Java Community Process Program: State of the Community

December 2003

The Java Community Process^{SM}

```
char[] result = { 106, 99, 112, 46, 111, 114, 103 };
for (int 1 = 0; i < result.length; i++) {
    System.out.print (result[i]);
}
```

The home of the international developer community whose charter it is to develop and evolve Java^{TM} technology specifications, reference implementations and technology compatibility kits.

http://JCP.org

Developer Benefits

- **The JCP is the place to**
  - Develop new APIs
  - Learn about new APIs
  - Give feedback, comment on Java APIs
  - ***Help Java advance!***
- **One can participate**
  - As a corporate or institutional representative
  - As an individual expert

Technologies

- **Java 2 Standard Edition tm (J2SE tm)**
  - The JDK
- **Java 2 Enterprise Edition tm (J2EE tm)**
  - Eg Java Server Pages, Servlets, Enterprise JavaBeans
- **Java 2 Micro Edition tm (J2ME tm)**
  - Eg MID-P, CLDC, PDA Profile, Bluetooth
- **XML and Web Services**
  - Eg XML data binding, XML schemas, XML messaging, RPC, Web Services for J2EE and J2ME
- **Tools Support**
  - Eg Web Services Metadata, Persistence for JavaBeans
- **Telecommunications – JAIN, OSS initiatives**

The JCP at a Glance

- **Goal: to set a binary software standard**
  - The promise to developers: Write Once, Run Anywhere
- **Each Java Specification Request creates:**
  - Java API specification
  - Reference Implementation
  - Compatibility Test Suite
- **Balancing speed, compatibility, consensus**
- **JSRs are approved by Executive Committees (EC)**
- **700+ Members**
- **234+ JSRs**

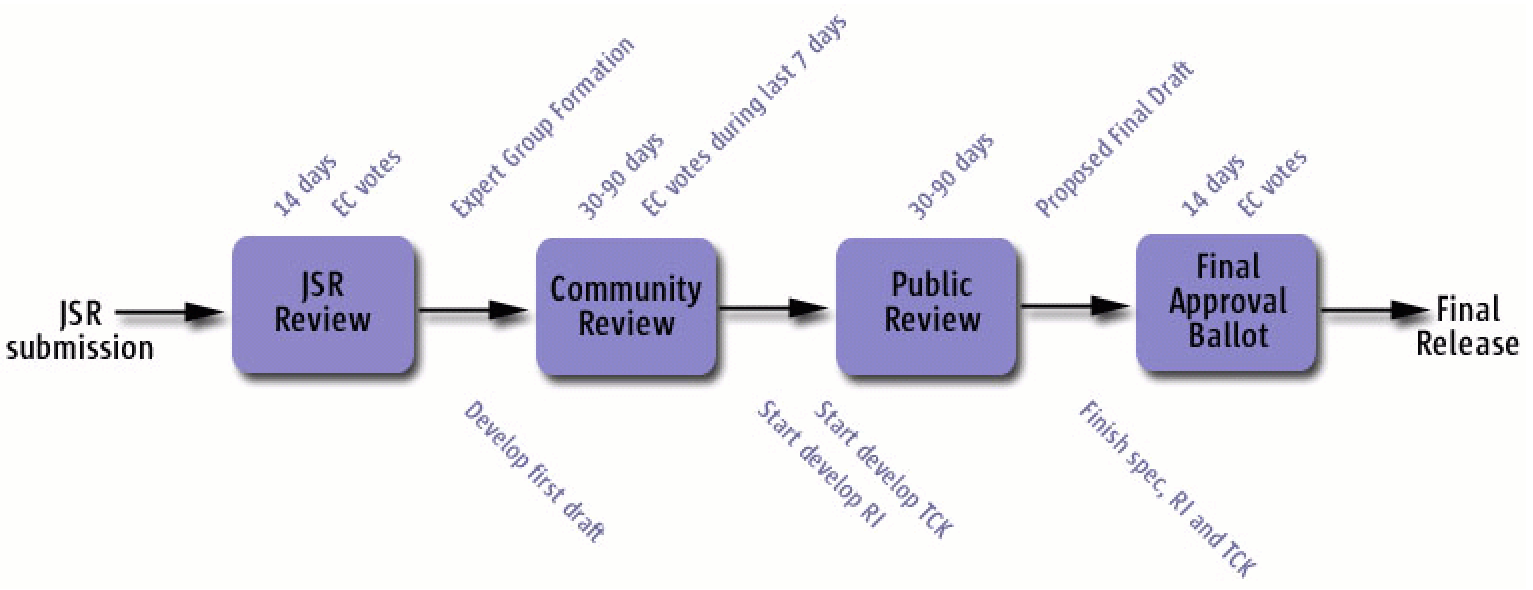
Executive Committees

- **Two Executive Committees (EC) elected each year by the JCP membership**
- **ME EC**
  - Ericsson, IBM, Insignia, Matsushita, Motorola, Nokia, Philips, RIM, Siemens, Sony-Ericsson, Sony, Sun, Symbian, Texas Instruments, Vodafone
- **SE/EE EC**
  - Apache, Apple, BEA, Borland, Fujitsu, HP, IBM, IONA, Doug Lea, Macromedia, Richard Monson-Haefel, Nokia Networks, Oracle, SAP, SCO Group, Sun

The JSR, the Spec Lead & the Expert Group

- **Each JSR has an Expert Group and is led by a Spec Lead**
- **Key aspects:**
  - The group's working model including decision making
  - Ensure diversity of opinion
  - Build relationships
  - Identify levels of collaboration and participation
- **Drafts are created via increasing levels of maturity and increasing levels of peer and shepherd review**

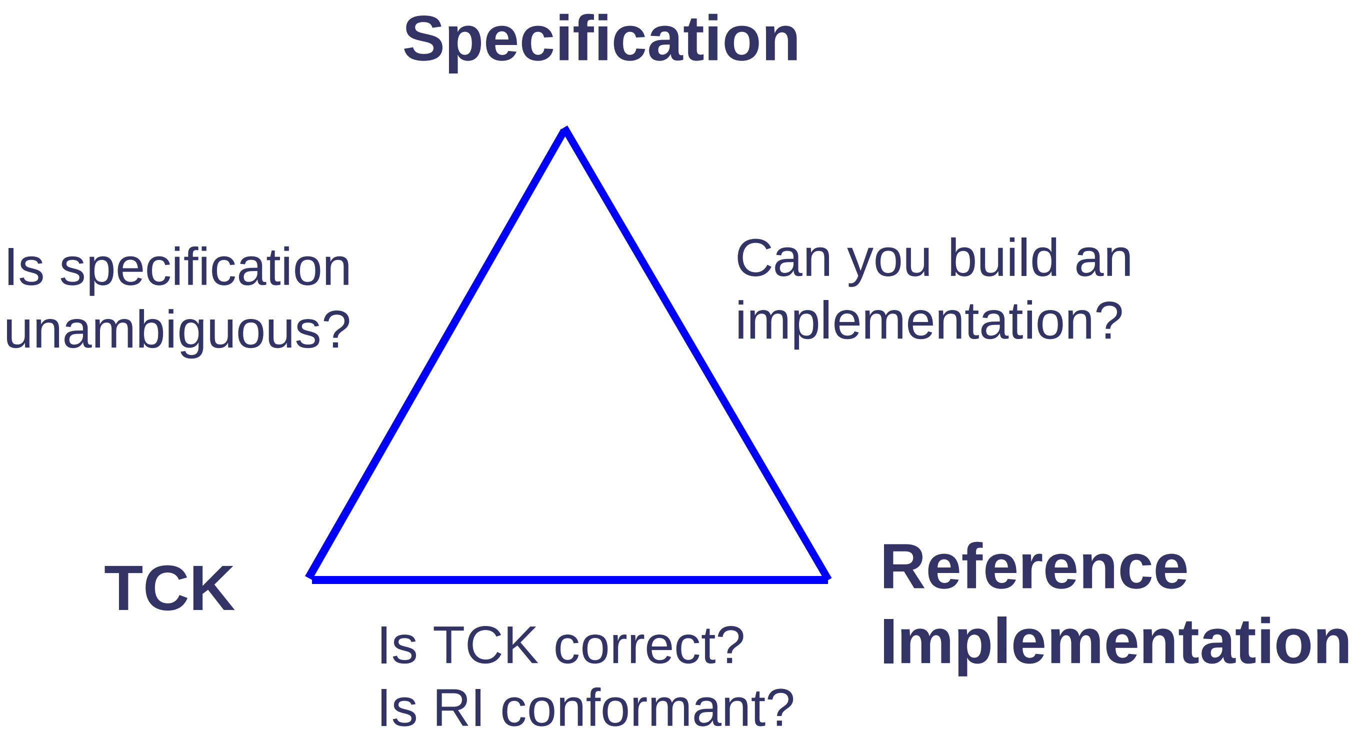
JSR Timeline



A Binary Software Standard

- **For developers: Write Once, Run Anywhere**
- **For all: product-level component interchange**
- **History shows: It does not happen by itself.**
- **Thus, for each JSR:**
  - Specification
  - Reference Implementation --> feasibility
  - Technology Compatibility Kit --> compatibility, interoperability

Why Three Parts are Required



Specification

Is specification unambiguous?

Can you build an implementation?

TCK

Reference Implementation

Is TCK correct?
Is RI conformant?

Each supports the other during development

Only Standards Body With a Version Number

- **JCP 1.0, Dec 1998**
  - Program Office at Sun was key decision maker
- **JCP 2.0, June 2000**
  - Installment of ECs as key decision makers
  - Others than Sun can lead and license JSRs
- **JCP 2.1, July 2001**
  - Updating of voting rules
- **JCP 2.5, October 2002**
  - Open Source gains equal standing in the Community
- **JCP 2.6, Planned for early 2004**
  - Greater efficiency in the process and transparency to JSRs

JCP 2.5 Licensing Rules

- **Spec must have spec license, required:**
  - Completely implement spec
  - No sub-, supersetting in java, javax name space
  - Must pass TCK
- **Required RI, TCK terms:**
  - Allow independent implementations
  - TCK must be licensed separately from RI
  - TCK available at no cost to qualified not-for-profits and individuals
- **At Spec Lead's discretion:**
  - Whether to use open source license for RI, TCK
- **No parallel copyright grant to Sun**

JCP 2.6, Upcoming Changes

- **JCP 2.6 will improve communication efficiencies and invite broader community and public participation**
  - All draft reviews will be made public, and public feedback will be actively solicited
  - Anyone interested will be able to more closely monitor the development and status of a JSR throughout its lifecycle, including decisions the EG has made along the way
  - Spec Leads will be have a greater responsibility to provide timely, accurate information to the community and to the ECs
  - The ECs will have new guidelines to help make each RI & TCK easier to understand, implement and administer

Questions?

The JCP program: Community development of Java technology specifications

SD Times 100, June 2003
JavaPro Award, March 2002
" Outstanding contribution to the growth of the Java developer community"

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