

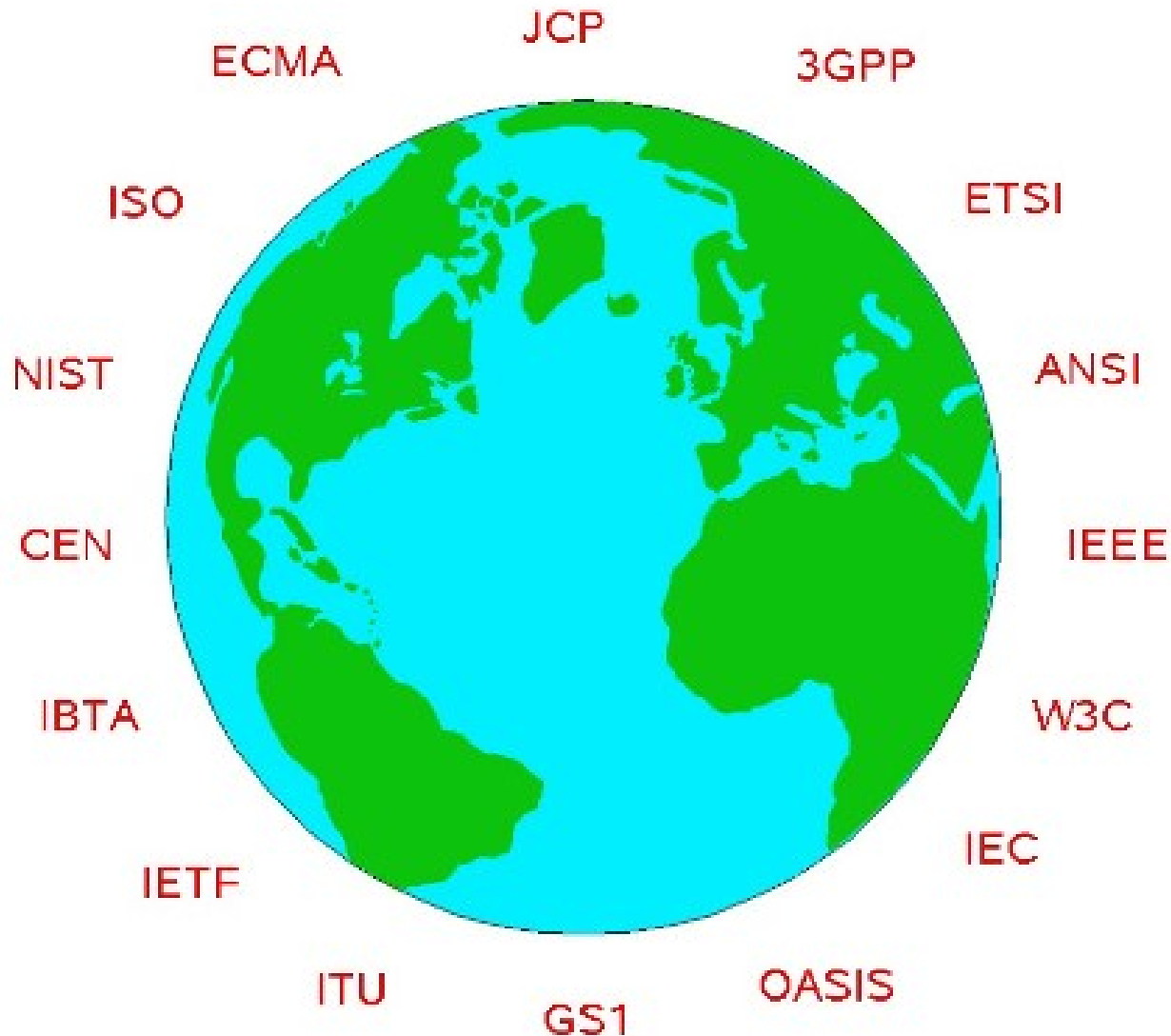
# Java User Groups and the JCP: a winning combination

Patrick Curran  
*JCP Program Chair*  
*patrick@jcp.org*  
*<http://jcp.org>*  
*April 2012*

# Welcome



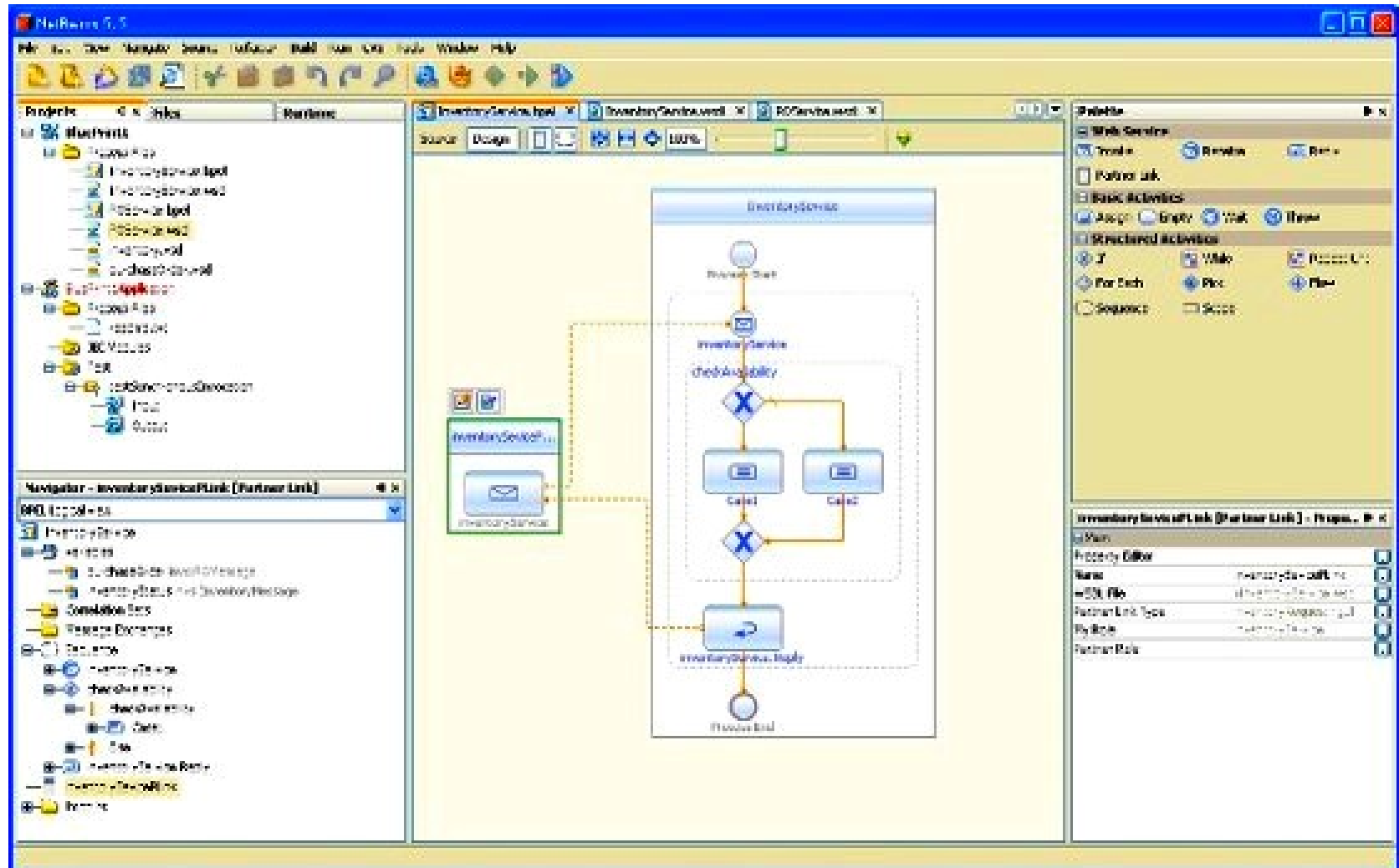
# Standards make the world go round



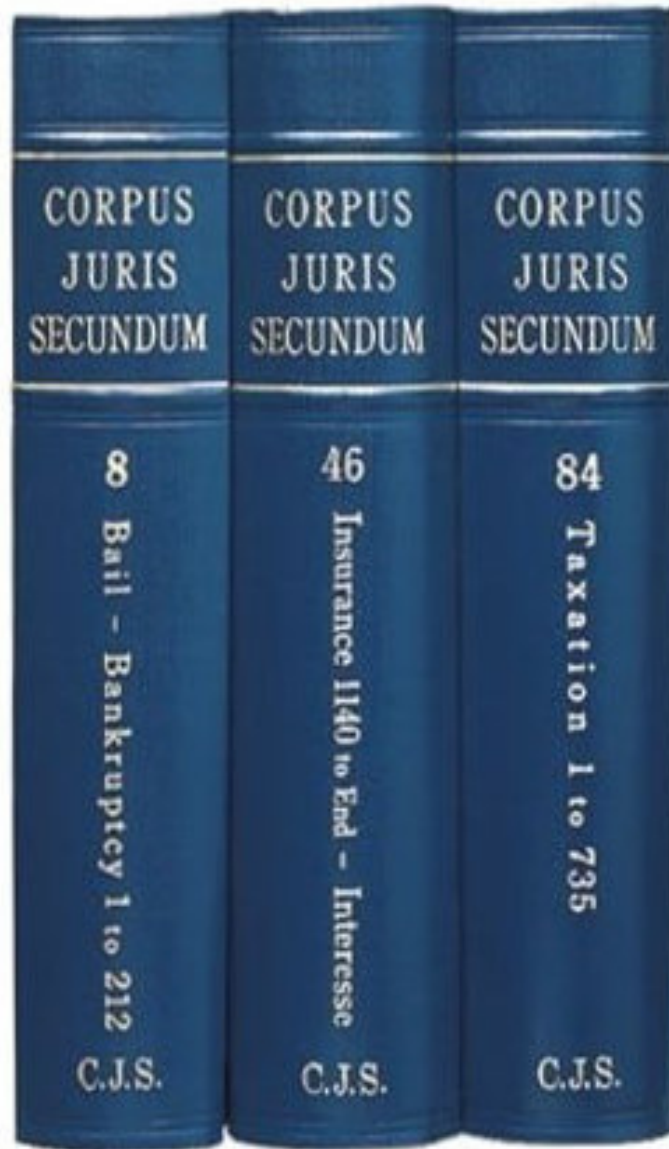
# Languages & protocols



# Interfaces

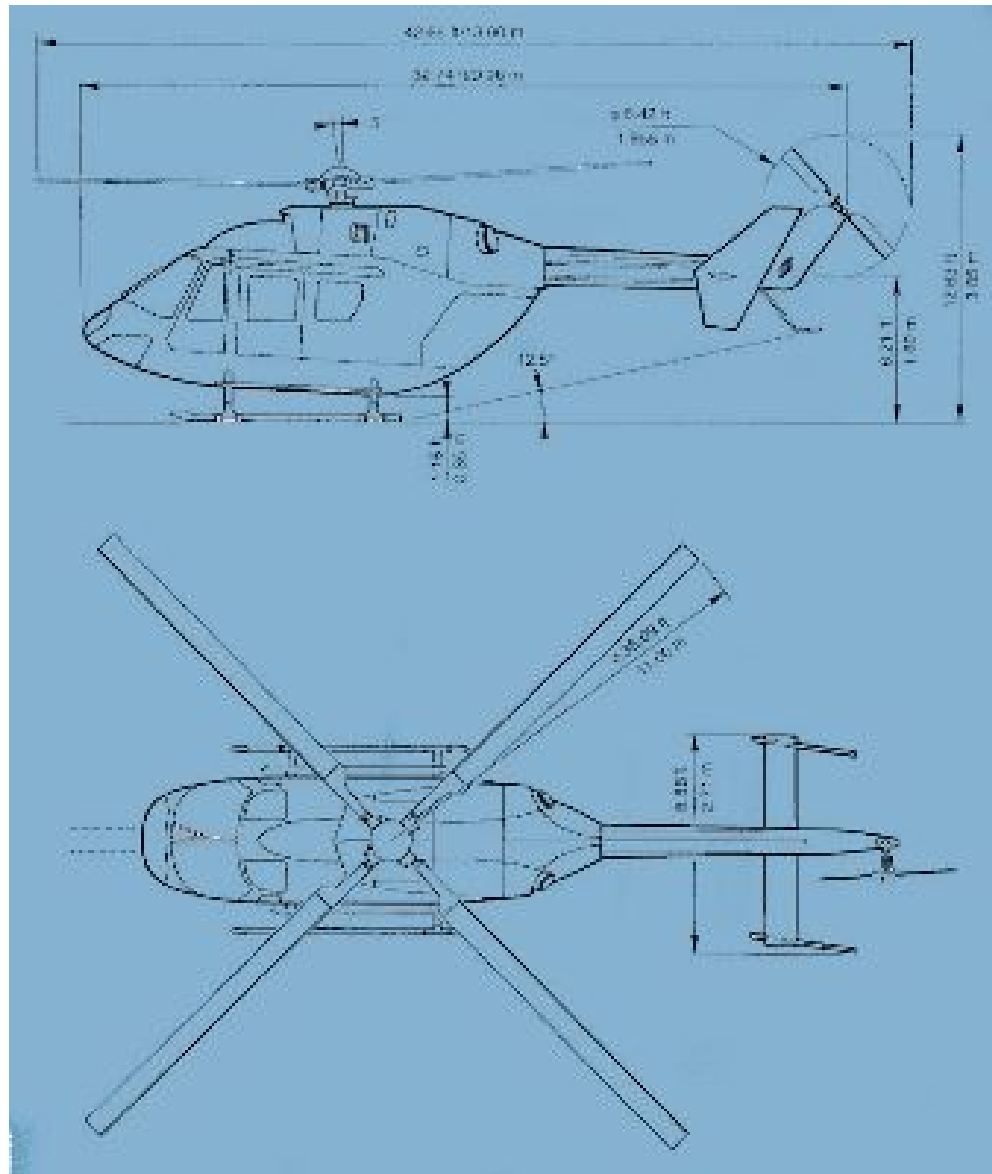
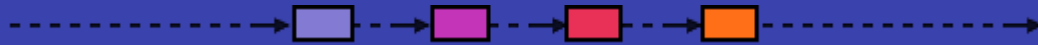


# Specifications





# Blueprints



# Certification



**DECLARATION OF CONFORMITY**

This device is in conformance with Part 15 of the FCC Rules and Regulations for Information Technology Equipment. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Model:	SV-M0007110C
Responsible Party:	SHARPVISION CO., LTD.
Address:	THE 4TH FLOOR, NO.4 TANGDONG EAST ROAD, TIANHE DISTRICT, GUANGZHOU, CHINA
Contact Person/Title:	STONER, DIRECTOR
Telephone:	+86-20-85573236
Fax:	+86-20-85581123

Equipment Class:	EUT Certification Summary
Product Type:	FCC Part 15 Class B
Report Number:	INT LCD MONITOR
Issuance Date:	8503071101
Tested by:	July 21, 2004
Signature of Official:	Buy Area Compliance Laboratory Corp.
	<i>John Y. Chan - Certification Manager</i>

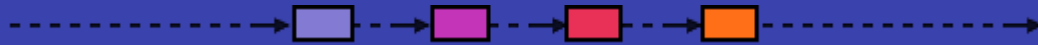
We, the responsible party:  
**SHARPVISION CO., LTD.**  
declare that the product  
**SV-M0007110C**  
was tested to conform to the applicable FCC Rules and regulations. The method of testing was in accordance to the most accurate measurement standards possible, and that all necessary steps have been enforced to assure that all production units of the same equipment will continue to comply with the Federal Communications Commission's requirements.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_



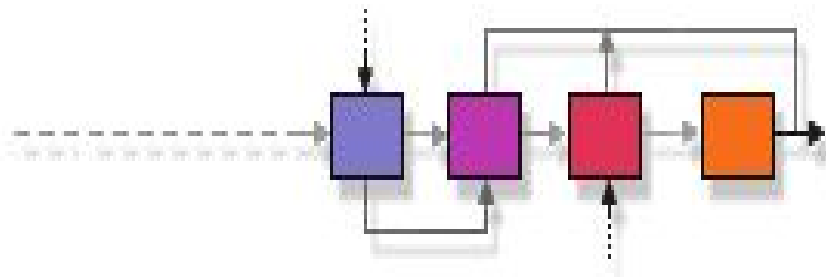
# No vendor lock-in



# Industrial-strength systems



# Java standards

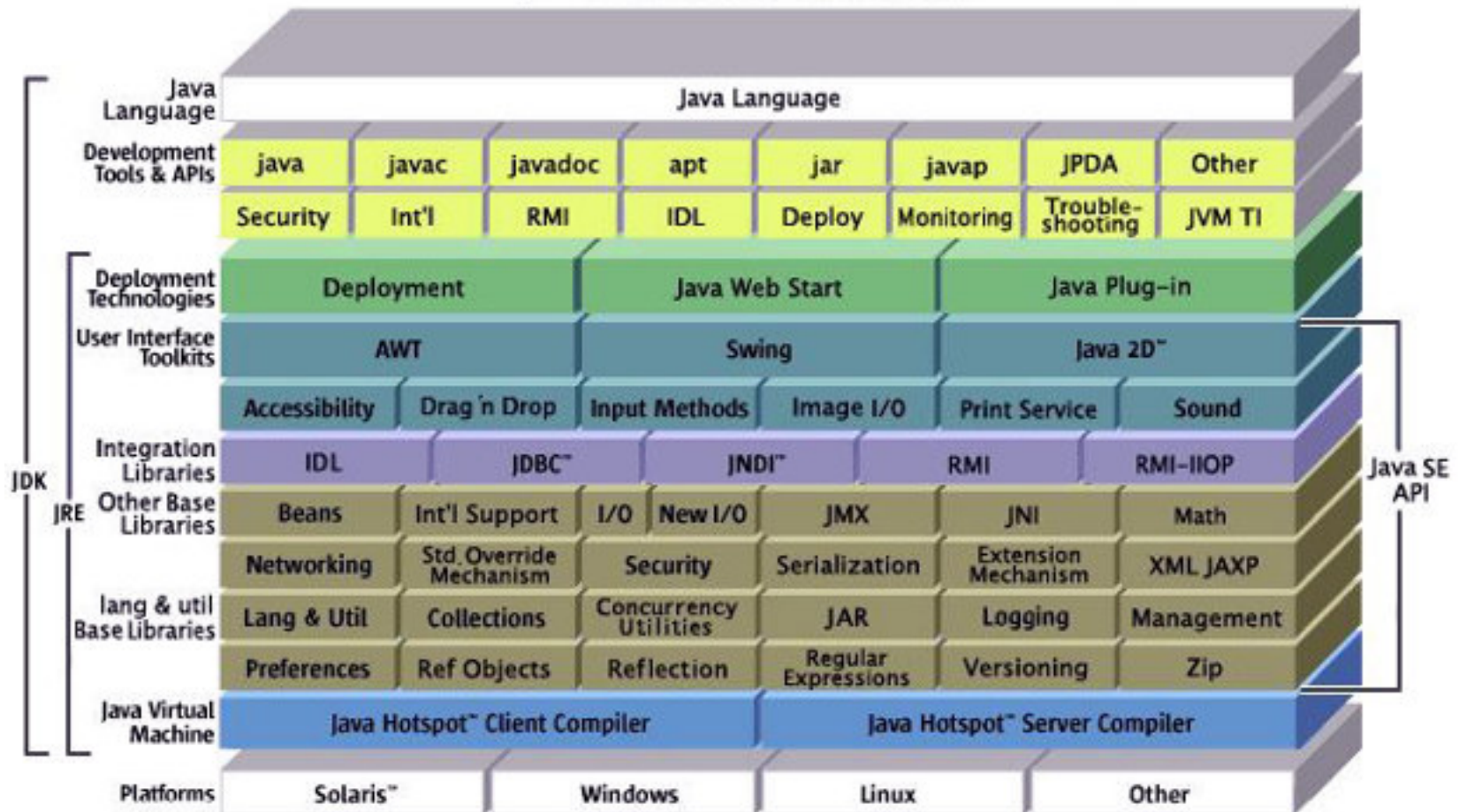


Community Development of  
Java Technology Specifications

# Java SE

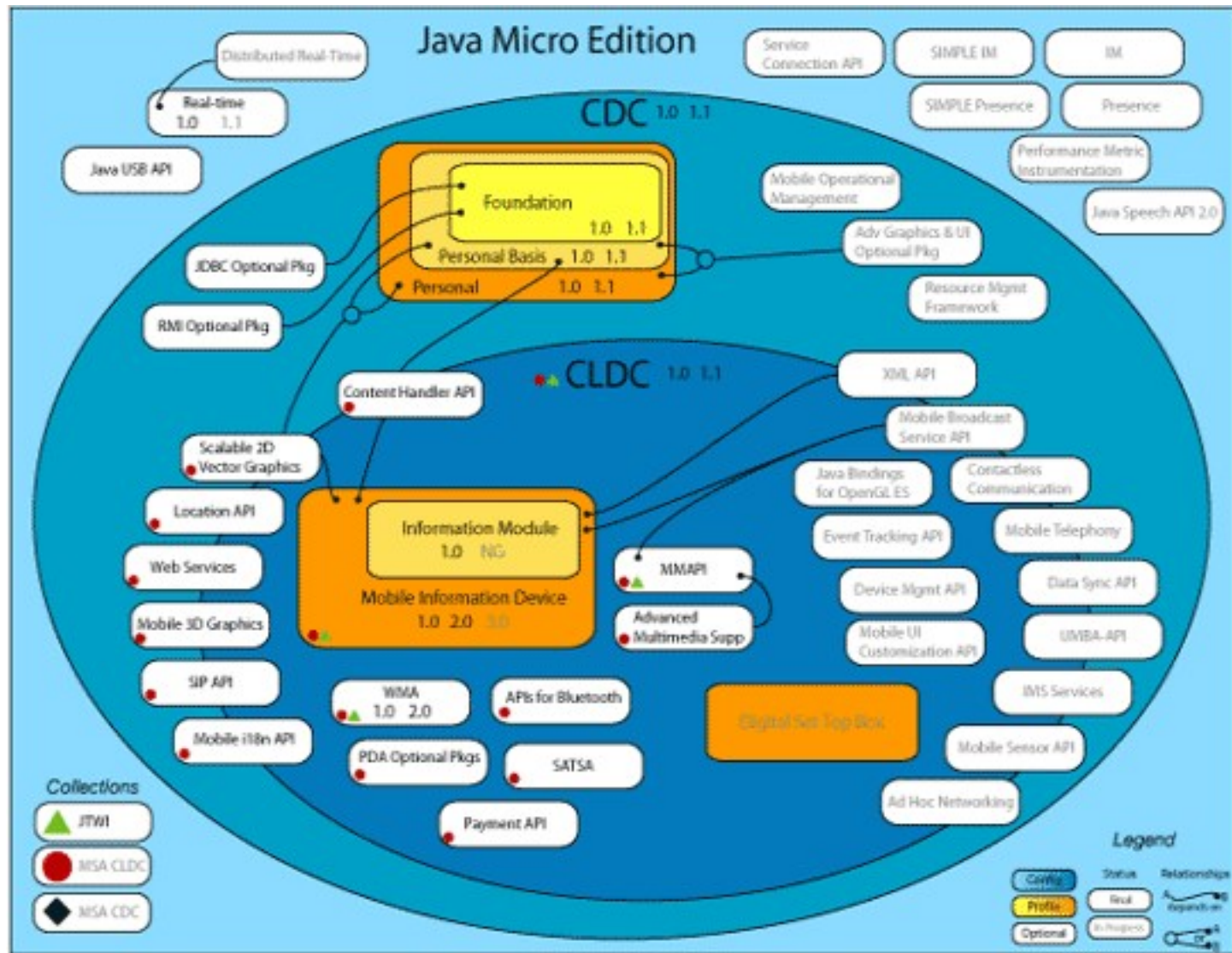


## Java™ Platform Standard Edition

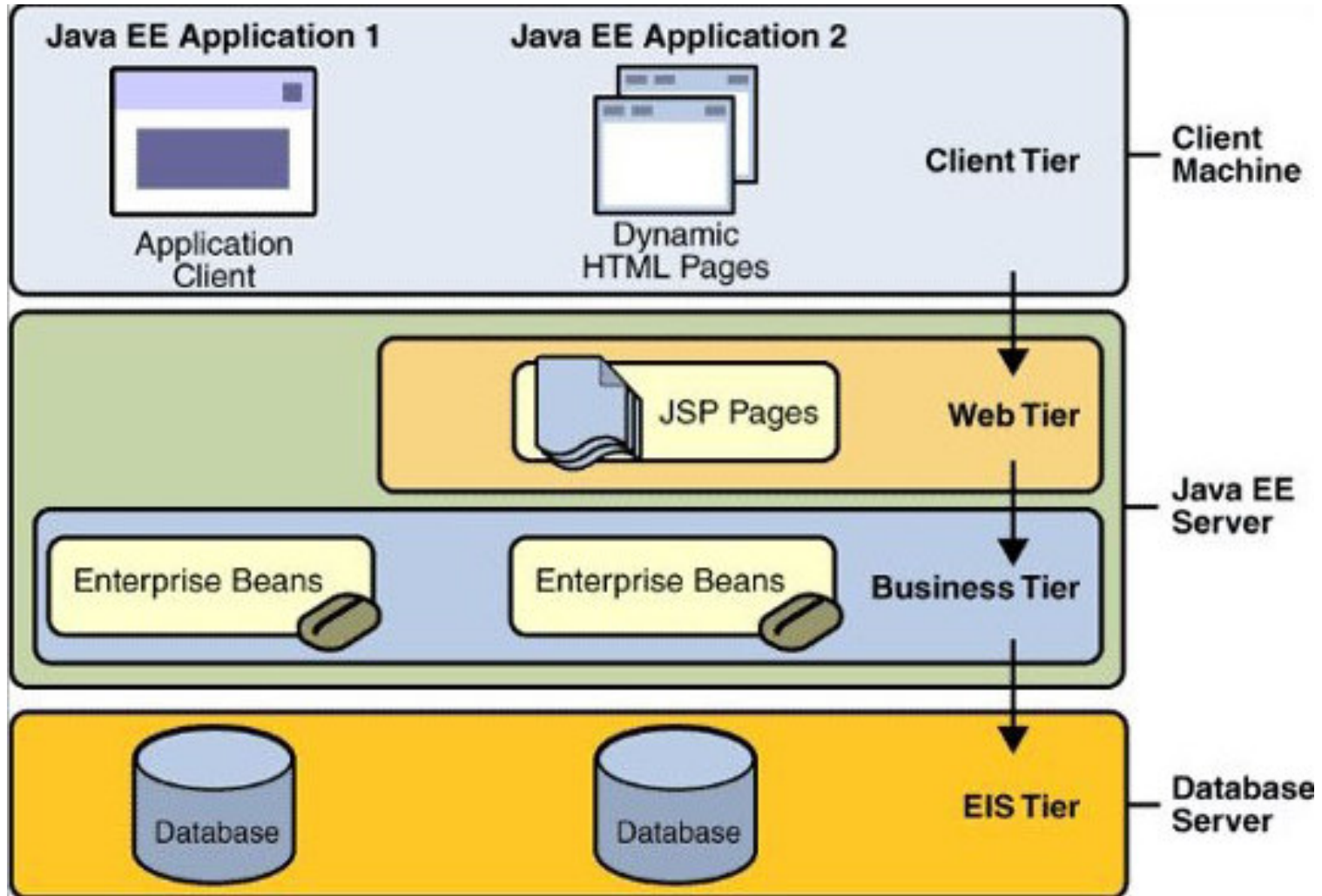




# Java ME



# Java EE



# How the JCP works





# How we do it



- Java Specification Requests (JSRs)
  - A JSR is a single version of a Java specification.
  - JSRs are led by a community member (the *Spec Lead*), with a group of interested members (the *Expert Group*) helping with the day-to-day decisions and work.
  - Any community member can submit and lead a JSR.
- Each Expert Group must deliver:
  - The Specification
  - The Reference Implementation (RI)
  - The Technology Compatibility Kit (TCK)

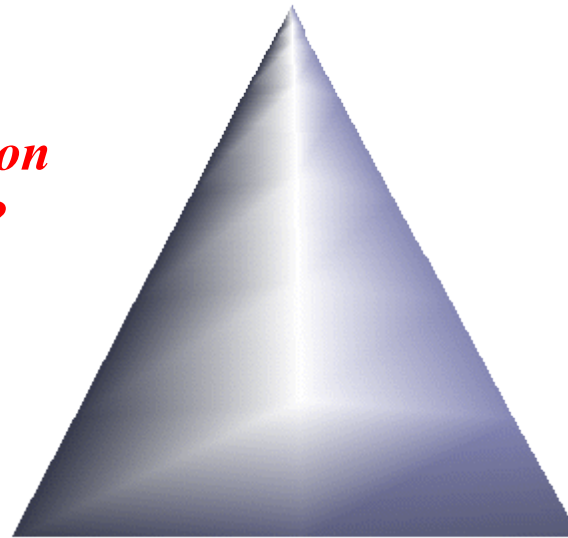
# The compatibility triangle



**Specification**

*Is the specification  
unambiguous?*

*Can you build an  
implementation?*

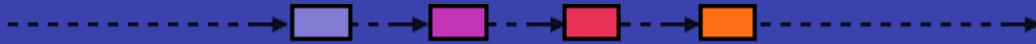


**Technology  
Compatibility Kit**

**Reference  
Implementation**

*Is the TCK correct?  
Does the RI conform?*

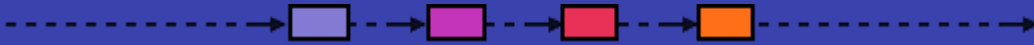
# Deliverables



# Compatibility testing

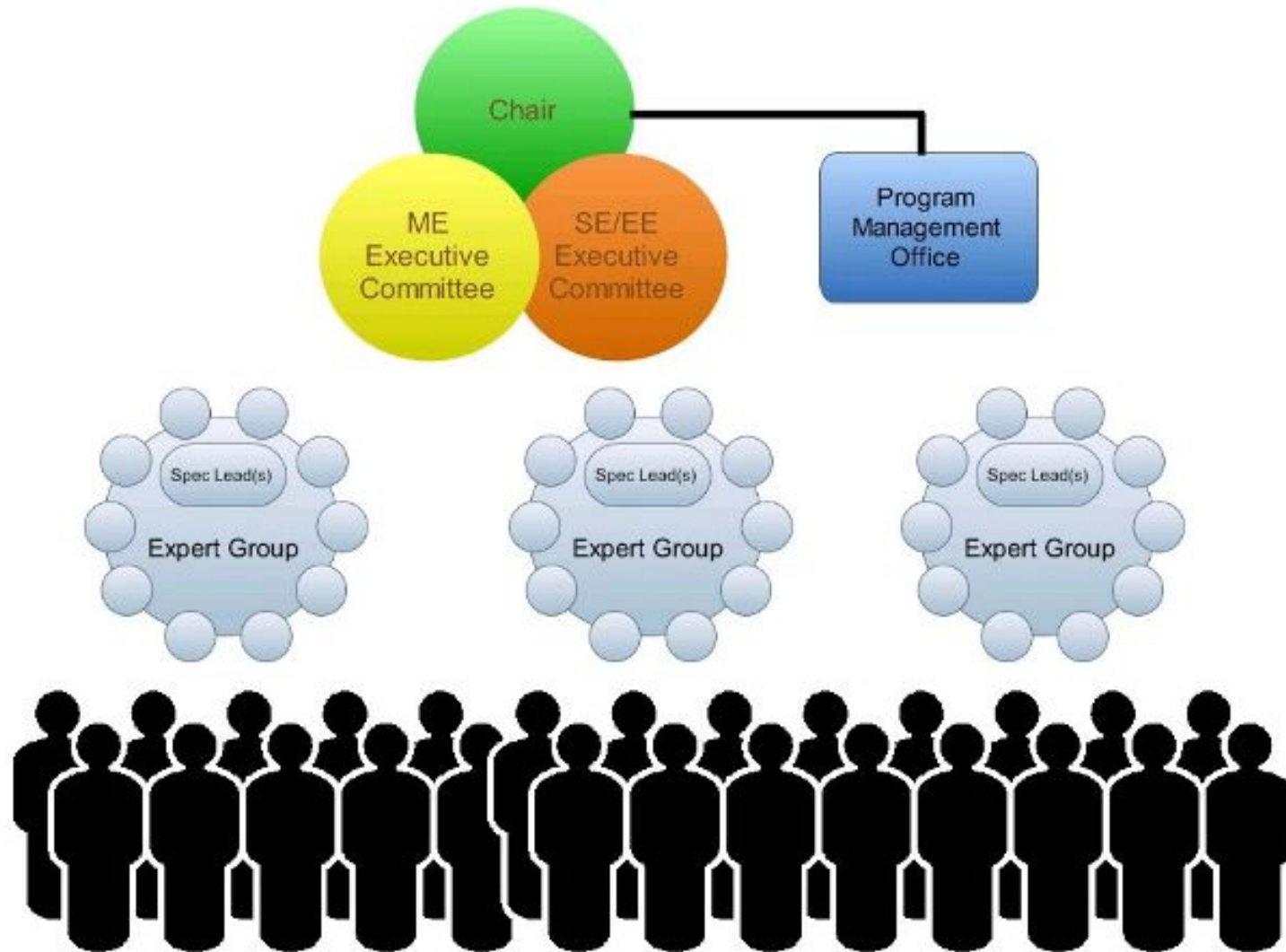


# Governance



- Java Specification Participation Agreement (JSPA)
  - A legal contract between members and Oracle.
  - Addresses Intellectual Property (IP) grants and the terms under which the spec, RI, and TCK should be licensed.
  - <http://www.jcp.org/aboutJava/communityprocess/JSPA2.pdf>
- JCP 2: Process Document
  - Defines the governance of the organization.
  - Defines the processes that are used to submit define, develop, review, approve, and maintain specifications.
  - Defines the obligations to produce an RI and TCK.
  - <http://jcp.org/en/procedures/jcp2>.

# Organization



# Roles



- JCP Chair
  - Leads the organization and manages the PMO.
- Program Management Office (PMO)
  - Manages day-to-day operations of the organization.
- Executive Committees
  - Define JCP governance, processes, and contractual terms of membership.
  - Vote on JSRs at defined stages through the process.
- Expert Groups
  - Create JSRs (write the spec, develop the RI and TCK.)
- Members
  - Review specs, may participate in Expert Groups, vote in Executive Committee elections.



# The Executive Committees



- Two Executive Committees:
  - One for Java ME and one for Java SE and Java EE together.
  - The two ECs will be combined in the future.
- ECs meet ~monthly by phone, 3 times a year face-to-face.
- EC meeting minutes are public.
  - See [http://jcp.org/en/resources/EC\\_summaries](http://jcp.org/en/resources/EC_summaries).
- We hold two public teleconferences and one public f2f meeting each year.
- We have a public mailing list for feedback.
  - Sign up at <http://java.net/projects/jcp-ec/lists>.

# Executive Committee elections



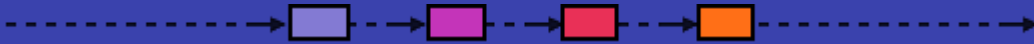
- Each EC has 16 members.
- Oracle has a permanent seat on each EC.
- 10 of the other 15 seats are *ratified* by Oracle.
  - Oracle nominates candidates.
  - The entire JCP membership must approve via ballot.
- The remaining 5 seats are *elected* (any JCP member may nominate themselves.)
- Yearly elections reconfirm or replace one-third of the members.
- Special elections are held to fill seats vacated by resignation.

# Executive Committee responsibilities



- Review and vote on all JSRs associated with their EC.
- Evolve the JSPA and the Process Document.
  - The JSPA and Process Document are modified through the JSR process itself.
  - The Executive Committees serve as the Expert Group for JSRs that make these changes; the Chair is the Spec Lead.
  - JSR 99 defined the JSPA.
  - JSR 215 defined the Process Document.
  - JSR 348 (*JCP.next*) to further evolve the Process Document was recently completed.
  - JSR 355 to merge the two ECs is in progress now.

# Current Executive Committee membership



- Java ME EC

- Stefano Andreani, Aplix, ARM, **AT&T**, CableLabs, IBM, Werner Keil, Nokia, Oracle, RIM, **Samsung**, Siemens, **SK Telecom**, T-Mobile, TOTVS, Vodafone.

- Java SE/EE EC

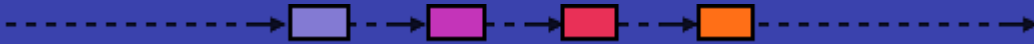
- Azul Systems, Credit Suisse, Eclipse, Ericsson, Fujitsu, Goldman Sachs, Google, HP, IBM, Intel, London Java Community, Oracle, Red Hat, SAP, SouJava, **Twitter**.

# The Spec Lead



- The individual or institutional owner and driver of a JSR.
  - Recruits and organizes the activities of the Expert Group.
  - Responsible for delivering the Spec, RI, and TCK.
- Intellectual Property rights to the technology incorporated in the JSR accrue to the Spec Lead.
  - Subject to obligations incurred under the JSPA.
- The Spec Lead is free to define the terms under which the RI, and TCK will be licensed.
  - Subject to obligations incurred under the JSPA.
- Oracle is the Spec Lead for the three existing Platforms: Java ME, Java SE, and Java EE.

# The Expert Group



- The Expert Group is recruited and led by the Spec Lead.
  - All members of the JCP are eligible to join.
  - Participation by all interested parties is encouraged and desirable.
  - The EG works as a team to define the JSR and to develop the Spec, RI, and TCK.
- The Expert Group must operate transparently, so that JCP members and the public can review and participate in its work.

# The membership



- Anyone can join.
- Total membership is approximately 1200.
- 3700 registered users at jcp.org.
- Fees:
  - Java Licensees: free.
  - Individuals: free
  - **Java User Groups: free.**
  - Non-profit organizations: \$2K/year.
  - Commercial organizations: \$5K/year.

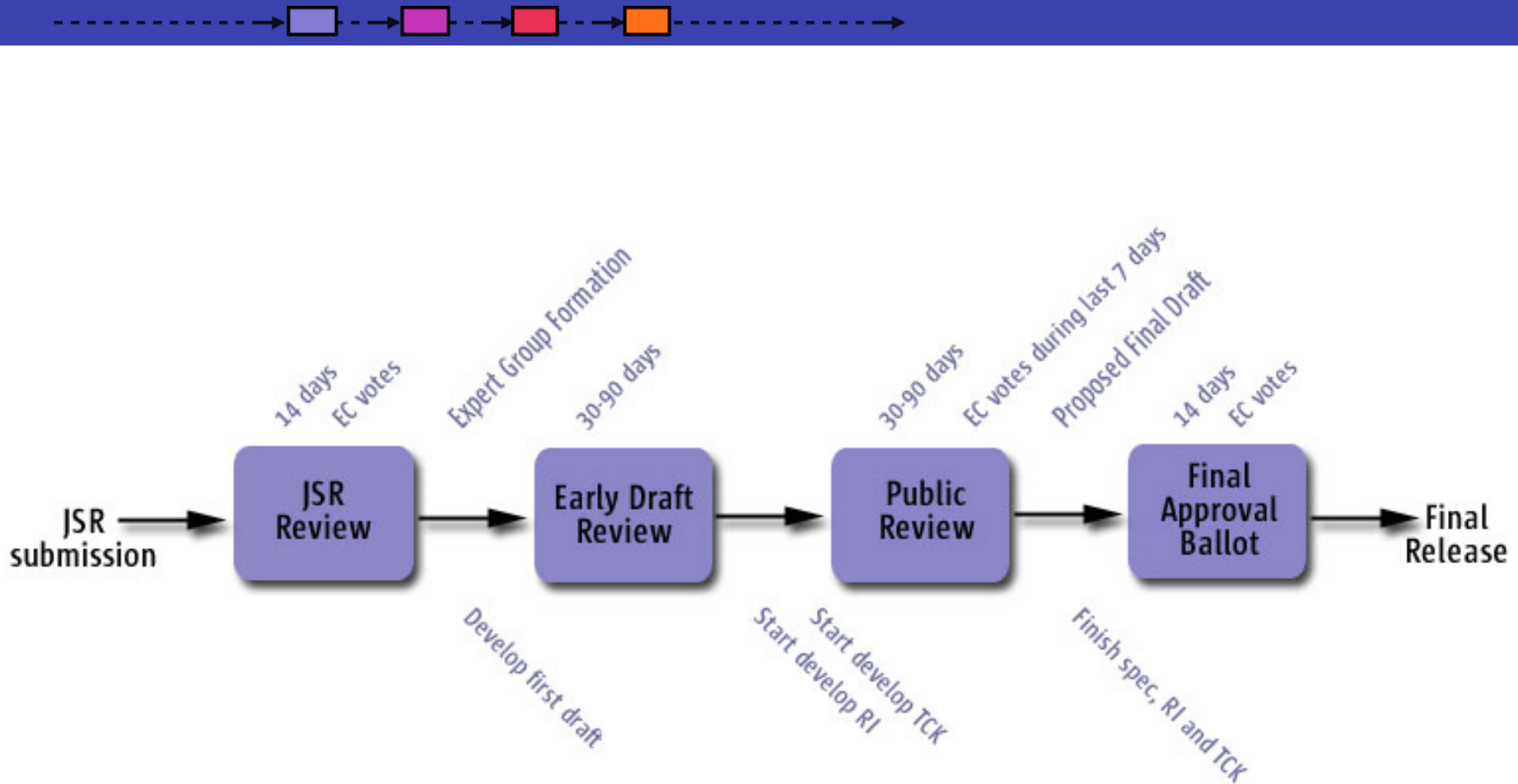


# Who are the members?



- Membership distribution by type:
  - 77% individual.
  - 21% corporate.
  - 2% non-profit.
- Membership distribution by location:
  - 50% North America
  - 32% Europe and the Russian Federation
  - 13% Asia and the Middle East
  - 5% South America

# The JSR development cycle

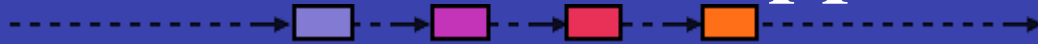


# JSR Submission



- Identify the submitters, the Specification Lead(s), and the initial members of the Expert Group.
- Describe the proposed specification and the reasons for developing it.
- Identify the target Platform(s).
- Estimate the development schedule.
- Describe the working model the Expert Group will adopt, and how it will involve the community and the public.
- Identify preexisting documents, technology descriptions, or implementations that might be used as a starting point.
- Publish the licensing terms for the Spec, RI, and TCK.

# JSR Review and Approval Ballot



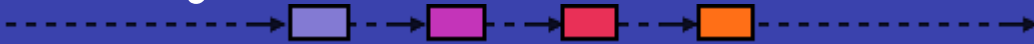
- JSR proposals are published on the JCP website.
- JCP members, the Executive Committees, and the public review and comment.
- JCP members may request to join the Expert Group during this period.
- The Executive Committee(s) vote on the JSR after the review period.
- If the JSR is voted down, submitters have 14 days to revise and resubmit for a second vote; if this fails the JSR is closed.

# Expert Group formation



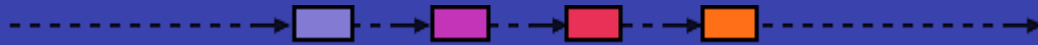
- Expert Group formation begins when the JSR is approved.
- Members request to join the EG through an online form.
- No size limit; Spec Leads should ensure that all interested parties are represented, but should keep the group small enough that it will be able to function efficiently.
- Members may be added at any time, subject to the agreement of the existing membership.
- The EG decides its mode of operation (communication mechanisms, meeting schedules, etc.)
  - Transparency and community involvement are required.

# Early Draft



- The Expert Group's first deliverable is the *Early Draft*.
  - Provides the JCP membership and the public with a draft that is detailed enough to generate useful feedback.
- No fixed deadline for generating the draft – EGs should take as long as they need (but no longer!)
- Early Draft is published for review on the JCP website.
  - Review period is typically 30 days but may be longer.
- No ballot at this stage – the purpose is to gather feedback.
- EGs may choose to revise the draft and resubmit if feedback indicates that significant changes need to be made.
  - OK to iterate through several Early Draft reviews.

# Public Review



- Spec should be relatively complete before *Public Review*.
- Expert Group should also be developing the RI and TCK while working on the spec.
- Spec is published for review on the JCP website.
  - Review period is 30–90 days (the EG decides how long).
- All public comments should be considered and addressed.
- The Public Draft Specification Approval Ballot takes place during the final 7 days of the review
- If the ballot fails, the EG has 30 days to resubmit for a *Reconsideration Ballot*.
  - If this ballot fails, the JSR is closed.



# Proposed Final Draft



- The EG submits a Proposed Final Draft of the spec to the PMO.
  - This should incorporate and address feedback from the *Public Review*.
- Spec is posted on the website for public download.

# Final Approval and Release



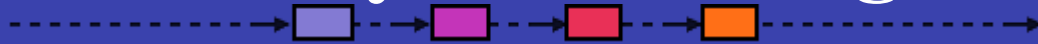
- The EG prepares the Final Draft of the spec and completes the RI and TCK.
  - The TCK must meet quality and coverage goals.
  - The RI must pass the TCK.
  - A test appeals process must be defined.
  - Final RI and TCK licensing terms must be published.
- The EC has two weeks to review these materials and to cast their votes in the Final Approval Ballot.
- If the ballot fails the EG has 30 days to resubmit for a Reconsideration Ballot; if that fails, the JSR is closed.
- Approved JSRs are posted for Final Release and may then be implemented commercially.

# Maintenance



- Spec Leads are expected to make a long-term commitment to revise and update the spec, RI, and TCK.
- The Spec Lead typically takes on the role of *Maintenance Lead*.
  - Reviews proposed changes in the Issue Tracker and decides which are to be included in the Maintenance Release.
- 30-day public *Maintenance Review* period followed by a seven-day ballot.
- When the Spec, RI, and TCK are updated and published, the Maintenance Release is completed.

# Summary of JSR stages



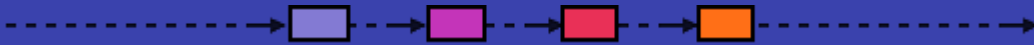
- JSRR: JSR Review - Mandatory - 2 or 4 weeks.
- JAB: JSR Approval Ballot - Mandatory - 2 weeks.
- EDR: Early Draft Review - Mandatory - 30/45/60/90 days.
- PR: Public Review - Mandatory - 30/45/60/90 days.
- PRB: Public Review Ballot – Mandatory - 7 days.
- PFD: Proposed Final Draft - Mandatory - no time frame.
- FAB: Final Approval Ballot - Mandatory - 2 weeks.
- FR: Final Release - Mandatory.
- MR: Maintenance Review - Mandatory – 30 days.
- MRB: Maintenance Review Ballot - Mandatory – one week.
- MREL: Maintenance Release - Mandatory.

*Each stage must be completed before the EG moves on to the next.*

# Constitutional change



# Using the Process to change the Process



- We modify the Process (as defined in the *Process Document* and the *JSPA*) by filing JSRs.
  - The Chair is the Spec Lead, and the Executive Committee members form the Expert Group.
- *JSR 348: Towards a new version of the Java Community Process* completed in October 2012.
  - This JSR focused on relatively simple changes that we were able to implement within about six months.
- *JSR 355: Executive Committee Merge* is in progress now.
- A follow-on JSR – to be filed soon – will implement more complex changes, including any that require modifying the JSPA.

# JCP.next (JSR 348)



- Transparency
- Participation
- Agility

# Transparency



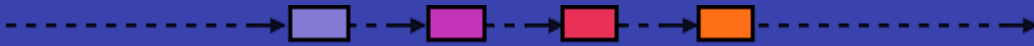


# Expert Group transparency



- Must do all substantive business on a public mailing list.
- Must track issues in a public issue tracker.
- Members of the public must be able to comment on the EG's work.
- EG must publicly respond to all comments.

# Practice what you preach



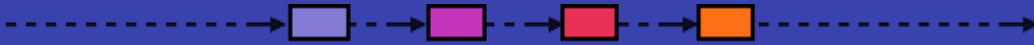
- As JSR 348 itself now requires, all our work was carried out in public.
- A public java.net project was created with a Wiki, *Expert Group* and *Observer* aliases, discussion forum, issue tracker, and file download area.
- All EG mail traffic was copied to the *Observers* alias.
- All our documents (meeting agendas and minutes, task lists, working drafts) were published in our Document Archive.
- The follow-on JSRs are being and will be run in a similar manner.

# Executive Committee transparency

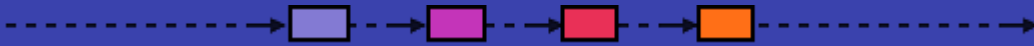


- Must hold semi-annual teleconferences and an annual open meeting at JavaOne.
  - All JCP members are free to attend these meetings.
  - Agenda will be chosen from topics suggested by members.
- Must create a public alias with archive for members to provide feedback to the ECs.
- Private and non-normative EC policies and procedures made public and normative in new EC Standing Rules.
- Escalation and Appeal process defined.
  - Spec Leads, EG members and JCP members can appeal to EC for help in resolving disputes.

# Participation



# Participation



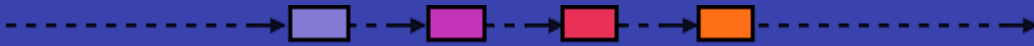
- Requests to join EGs, the Spec Lead's responses, and decisions to remove or replace EG members, must be reported on the EG's public alias.
- Better processes for dealing with uncooperative, unresponsive, or disruptive EG members and Spec Leads.
- EC members who miss two consecutive meetings lose their voting privileges until they have attended two.
  - Four EC members have already lost their voting privileges.
    - AT&T, Samsung, SK Telecom, Twitter.
- EC members who miss 5 meetings in a row or 2/3 of the meetings in a 12 month period lose their seat.



# Agility



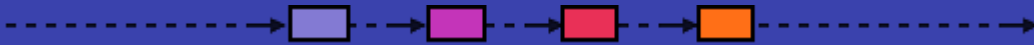
# Agility



- Time-outs for inactive JSRs.
  - Must reach Early Draft within 1 year, Public Draft within 2 years, Final Release within 3 years, else can be withdrawn by EC vote.
- Simplify the Maintenance Release process.
- Clarify the Final Release and Maintenance processes to ensure that completed/updated Spec, RI, and TCK are posted promptly.
- Ensure that links to RI and TCK are maintained.
  - If broken and not fixed, JSR must revert to “incomplete” stage.

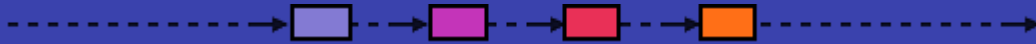


# Results...

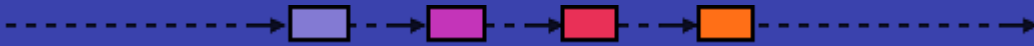


- It is now easier for JCP members and the public to observe and participate in the work of Expert Groups.
- Transparency is the default mode of operation.
- All new JSRs will be bound by the new rules.
  - Existing JSRs will be encouraged to voluntarily adopt them.
- Further changes will be introduced in follow-on JSRs.
- Now we need your participation!

# JCP.next.2

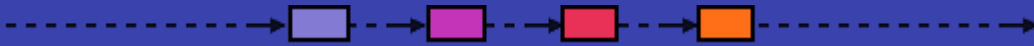


# JSR 355 (the EC merge)



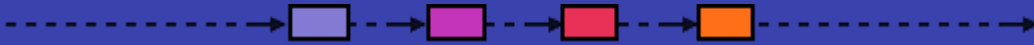
- Because *Java is One Platform*, and because we expect ME and SE to converge over time, we plan to merge the two ECs into one.
- We will reduce the number of seats, and keep the same ratio (2:1) of ratified and elected seats.
  - Oracle will give up one of its permanent seats.
  - No other member may hold more than one seat.
- No other significant changes to our processes (in this JSR.)
- The JSR is making good progress and will be completed within a few months.
- As with JSR 348, everything is being done in public.
  - See our [java.net project](http://java.net/project) and provide your input!

# Implementation plan



- Reduce the size of the merged EC to 25 members.
- Merge the ECs after the 2012 election and eliminate Oracle and IBM's second seats at this time.
- Allow members elected in 2010 to serve their full terms (until 2013) and then eliminate the remaining seats.
  - Everyone must stand for re-election in 2013.
  - Reconsider the goal of 25 seats before the 2013 election
    - if we need to change this, do so with a Maintenance Release of JSR 355.
- Switch to a two-year election cycle after 2013.

# That was easy!



# JCP.next.3



# JCP.next.3



- The last of the three JCP.next JSRs will be filed soon.
- This will tackle more complex issues such as licensing, IP flow, and governance, and will modify the JSPA.
- This is ★ **a big deal** ★ (because all the lawyers will get involved.)
  - It will take a loooong time.
- Wish us luck...

# And so...



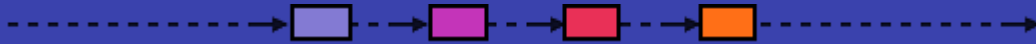


# Putting the *community* back into the JCP



- No more barriers to participation.
- All members of the Java community can participate:
  - In the implementation of the platform through OpenJDK and GlassFish.
  - In the evolution of the platform through the JCP.
- If you care about the future of Java you have no excuse...

# Get involved!



# Everyone is welcome

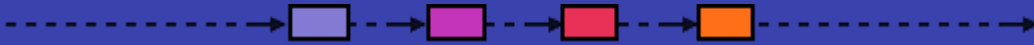


# Why participate?



- As a corporation:
  - To influence the technologies that drive your market.
  - Because it's cheaper than developing everything yourself.
  - To provide opportunities for your developers.
  - To increase the size of your market.
  - To gain a competitive advantage (ship new products faster.)
- As an individual:
  - Good karma!
  - Experience.
  - Fame and fortune.

# How to participate?



- As an individual – OK.
- As part of a team – better.
- Work through your JUG.
  - Help each other.
  - Teach each other.
  - Work with each other.



# JUG members



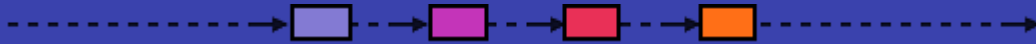
- 
- BeJUG (Belgium)
  - BreizhJUG (Brittany)
  - Central Ohio JUG (USA)
  - Connecticut JUG (USA)
  - Detroit JUG (USA)
  - Duchess (Women)
  - Houston JUG (USA)
  - iJUG e.V. (Germany)
  - IndiJava (India)
  - Japan JUG
  - Java Student User Group (Vienna)
  - Java Web User Group (London)
  - JUG-AFRICA
  - JUG Chennai (India)
  - UG-EG (Egypt)
  - JUG Indonesia
  - JUG-MK (Macedonia)
  - JUG-RU (Russia)
  - JUG-USA
  - London Java Community (UK)
  - Malaysia-JUG
  - MoroccoJUG
  - Nashville JUG (United States)
  - Oklahoma City JUG (USA)
  - Rio JUG (Brazil)
  - Riviera JUG (France)
  - Ruhrjug (Germany)
  - Silicon Valley JavaFX User Group (USA)
  - SouJava (Brazil)
  - Utah JUG (USA)

# JUG representation on the EC



- **SouJava** (Bruno Souza, Fabio Velloso, Yara Senger):
  - Nominated by Oracle to a ratified seat on the SE/EE EC in the May 2011 Special Election.
- **London Java Community** (Ben Evans, Martijn Verburg, Trisha Gee):
  - Won an elected seat on the SE/EE EC in the May 2011 Special Election.
- Both have already made significant contributions to the work of the JCP.

# Adopt a JSR!



Thank  
you

LJC and

  
**SOU Java**  
sociedade de usuários java



# What is it?



- A JUG-lead initiative to improve Java standards.
- Groups of JUG members work on JSRs.
- See <http://java.net/projects/jugs/pages/AdoptAJSR> for full details.



# Why should the JUGs get involved?



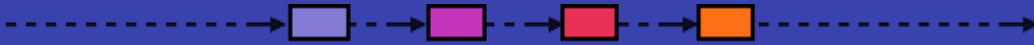
- To move the entire Java ecosystem forward.
- To speed up the standards-development process.
- To become part of the solution as opposed to staying silent.
- To be at the forefront of new technology.
- To ensure that Java standards are practical and relevant for the real world as opposed to the ivory tower.
  - We need expert input from end-users and developers.
- To ensure that Java standards are truly global.
  - We must enable non-English speakers to participate and to provide their input.

# How can you help?



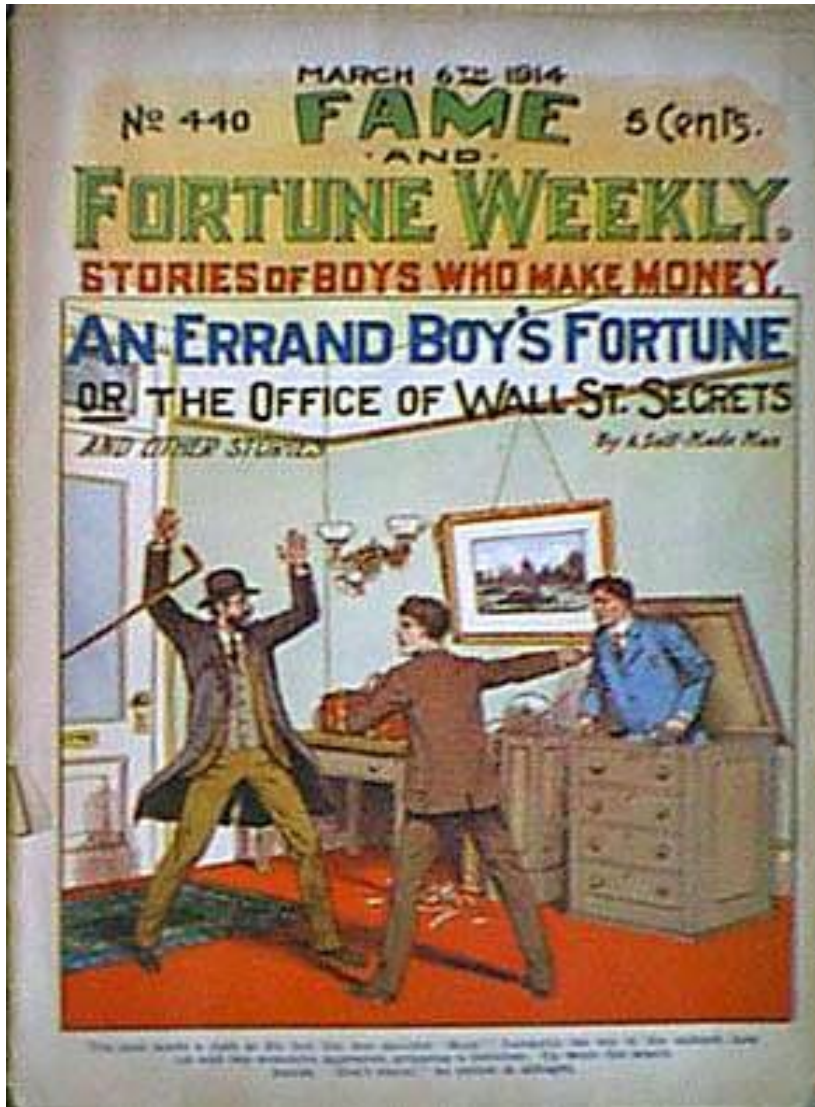
- Review the specs and provide feedback.
- Help to develop the RI and TCK.
- Respond to messages on mailing lists.
- Triage issues.
- Perform testing.
- Help with documentation.
- Evangelize the project.
- And more...

# How can you join?



- Contact your local JUG leader, or...
- Go to <http://java.net/projects/jugs/pages/AdoptJSR>
  - Follow the simple set-up steps there
- Team up with fellow-JUG members, friends, and other JUGs.
- Deliver a lightning talk on a JSR in progress at your JUG meetup.
- Have fun!

# What's in it for me?



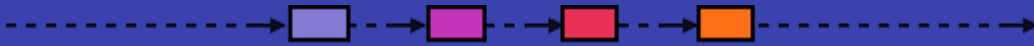
- Advance your career.
- Make contacts.
- Improve your “soft skills”
  - Verbal and written communications
  - Negotiation.
  - Collaboration.

# Coming soon...



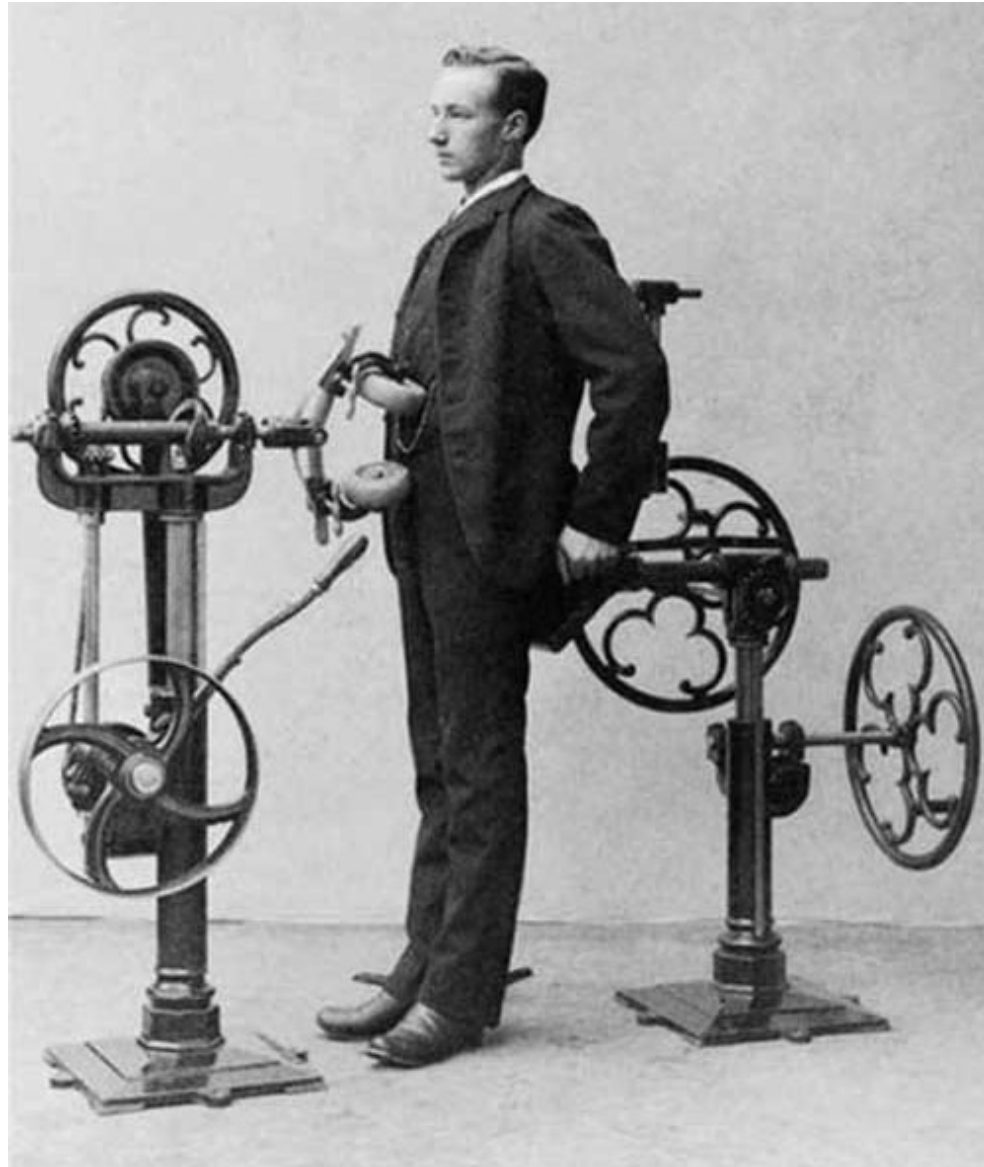
## Adopt OpenJDK

# What next?



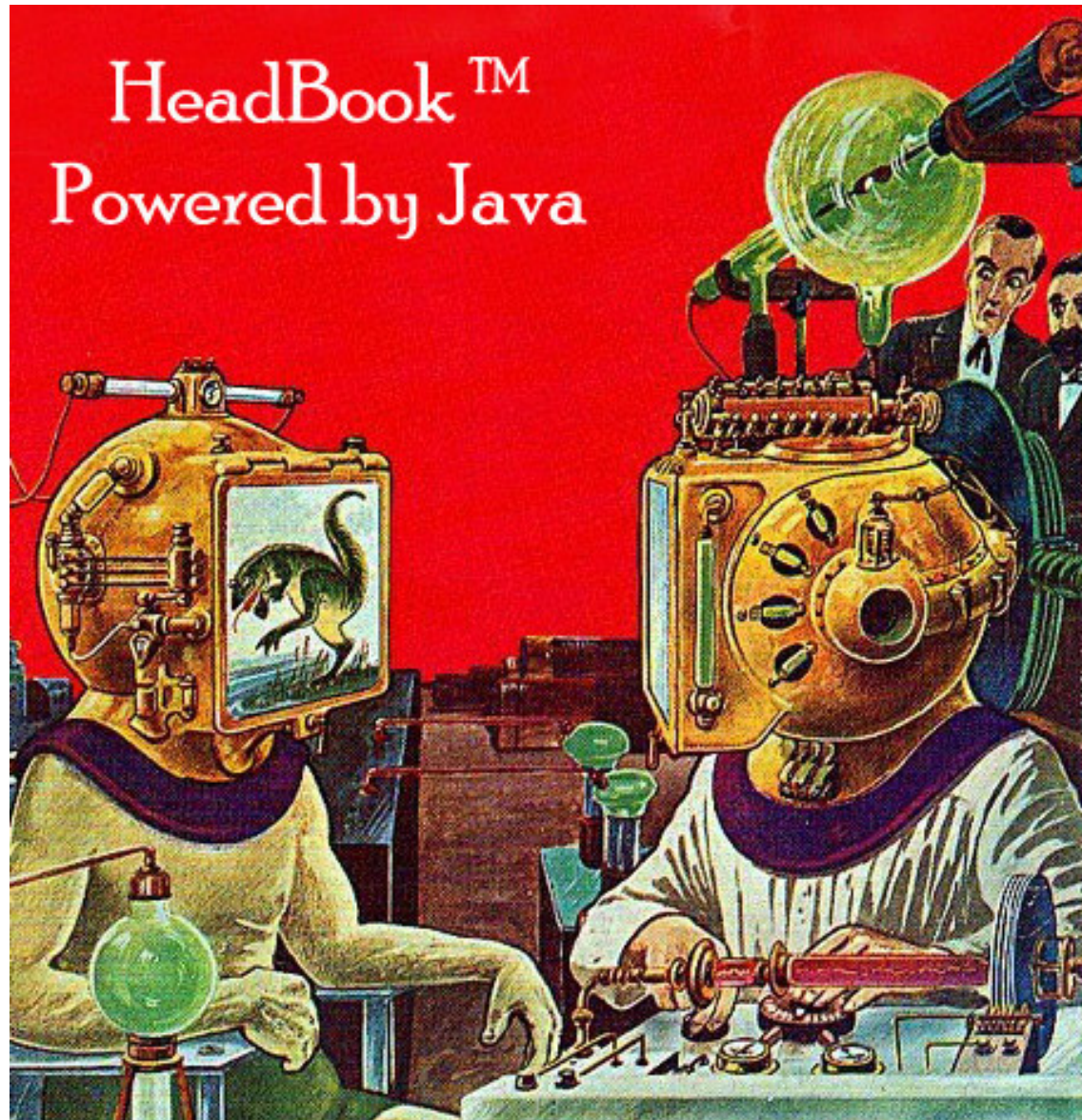
- We have *only* ~30 JUG members in the JCP.
  - Although they represent tens of thousands of developers.
- The *Adopt a JSR* program was the brain-child of the London Java Community and SouJava.
- There must be other ways in which you can get involved.
- We won't know until you try.

# Java-powered exercise equipment?



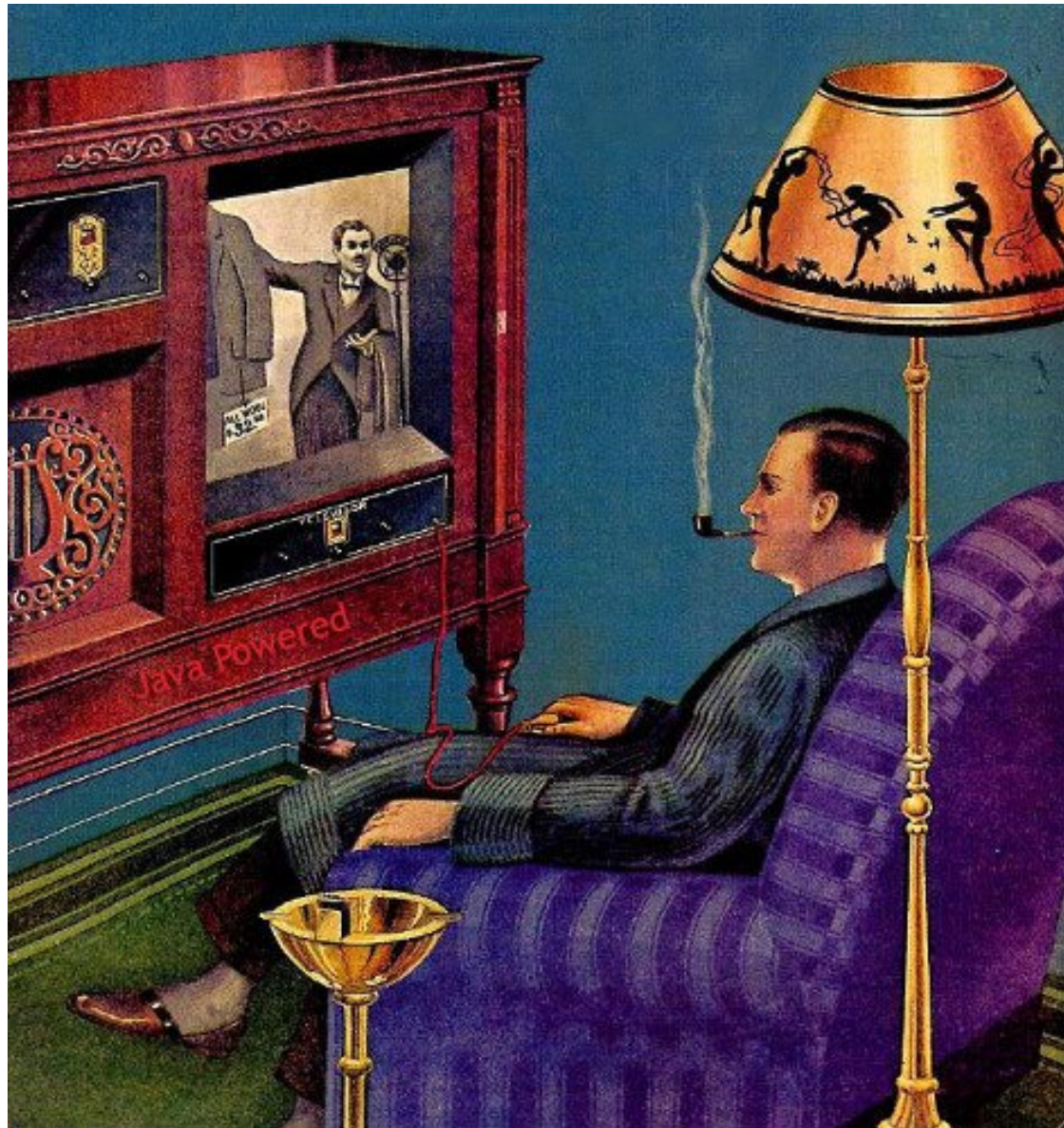


# Heads-up display?





# Interactive TV?



# Personal communicators?



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Will Johnny, in the days to come, walk into class with a 4-tube notebook? Will he, by pressing a button, record all that goes on in the classroom... readily and easily... as he sees and hears again during his study hours at home? Perhaps... but of this there can be no doubt—the new science of Opti-onics, in one way or another, will definitely speed learning methods in the classrooms of tomorrow.

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# In-home entertainment?



# The future is yours...





# Questions?

