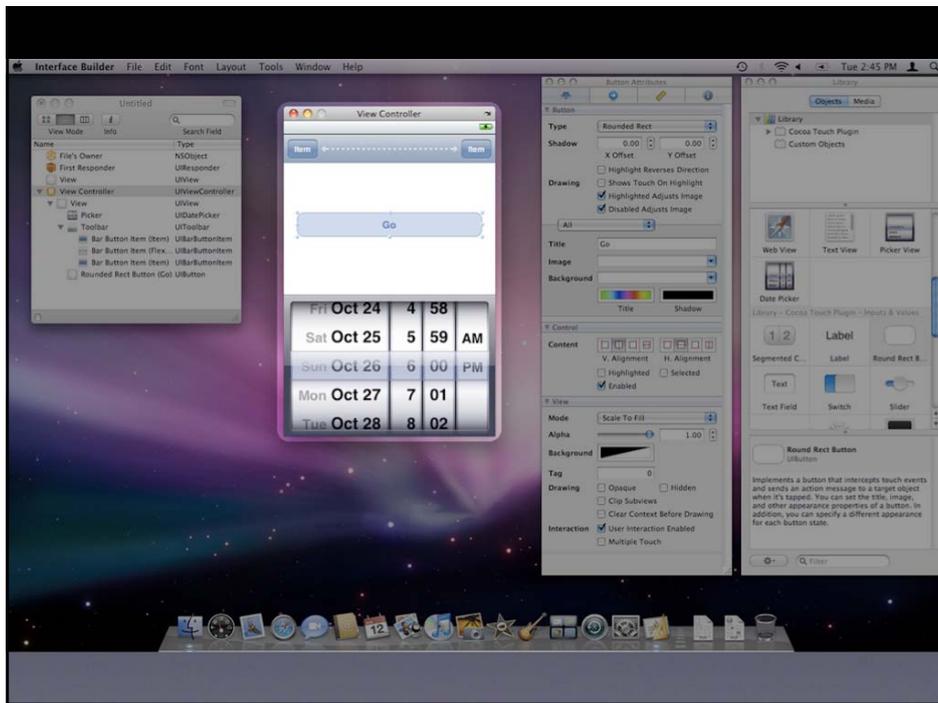
XCode: iPhone Development

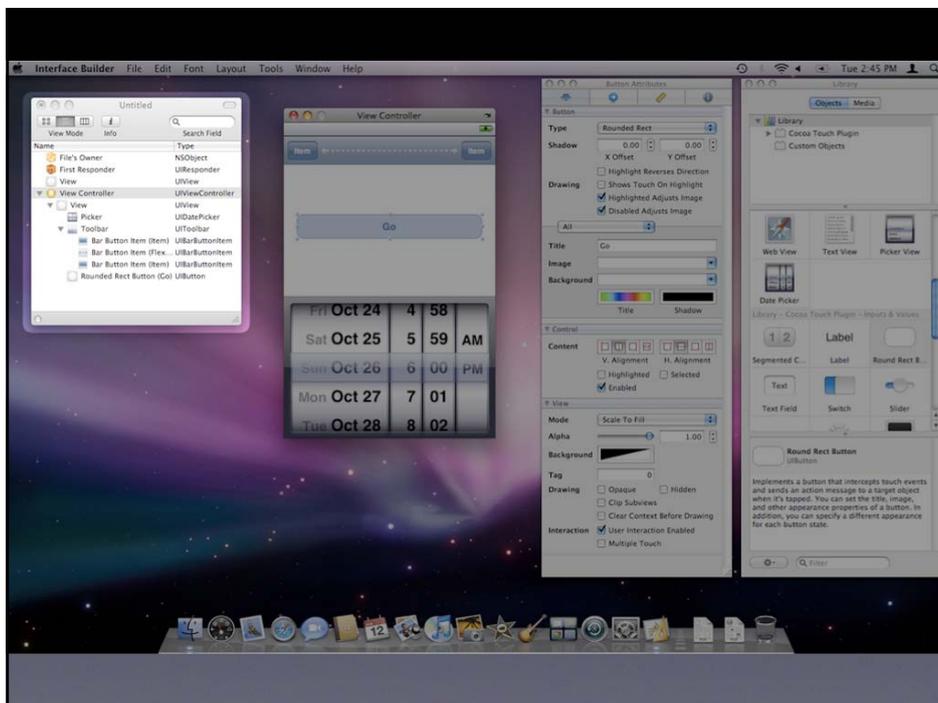
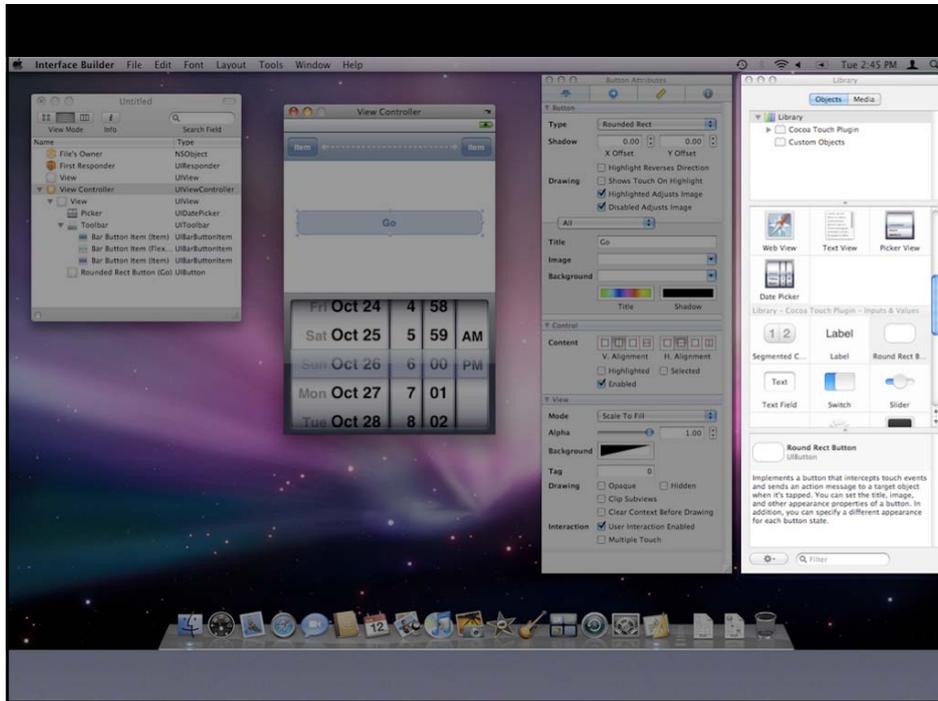


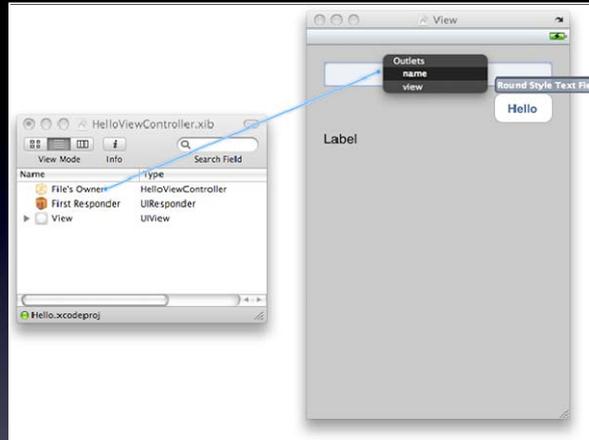
Interface Builder yesterday



Once you've designed your application interface, Interface Builder lets you establish links so that actions on one object can have an effect on another. Links are created graphically.







Connections

NIB

means

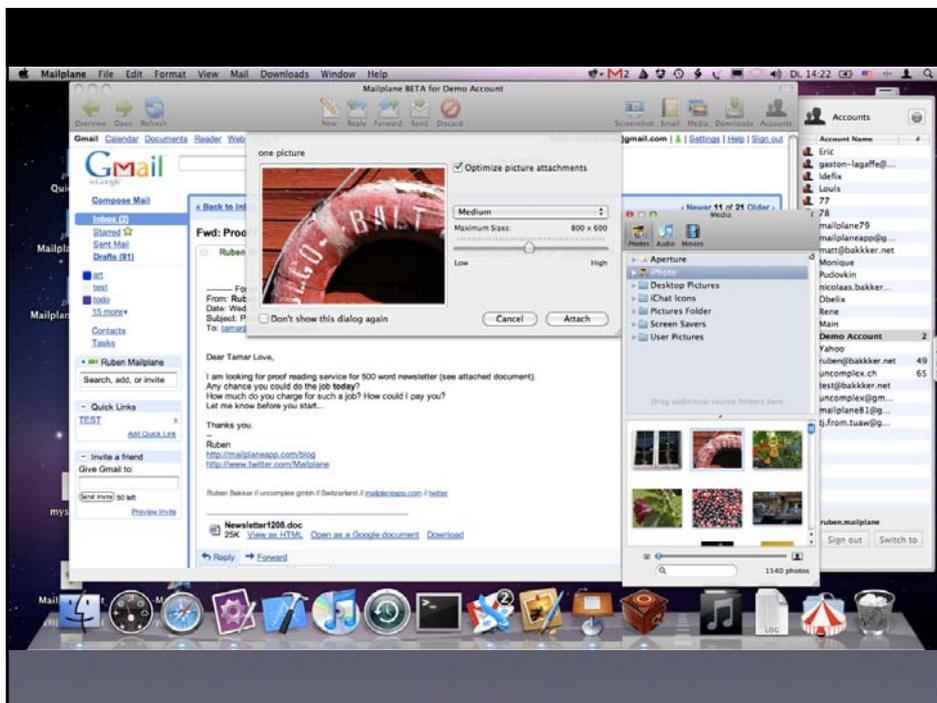
NeXT Interface Builder

My NeXT story

Summer 2006



Mailplane



March 2007

The image shows a screenshot of a blog post on TUAW (The Unofficial Apple Weblog). The post is titled "First Impressions: Mailplane - the desktop Gmail client" and is attributed to David Chartier, dated March 15th, 2007. The post content includes a screenshot of the Mailplane application interface, which shows a Gmail inbox integrated into a Mac desktop environment. Below the main post, there is a digg widget showing 1110 diggs and a link to the article on Shirtyone.com. The article on Shirtyone.com describes Mailplane as a desktop email client for Mac OS X that integrates with Gmail and other applications like iPhoto, Firefox, Safari, and Address Book. The article also mentions that Mailplane is a new Cocoa application that integrates with Gmail.

TUAW The Unofficial Apple Weblog

News App Hub Mac 101 Request App Review iPhone TUAW App Jobs

Filed under: Software, Features, Internet Tools, Beta Beat

First Impressions: Mailplane - the desktop Gmail client

by David Chartier (RSS feed) on Mar 15th 2007 at 7:00PM

Mailplane for Gmail

macnn read me first mac news reviews blog

Hot Stories TomTom's iPhone Car Kit arrives in US online st

macnn news

Mailplane integrates Gmail into Mac desktop

Mailplane enters beta

An avid Mac developer has unveiled [Mailplane](#) for Mac OS X, a new Cocoa [showcase application that integrates Gmail](#)

1110 diggs

Thanks to Mailplane, Gmail can replace your desktop email client

Shirtyone.com — Mailplane integrates your Gmail account with a handful of applications including iPhoto, Firefox, Safari, and Address Book among others acting as your default email solution. Rest at ease knowing that your desktop email client + POP3 account is no longer a requirement for enjoying a seamless email experience on OS X.

Bury Who dugg this? Made popular Apr 16, 2007

January 2008



Mailplane
Brings Gmail to your Mac desktop

Home | Download | Buy Now | Get Help | Blog

[mailplaneapp.com](#) > Store

Mailplane Store

Choose your Mailplane

Please choose the kind of license you like to buy:

- Mailplane Single User License** US\$ 24.95
Our most popular license: A single-user license for Mailplane 2.x that you can install on any Mac you personally use.
- Mailplane Family License** US\$ 39.95
Best license for families: Allow up to five (5) family members living in the same household to use Mailplane 2.x on their Macs.
- Mailplane Site License** users x US\$ 24.95
The right choice for companies or institutions: Get a Mailplane 2.x site license for multiple users. Quantity discount offered.

Enter license information

Name on License
Firstname and lastname or institution/company name

Email Address
License is sent to this email address (please double check your entry)

Coupon
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Join Newsletter



30-day money back guarantee: If for any reason you are not satisfied with Mailplane, we will return 100% of your purchase price.

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[Upgrade your license](#)
Do you already own a license? [Click here to upgrade your license.](#)

What others are saying
"Just want you to know that this is one of my favorite Mac apps. Good work and keep it up!!"

80%

November 2008
60%

July 2009
0%

Thanks to the NeXT

Q & A

Happy 25th
anniversary
and *QL forever!*

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ruben@mailplaneapp.com

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