# What is Java Platform?!

By

| | |
|---|---|
| Ahmed Hashim<br>EGJUG Leader<br>Sun Java Champion<br>hashim@egjug.org<br>http://weblogs.java.net/blog/ahashim/ | Java™ Champions |
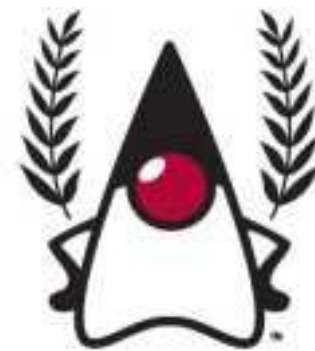
# Objective

- What is Egyptian Java User Group
- Give you an overview about the Java platform.
- The full picture of the Java platform.
- Your career guide.

# Agenda

- Egyptian Java User Group
- Some facts about Java
- What is Java Platform?
- The usages of Java Platforms.
- Advantages of programming with Java
- What is JCP/JSR?
- Some new cool features in Java.
- Java from Novice to Expert; how to?

# www.egjug.org

- EGJUG was founded at 2005
- An active website
- A lot of meetings & session
- 2 annual conference; JDC 2008 got 650 developers.
- 1200+ member.

# Egyptian Java User Group

- Get support from the forums
- Post articles and blogs
- Read news from the aggregator
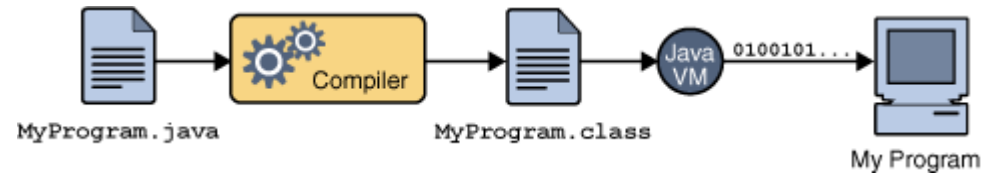- Check the latest jobs available there
- Free Book reviews

# Java has a community

# About Java

- Pure Object Oriented
- Platform independent
- Backward compatible
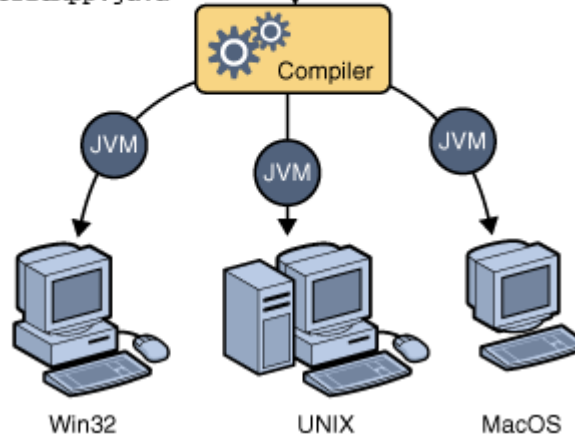- Open Source
- Multiple vendors

# Platform Independent

# Backward Compatibility!!

- Applications developed using Java 1.0 still works!! Although the API's implementation changed!
- Old code is not removed, it is being marked as deprecated.
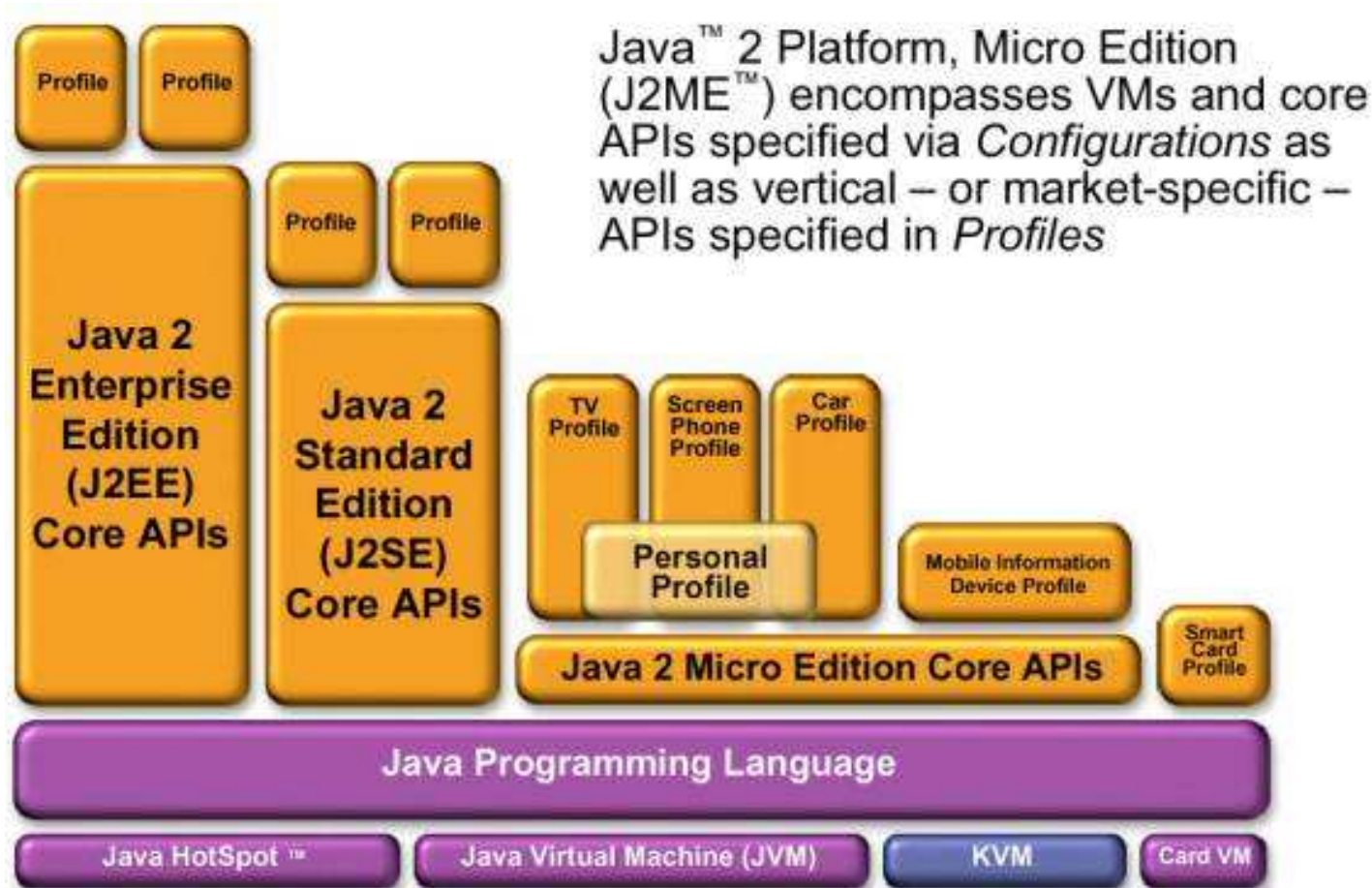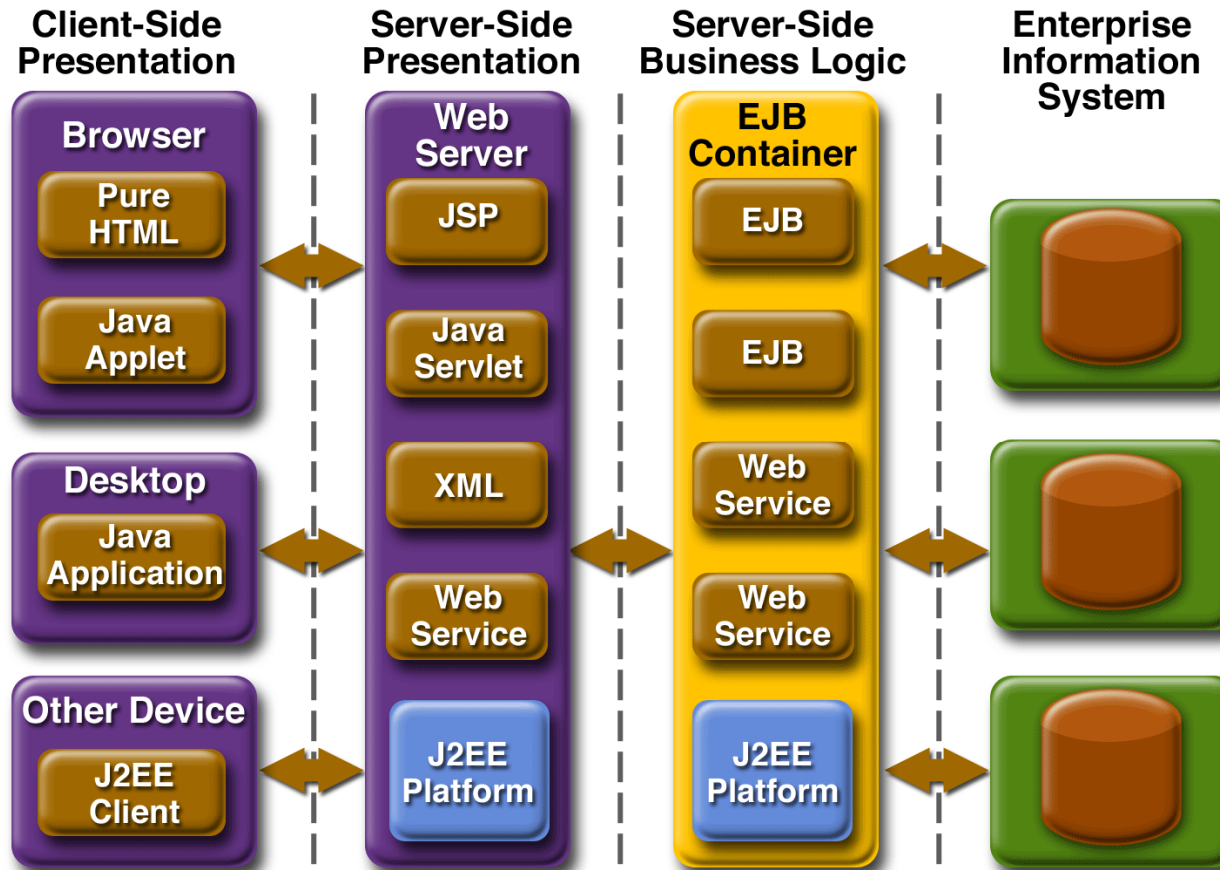- Quick Demo

# Java is Open Source

Java is open source

Java has more than vendor

- Sun Microsystems
- IBM
- Oracle
- Bea Systems "recently acquired by Oracle)
- Apache Software Foundation
- JBoss
- Others …

# Java is a complete platform



Java™ 2 Platform, Micro Edition (J2ME™) encompasses VMs and core APIs specified via *Configurations* as well as vertical – or market-specific – APIs specified in *Profiles*

# Java is a complete platform

# The Usage of Java

- Desktop Applications
- File processing
- Data Access
- Graphics
- Clinet/Server
- Remote Processing
- Web development
- Security
- Unit Testing

- XML
- AJAX
- Webservices
- Messaging
- Workflow and BPM
- Service Discovery
- Email
- Reporting
- Logging

# The Usage of Java

- Java is a complete platform for software development.
- Java is suitable for enterprise large scale applications; through the different containers.
- Java is available for smart devices and smart cards.

# Advantages of programming with Java

- Java is dominant in the market!
- Developing enterprise applications with Java will show you the meaning of scalability, security, performance, monitoring...etc
- You will learn Design patterns and OOP
- You will work with best practices.
- Java and Java frameworks are white box; open the champers of secrets.
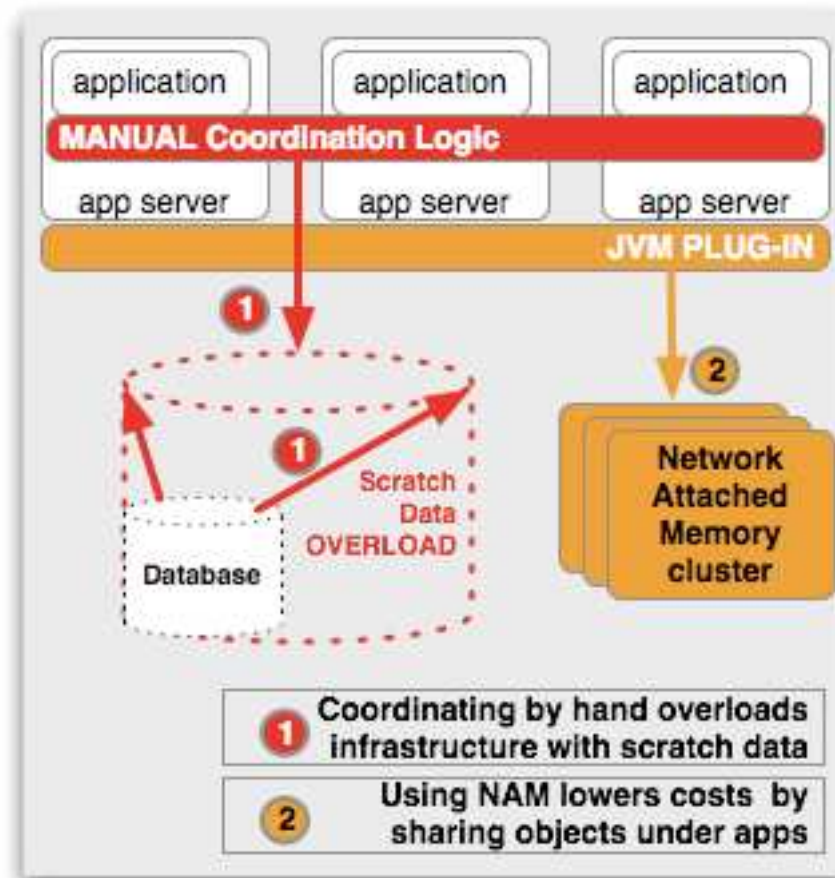
# Advantages of programming with Java
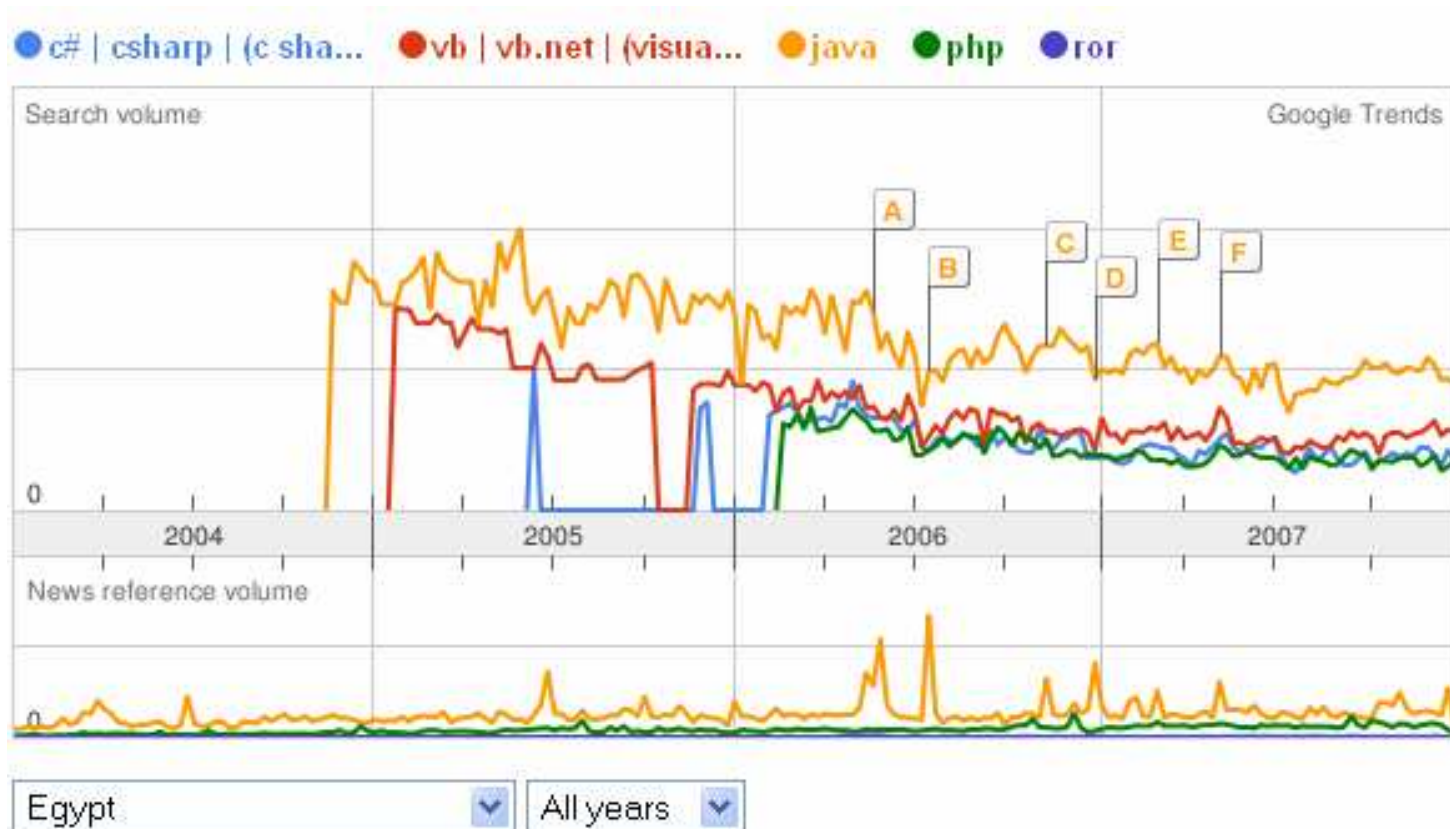
# Advantages of programming with Java

- A lot of tools available to help you.
- Out of the box containers to hold your applications and provide a lot of services like
  - Security
  - Scalability
  - Caching
  - Connection pooling
  - Messaging
  - Transaction Management
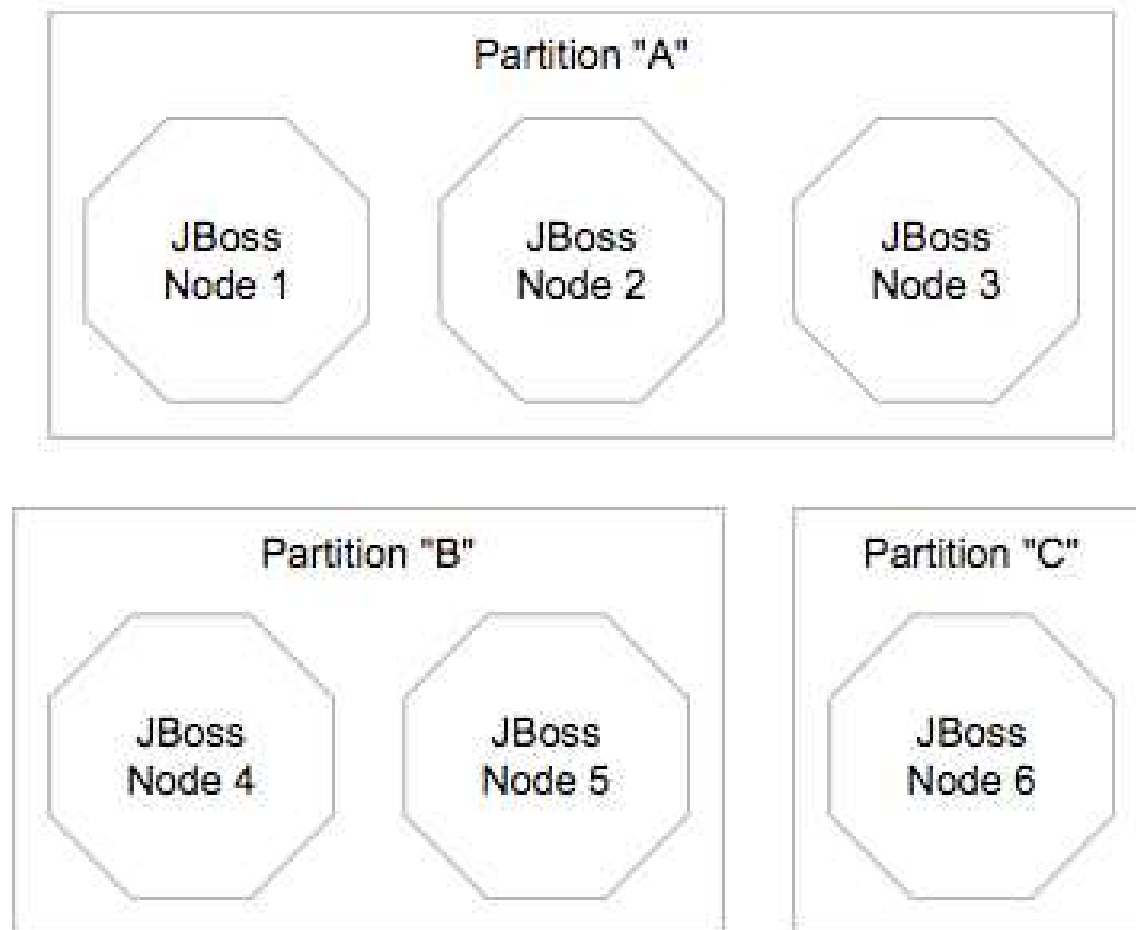- Many frameworks for Web and middleware.

# How Java Scale?

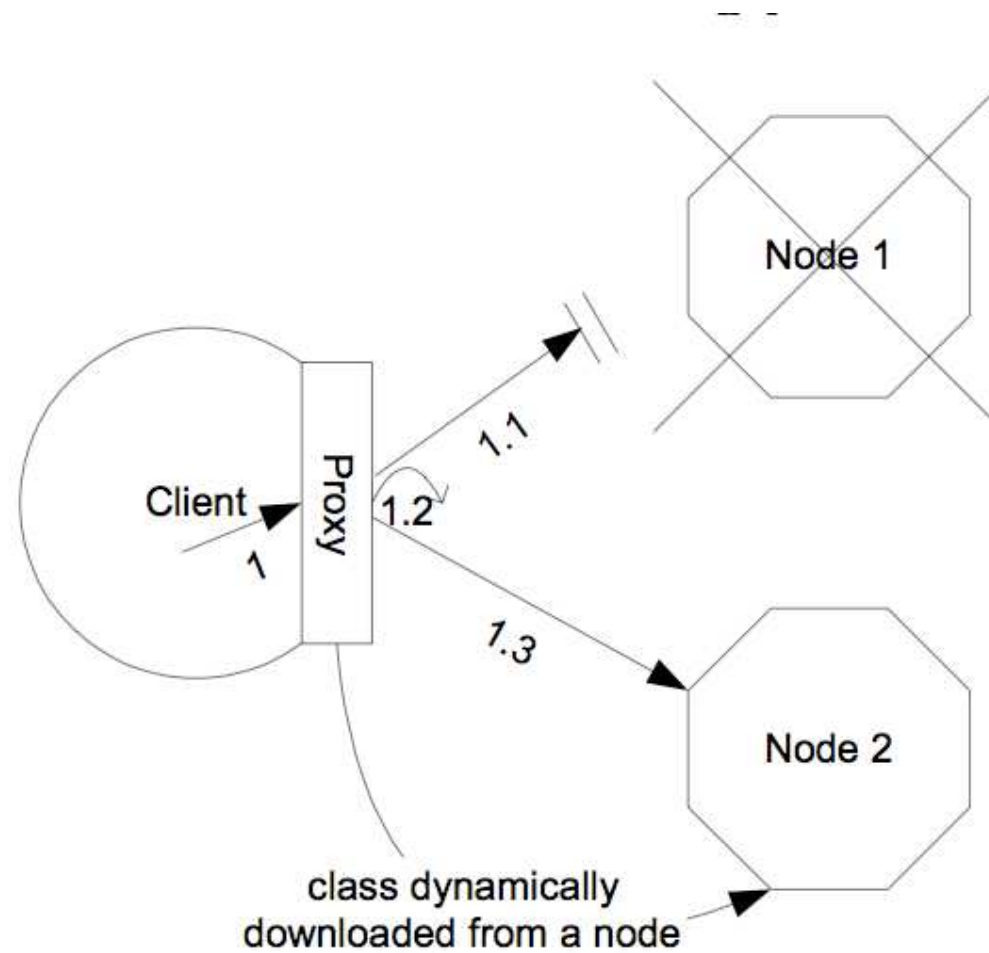- JVM Clustering
- Application Server Clustering

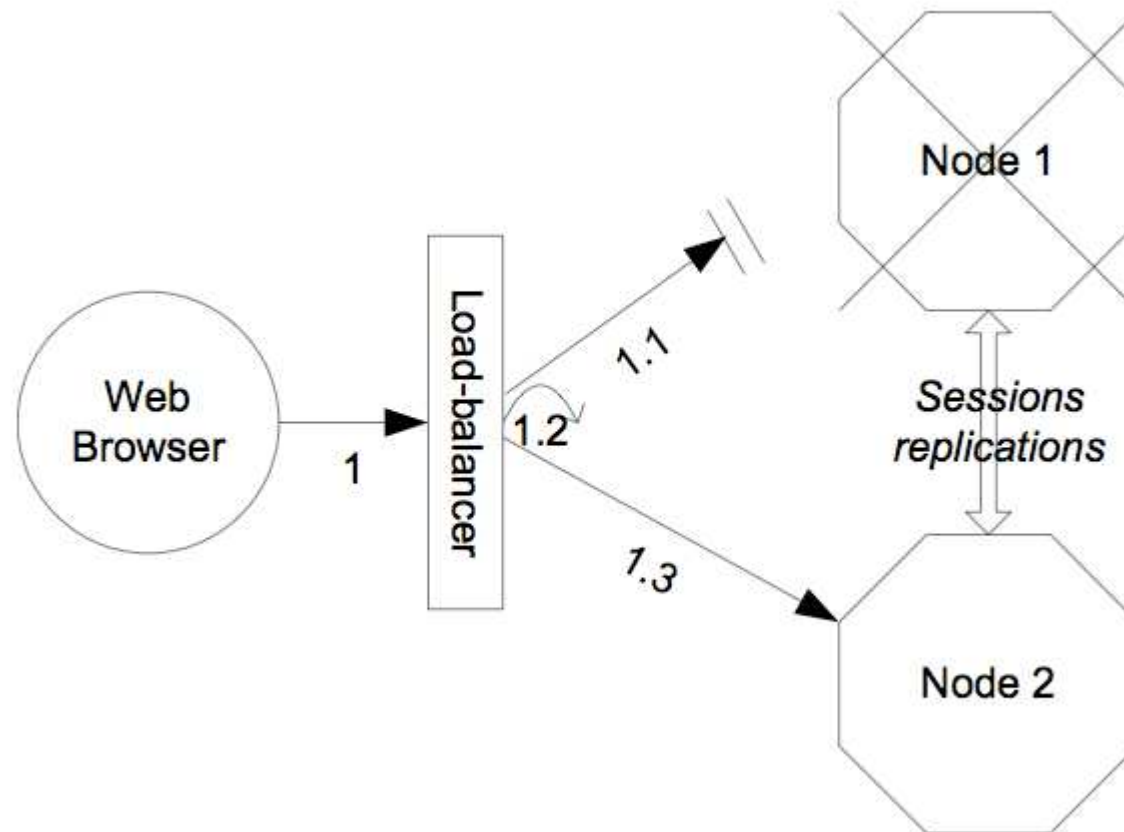# How Java Scale? JVM Clustering

# How Java Scale? JBoss Clustering

# How Java Scale? JBoss Clustering



Node 1

Client

Proxy

1.1

1.2

1.3

class dynamically
downloaded from a node

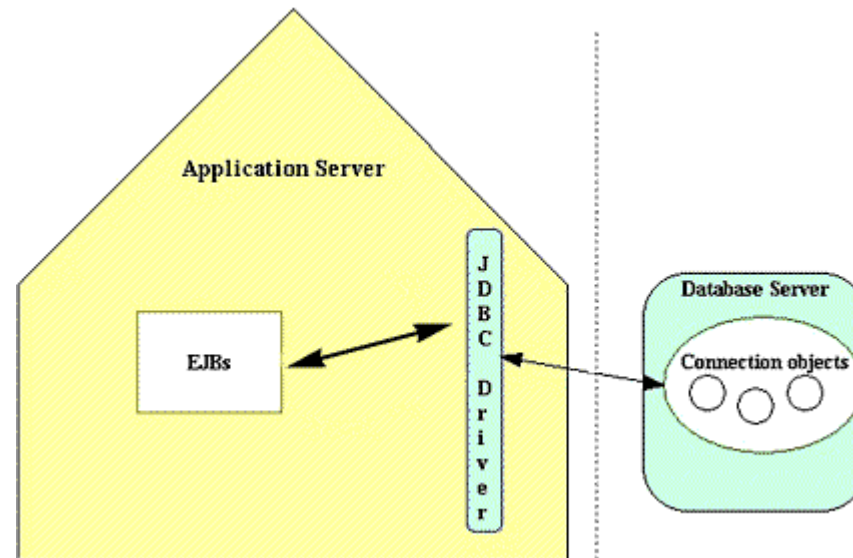Node 2

EGjug
Egyptian Java Users Group

# How Java Scale? JBoss Clustering
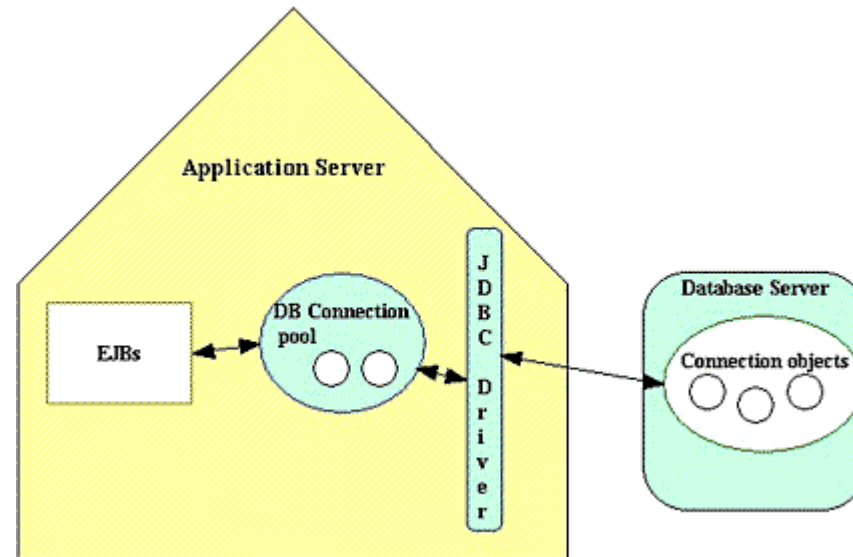
# What is security about in Java?

- Cryptography API's
- PKI API's
- Digital Signature
- JAAS (Java Authentication and Authorization Service)
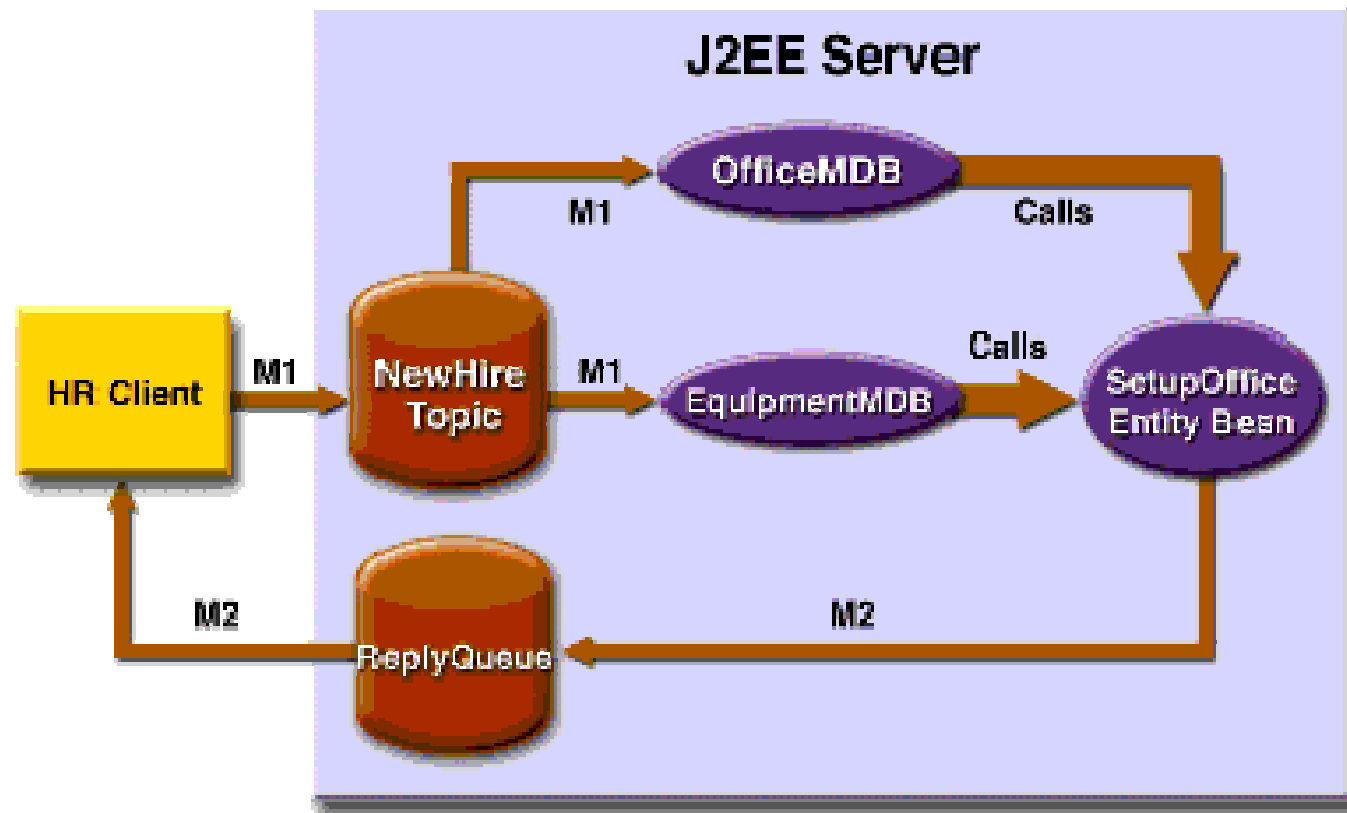
# Connection Management in J2EE

# Connection Management in J2EE

# Messaging in Java

# Cool features in Java

- Annotations
- Generics
- Logging
- Unit Testing
- Security Filter

# What is JCP?

- Java Community Process is the community who is initiating the Java projects specifications.

- JCP contains companies and individual.

- JCP issue JSR (Java Specification Request) and the vendors implements it.

# Java From Novice to Expert

- Phase 1: Learning
- Phase 2: Trying
- Phase 3: Hands on

- General Guide lines
  - Focus on the core!!!
  - Read blogs and news
  - Attend sessions and seminars
  - Help others and transfer the knowledge

# Java From Novice to Expert

- Phase 1: Learning
  - Tutorial
  - Book
  - Learning by example
  - Training course
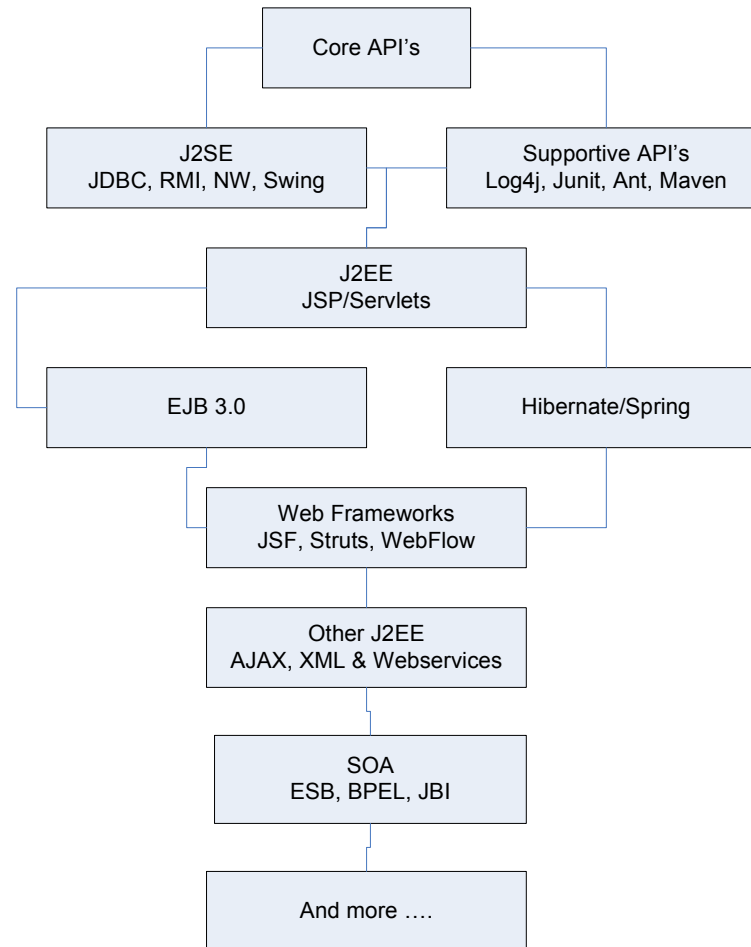
# Java From Novice to Expert

- Phase 2: Trying
  - College Assignment
  - Graduation projects
  - Programming for fun
  - On job training

# Java From Novice to Expert

- Phase 3: Hands on
  - Java is Open platform, Fast and self learning are required to be uptodate .
  - Try any new framework or library.
  - Use productivity and quality tools.

# Java From Novice to Expert

# Thanks

Any questions?

# Contact

Ahmed Hashim

[hashim@egjug.org](mailto:hashim@egjug.org)

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

http://weblogs.java.net/blog/ahashim/