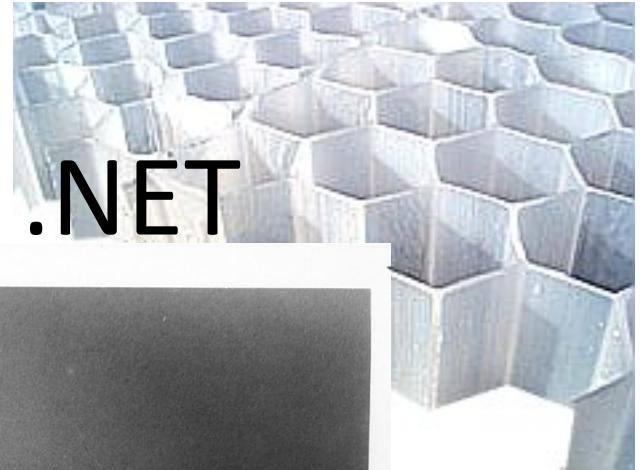
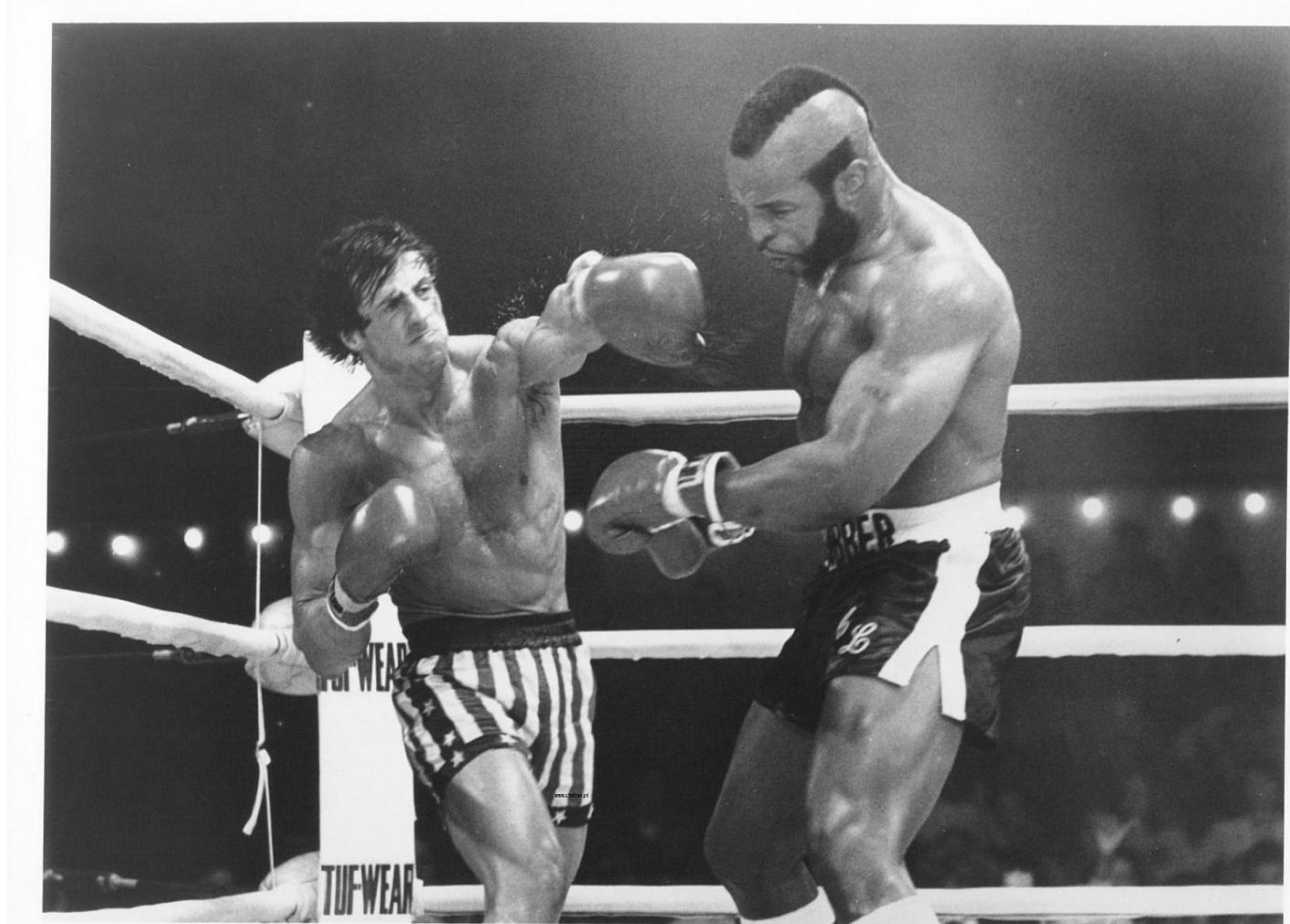


# JavaEE compareTo .NET



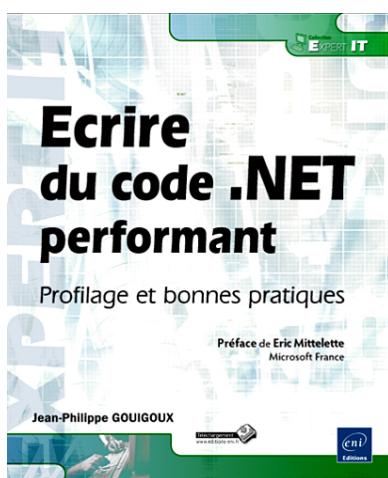
Jean-Philippe Gouigoux & Nicolas De Loof

# Who's who ?



## Jean-Philippe Gouigoux

- Architecte .NET
- UBS, AgileTour
- MCPD.NET
- Auteur



**Dotnet France**  
Technologies Sharepoint, SQL Server & .NET

[search://gouigoux](http://search://gouigoux)

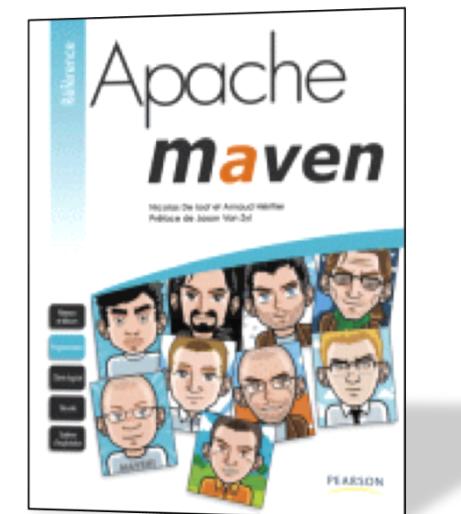
## Nicolas De Loof

- Architecte Java
- JUG-Leader
- Open-sourceur
- Auteur
- ...



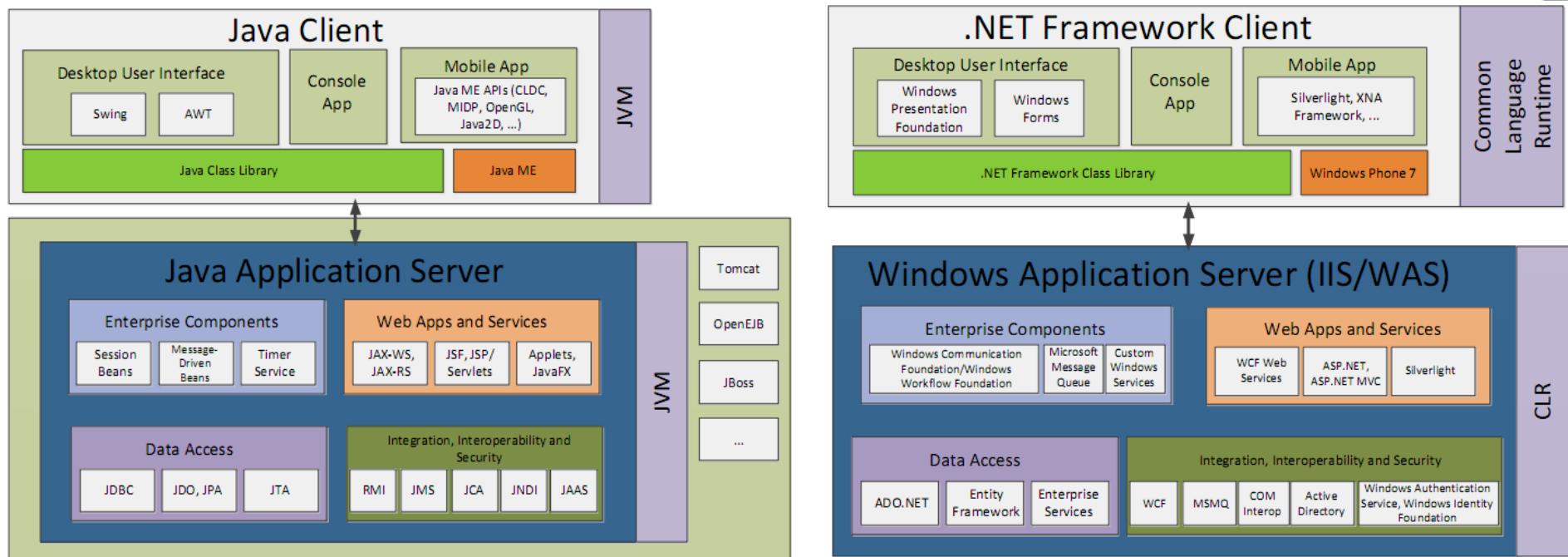
  
**CloudBees**

<http://blog.loof.fr/>



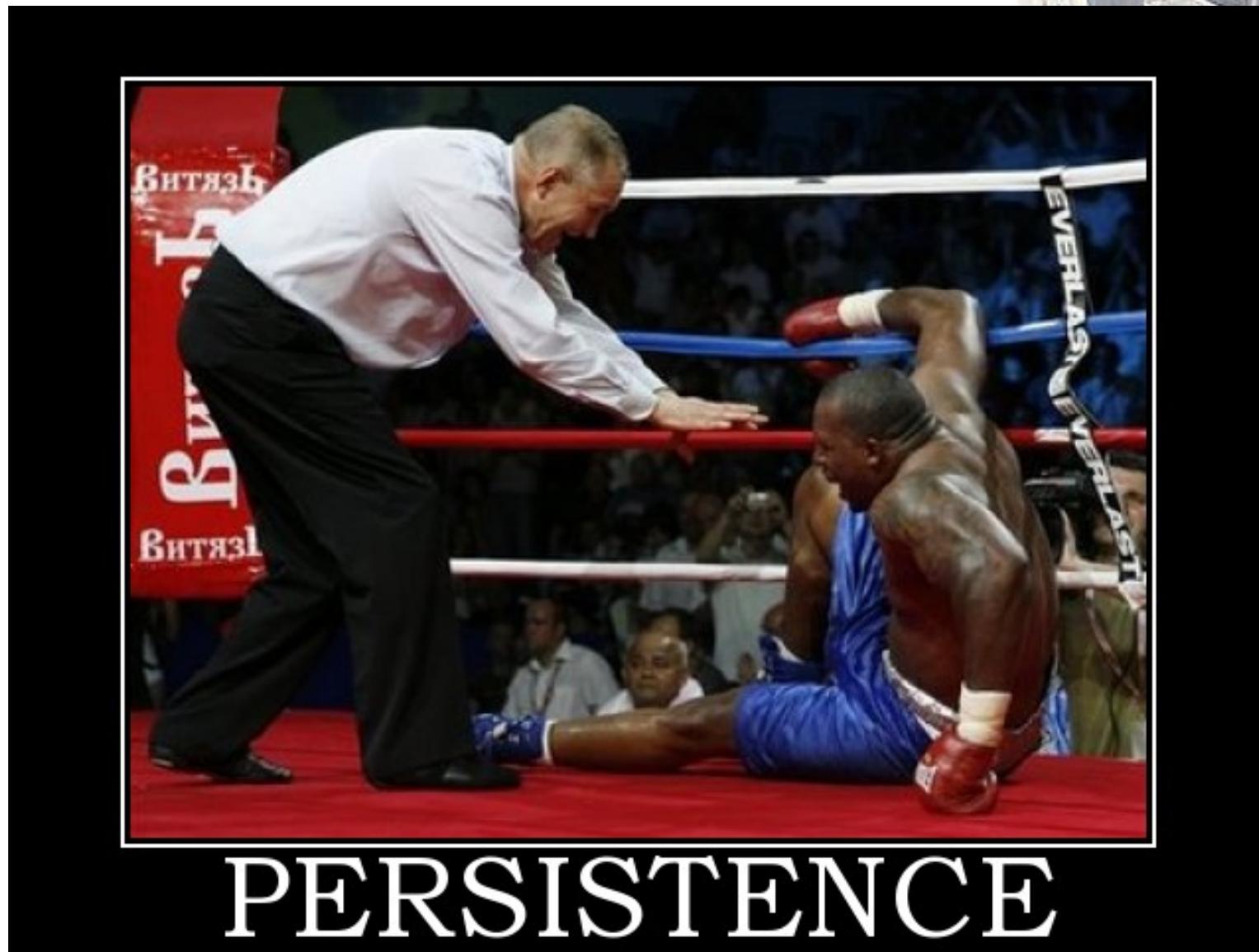
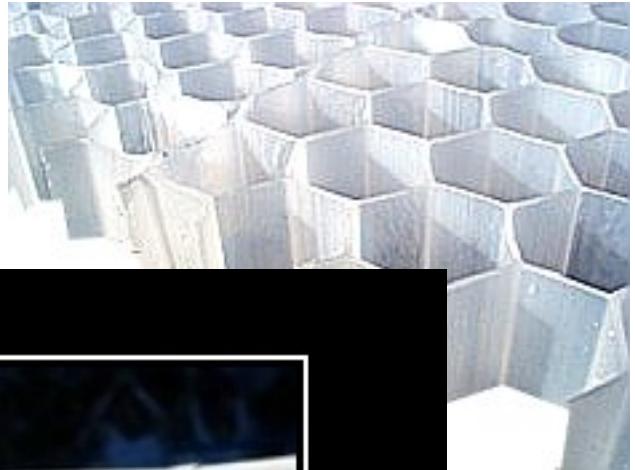


# Une similitude certaine



Source : <http://java.interoperabilitybridges.com>

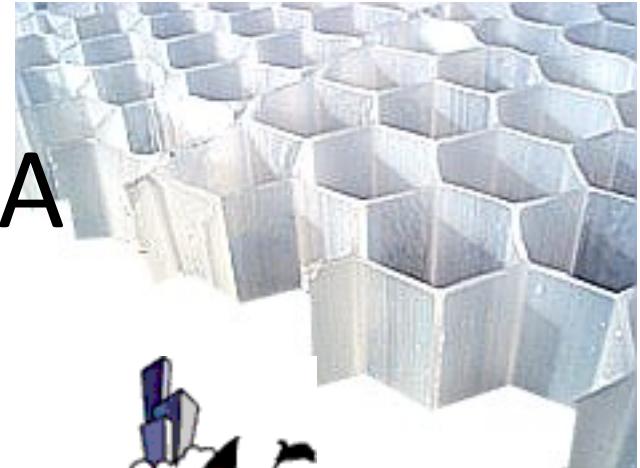
# Round 1



PERSISTENCE



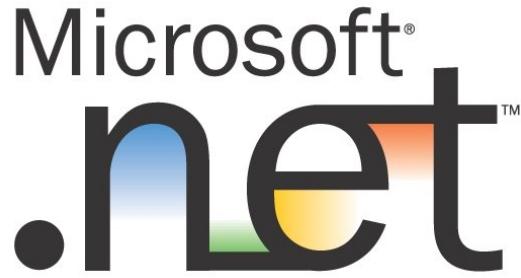
# Hibernate & JPA



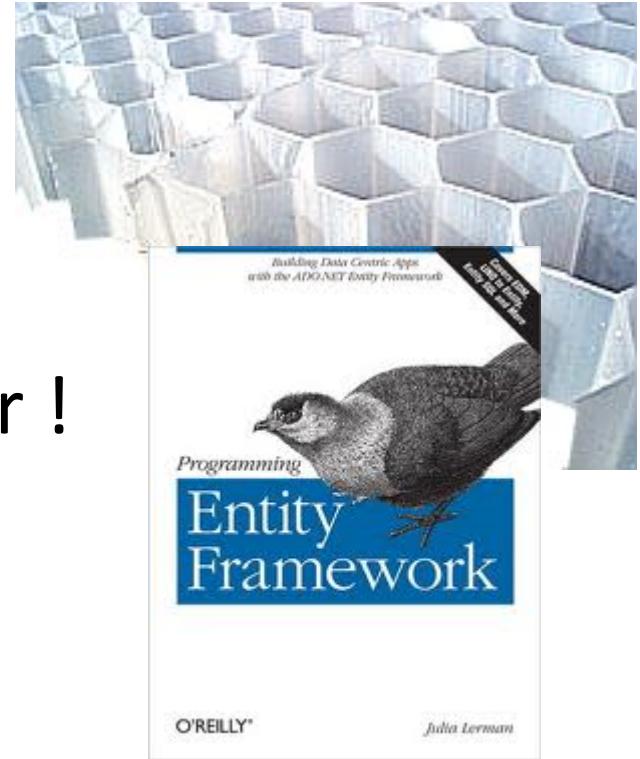
- EJB Entity :'(
- JDO :-/
- Hibernate :)
- JPA :D

... Criteria ? NoSQL ?

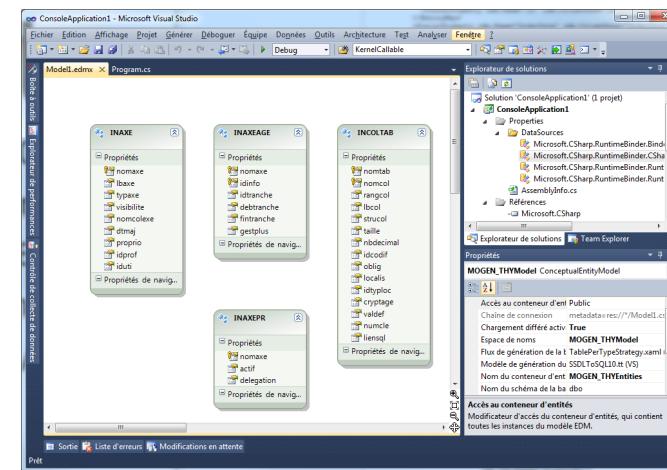




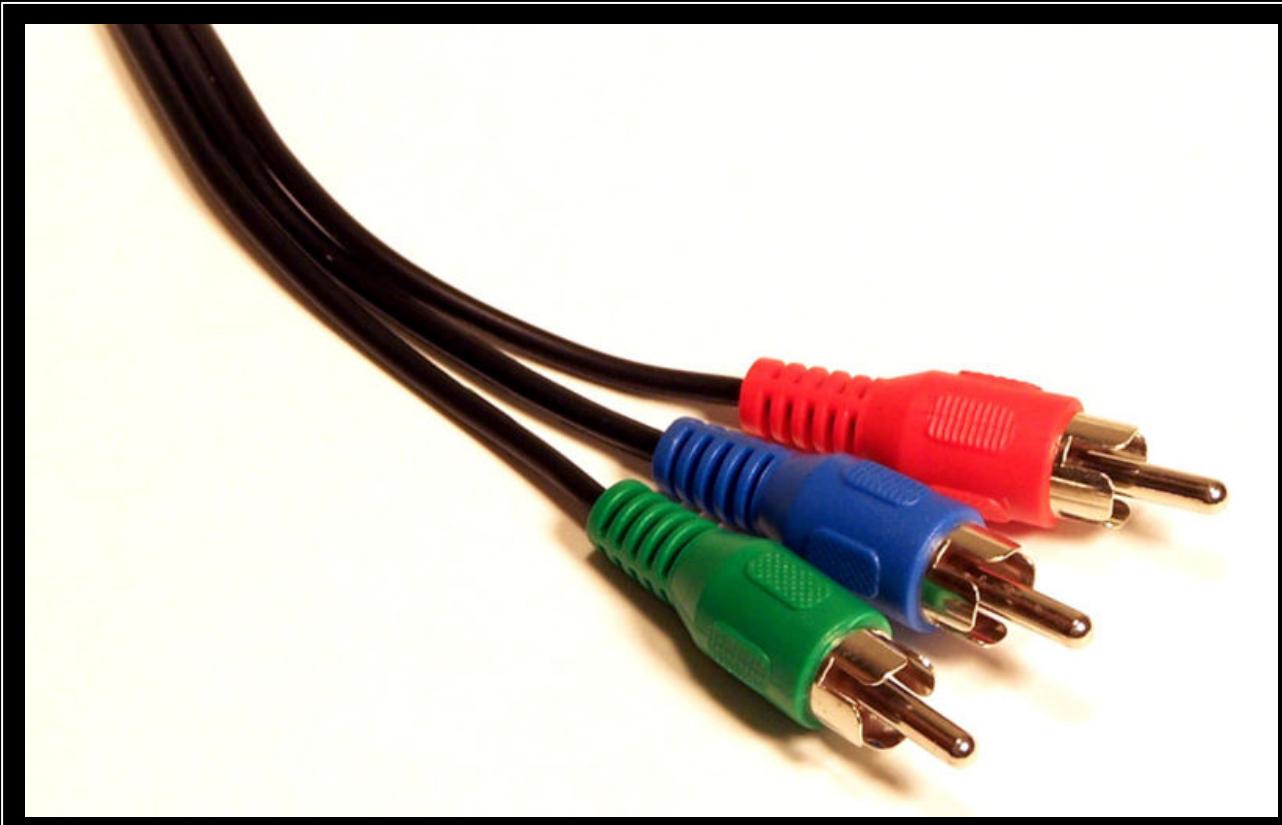
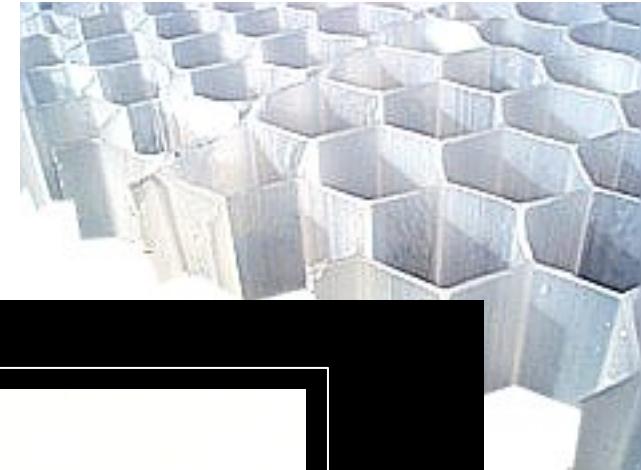
# ADO.NET



- .NET 2.0 : circulez, y'a rien à voir !
- NHibernate
- ADO.NET Entity Framework
- Mapping XML / Attribut
- NoSQL / Object Prevalence (Bamboo)



# Round 2



# COMPONENT



# POJO and/or EJB

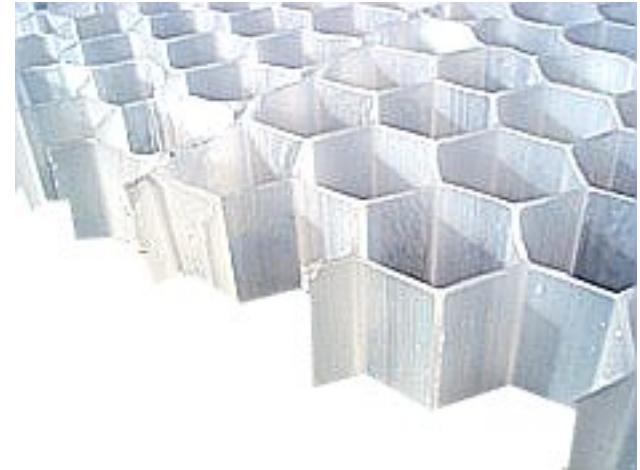


- EJB 1
- EJB 2
- Spring !
- EJB 3
- CDI & @Inject
- ...





## POCO, MEF



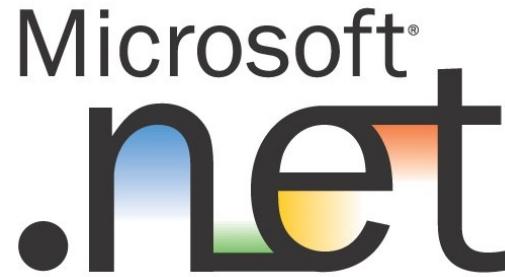
- ADO.NET Entity Framework
- Linq to Entity
- Génération T4
- Injection .NET 2.0 : NInject, Unity, etc.
- Injection .NET 4.0 : MEF (intégré)



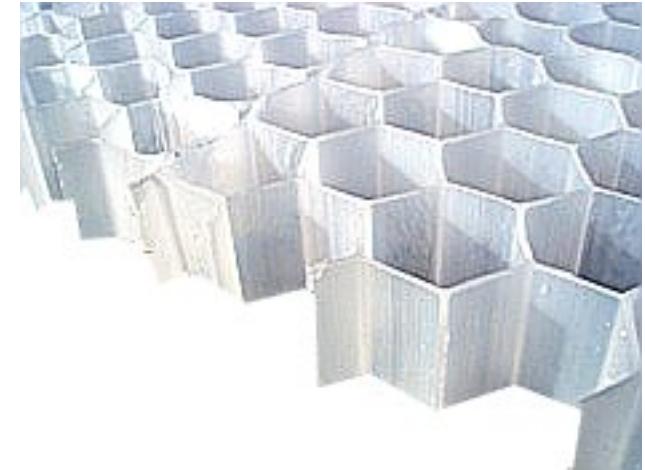
# Round 3



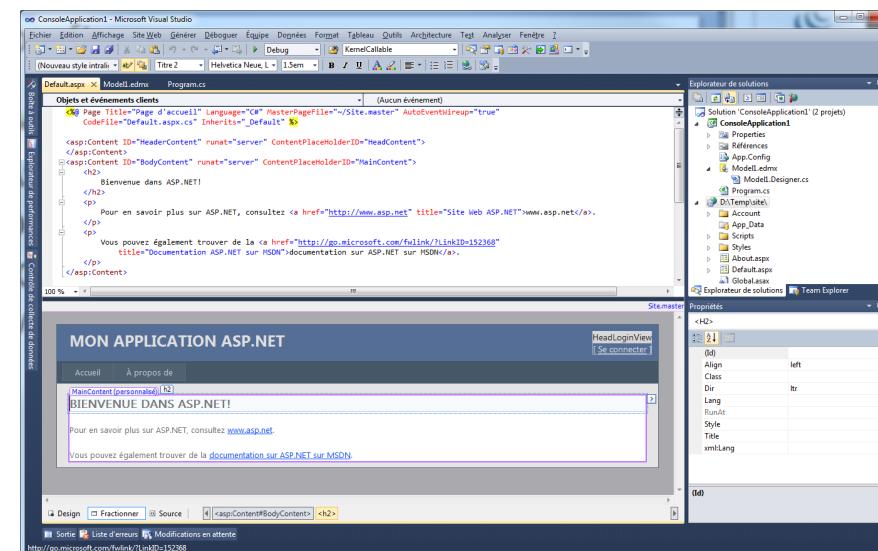
WEB U.I



# WebForms



- ASP.NET / Designer graphique
- Silverlight 3, 4, 5 ! (Silverlight 2 # JavaFX 2)
- JQuery intégré dans Visual Studio .NET
- MVC 3





# L'embarras du choix



- JSF / Seam / Wicket / SpringMVC / Stripes / Struts / Tapestry / GWT / ...



tapestry



///Stripes



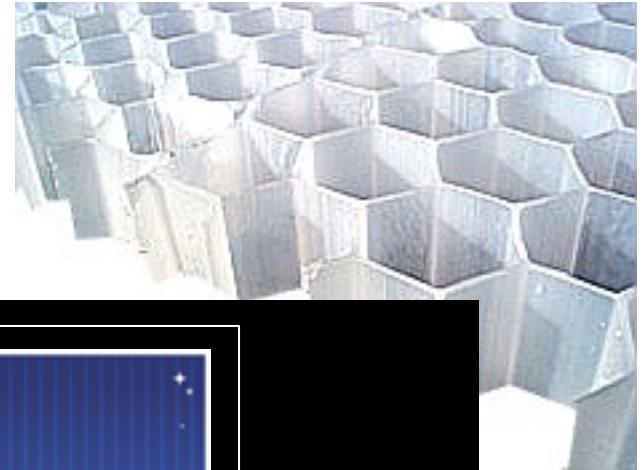
ooo webwork Struts

Spring<sup>2.5</sup>



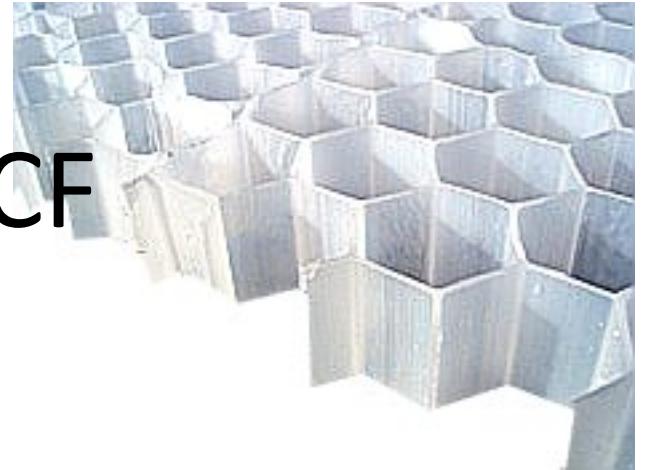
Struts<sup>2</sup>

# Round 4



**WEB SERVICES**

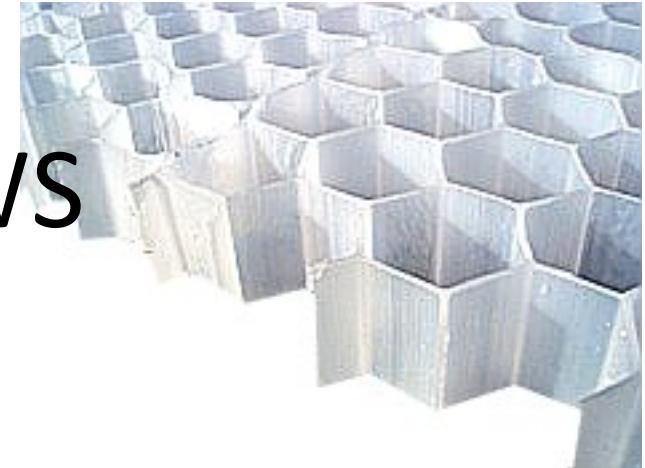
# Microsoft .NET D'ASP.NET A WCF



- [WebMethod] et ça marche...
- WS-I Basic Profile 1.1
- D'Axis-1 à Axis-2
- WCF : framework de communication complet (RMI, SOAP, REST, JSON, etc.)
- Contract First
- Excellente extensibilité, lien à WF, etc.

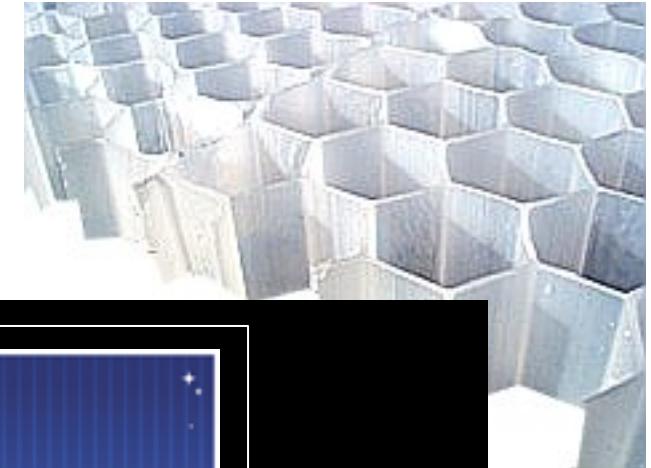


## JAX-RPC, JAX-WS



- RPC/Encoded, seul contre tous ...
- JAX-RPC 2 → JAX-WS
- JAXB 2 :D
- (JiBX, Xstream, Aegis, ... )





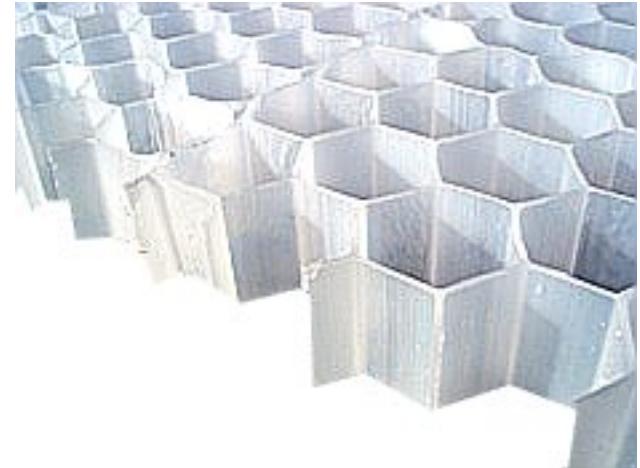
# Round 4 (bis)



REST



# JAX-RS



- JAX-RS 1.0 :)
- JAX-RS 2.0 :D

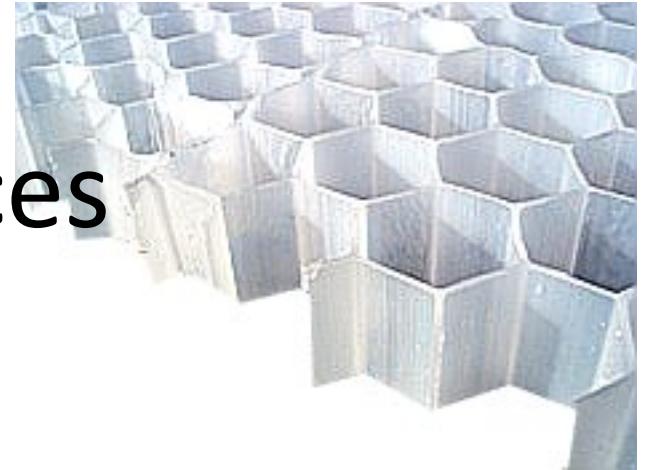
*Designing and Developing Distributed Web Services*



O'REILLY®

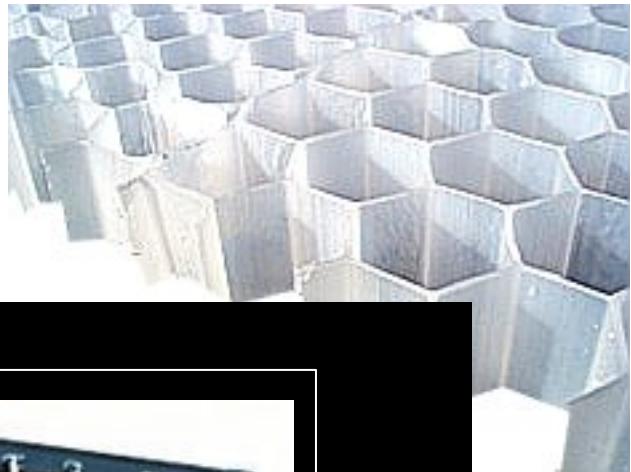
Bill Burke

# Microsoft .NET WCF data services



- Anciennement Astoria,  
puis ADO.NET Data Services,  
puis WCF Data Services
- Excellent lien à Odata
- Exposition REST / XML / JSON en 3 lignes

# Round 5



# CONTAINER



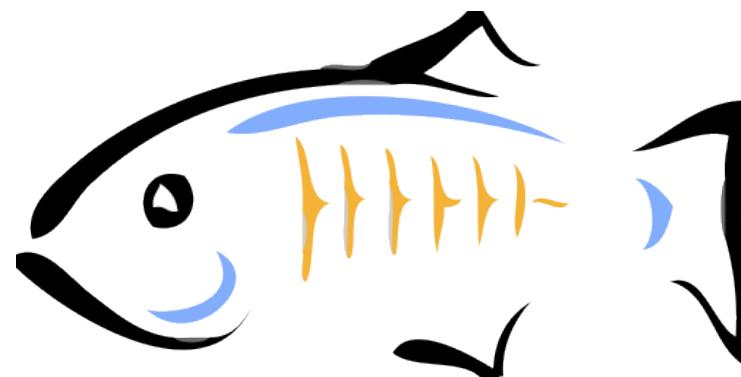
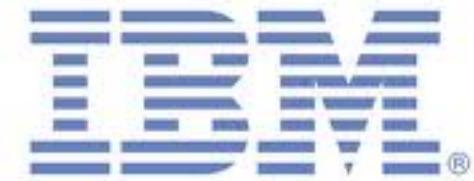
# Spring vs JavaEE



- J2EE

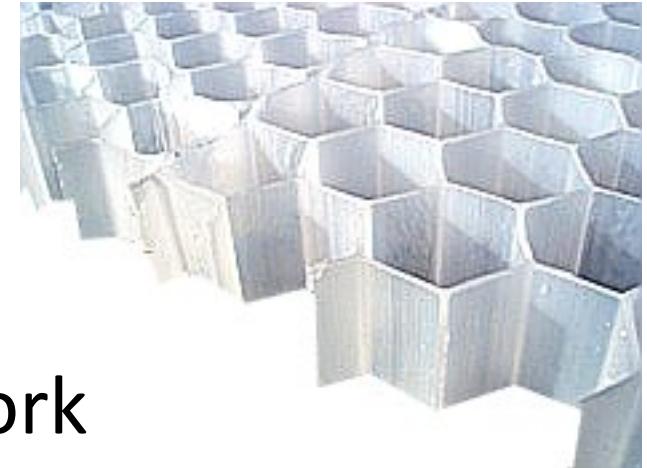


- Java EE 6+





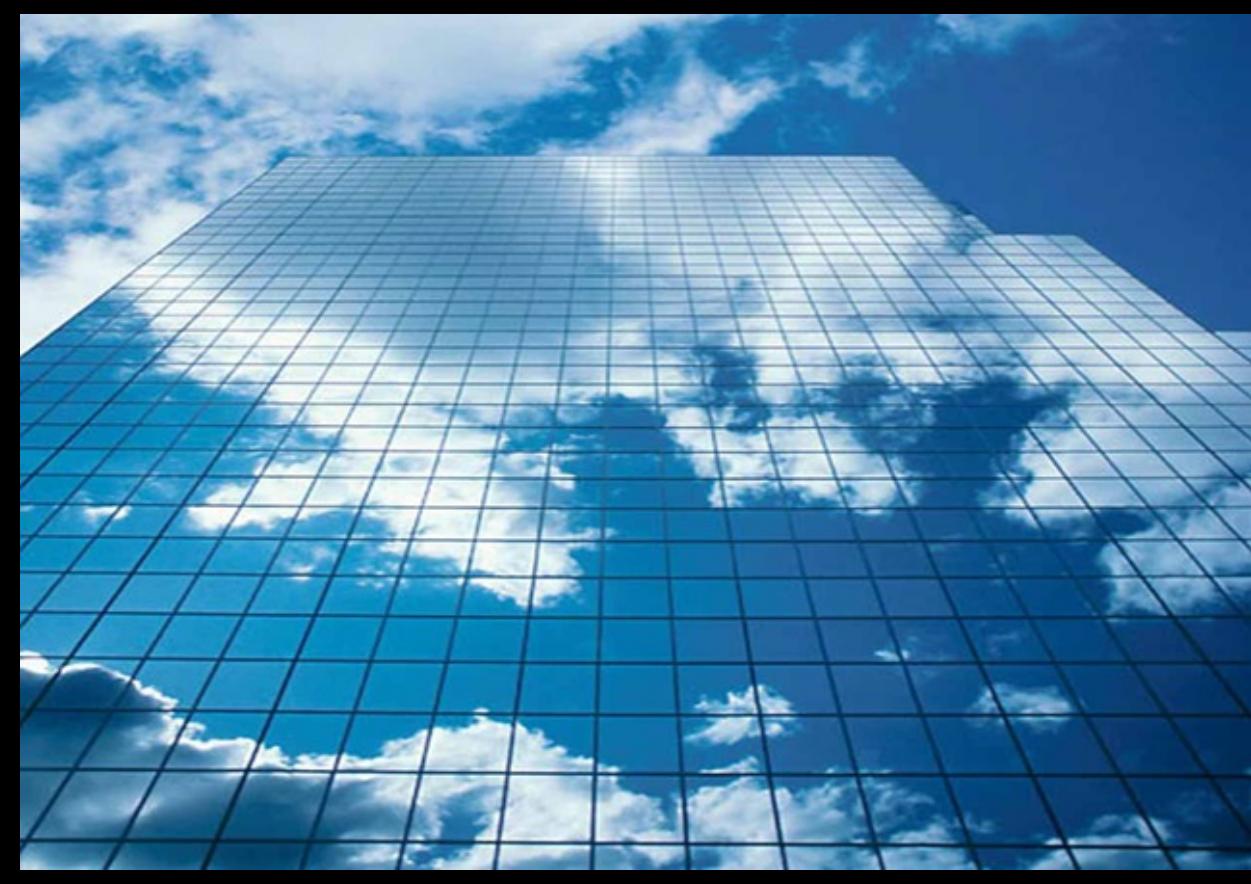
# MEF



- Managed Extensibility Framework



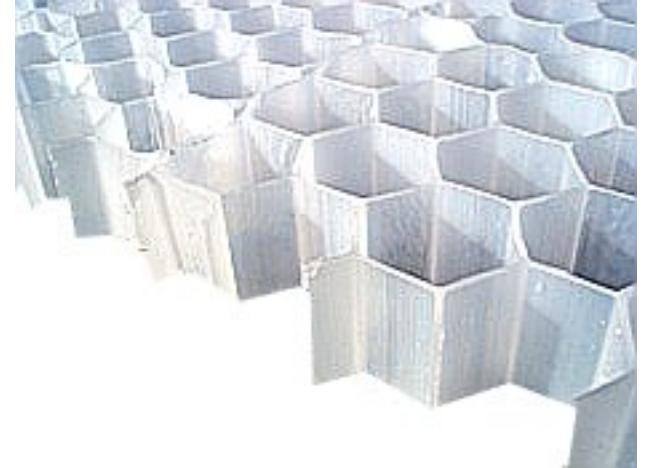
# Round 6



CLOUD



... JavaEE 7 ?



- Google App Engine
- Amazon ElasticBeans
- RedHat OpenShift
- CloudBees RUN@Cloud
- ... ?

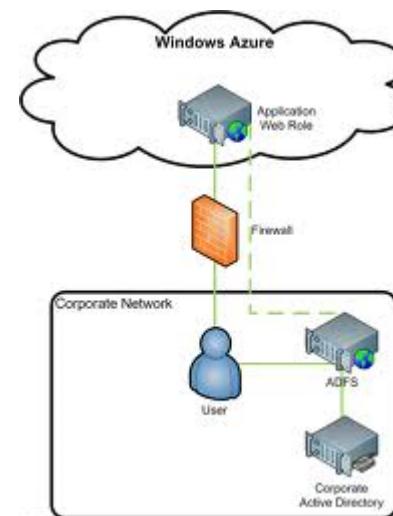
*Standardisation annoncée dans JavaEE 7*



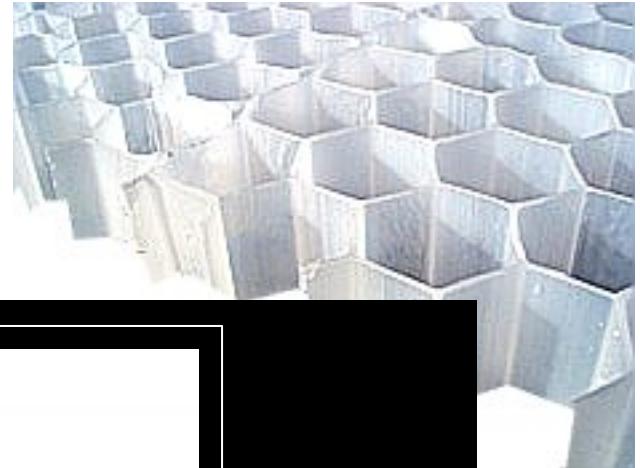
# Azure



- Un an d'existence en production
- Azure Data Market très riche
- Accès Odata, SDK Java, Intégration Eclipse
- Architectures partagées Cloud / LAN



# Round 7



TOOLS



# De facto ...

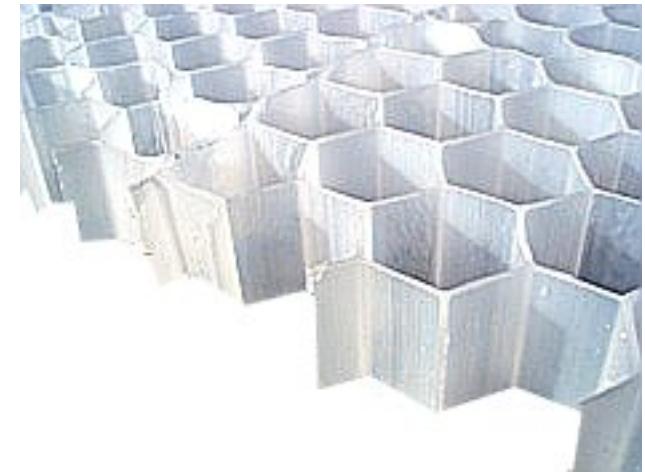


- Dev : Eclipse  
(Idea, Netbeans)
- Build : Maven  
(Ant, Gradle)
- Intégration Continue : Jenkins (what else?)
- Qualimétrie : Sonar

Quel niveau d'intégration ?



# Intégration



Open Source :



Microsoft  
Expression

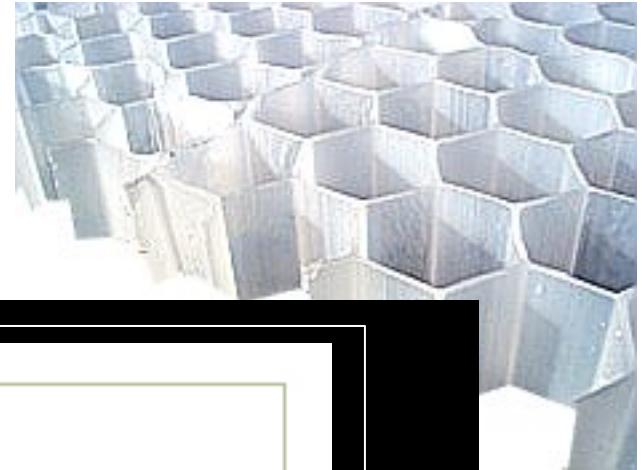


Windows  
phone



L'aspect « propriétaire » a ses avantages

# Round 8



ALTERNATIVES



# Spring, Play!, Grails, Scala...



- Java n'est pas juste un langage,  
c'est une **plateforme** !

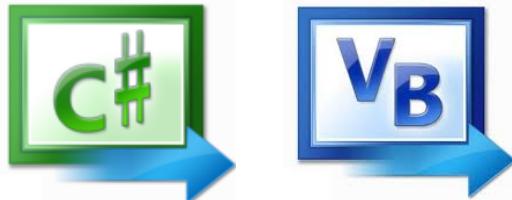




Ouvert (si, si)



- Multi-language



IronRuby



IronPython

- Multi-plateforme

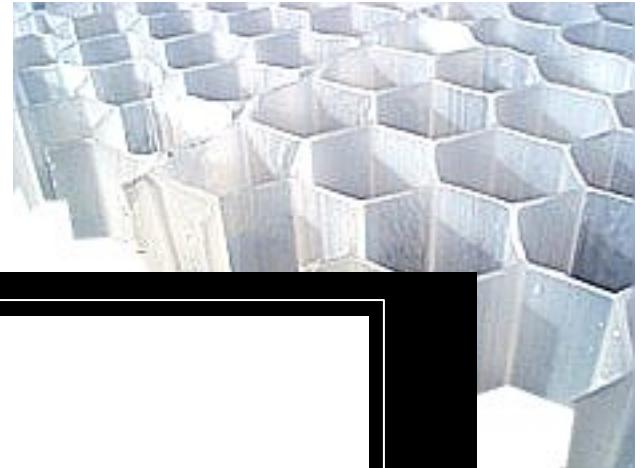


Microsoft  
Silverlight



- Azure : SDK Java, PHP, Tomcat Accelerator, etc.

# Round 9



INTEROPERABILITY



« run anywhere »

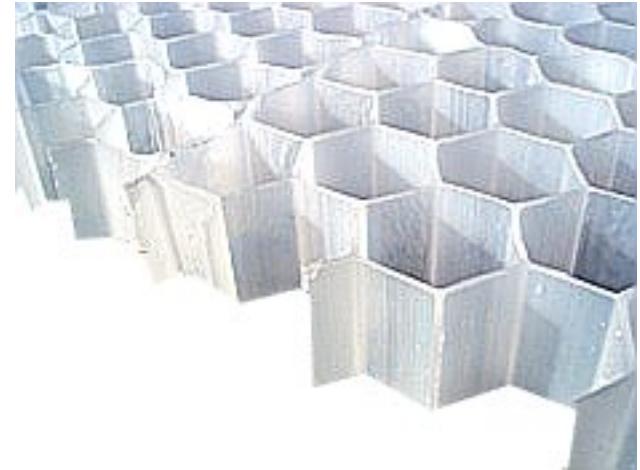


- Ou presque ...



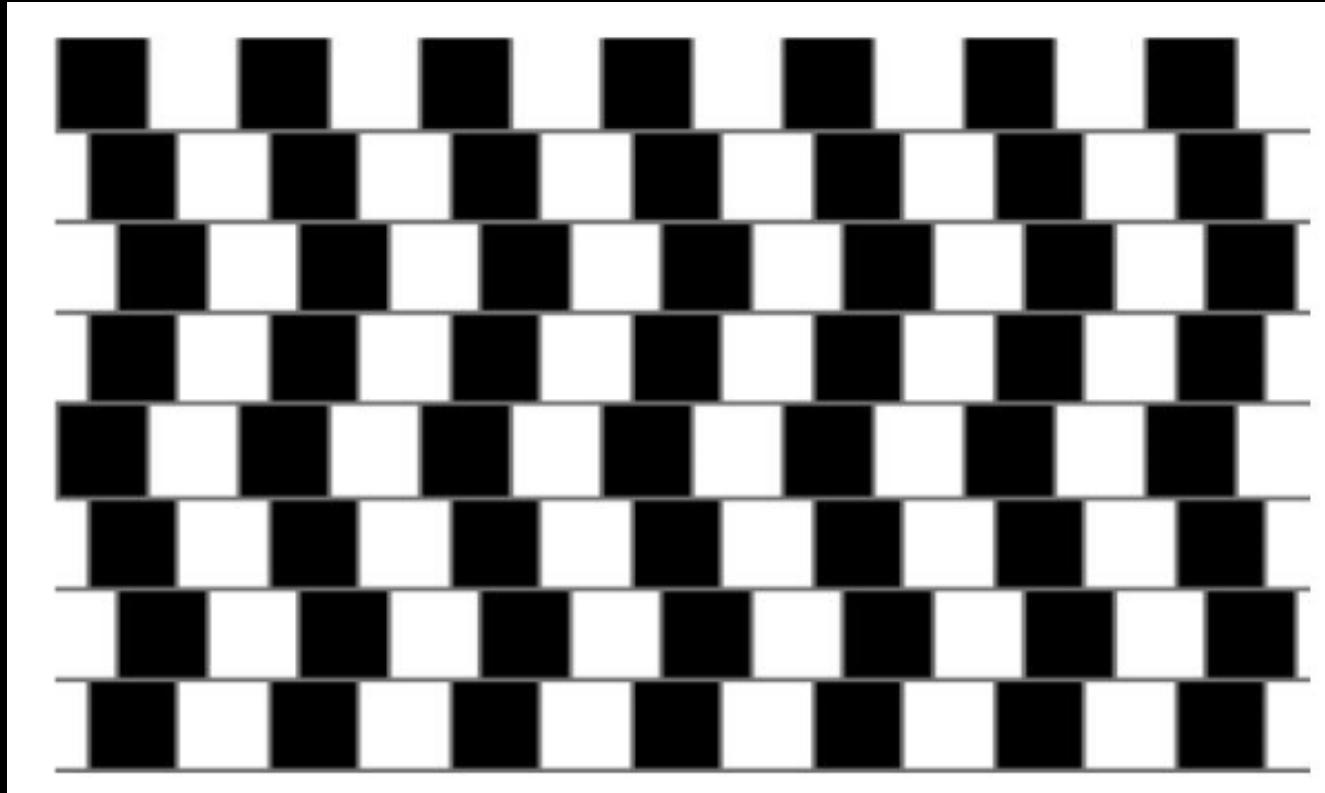
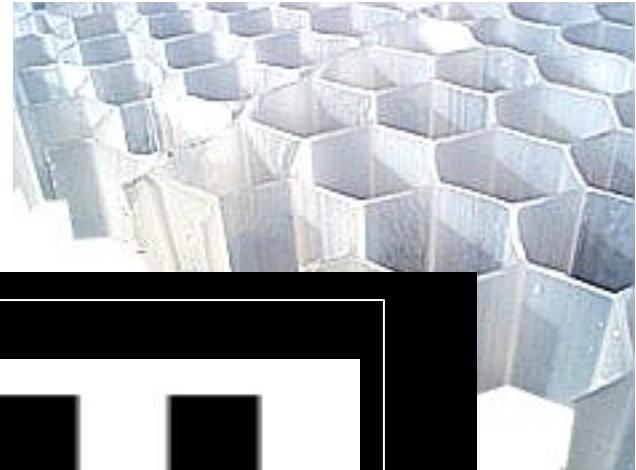


# Surprenante



- COM, PInvoke
- SOAP, WSDL, etc.
- XML Office
- .NET : deux standards ECMI
- Cas d'école : interop WS avec AXIS 1 / AXIS 2
- Interop devenue stratégique pour Microsoft

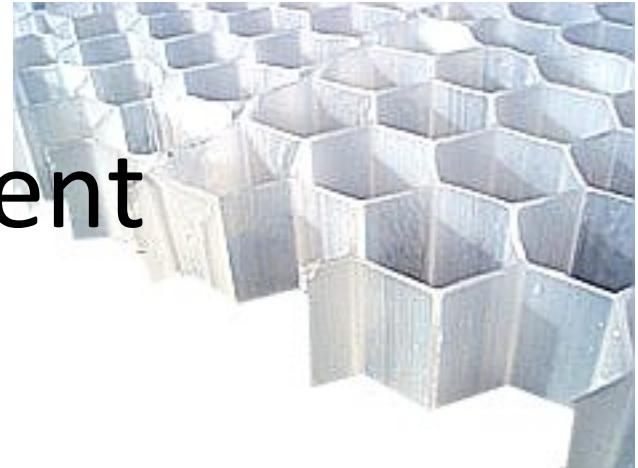
# Round 10



MULTITHREAD



# Java.util.concurrent

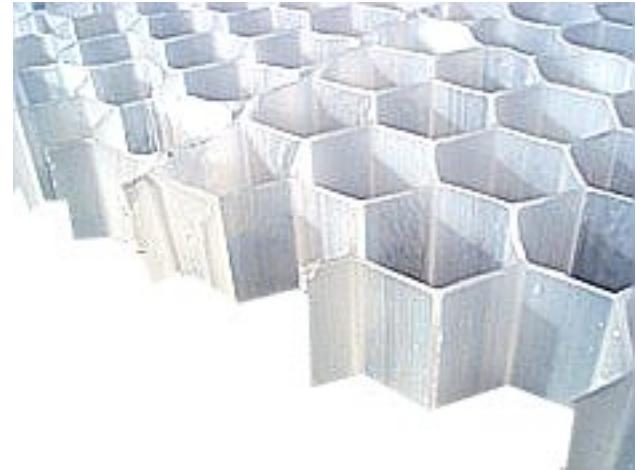


- JSR 166
  - Java6 : bon niveau d'abstraction
  - Java7 : ajout des parallel arrays

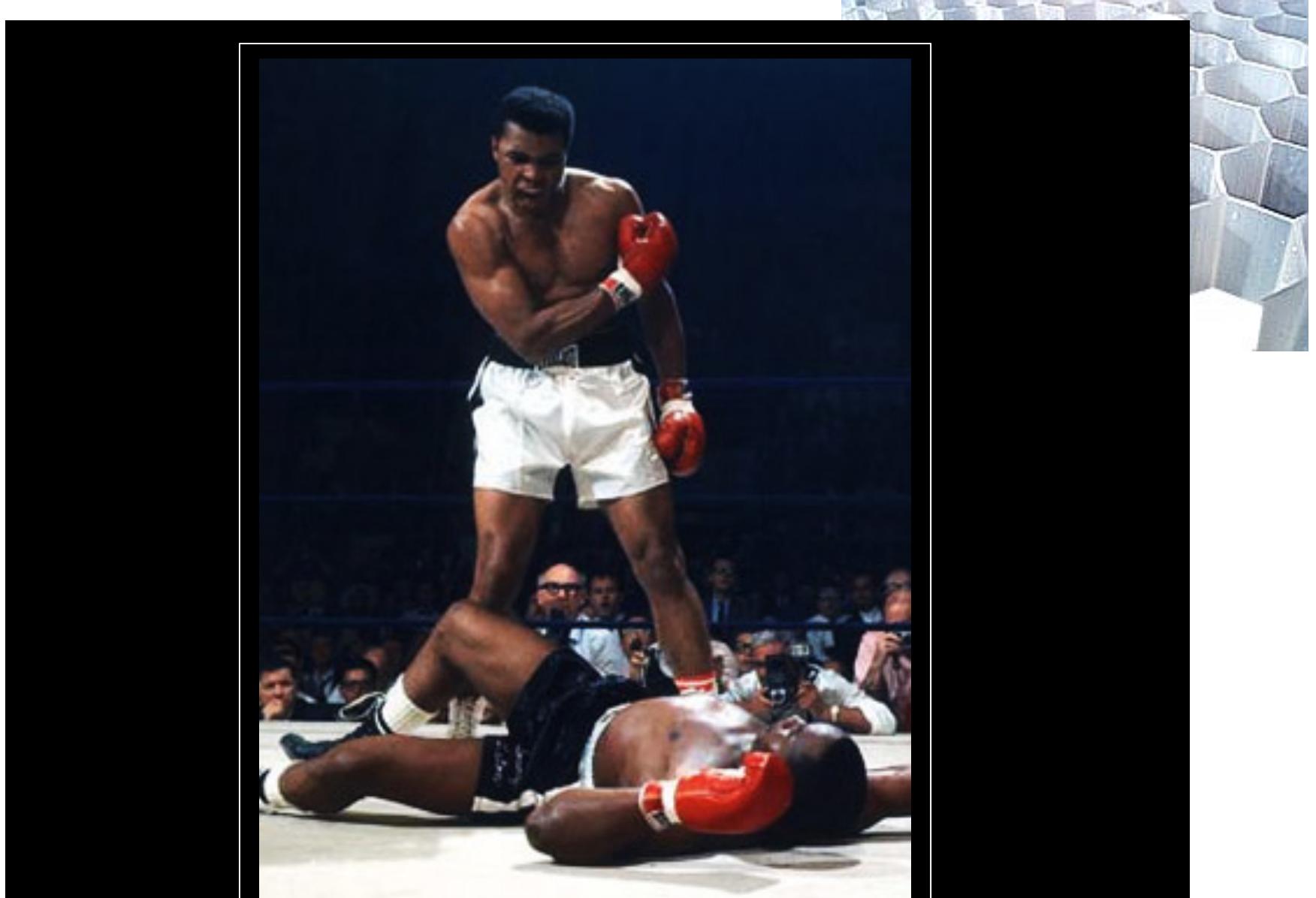
Scala, Clojure ou Groovy pour aller plus loin



Matûre



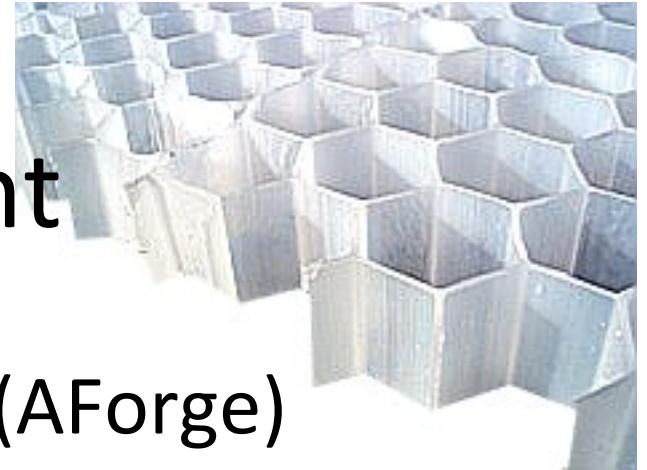
- System.Threading
- Parallel Linq
- Tasks
- TPL
- R&D « Phoenix »



# CONCLUSION



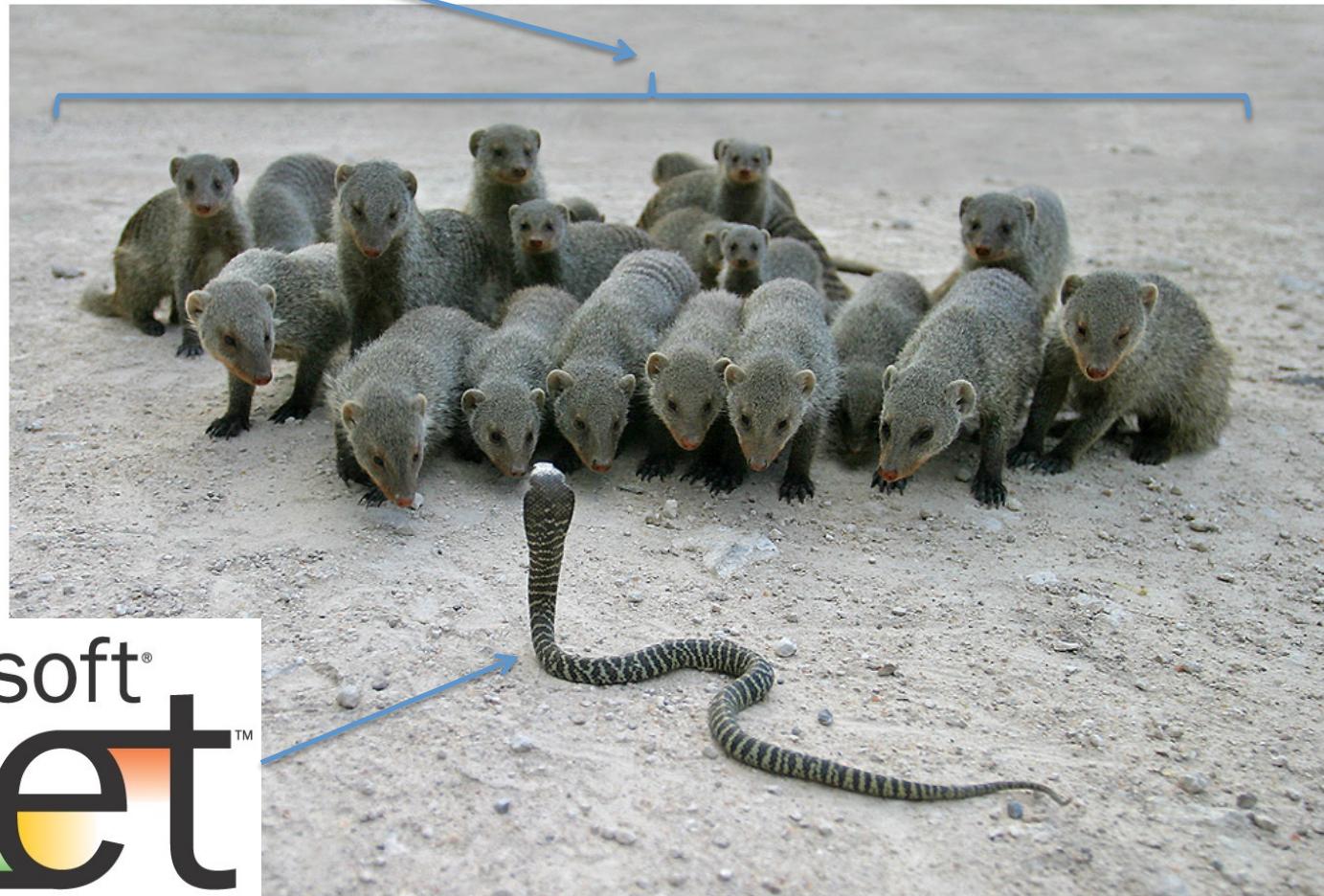
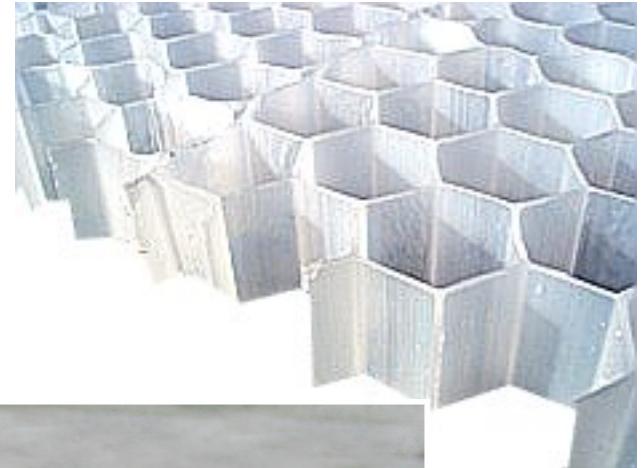
# Un futur brillant



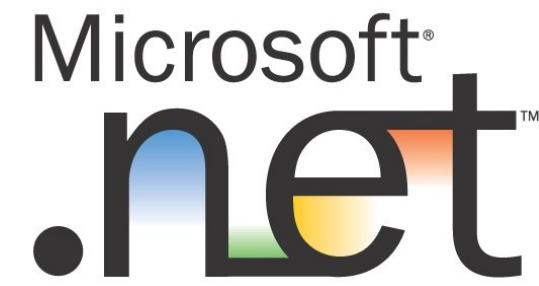
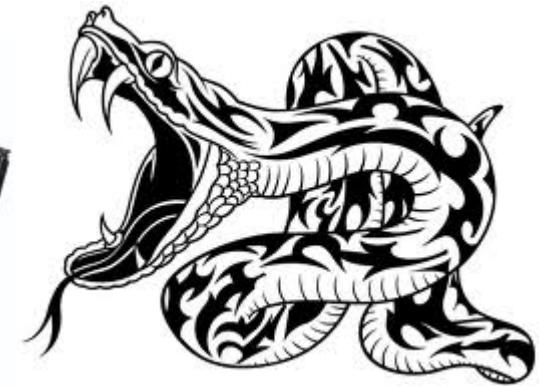
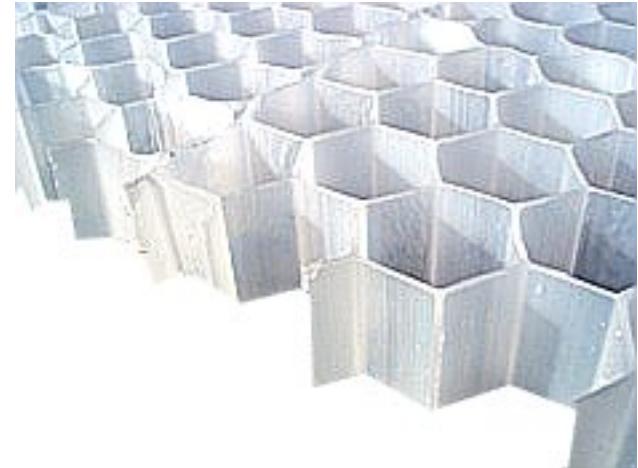
- Ecosystème Open Source riche (AForge)
- F#, Async, Linq, TPL
- OpenCL .NET, Accelerator, Brahma
- Force de l'intégration (TFS / hand-made)
- Combien de temps pour un F# / un Linq en Java ?



2000

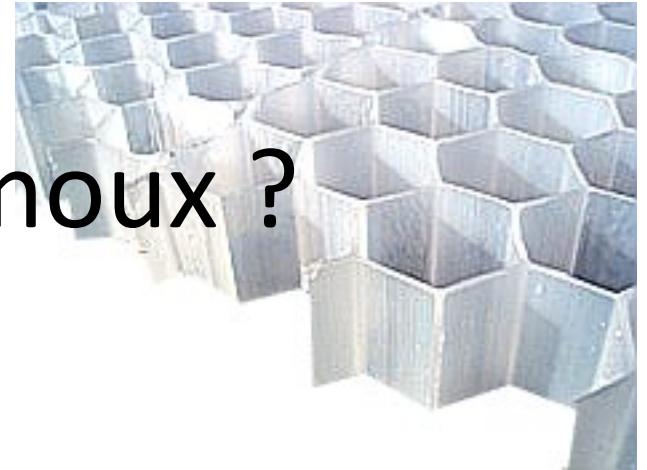


2010





# Du mou dans les genoux ?



- Depuis la sortie de Java 6 (2006), gros coup de frein dans le monde Java :
  - Conflits politiques dans le JCP
  - Départ des spec-leads...
- Un nouveau lead apparaît
  - **JBoss** via l'opensource et en collaboration avec le JCP
  - **Oracle** reprend la main et passe en force

