Quand il y a des clients riches dans l'Air

CamilleRoux blog

Plan

- Qui parle?
- Voyage au monde des RIA
- Flex in a nutshell

Qui parle?

Plan

- Qui parle?
  - Général
  - Etudes
  - Expérience
- Voyage au monde des RIA
- Flex in a nutshell

Qui parle?

- Camille Roux
- 23 ans
- Ingénieur étude et conception chez bebook
- http://www.camilleroux.com

CamilleRoux blog

Etudes

- Polytech'Nice-Sophia

Polytech'Nice-Sophia
École d'ingénieurs

- Filière : Architecture logicielle
- Options : CLAW, Web sémantique, BD avancées, Crypto/Sécurité, algo. avancée
- Promotion 2008

Expérience

- +1an de Flex/Air

- Utilisation avancée
- Dialogue fréquent avec des professionnels et experts Flex
- Participation à des événements dédiés
- Veille quotidienne

Voyage au monde des RIA

Plan

- Qui parle?
- Voyage au monde des RIA
  - Un peu d'histoire
  - Définition et classification des RIA
  - Les technologies RIA
  - Conclusion
- Flex in a nutshell

Un peu d'histoire ...

Evolution des Desktops

I. 1945 : Batch System **0D**

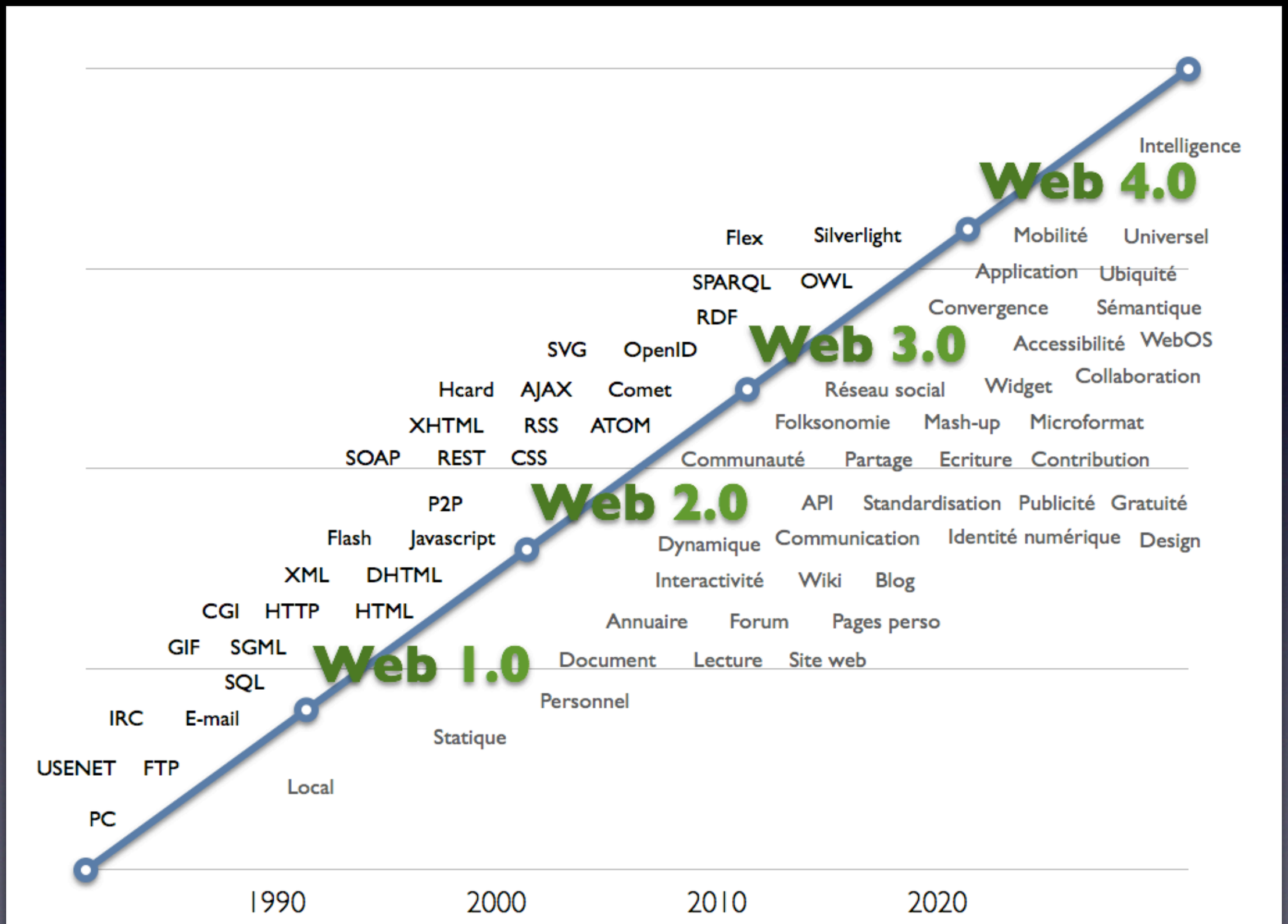
II. 1955 : Interface orientée ligne **1D**

III. 1965 : Plein écran **2D**

IV. 1980 : Interface utilisateur graphique **2.5D**

V. 1995 : Nouvelle génération **+3D**

Evolution du web



Desktop

Web

RDA

RIA

Rich
Internet Application
(embarqué dans le navigateur)

Desktop

Web

Rich Desktop Application *(standalone)*

RDA

RIA

Desktop

Web

✓Bonne exploitation des ressources
✓Déconnecté
✓Confidentialité des données
✓Continuité du contexte
✓Gestion/affichage possible de grandes quantités de données

✓Pas d'installation/update
✓Portable
✓Fortement connecté
✓Traçage de l'utilisateur possible
✓Pas de piratage de licence

RDA

RIA

Pas de serveur

Client

Application Desktop

Logique de présentation

Logique business

Données

Serveur

Pas de serveur

•Page web statique
•Pas interactif

	Application Desktop	Site web classique
Client	Logique de présentation	Navigateur
	Logique business	
	Données	
Serveur		Logique de présentation
		Logique business
		Données

RIA

Expérience utilisateur similaire à celle des Desktops

Client

Serveur

Application Desktop	Client lourd	Site web classique
Logique de présentation	Logique de présentation	Navigateur
Logique business	Logique business	
Données		Logique de présentation
	Données	Logique business
		Données

RIA
(Rich Interne

Partionnement de la logique business

	Application Desktop	Client lourd	Hybride	Site web classique
Client	Logique de présentation	Logique de présentation	Logique de présentation	Navigateur
	Logique business	Logique business	Logique business	
	Données			
Serveur		Données	Logique business	Logique de présentation
			Données	Logique business
				Données

RIA
(Rich Internet Application)

Partionnement de la logique de présentation

	Application Desktop	Client lourd	Hybride	Hybride	web classique
Client	Logique de présentation	Logique de présentation	Logique de présentation	Logique de présentation	Navigateur
	Logique business	Logique business	Logique business		
	Données				
Serveur		Données	Logique business	Logique de présentation	Logique de présentation
			Données	Logique business	Logique business
				Données	Données

RIA

(Rich In

Seul le moteur de présentation est coté client

	Application Desktop	Client lourd	Hybri		Client léger	Site web classique
Client	Logique de présentation	Logique de présentation	Logique de présentation	Logique de présentation	Moteur de présentation	Navigateur
	Logique business	Logique business	Logique business			
	Données					
Serveur		Données	Logique business	Logique de présentation	Logique de présentation	Logique de présentation
			Données	Logique business	Logique business	Logique business
				Données	Données	Données

Les technologies RIA

Du client léger au client lourd : Les technologies mises en jeu

Nom : **Silverlight**

Editeur : **Microsoft**

Date de création : **avril 2007**

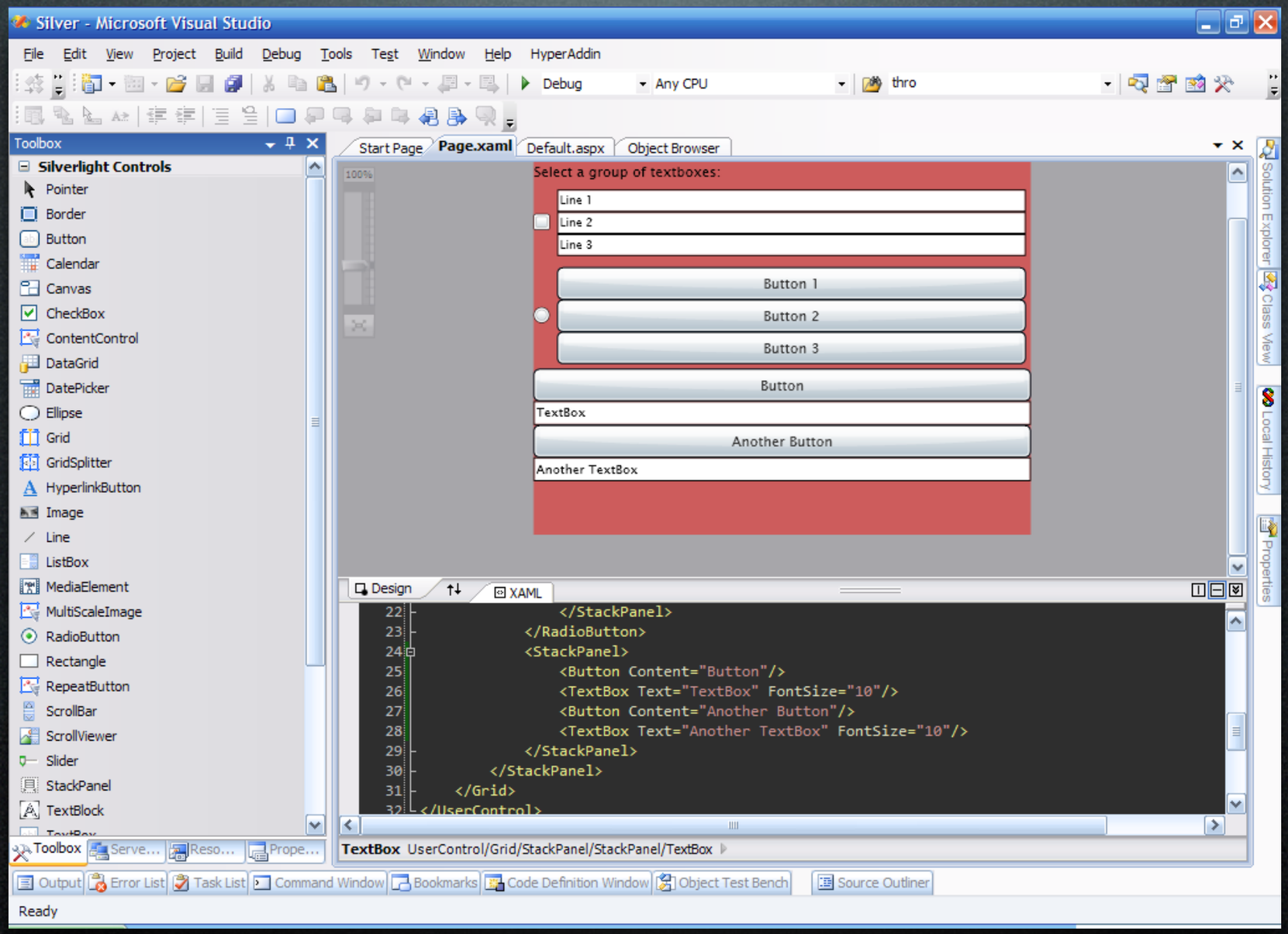
Licence : **Propriétaire**

Langages : **XAML / .net**

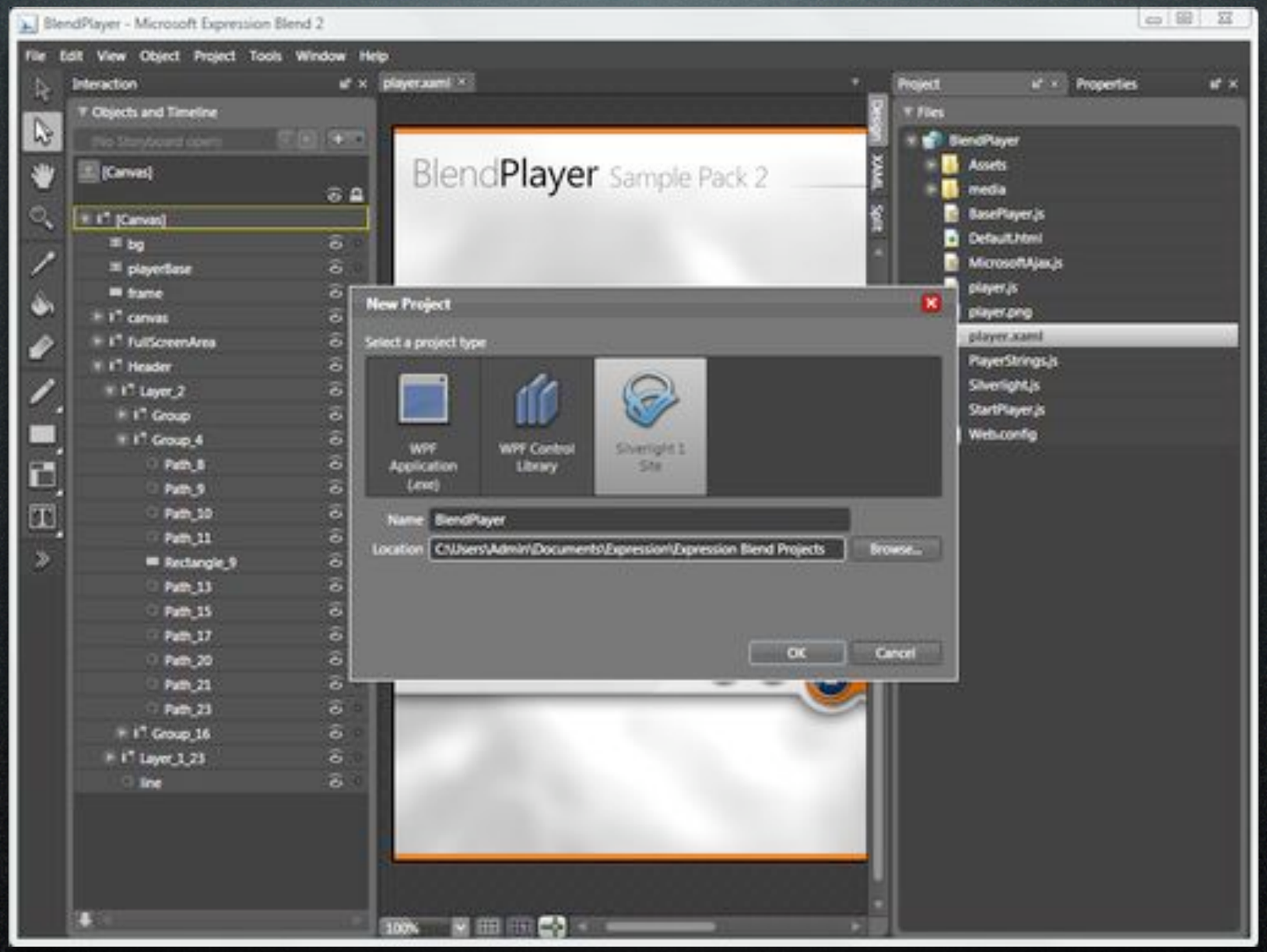
Ide : **Visual Studio + Expression Bend**

Signes particuliers :

- Non compatible Linux
  - Moonlight
- Non compatible Opera
- Version mobile en 2009

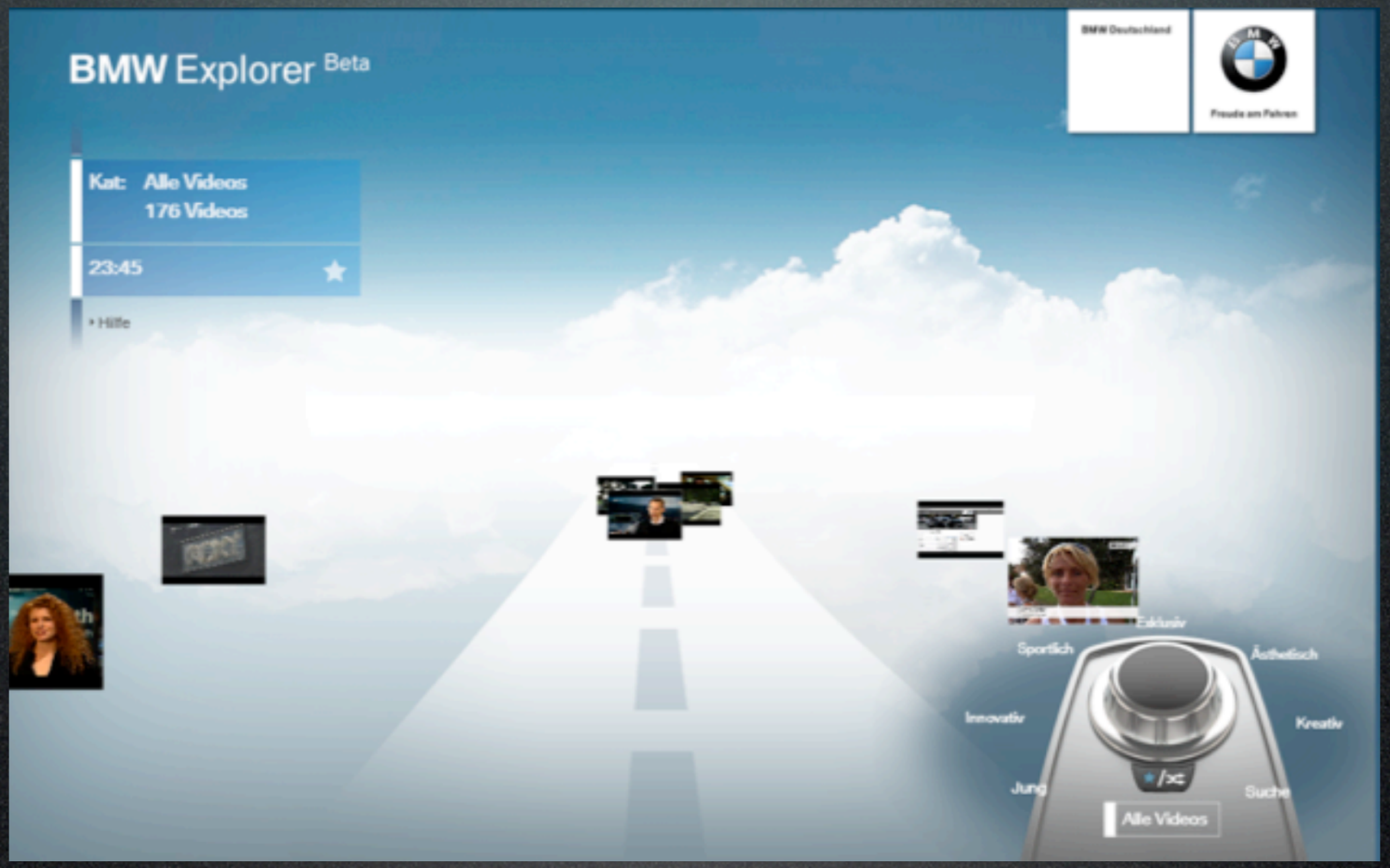


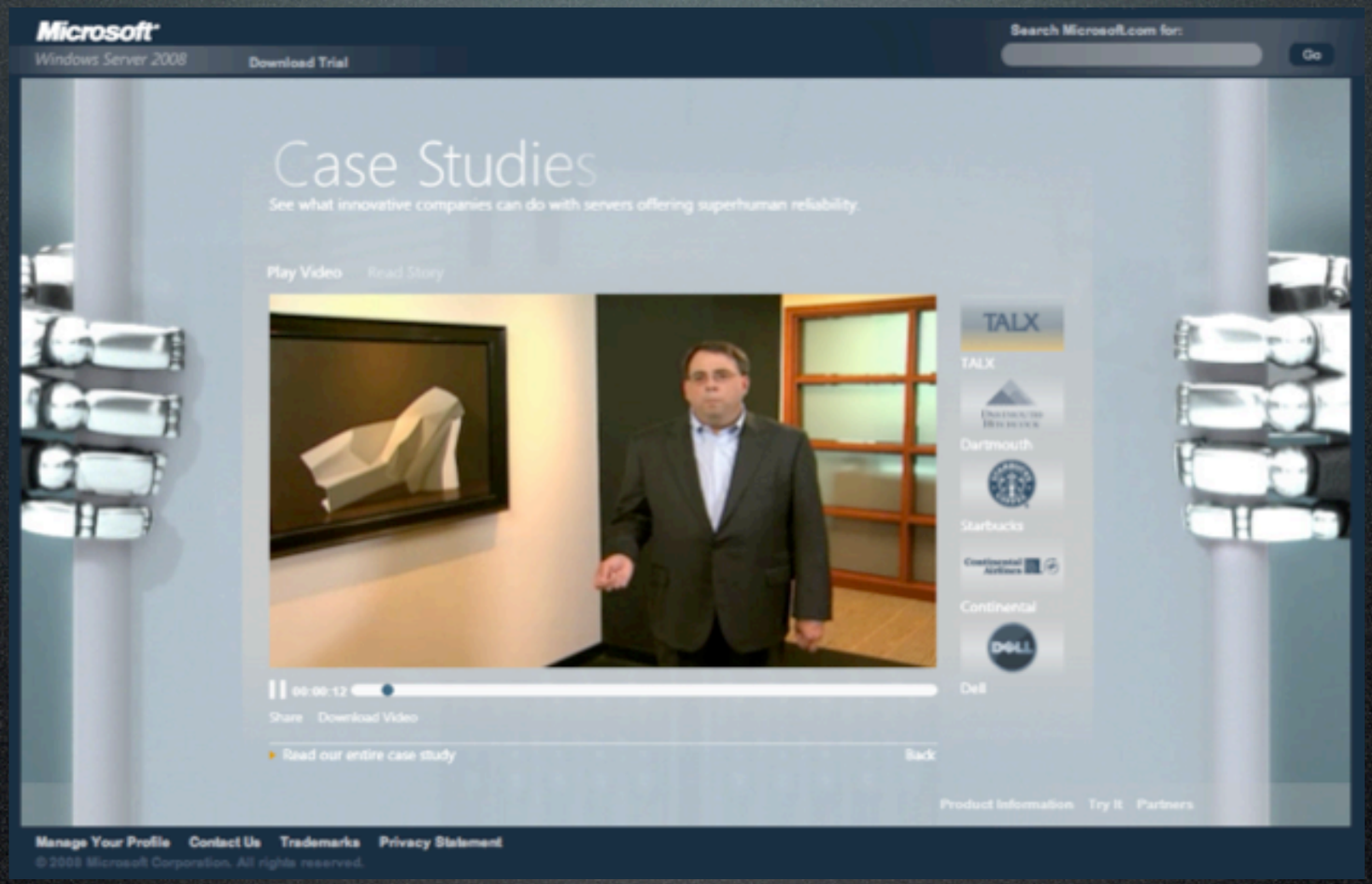
MS Visual Studio

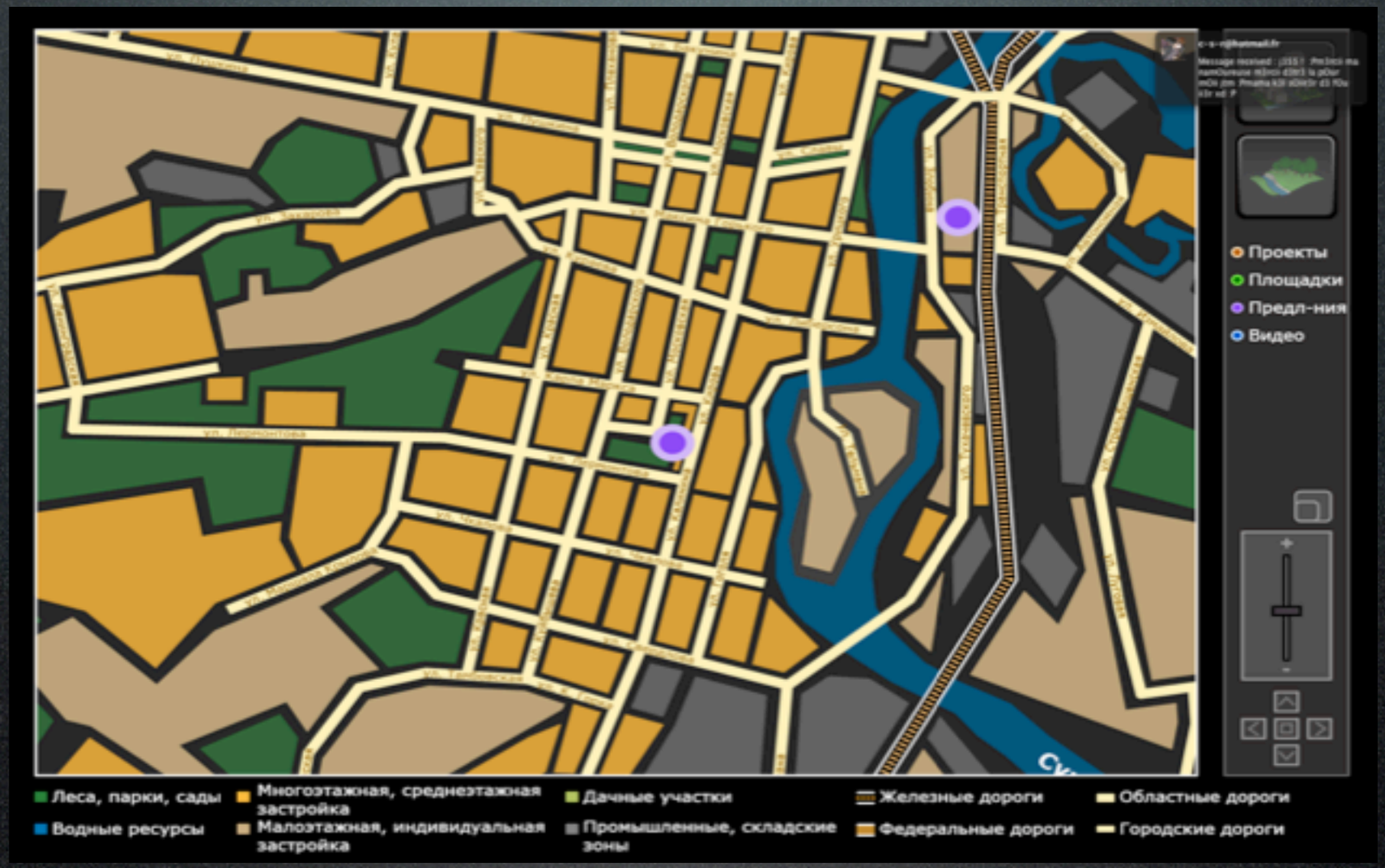


MS Expression Bend

Microsoft Silverlight
Home
Get Started
Showcase
Learn
Community
Forums
DESIGNER? DEVELOPER? START MAKING SILVERLIGHT EXPERIENCES TODAY.
SUBMIT
Search Showcase
Filters
Category
Geography
Sort By: Most viewed
Date added
Average rating
Most viewed
267 Applications 45 Countries/Regions
View Map
1 2 3 4 5 6
TELERIK SILVERLIGHT CONTROLS
RadControls for Silverlight 2 - a comprehensive suite of 22 controls bringing style and interactivity to any web application.
• Common codebase and shared API with RadControls for WPF
• Great performance and smart use of UI and data virtualization
• Full support for Expression Blend
• Full interoperability with ASP.NET AJAX
• Ready to use themes
Coming soon: RadGridView, RadDocking
See demo
Microsoft Dynamics CRM 4.0
Created By: Microsoft
Microsoft Dynamics Italy introduces Microsoft Dynamics CRM 4.0 using Silverlight.
View
Silverlight Weather Widget
Created By: Rik Robinson
Returns 5 day weather forecast directly from The Weather Channel given a valid 5-digit US Zip Code. Uses Silverlight 1.0, ASP.NET AJAX, LINQ-to-XML, and most of the new C# 3.5 goodness!
View
BMW TV Explorer
Created By: BMW AG
BMW innovates the user experience of interacting with the video file-archive of BMW TV with an emotional impact. I-D Media developed a highly explorative application with features like HD video streaming and a 3-D visualization of a high-way drive.
View
Pilgrim
Created By: Pilgrim
Pilgrim is one of the leading jewelry manufacturers in Scandinavia, and now their website runs on Silverlight.
View
Windows Server 2008 The Server Unleashed
Created By: Microsoft
Meet Windows Server 2008. The server unleashed. What happens when you take a world-class enterprise server, add innovations that increase uptime, defend against intrusion, and automate management? You get super-human reliability that unleashes the future of server technology.
View
Happy Holidays
Created By: ObjectSharp
Wishing you a Happy Holidays and a Happy New Year, from all of us at ObjectSharp.
View


BMW Explorer Beta
BMW Deutschland
Freude am Fahren
Kat: Alle Videos
176 Videos
23:45
Hilfe
Exklusiv
Sportlich
Ästhetisch
Innovativ
Kreativ
Jung
Suche
Alle Videos


Microsoft
Windows Server 2008
Download Trial
Search Microsoft.com for:
Go
Case Studies
See what innovative companies can do with servers offering superhuman reliability.
Play Video
Read Story
TALX
TALX
Dartmouth
Starbucks
Continental
Dell
00:00:12
Share
Download Video
Read our entire case study
Back
Product Information
Try It
Partners
Manage Your Profile
Contact Us
Trademarks
Privacy Statement
© 2008 Microsoft Corporation. All rights reserved.


Проекты
Площадки
Предл-ния
Видео
Леса, парки, сады
Водные ресурсы
Многоэтажная, среднеэтажная застройка
Малоэтажная, индивидуальная застройка
Дачные участки
Промышленные, складские зоны
Железные дороги
Федеральные дороги
Областные дороги
Городские дороги

WeatherBug
Las Vegas, NV
Sun 11/23
Mon 11/24
Tue 11/25
Wed 11/26
73° 48°
73° 48°
68° 49°
64° 50°
Extended Forecast

Nom : **Flex**

Editeur : **Adobe**

Date de création : **mars 2004**

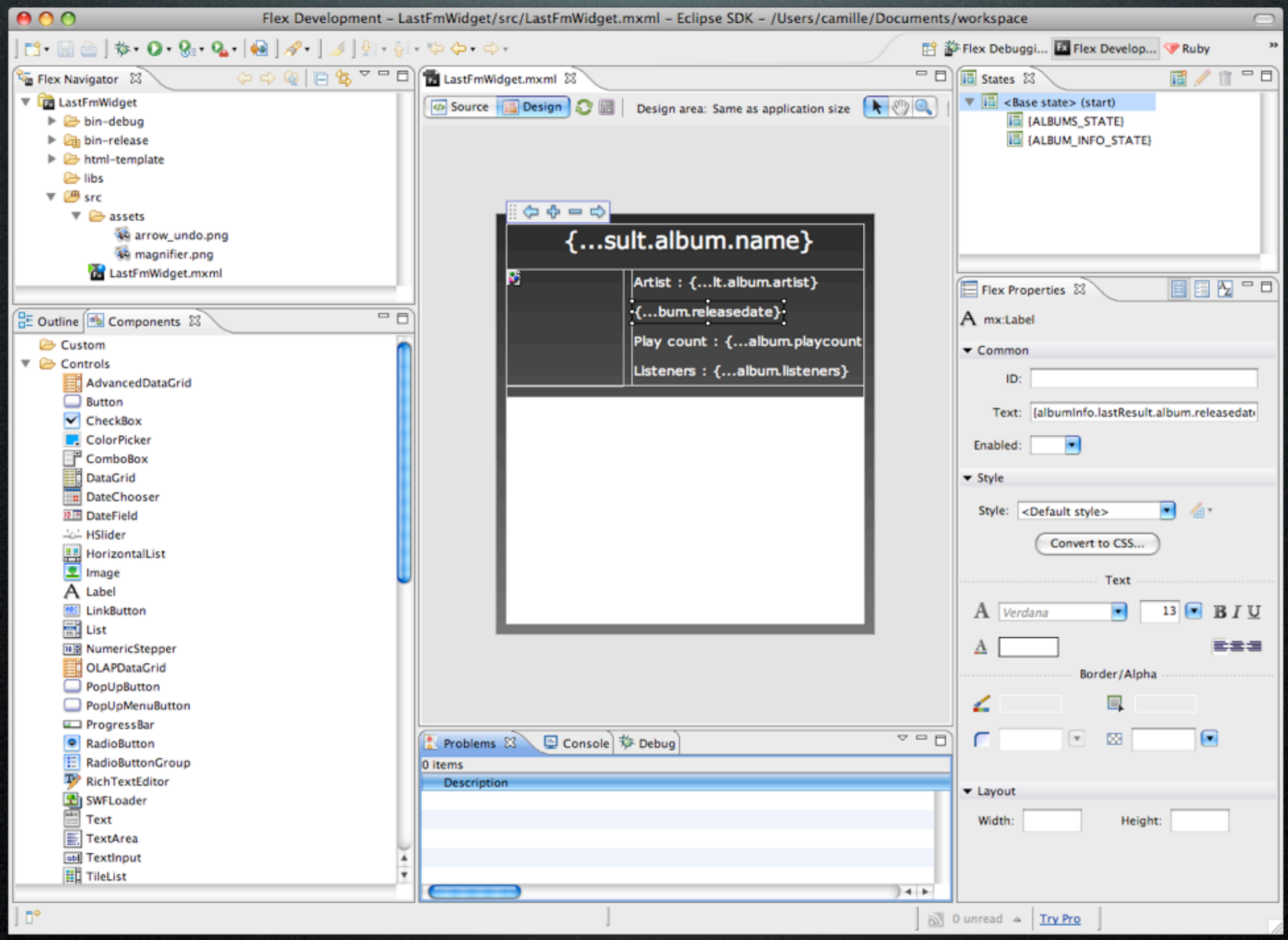
Licence : **Open source** /Propriétaire

Langages : **MXML** /ActionScript 3

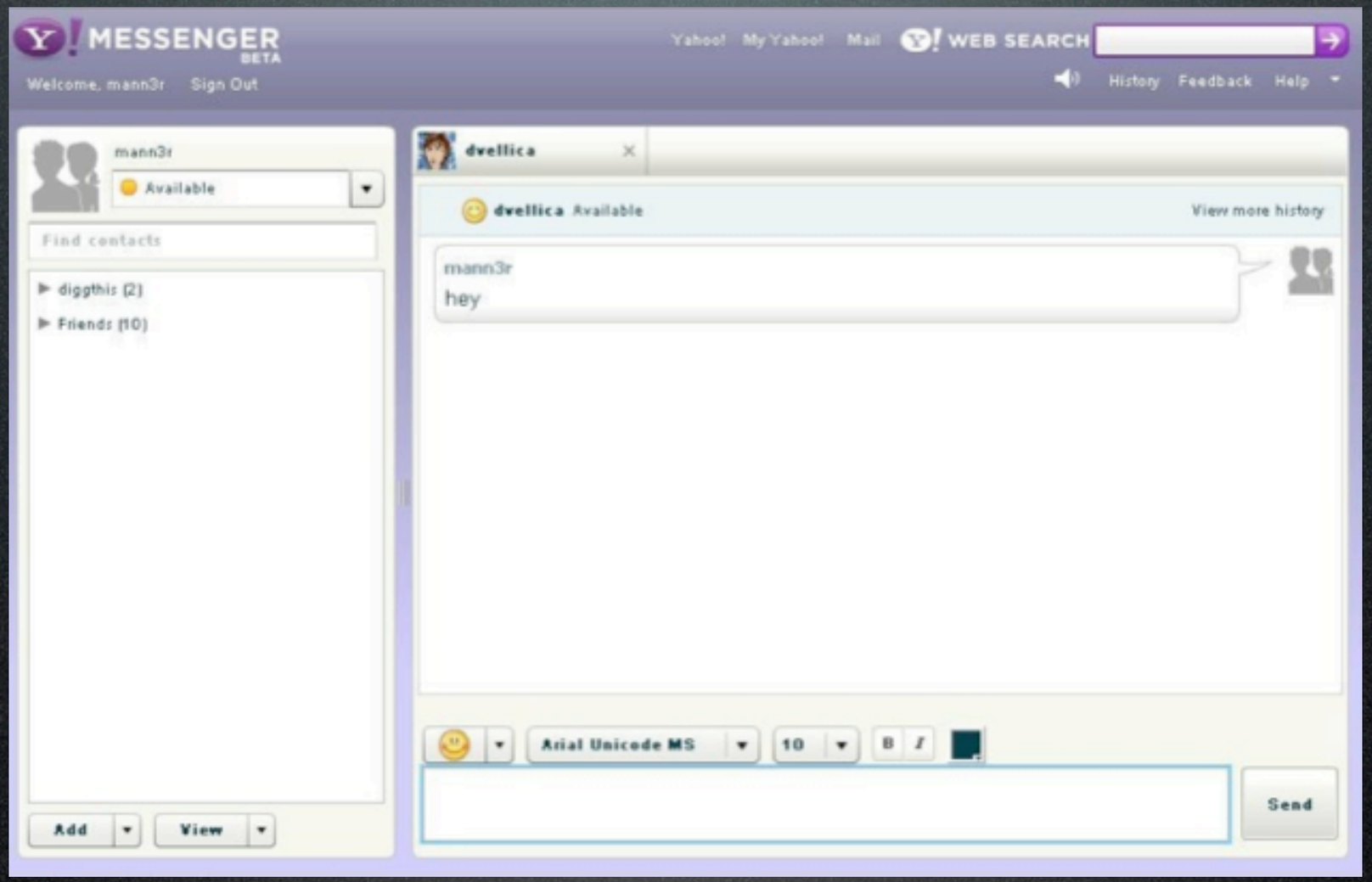
Ide : **Adobe Flex Builder** (plugin Eclipse)

Signes particuliers :

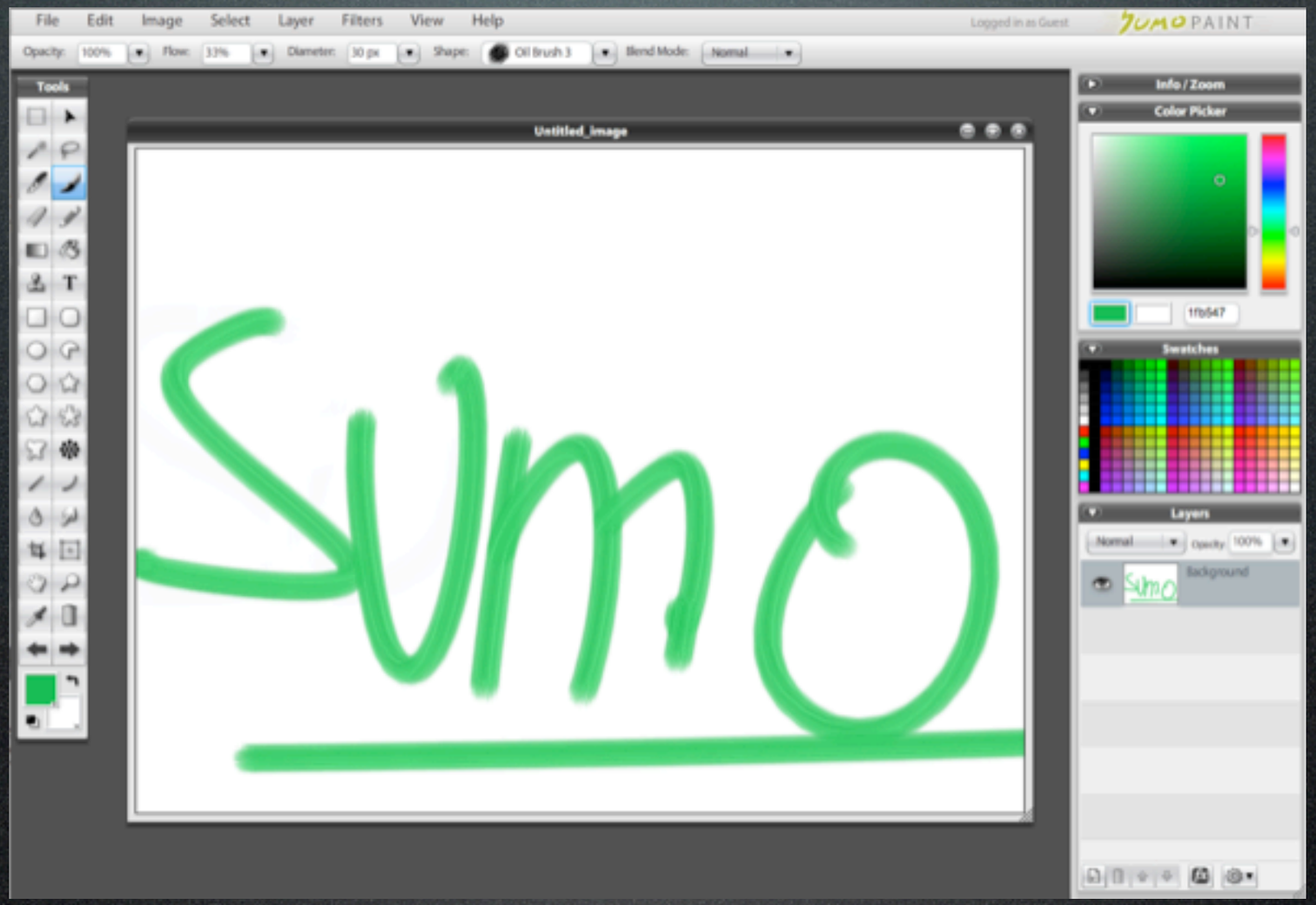
- Repose sur Flash
- Flex 4 en 2009
- Adobe Air (Desktop)



Adobe Flex Builder


MESSENGER
BETA
Welcome, mann3r
Sign Out
Yahoo!
My Yahoo!
Mail
WEB SEARCH
History
Feedback
Help
mann3r
Available
Find contacts
diggthis (2)
Friends (10)
Add
View
dvellica
dvellica Available
View more history
mann3r
hey
Arial Unicode MS
10
B
I
Send

Yahoo! | My Yahoo! | Mail | More
Make Y! My Homepage
Hi, Camille | Sign Out | Help
YAHOO! LOCAL
Maps
Search
WEB SEARCH
GET MAP AND DIRECTIONS
Clear
Bot
Address, City, State
Reverse Directions | Round-Trip
Go
FIND A BUSINESS ON THE MAP
Clear
Find Restaurants, Hotels...
Search
Printable Version
Send
Save
Live Traffic
Help/Policies
Map
Grenoble
Romans-sur-Isère
Rhône-Alpes
Gap
Digne-les-Bains
Provence-Alpes-Côte d'Azur
Aix-en-Provence
Marseille
Toulon
Nice
Monaco
Cuneo
Alba
Bra
Mediterranean Sea
30km
25mi
©2008 Yahoo! Inc.
See these business locations on this map
ADVERTISEMENT
Partez vivre aux Etats-Unis
Gagnez une Green Card Aujourd'hui
Cliquez ici pour vérifier votre éligibilité
Cliquez ici
Chun Huang
TAIWAN
usafis


File
Edit
Image
Select
Layer
Filters
View
Help
Logged in as Guest
JUMO PAINT
Opacity:
100%
Flow:
33%
Diameter:
30 px
Shape:
Oil Brush 3
Blend Mode:
Normal
Tools
Untitled_Image
Info / Zoom
Color Picker
1fb547
Swatches
Layers
Normal
Opacity:
100%
Background
Sumo

buzzword
Document
Edit
Insert
Help
Font
Minion Pro
12
B
I
U
Buzzword
Images
Image
While current HTML editors have some graphic capabilities, they're constrained by HTML limitations. Buzzword, however, can flow text around a graphic quite well. To place a graphic into this document, open the Image Bar and then click on the Insert Image icon. Or, you can select Insert Image from the Edit Menu. Pick a JPEG, GIF, or PNG from your disk drive. Buzzword will take that image, send it up to the server, and then place it at your insertion point. You can drag and drop the image anywhere in the document. You can also size it by pulling on the corners. Placement Icons provide easy placement options like centering a graphic or pushing it to the side, or using the graphic as an inline element. Select the image and click on each of the graphic icons to get a feel for how they work.
The Document Organizer
Docs
The Document Organizer shows you a list of all of your documents. Use the icons at the top of the page to sort the documents. When you are editing a document and you click the Docs Icon, your current document is saved and you return to the Document Organizer. At the bottom of the screen is a panel that shows you who is collaborating on each document and what rights they have. You can also see whether others have the document open and if they are editing it.
List Handling
Should we list the file formats in lower case?
Daniela Procupez Aug 6, 2007 12:52 PM
Can we rename this to be the "What's Up Doc" icon? (sorry - couldn't resist)
Robby Shaver Aug 6, 2007 12:47 PM
Share
Robby Shaver
Author open
Daniela Procupez
Co-author open
Rosie Shaver
Co-author
100%

twhirl
u.0.3.001
twhirl
@twhirl well... I still prefer the (improved) standard theme, but I like "into the dark" and "watermellon" themes too...
Giovy (Giovy) about 14h ago from twhirl
unfortunately, I did not hit the 43 million euro lottery jackpot today...
mak (kaotisch) about 14h ago from twhirl
@Giovy (that reminds me that i should provide some visual feedback that the limit is reached...)
twhirl (twhirl) about 15h ago from twhirl
@Giovy what's your favorite so far? still like the default theme most? ;-)
What are you doing?
140
Timeline
13:56 replies received

3D UI Interaction Demo
Instructions
Standard Components
3D UI Interaction Demo
CheckBox
Button
Shoes
LinkButton
November
2008
S M T W T F S
outsmart

<xul/>

Nom : **XUL**

Editeur : **Fondation Mozilla**

Licence : **Format ouvert**

Langages : **XUL/HTML /CSS/DOM/Javascript /XML**

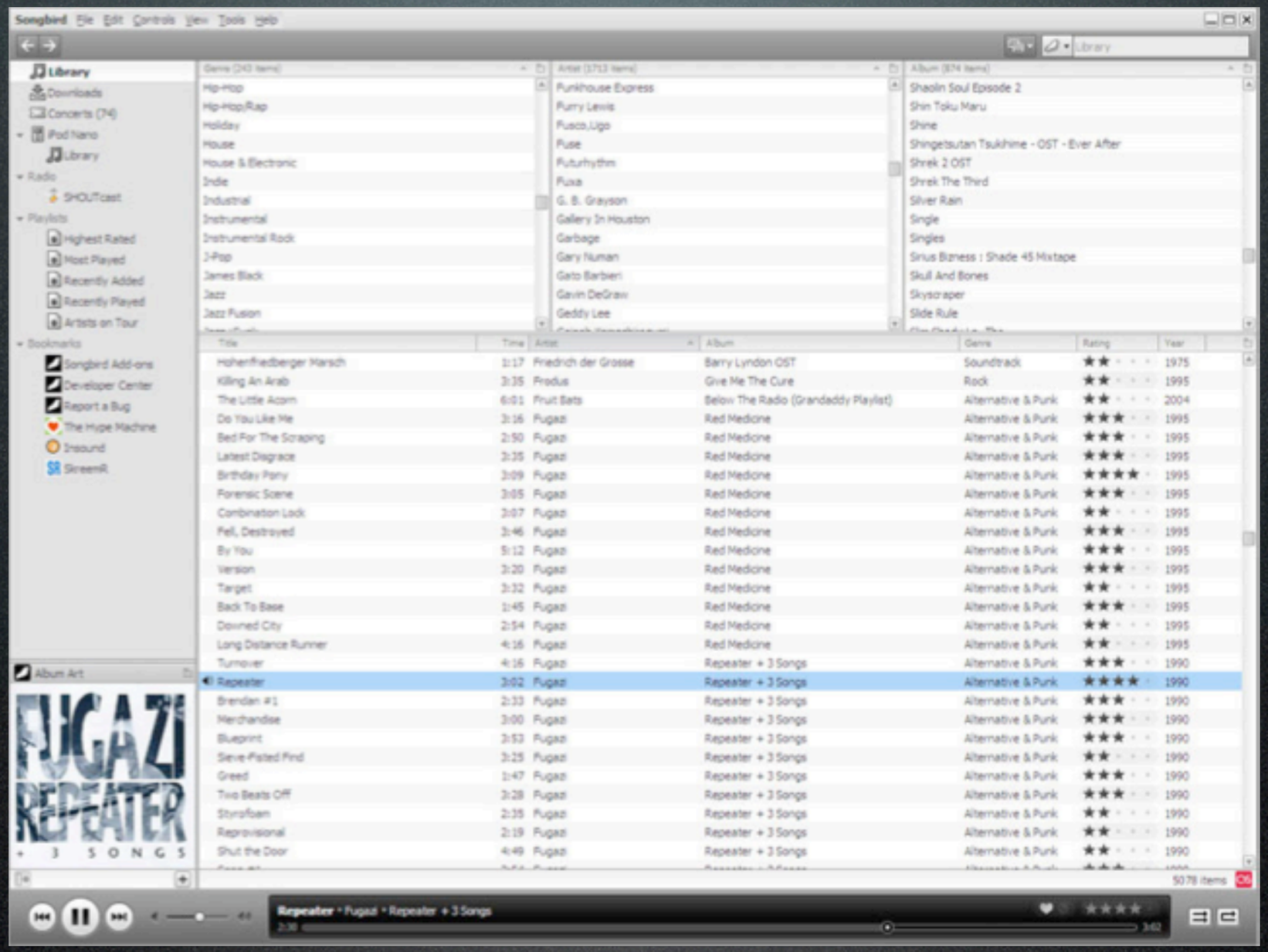
Ide : **Plusieurs IDE disponibles**

Signes particuliers :

- Prononcer "zoul"

Back
Explore
Search
Explore
My Channels
What's Popular
Cartoons & Animation
Comedy
Documentary
Drama
Entertainment
Film
Lifestyle
Music
Music Entertainment
News
Sports & Games
50 Cent v. Kanye West
88HIPHOP
A&E
A3tv The Nightlife Network
A&E
Aardman Animations
Alliance Atlantis Sci-Fi
Alliance Atlantis Sci-Fi Films
Aniboom
GONG
Associated-Rediffusion
Atlantic Street
Atlantic TV
Audi Channel
Joost Suggests
Create your own channel by dragging shows to this bar
Create Channel

Showcase


Songbird File Edit Controls View Tools Help
Library
Downloads
Concerts (74)
iPod Nano
Library
Radio
SHOUTcast
Playlists
Highest Rated
Most Played
Recently Added
Recently Played
Artists on Tour
Bookmarks
Songbird Add-ons
Developer Center
Report a Bug
The Hype Machine
Iroaund
SkreemR
Album Art
FUGAZI
REPEATER
+ 3 SONGS
Hip-Hop
Hip-Hop/Rap
Holiday
House
House & Electronic
Indie
Industrial
Instrumental
Instrumental Rock
J-Pop
James Black
Jazz
Jazz Fusion
Punkhouse Express
Furry Lewis
Fusco,Ligo
Fuse
Futurhythm
Fuxa
G. B. Grayson
Gallery In Houston
Garbage
Gary Numan
Gato Barbieri
Gavin DeGraw
Geddy Lee
Shaolin Soul Episode 2
Shin Toku Maru
Shine
Shingetsutan Tsukihime - OST - Ever After
Shrek 2 OST
Shrek The Third
Silver Rain
Single
Singles
Sirius Bizness : Shade 45 Mixtape
Skull And Bones
Skyscraper
Slide Rule
Title Time Artist Album Genre Rating Year
Hohenfriedberger Marsch 1:17 Friedrich der Grosse Barry Lyndon OST Soundtrack 1975
Killing An Arab 3:35 Produs Give Me The Cure Rock 1995
The Little Acorn 6:01 Fruit Bats Below The Radio (Grandaddy Playlist) Alternative & Punk 2004
Do You Like Me 3:16 Fugazi Red Medicine Alternative & Punk 1995
Bed For The Scraping 2:50 Fugazi Red Medicine Alternative & Punk 1995
Latest Disgrace 3:35 Fugazi Red Medicine Alternative & Punk 1995
Birthday Pony 3:09 Fugazi Red Medicine Alternative & Punk 1995
Forensic Scene 3:05 Fugazi Red Medicine Alternative & Punk 1995
Combination Lock 3:07 Fugazi Red Medicine Alternative & Punk 1995
Fell, Destroyed 3:46 Fugazi Red Medicine Alternative & Punk 1995
By You 5:12 Fugazi Red Medicine Alternative & Punk 1995
Version 3:20 Fugazi Red Medicine Alternative & Punk 1995
Target 3:32 Fugazi Red Medicine Alternative & Punk 1995
Back To Base 1:45 Fugazi Red Medicine Alternative & Punk 1995
Downed City 2:54 Fugazi Red Medicine Alternative & Punk 1995
Long Distance Runner 4:16 Fugazi Red Medicine Alternative & Punk 1995
Turnover 4:16 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Repeater 3:02 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Brendan #1 2:33 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Merchandise 3:00 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Blueprint 3:53 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Sieve-Fisted Find 3:25 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Greed 1:47 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Two Beats Off 3:28 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Styrofoam 2:35 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Reprovisional 2:19 Fugazi Repeater + 3 Songs Alternative & Punk 1990
Shut the Door 4:49 Fugazi Repeater + 3 Songs Alternative & Punk 1990
5078 items
Repeater • Fugazi • Repeater + 3 Songs
2:30
3:02

Showcase

Nom : **JavaFX**

Editeur : **Sun Microsystems**

Date de création : **mai 2007**

Licence : **Propriétaire**

Langages : **Java /JavaFX script**

Ide : **Netbeans + plugin**

Signes particuliers :

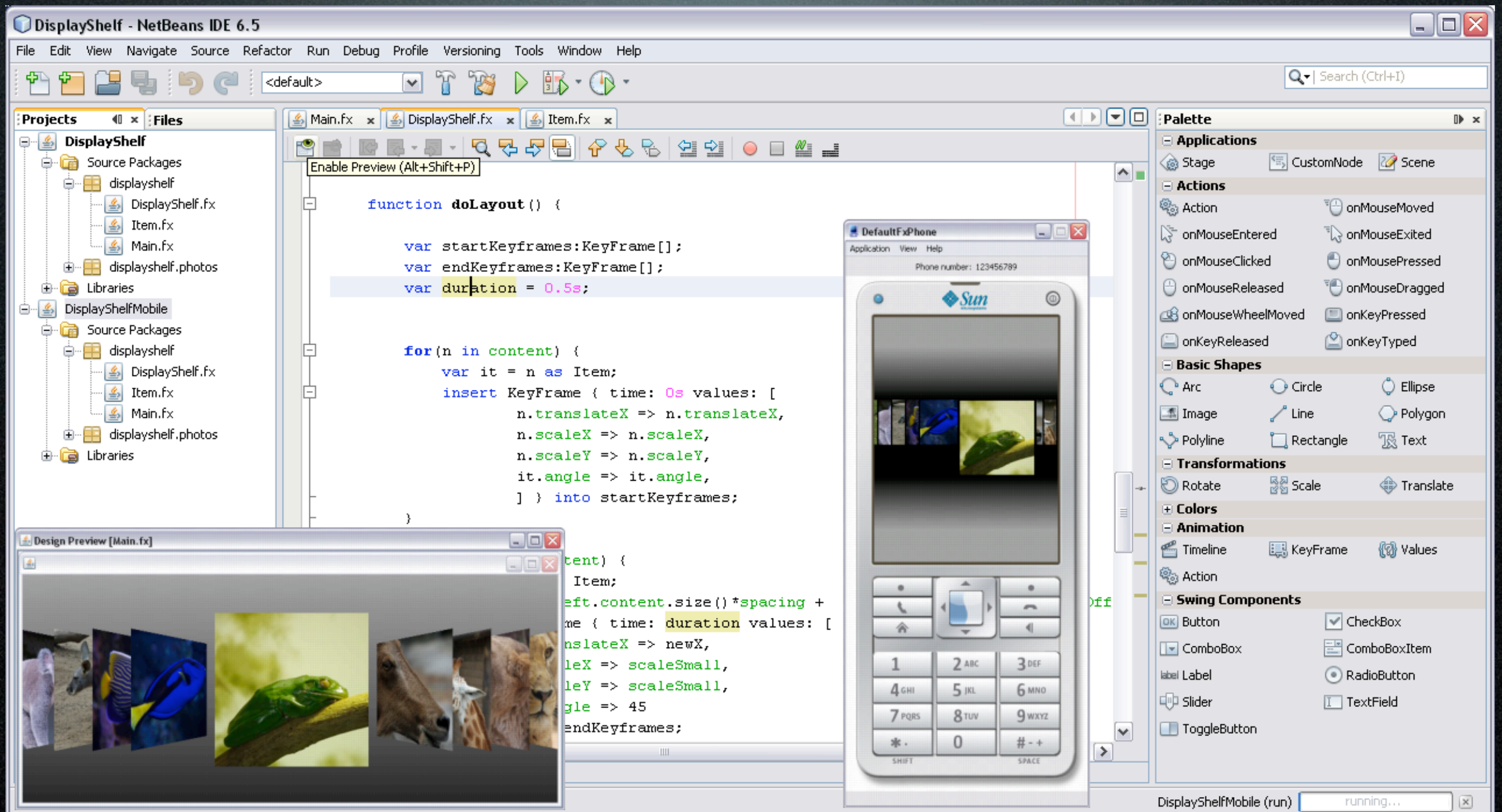
- Langage de script, wrap de Swing et Java 2D/3D
- JavaFX 1.0 sorti le 4 dec 2008

Java Swing

```
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.SwingUtilities;

public class FrameApplication {

    public static void main(String[] args) {
        SwingUtilities.invokeLater(new Runnable() {
            public void run() {
                JFrame win = new
                JFrame("My Java Application");
                win.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                win.setSize(500, 300);
                JLabel label = new JLabel("Hello World!");
                win.add(label);
                win.setVisible(true);
            }
        });
    }

}
```

JavaFX Script

```
import javafx.ui.*;
Frame {
    title: "My Java Application"
    width: 500
    height: 300
    content: Label {
        text: "Hello World!"
    }
    visible: true
}
```



Netbeans + plugin JavaFX

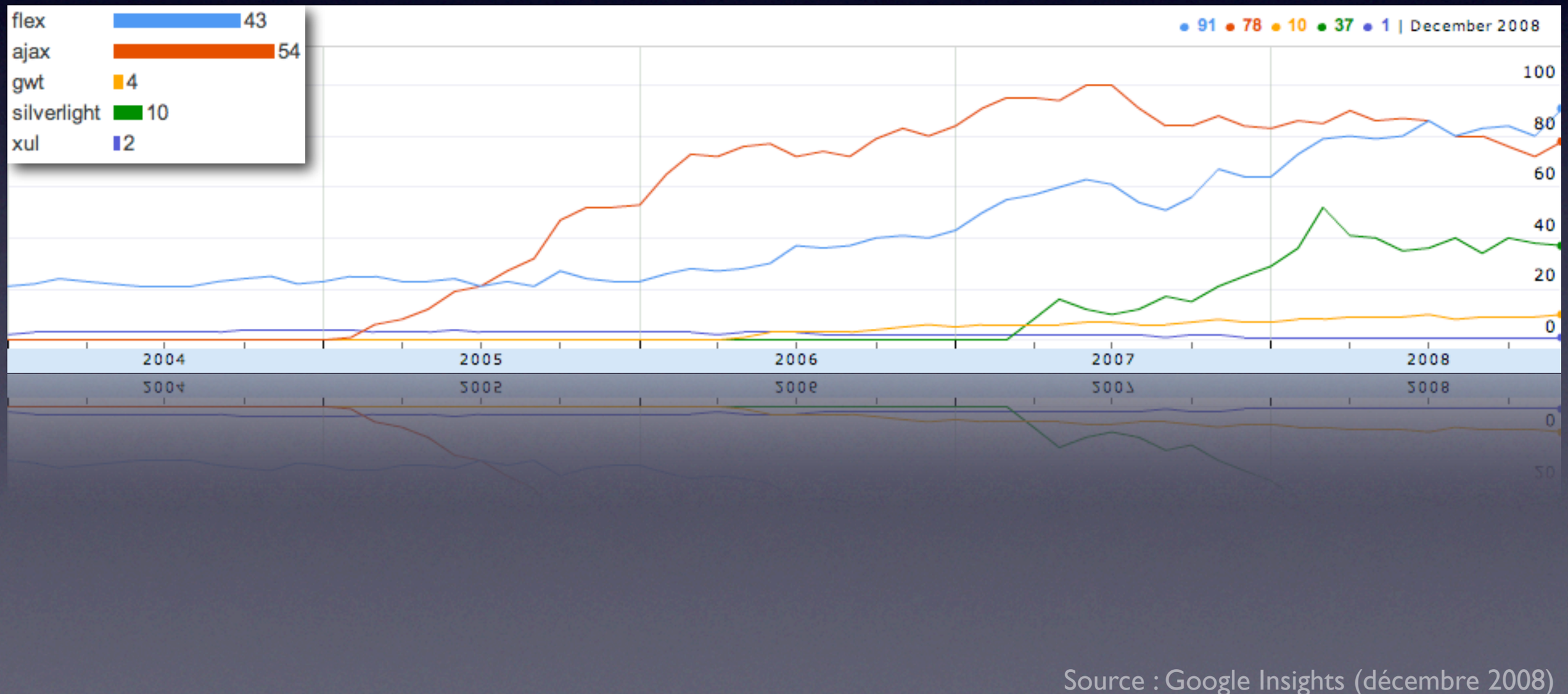
AJAX?

GWT?

Titanium?

Popularité

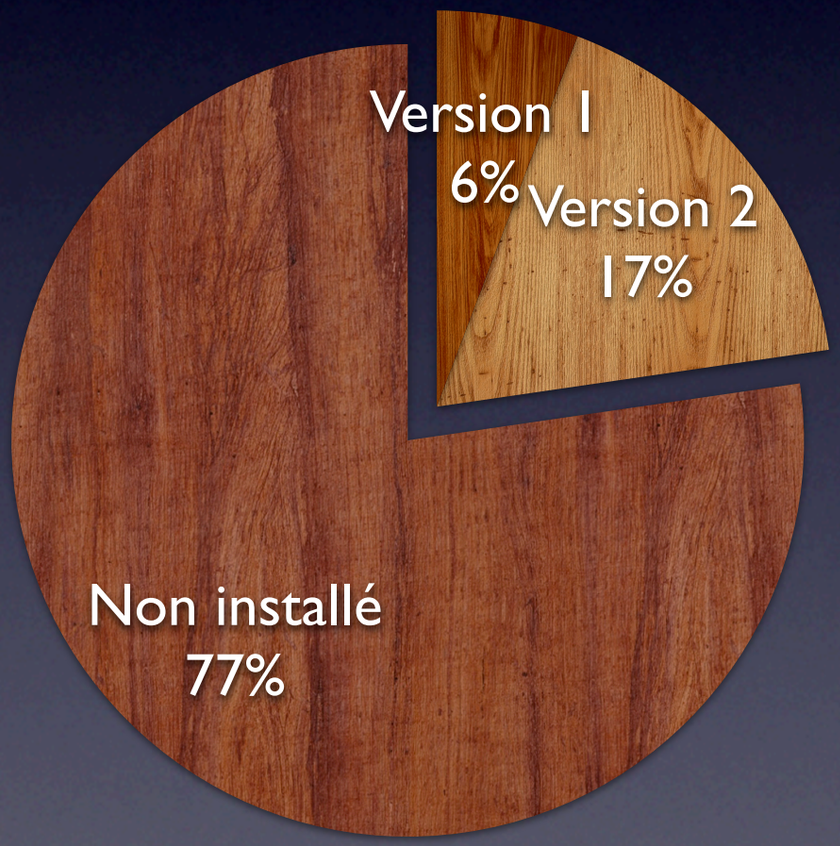
Nombre relatif de requêtes sur Google



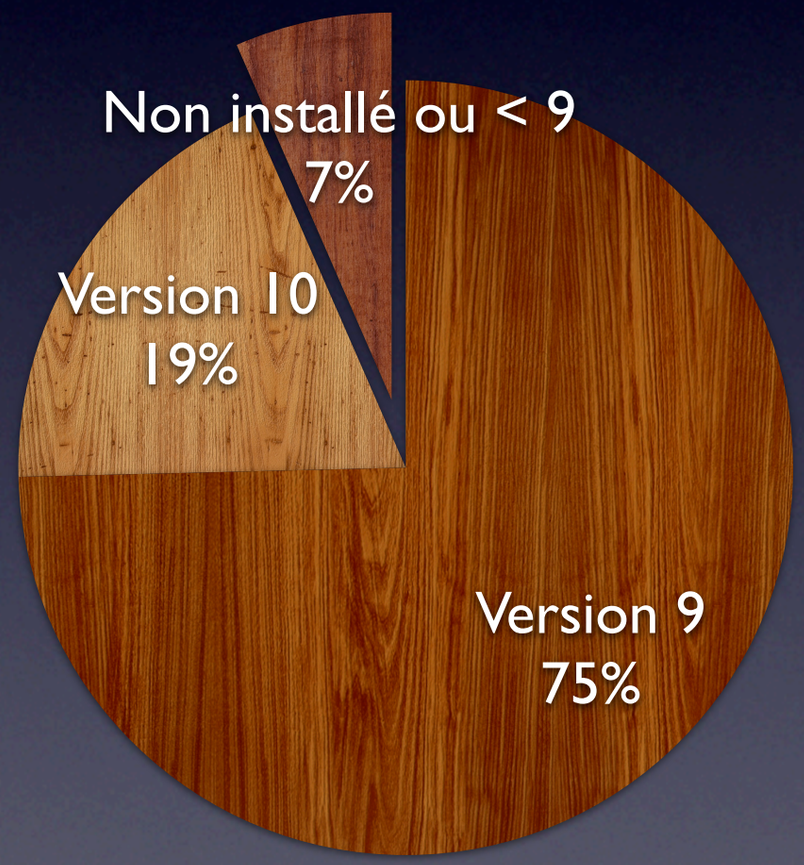
Source : Google Insights (décembre 2008)

Pénétration du marché

Microsoft Silverlight



Adobe Flash Player



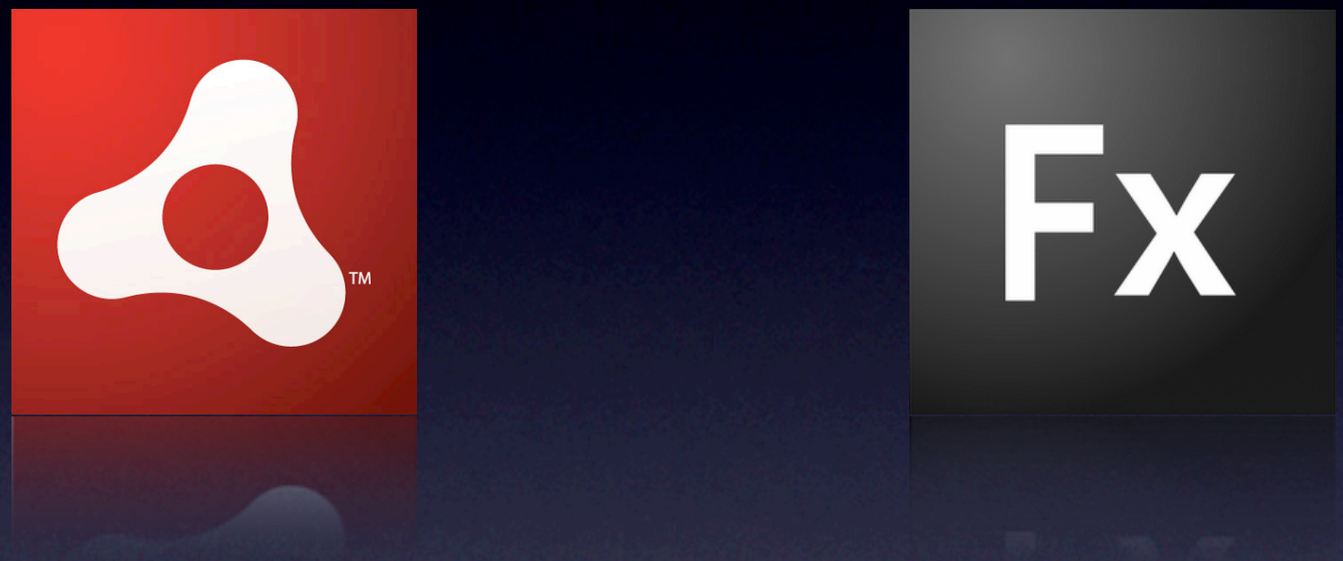
Source : riastats.com

Points communs

- Multi-plateformes (grâce à un player)
- 1 langage de description du UI + 1 langage de programmation
- Programmation orientée événement
- UI riches
- Connectés : REST, SOAP, AMF, ...
- ...

Critères de choix

- Type d'application
- Public visé
- Utilisations avancées désirées (3D, son, vidéo...)
- Performance / complexité de l'application
- Rendu graphique
- Communauté
- ...



Flex/Air in a nutshell

Plan

- Qui parle?
- Voyage au monde des RIA
- Flex in a nutshell
  - Qu'est-ce que Flex?
  - Les langages
    - Actionscript 3
    - MXML
  - Culture Flex
  - Retour sur expérience
  - Ressources

Flex in a nutshell > Qu'est-ce que Flex?

Qu'est-ce que Flex?

Un moyen de faire des **SWF**

C'est pour les **développeurs**

Cela permet de faire des **applications**

sur le **web** (Flex)

et sur **desktop** (AIR)

Historique

- Flex 1.0 : mars 2004 (Macromedia)
- Flex 1.5 : octobre 2004
- Flex 2.0 : juin 2006
- Flex 3.0 : février 2008
- Flex 4.0 ("Gumbo") : 2009

Les langages

MXML

- Description de l'interface
  + logique business
    + connexion à des webservices, REST, ...
- Basé sur XML
- Intégré avec l'AS : syntaxe *{ . . . }*

ActionScript 3.0

- Norme ECMAScript 4.0 (draft edition)
- Proche de Java et JavaScript
- Orienté objet
- Typé (mode strict par défaut)
- Pseudo-compilé
- Dynamique (*`dynamic class`*)
- Réflexif

"The power of the ActionScript language tools along with the hybrid type checking (mostly static for tool support in Flex Builder, but dynamic whenever it's convenient) makes for a programming experience that I find much more straightforward and pleasing than Java."

Bruce Eckel

Auteur de "Thinking in Java"

Runtime

- Langage **pseudo-compilé** (byte code)
- **Compilation à la volée** (Just In Time Compilation)
- Monothreadé
- Ramasse-miette

ActionScript 3

Variable

- var variable:String;
- var variable:String = "Ma chaine";

Constante

- const CONSTANTE:String = "ma chaine";

Quelques types de base

Types primitifs	Types complexes
Boolean	Object
int	Array
Null	Date
Number	Error
String	Function
uint	RegExp
void	XML
	XMLList

Traitement conditionnel

```
var entier:Number = 5;
if (entier < 0)
{
    trace("< 0");
}
else if (entier == 0)
{
    trace("= 0");
}
else
{
    trace("> 0");
}
```

Traitement conditionnel

```
var entier:String = "5";
switch(entier)
{
    case "5":
        trace("le nombre est 5");
        break;
   case "6":
        trace("le nombre est 6");
        break;
    default:
        trace("le nombre est différent de 5 et 6");
}
```

Boucles

```
for(var i:uint ; i<10 ; i++)
{
    trace(i);
}
```

Boucles

```
var i:uint = 1;
while(i<10)
{
    trace(i);
    i++;
}
```

Boucles

```
var i:uint=1
do
{
    trace(i);
    i++;
}
while(i<10);
```

Boucles

- var tableau:Array = new Array("un","deux","trois");
  for(var p:* in tableau) //itère sur les index
  {
  trace(p + " :: " + tableau[p]);
  }

- for each (var p:* in tableau) //itère sur les valeurs
  {
  trace(p)
  }

Programmer avec classe

```
package com.camilleroux.flex
{
    import mx.control.Button;

    public class MicroOnde extends Device implements IMicroOnde
    {
        protected var temperature:Number;

        public function MicroOnde()
        {
        }
        public function start():void
       {
       }
    }
}
```

Programmer avec classe

importation de classes et interfaces

```
package c
{
    import mx.control.Button;

    public class MicroOnde extends Device implements IMicroOnde
    {
        protected var temperature:Number;

        public function MicroOnde()
        {
        }
        public function start():void
        {
        }
    }
}
```

Programmer avec classe

internal : visible que dans son package

public : visible par tous

```
package
{
    import

    public class MicroOnde extends Device implements IMicroOnde
    {
        protected var temperature:Number;

        public function MicroOnde()
        {
        }
        public function start():void
        {
        }
    }
}
```

Programmer avec classe

+ **final** : ne peut être étendue
+ **dynamic** : possibilité de lui ajouter des attributs et méthodes au runtime

```
package co
{
    import mx

    public class MicroOnde extends Device implements IMicroOnde
    {
        protected var temperature:Number;

        public function MicroOnde()
        {
        }
        public function start():void
        {
        }
    }
}
```

Programmer avec classe

- internal (par défaut)
- public
- protected
- private
- + static

```
package com.cam
{
    import mx.

    public class M                    ements IMicroOnde
    {
        protected var temperature:Number;

        public function MicroOnde()
        {
        }
        public function start():void
        {
        }
    }
}
```

Programmer avec classe

```
package com.camilleroux.flex
{
    import mx.control.Button;

    public class MicroO                    vice implements IMicroOnde
    {
        protec
                                    public function start():void
        public
        {
        }
        public function start():void
        {
        }
    }
}
```

- internal (par défaut)
- public
- protected
- private
- + static

Interface

```
package com.camilleroux.flex
{
    public interface IMicroOnde
    {
        function start():void;
    }
}
```

Accesseurs

- public function get maVariable():Type
- public function set maVariable(value:Type):void

MXML

Hello World

Du vrai XML

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:Button label="Hello world"/>
    </mx:Panel>
</mx:Application>
```

Hello World

Base de tout document MXML

```
<?xml vers                oding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:Button label="Hello world"/>
    </mx:Panel>
</mx:Application>
```

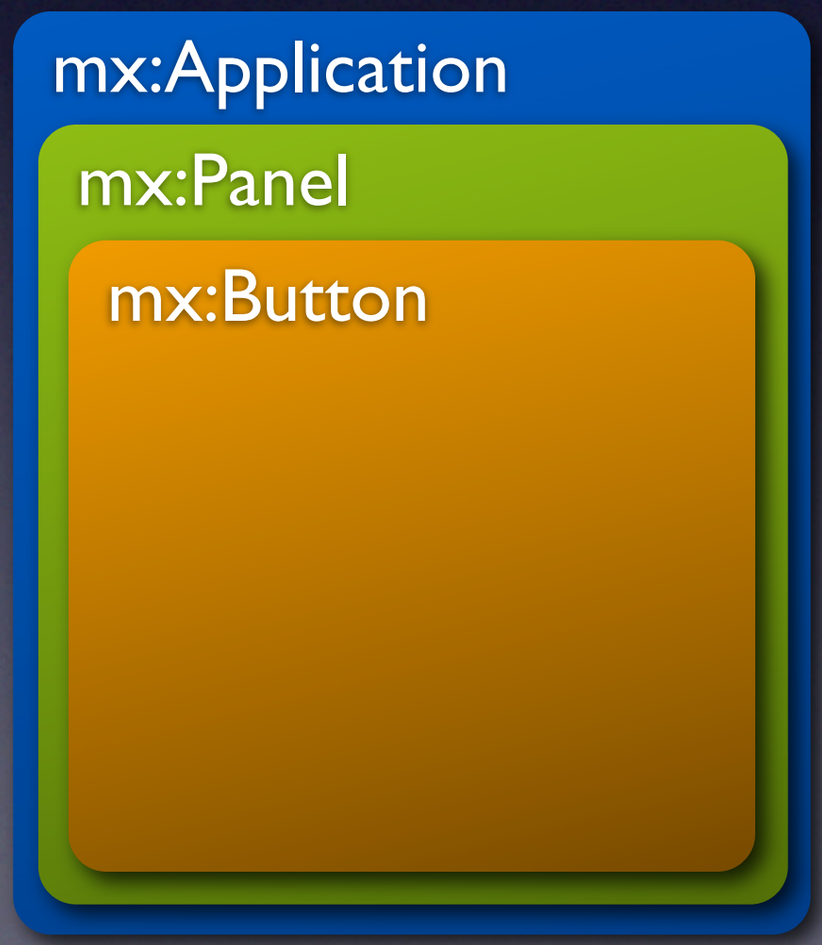
Hello World

Espace de nommage

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:Button label="Hello world"/>
    </mx:Panel>
</mx:Application>
```

Hello World

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:Button label="Hello world"/>
    </mx:Panel>
</mx:Application>
```



Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Etudions un exemple

Composant MXML

```
<?xml version="1                    utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" heigh…00">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

id

Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.a                    6/mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Propriété

Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.ado                    mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Binding

Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.ado                    mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Binding

Etudions un exemple

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:TextInput id="input"/>
        <mx:Label text="Texte : {input.text}"/>
        <mx:Button label="Reset" click="{input.text=' '}"/>
    </mx:Panel>
</mx:Application>
```

Evénement

Génère de l'AS

MXML Original

```
<?xml version="1.0" encoding="utf-8"?>
<mx:Application xmlns:mx="http://
www.adobe.com/2006/mxml">
    <mx:Panel width="200" height="200">
        <mx:Button label="Hello world"/>
    </mx:Panel>
</mx:Application>
```

Code généré

Option de compilation : -keep

```
private var _documentDescriptor_ : mx.core.UIComponentDescriptor =
new mx.core.UIComponentDescriptor({
  type: mx.core.Application
  ,
  propertiesFactory: function():Object { return {
    childDescriptors: [
      new mx.core.UIComponentDescriptor({
        type: mx.containers.Panel
        ,
        propertiesFactory: function():Object { return {
          width: 200,
          height: 200,
          childDescriptors: [
            new mx.core.UIComponentDescriptor({
              type: mx.controls.Button
              ,
              propertiesFactory: function():Object { return {
                label: "Hello world"
              }}
            })
          ]
        }}
      })
    ]
  }}
})
```

Compilation

MXML vers ActionScript 3

CSS vers ActionScript 3

ActionScript 3 vers Byte code

Assets vers SWF

Byte code vers SWF

Exécution du SWF sur Flash Player

Les Evénements

```
<mx:Button label="show" click="{Alert.show('event')}"/>
```

```
<mx:Script>
    <![CDATA[
        import mx.controls.Alert;

        private function showAlert(event:Event):void
        {
            Alert.show('event')
        }
    ]]>
</mx:Script>

<mx:Button label="show" click="showAlert(event)"/>
```

```
<mx:Script>
	<![CDATA[
		import mx.controls.Alert;

		private function showAlert(event:Event):void
		{
			Alert.show('event')
		}
	]]>
</mx:Script>

<mx:creationComplete>
	<![CDATA[
		bouton.addEventListener(MouseEvent.CLICK, showAlert);
	]]>
</mx:creationComplete>

<mx:Button id="bouton" label="show"/>
```

Les Bindings

```
<mx:TextInput id="input"/>
<mx:Label text="Texte : {input.text}"/>
```

```
<mx:Script>
    <![CDATA[
        [Bindable]
        private var bind:String;
    ]]>
</mx:Script>

<mx:TextInput id="input" change="{bind=input.text}"/>
<mx:Label text="Texte : {bind}"/>
```

```
<mx:creationComplete>
    <![CDATA[
        BindingUtils.bindProperty(lab,"text",input,"text");
    ]]>
</mx:creationComplete>

<mx:TextInput id="input"/>
<mx:Label id="lab"/>
```

Les Etats

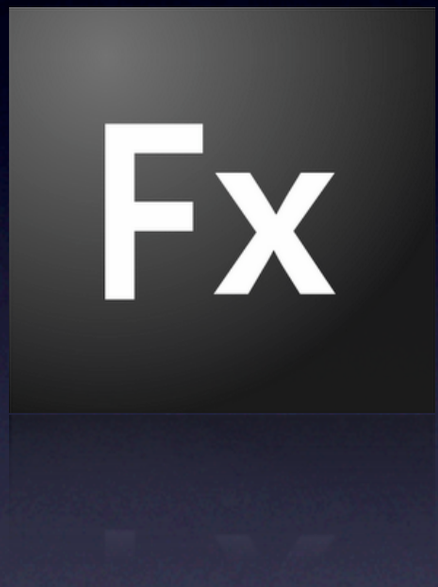
Exemple

```
<mx:states>
    <mx:State name="monEtat">
        <mx:SetProperty target="{views}"
                        name="selectedIndex" value="2" />
        <mx:RemoveChild target="{backButton}" />
    </mx:State>
</mx:states>
```

Chaque composant possède une variable **currentState** qui contient l'étant courant. Il suffit de le modifier pour le changer d'état.
L'état par défaut a pour valeur "".

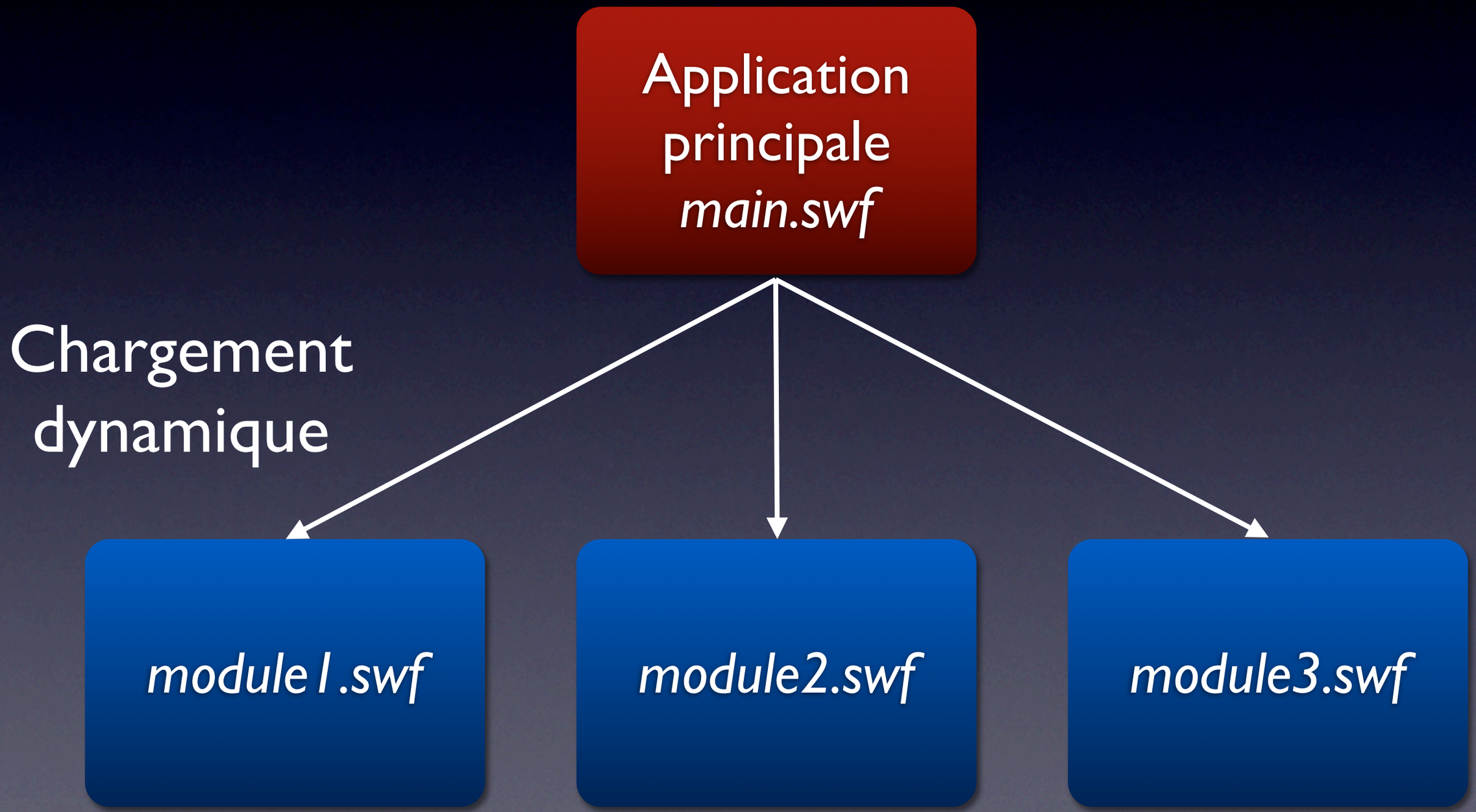
Actions possibles
SetProperty
AddChild
RemoveChild
SetEventHandler
SetStyle

Culture

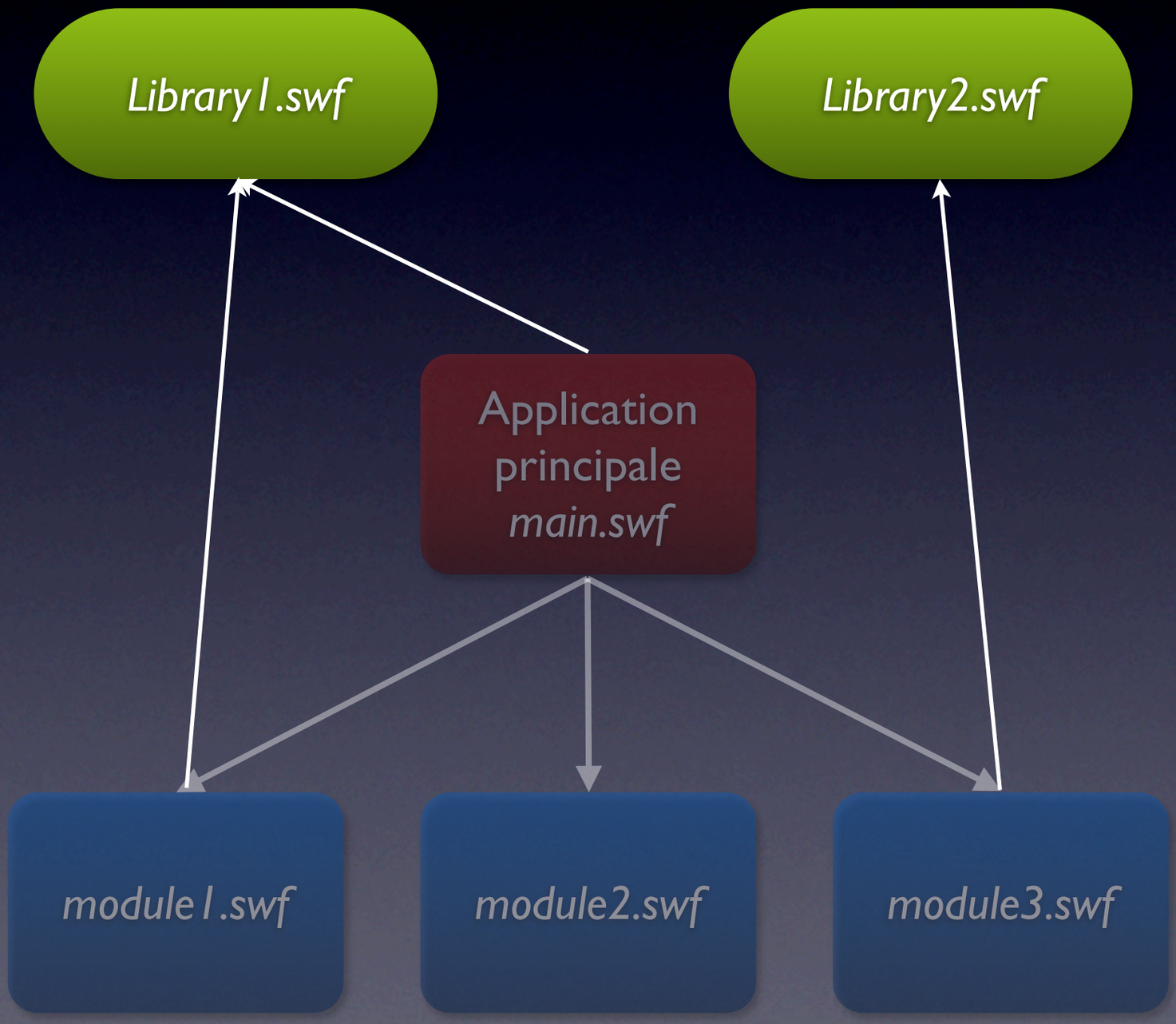


Modules et RSL

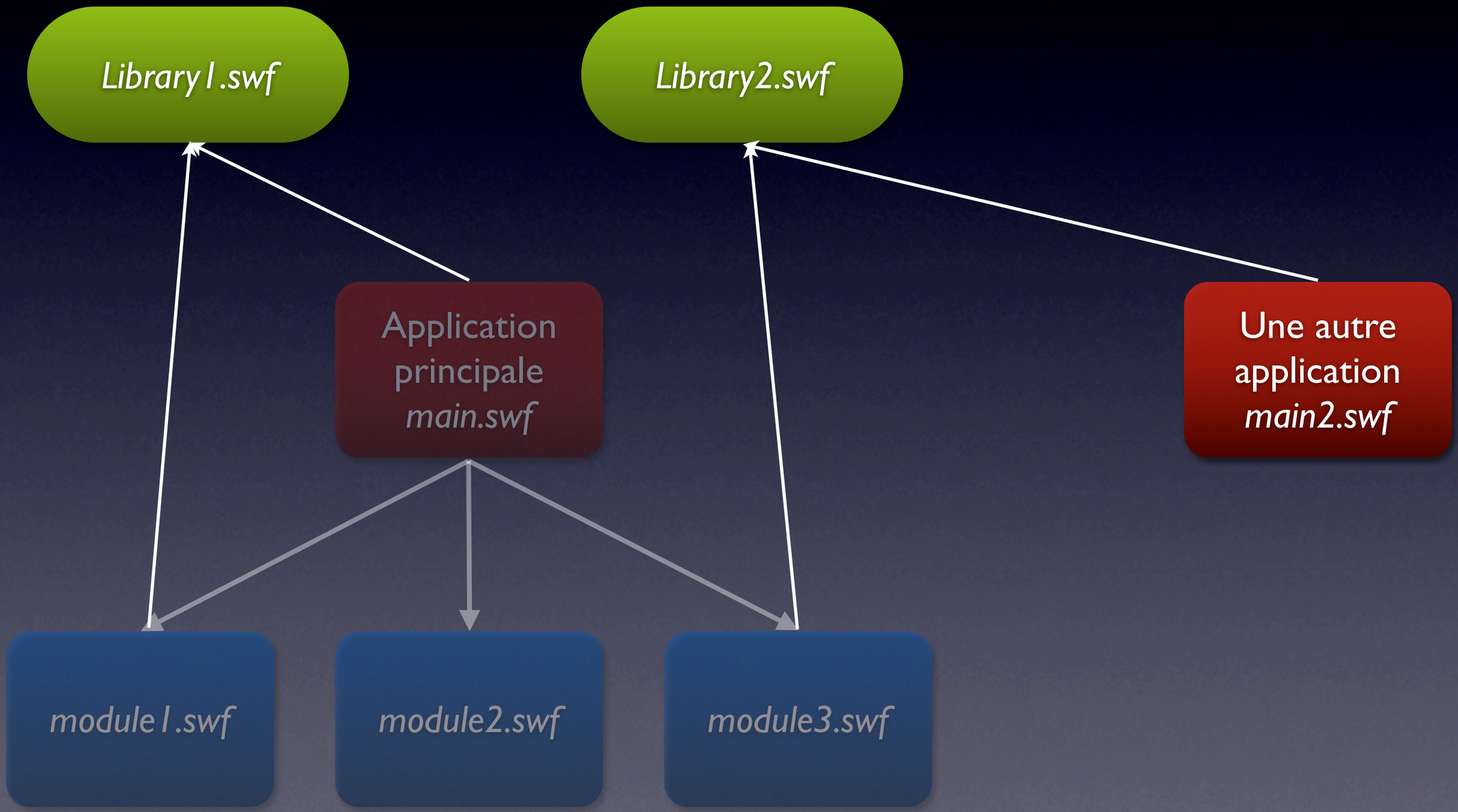
Modules


Application principale
main.swf
Chargement dynamique
module1.swf
module2.swf
module3.swf

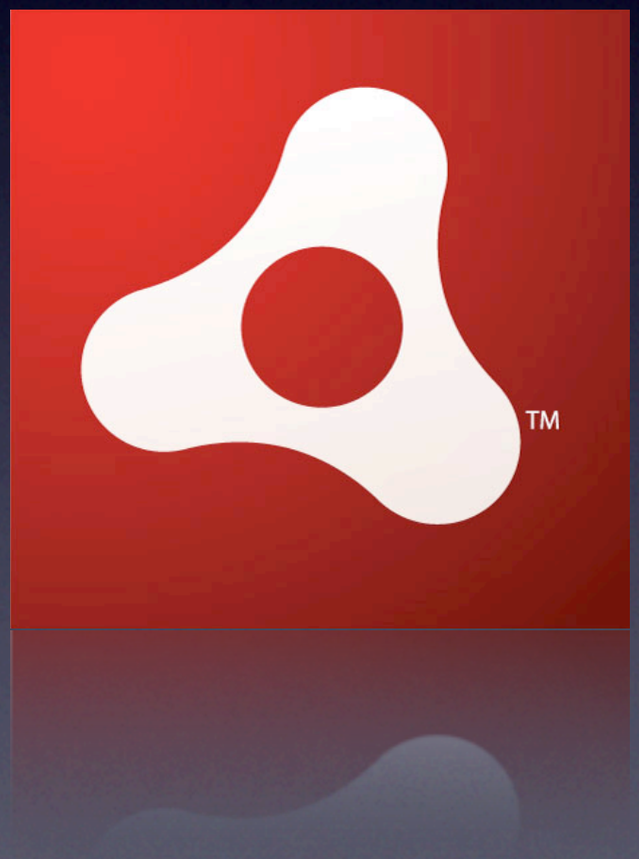
Runtime Shared Library



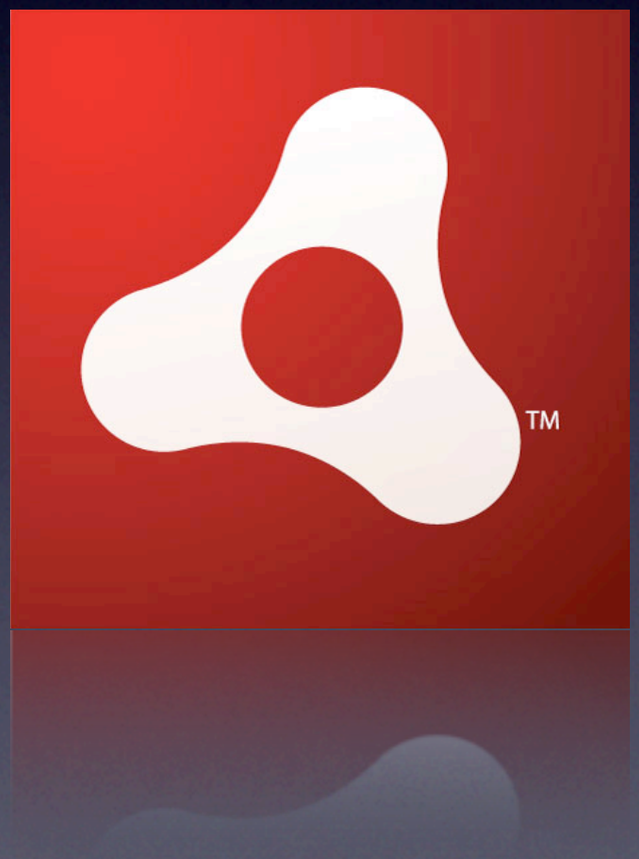
Runtime Shared Library



AIR



RIA



Quoi de plus dans AIR?

Accès au système de fichier

PDF

UI natif *(fenêtres et menus)*

Processus en tâche de fond

SQLite

WebKit

API pour les mises à jour

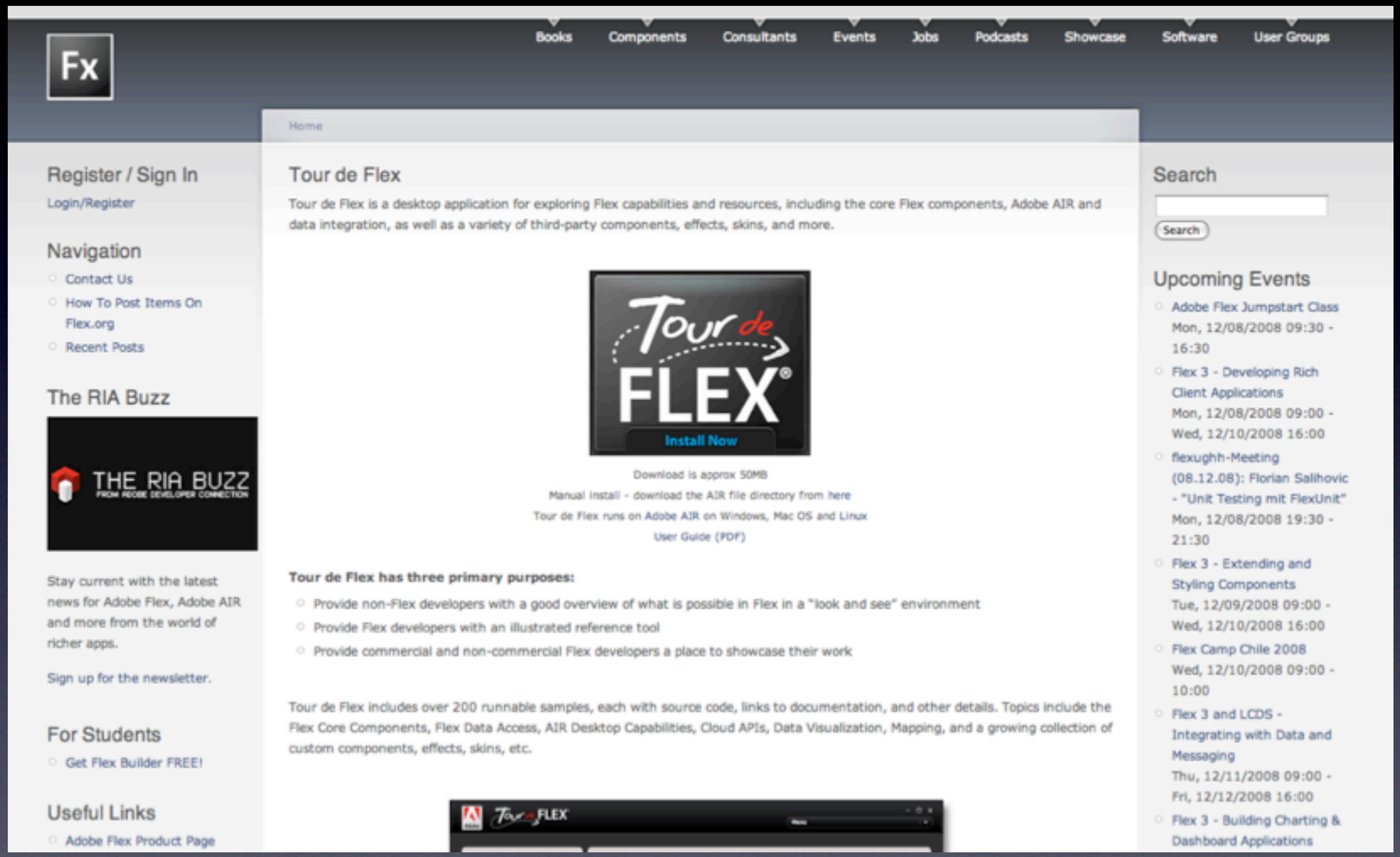
Stockage local

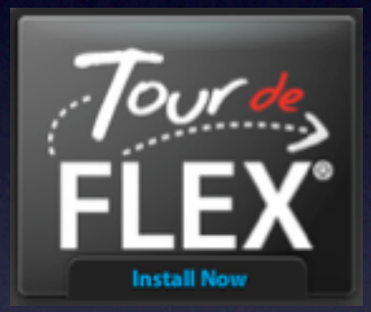
Monitoring de la connexion réseau

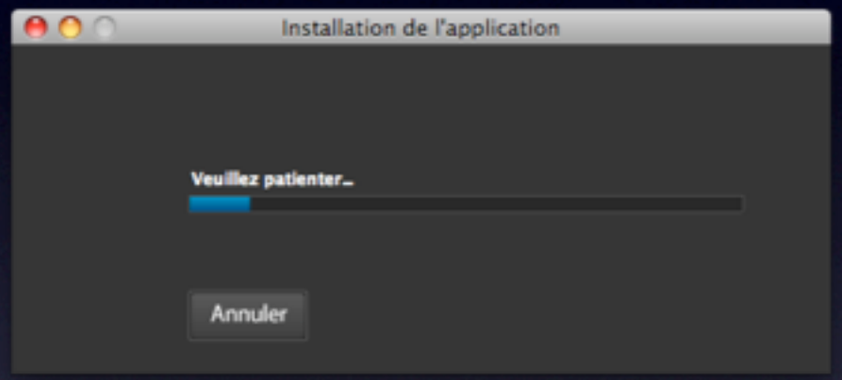
Contrôle du chrome

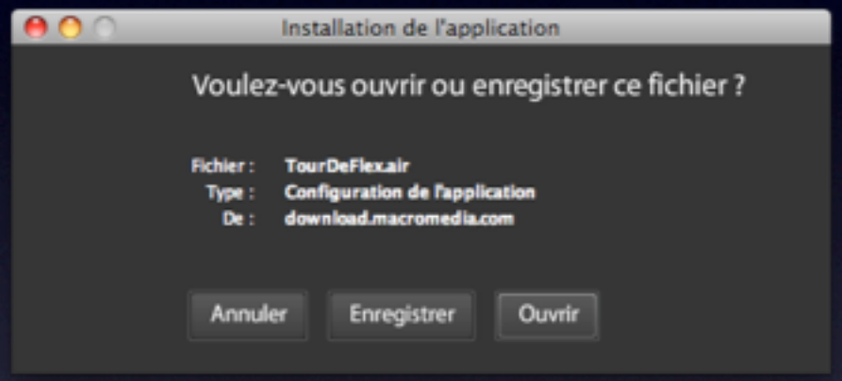
Système de notification

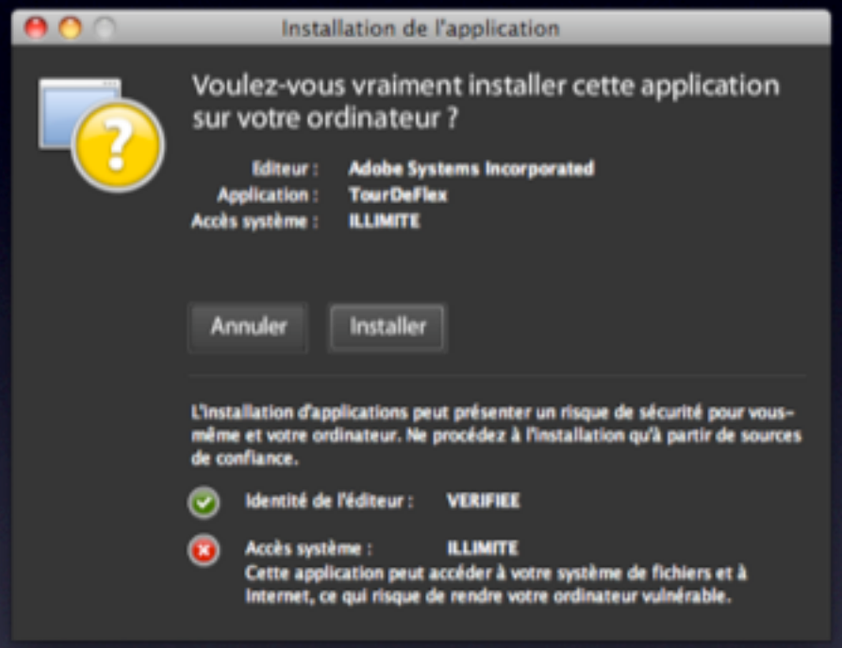
Installation d'une application AIR

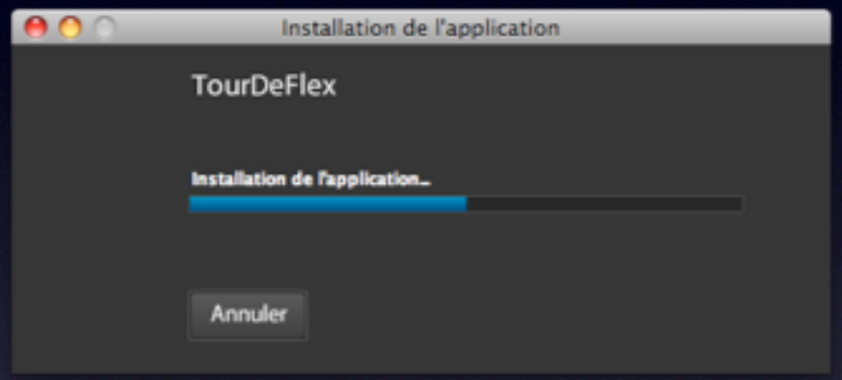

Fx
Books
Components
Consultants
Events
Jobs
Podcasts
Showcase
Software
User Groups
Home
Register / Sign In
Login/Register
Navigation
Contact Us
How To Post Items On Flex.org
Recent Posts
The RIA Buzz
THE RIA BUZZ
FROM ADOBE DEVELOPER CONNECTION
Stay current with the latest news for Adobe Flex, Adobe AIR and more from the world of richer apps.
Sign up for the newsletter.
For Students
Get Flex Builder FREE!
Useful Links
Adobe Flex Product Page
Tour de Flex
Tour de Flex is a desktop application for exploring Flex capabilities and resources, including the core Flex components, Adobe AIR and data integration, as well as a variety of third-party components, effects, skins, and more.
Tour de FLEX
Install Now
Download is approx 50MB
Manual install - download the AIR file directory from here
Tour de Flex runs on Adobe AIR on Windows, Mac OS and Linux
User Guide (PDF)
Tour de Flex has three primary purposes:
Provide non-Flex developers with a good overview of what is possible in Flex in a "look and see" environment
Provide Flex developers with an illustrated reference tool
Provide commercial and non-commercial Flex developers a place to showcase their work
Tour de Flex includes over 200 runnable samples, each with source code, links to documentation, and other details. Topics include the Flex Core Components, Flex Data Access, AIR Desktop Capabilities, Cloud APIs, Data Visualization, Mapping, and a growing collection of custom components, effects, skins, etc.
Search
Search
Upcoming Events
Adobe Flex Jumpstart Class
Mon, 12/08/2008 09:30 - 16:30
Flex 3 - Developing Rich Client Applications
Mon, 12/08/2008 09:00 - Wed, 12/10/2008 16:00
flexughh-Meeting (08.12.08): Florian Salihovic - "Unit Testing mit FlexUnit"
Mon, 12/08/2008 19:30 - 21:30
Flex 3 - Extending and Styling Components
Tue, 12/09/2008 09:00 - Wed, 12/10/2008 16:00
Flex Camp Chile 2008
Wed, 12/10/2008 09:00 - 10:00
Flex 3 and LCDS - Integrating with Data and Messaging
Thu, 12/11/2008 09:00 - Fri, 12/12/2008 16:00
Flex 3 - Building Charting & Dashboard Applications


Tour de
FLEX®
Install Now


Installation de l'application
Veuillez patienter...
Annuler


Installation de l'application
Voulez-vous ouvrir ou enregistrer ce fichier ?
Fichier : TourDeFlex.air
Type : Configuration de l'application
De : download.macromedia.com
Annuler
Enregistrer
Ouvrir


Installation de l'application
Voulez-vous vraiment installer cette application sur votre ordinateur ?
Editeur : Adobe Systems Incorporated
Application : TourDeFlex
Accès système : ILLIMITE
Annuler
Installer
L'installation d'applications peut présenter un risque de sécurité pour vous-même et votre ordinateur. Ne procédez à l'installation qu'à partir de sources de confiance.
Identité de l'éditeur : VERIFIEE
Accès système : ILLIMITE
Cette application peut accéder à votre système de fichiers et à Internet, ce qui risque de rendre votre ordinateur vulnérable.


Installation de l'application
TourDeFlex
Installation de l'application...
Annuler

Adobe
Tour de FLEX
Menu
Search » Filter
Flex Core Components
UI Controls
Containers
Effects
Formatters
Validators
Charting
Coding Techniques
Comments
Download
Open in Browser
Expand
Tour de FLEX®
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Version: 1.0
List Version: 2008-11-10.2
Samples: 217

Adobe Flash Platform and web technologies

TOOLS TO DESIGN AND DEVELOP

- After Effects
- Illustrator
- Fireworks
- Photoshop
- Flash CS4 Professional
  - Interactive
  - Animation
  - Visual Layout
- FXG
- Flash Catalyst
  - Prototyping
  - Design to Interactive
- Flex Builder
  - Eclipse IDE
  - Code Profiling
  - Debugging

FRAMEWORK

Flex

- Components
- MXML
- Declarative UI
- ActionScript

CLIENTS

Browsers

- JavaScript, HTML, CSS, etc
- DOM APIs

Flash Player

- ActionScript
- E4X, Binary Data
- H.264 Video AAC Audio
- Real-time data
- PixelBender
- 3D Effects

AIR

- JavaScript, HTML, CSS, etc.
- OS /Desktop Integration
- ActionScript
- Local Storage
- PDF Integration
- Persistent Application

OPERATING SYSTEMS

Mac, Windows, Linux, Symbian, Windows Mobile, Wii, PlayStation, etc.

NETWORK

AMF, XML, JSON, SOAP, RSS, ATOM, etc. HTTP/S, Sockets, RTMP, etc.

FLASH SERVERS

- Flash Media Server Family
- BlazeDS
- On-Demand & Live Streaming
- Enterprise Services
- RealTime Interactivity
- Remoting / AMF
- Protected Streams
- Data Management

ADOBE SERVERS

- ColdFusion
- LiveCycle ES
- Messaging
- Data Capture and Output
- Remoting
- Process Automation
- Data Management
- Security

THIRD PARTY SERVERS

Java, php, etc.

- BEA
- Business Objects
- Intuit
- SAP
- salesforce.com
- WebSphere
- Zend
- Java
- .NET
- Perl
- PHP

RESOURCE TIERS

- Databases
- Directories
- ECM Repository
- Message Queues
- Legacy Systems

Retour sur expérience

- Api parfois minimalistes
- Architecture (MVC + structure par composants)
- IDE incomplet
- Communauté active

- Scroll sous Mac OS
- Temps de compilation parfois long
- Machine virtuelle à optimiser
- Développement rapide du UI

Ressources

Liens à connaître

- **Flex Language Reference** (http://livedocs.adobe.com/flex/3/langref/)
- **Flex ressources** (http://www.adobe.com/support/documentation/en/flex/)
- **Flex in a week** (http://www.adobe.com/devnet/flex/videotraining/)
  Vidéos et tutoriels pour apprendre Flex en 1 semaine
- **Flex.org** (http://flex.org/)
  Agrégation d'actualités provenant de la sphère Flex/Air
- **TourDeFlex** (http://flex.org/tour)
  RDA en Air pour explorer des ressources et des composants Flex

Tour de FLEX

Menu

Search » Filter

Data Visualization

- ILOG Elixir
- Kap IT Lab
  - Diagrammer
  - Kiviat(Radar Chart)
  - TreeMap
  - Visualizer

Visualizer is a data visualization Flex component.
Author: Kap IT
Date Added: 2008-09-10

Visualizer

Comments (1) | Download | Open in Browser | Expand

Hierarchical | Balloon | Radial | Hierarchical Cyclic

Click on + to expand or Roll over a person to see its details

Visible levels :

Orientation
Top to Bottom

Link drawing type
Orth. polyline

powered by KapIT

TDFVisualizer... | CustomCount... | Lang Ref | Product guide | Component H... | About Kap IT ...

```
<?xml version="1.0" encoding="utf-8"?>
<TDF:TDFApplication
    xmlns:mx="http://www.adobe.com/2006/mxml"
    xmlns:component="fr.kapit.tourdeflex.component.*"
    xmlns:TDF="fr.kapit.tourdeflex.*"
    xmlns:visualizer="com.kapit.visualizer.*"
    layout="absolute"
    backgroundColor="#F7F7F7"
    >

    <!--
        This application demonstrates how to use Visualizer component to display Hierarchical
    -->

    <mx:Style source="../../TDFStyle/src/TDFStyle.css" />

    <mx:Script>
```

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Version: 1.0 | List Version: 2008-11-10.2 | Samples: 217

Frameworks

- **Cairngorm** (http://opensource.adobe.com/wiki/display/cairngorm/)
- **PureMVC** (http://puremvc.org/)
- **Mate** (http://mate.asfusion.com/)
- ...

- Architectures et Framework Flex / Air
  par Matthieu Segret
  http://techtalks.intellicore.net/2008/05/29/architectures-frameworks-flex/

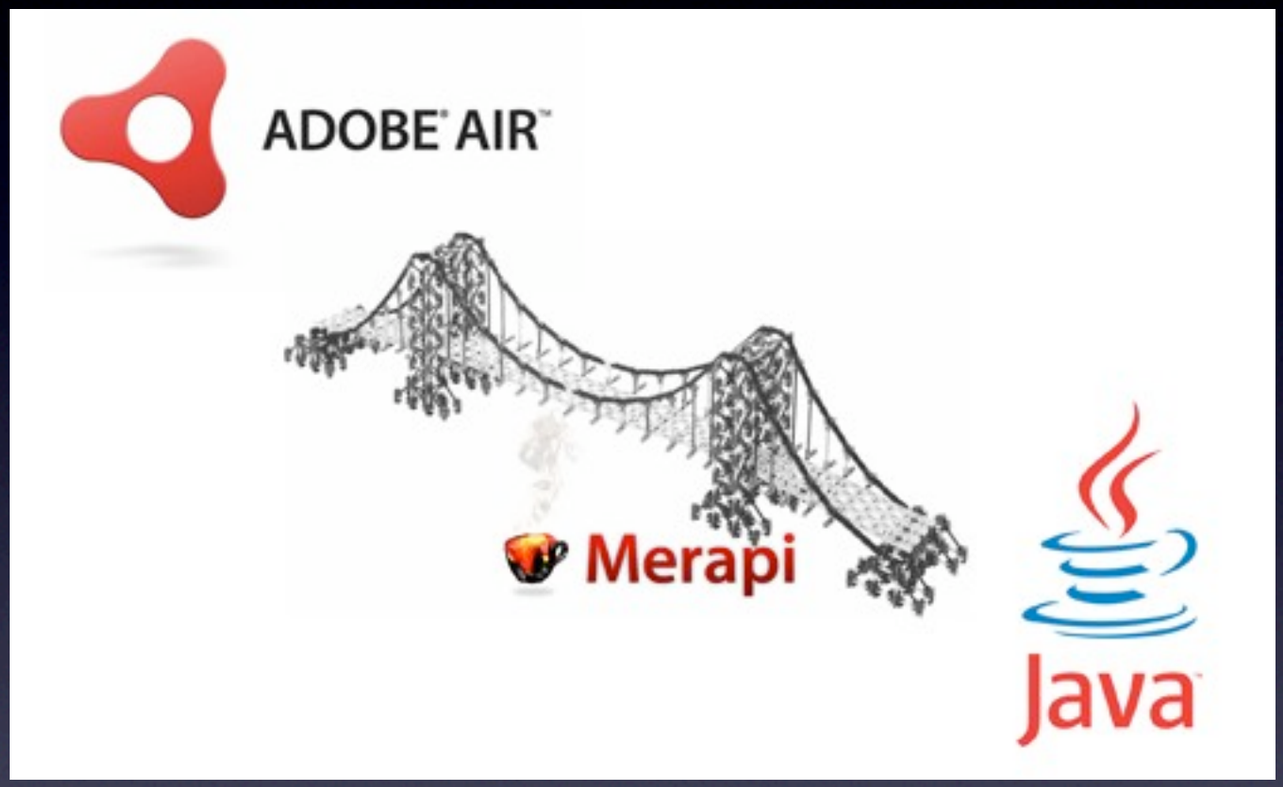
Frameworks

Source : Google Insights (décembre 2008)

Bibliothèques

- **FlexUnit** (http://code.google.com/p/as3flexunitlib/)
  Tests unitaires
- **Thunderblolt** (http://code.google.com/p/flash-thunderbolt/)
  Logger extension
- **Flexlib** (http://code.google.com/p/flexlib/)
  Composants graphiques
- **Degrafa** (http://www.degrafa.org/)
  Framework graphique

Merapi



Communication par message entre AIR et JAVA

http://merapiproject.net/

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