

# Fractal Management Console

25<sup>th</sup> March 2004

Fractal Workshop

ObjectWeb Architecture Meeting  
Jussieu University - Paris - France

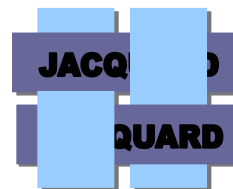
**Jérôme Moroy - Philippe Merle**

**INRIA Futurs – Lille – Jacquard Project**

**OpenCCM Project**



[www.objectweb.org](http://www.objectweb.org)



## → Fractal Management Console

## → Demonstrations

- Managed Fractal application (HelloWorld)
- Managed Distributed Fractal application (rmi HelloWorld)

## → Conclusion

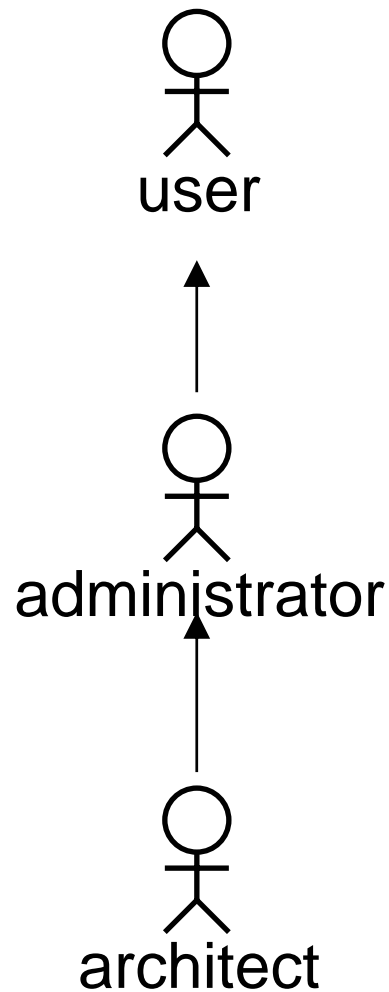
## → Generic Console For Fractal Application

- Plug-in built on top of the Generic Browser Framework
- Compliant with the Fractal 2.0 Specification
- Customizable for every Fractal applications
  - Provides a personalized API dedicated to Fractal context

## → Default Fractal Console Features

- Discovers the components of the application
- Introspects their interfaces and its structure
- Manages the controllers of the components
  - LifeCycle controller, Content controller, ...
- Monitors the application status
- Reconfigures the Fractal application at runtime
  - Changes a component instance
  - Changes the component bindings

# Current Roles



## ➔ **user of the application (basic)**

- sees the main component as a « black » box
- the client/server interfaces are visible
- only the business actions are available

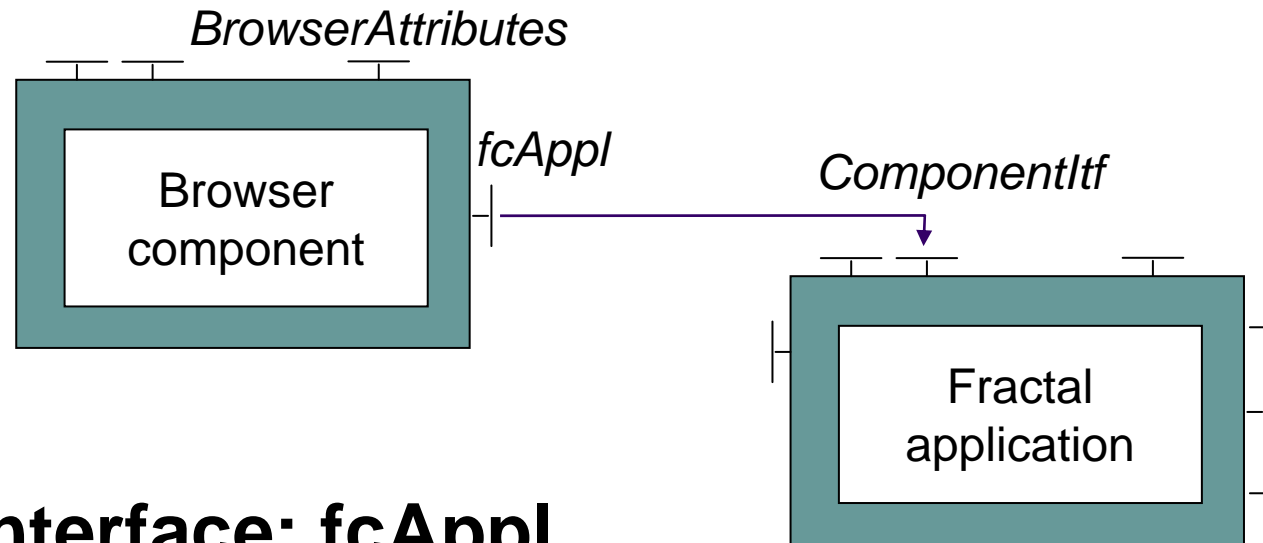
## ➔ **administrator of the application**

- the controllers of the components are visible
- (re)configures the application at runtime

## ➔ **Fractal architect (advanced)**

- builds Fractal application
- instantiates Fractal application

# The Browser Fractal Component



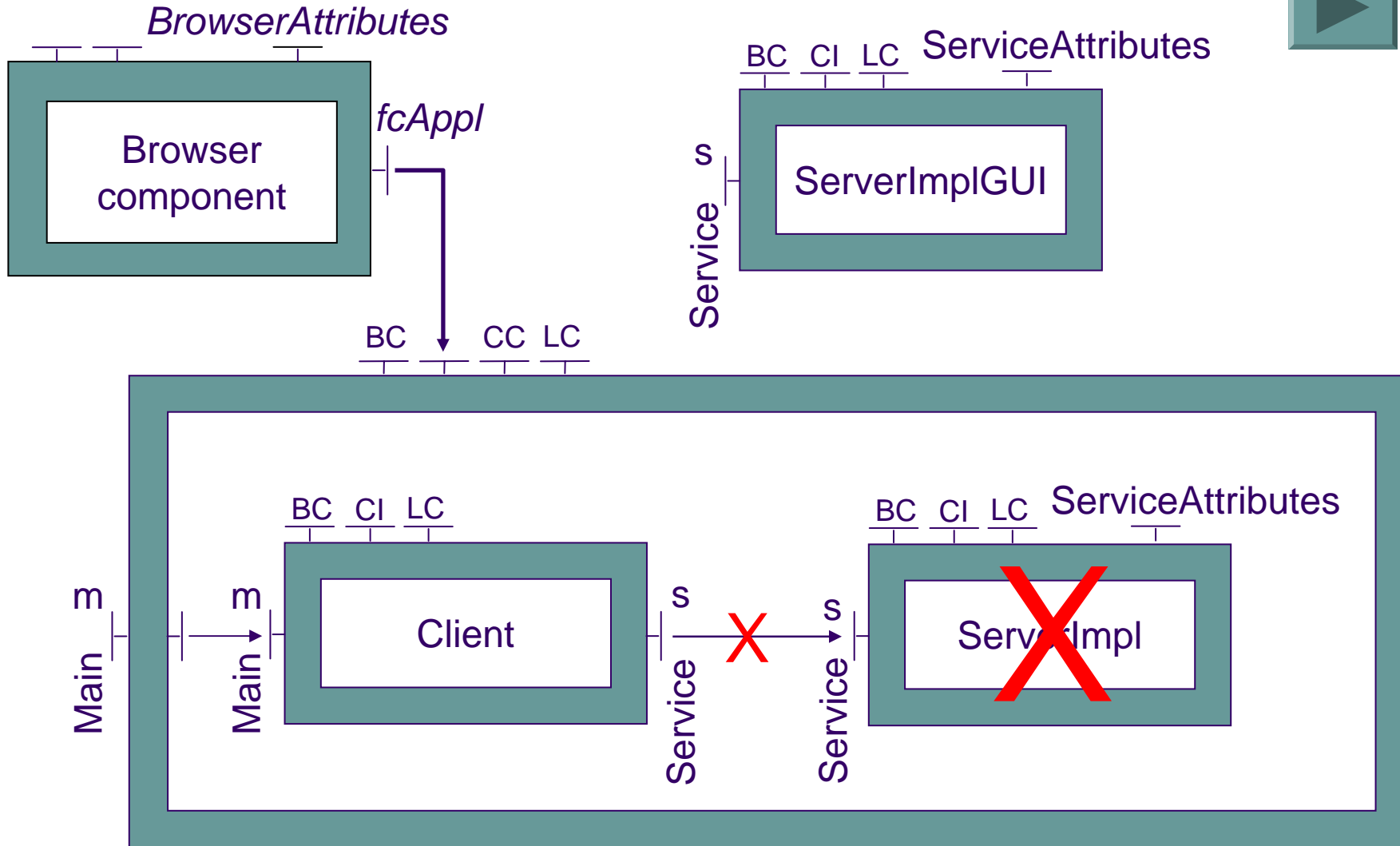
## → One client interface: **fcAppl**

➤ Signature: `org.objectweb.fractal.api.Component`

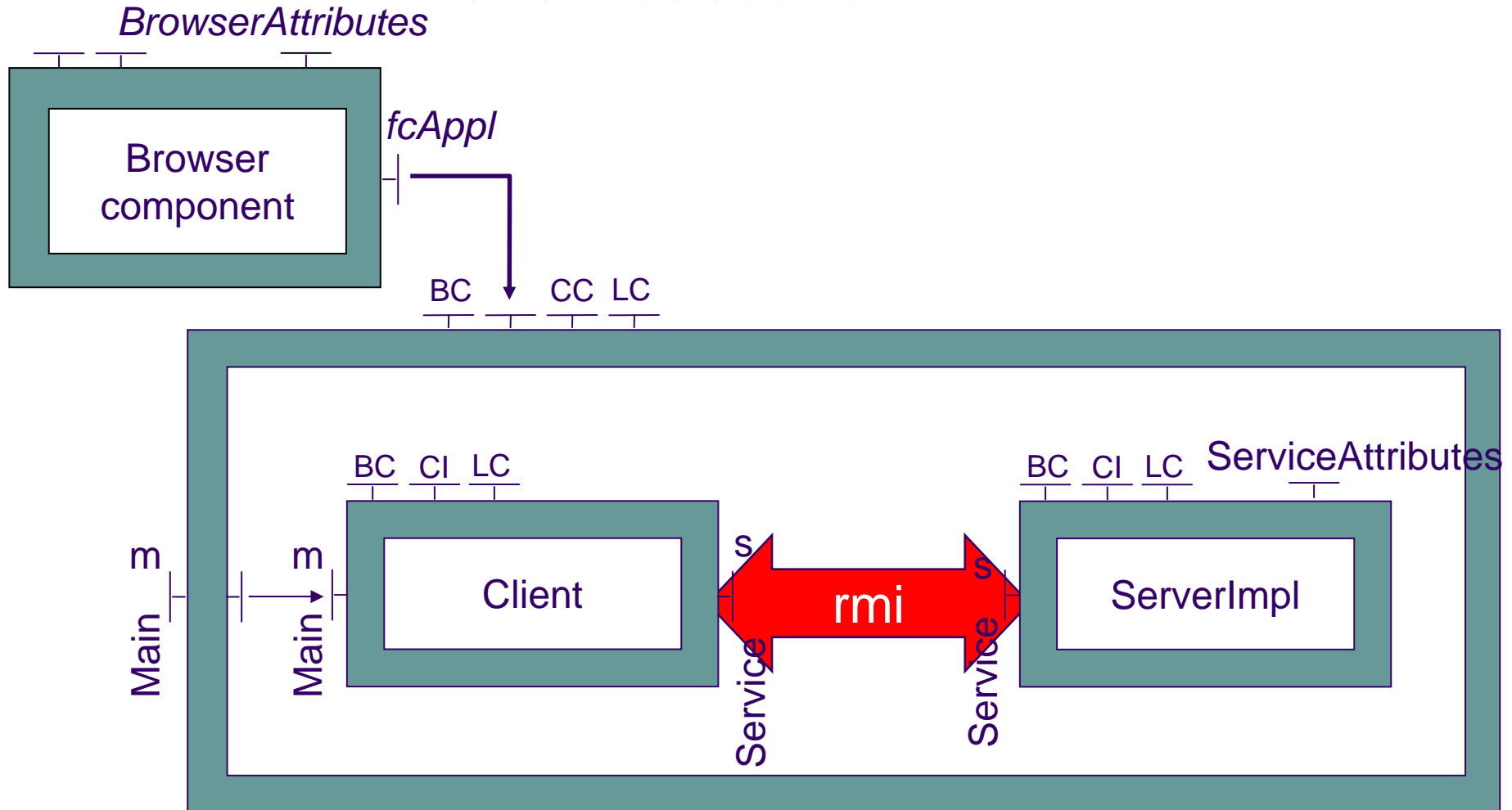
## → One customizable attribute

```
interface BrowserAttributes {  
    // path for configuration files  
    public void setConfigFiles(String configFiles);  
    public String getConfigFiles();  
}
```

# The « HelloWorld » scenario



# The distributed « HelloWorld » architecture



## → Operational GUI for Fractal runtime management

- Fractal 2.0 compliant (exist also for Fractal 1.0)
- Class introspection plugin
- Any Fractal application is pluggable/manageable
- An application personalization could be specified
- In addition of the FractalGUI tool
- Used by the ObjectWeb GoTM project

## → Available in the OpenCCM CVS Repository

- Example of the Browser Framework
- CVS: <http://openccm.objectweb.org>
- Module: browser





# Thank You – Q&A

## ➔ **Presentation of the Generic Browser Framework**

➤ System Management Workshop (tomorrow)

➔ **<http://openccm.objectweb.org>**