OSGI STANDARDIZATION: AN EVOLVING FUTURE
(or)
Darwin Was Only Partially Right

Carl Cargill
Senior Director
Corporate Standards
Sun Microsystems, Inc.
A FUTURISTIC VIEW

THE FUTURE NEVER
“JUST HAPPENED.”

IT WAS CREATED.

Will and Ariel Durant
WHERE WE ARE

- OSGi is hosted on Java™ 2 VM technology
- Java™ 2 Micro Edition supports future OSGi technologies today
- OSGi/MEG first group to
  - Redefine footprint
  - Leverage scalability of Java™ 2 Micro Edition
DEPLOYMENTS OF OSGI ON JAVA™ 2

- Shell Home Genie
  - Partners:
    Motorola and Prosyst

- BMW 5-Series and 6-Series
  - Partners:
    Siemens/VDO
JSR 233 – MANAGEMENT SERVER

- OSGi does not explicitly define
  - Provisioning Server
  - Management Server
- JSR 124 is the Provisioning Server
- JSR 233 is the Management Server
OSGi STATUS

- OSGi specifications being implemented
  - Implementations and use of specifications growing
  - Products are appearing – from multiple sources
  - World Congress is proof that there is interest

- Very importantly, Google™ shows many OSGi references
  - Simple criteria: how often you're sought/referred
  - Random sample indicates generally positive views
BUT...

● Is the Underlying OSGi Philosophy current?
  – OSGi was founded in March 1999
  – It has been working for 5 ½ years so far
● Productization slower than anticipated
  – Picking up speed now
  – Market play and relevance?
● Is the rationale for creation the same as the rationale for continuing?
VALIDITY TESTING

- “The OSGi Alliance serves as the focal point for a collaborative ecosystem…”
  – Is everyone here?

- “OSGi technology is designed ...for the latest generation of networked devices…”
  – What is the Latest Generation of Networked Devices?
THE QUESTION

● What is the future for OSGi as an organization?
● The organization is over five years old
  – Most consortia achieve major success in first three to five years
  – Newness is appealing in high technology
  – There is either a mid-life kick – or slow decline
● What drives this question?
THE CHANGING REALITY

● The “Internet of things” is **coming (!)**
  – Concept is clear, implications clear
  – Reality a “bit fuzzy”

● Naming “IOT” is not essential, but it is fun
  – Could be called 4\textsuperscript{th} generation
  – Could be called “Future Generation”
  – Could be called a “pipe dream”...
THE PROBLEM WITH “IOT”

- The “Internet of things” includes:
  - RFID
  - Location (spatial data)
  - Security
  - Identity
  - “State management”
  - Privacy
  - Naming
  - Semantic Web
  - ...
  - The kitchen sink...
THE “INTERNET OF THINGS”

- The “Internet of things” includes:
  - Anything that indicates state change and talks about it or remembers it or reports it
  - Real, virtual, legal, or any combination...

- The “Internet of things” is:
  - Based on IPV6 and IPV4, XML, Web Services
  - Wired and Wireless structures
  - Real or Virtual data from everything, everywhere

- Billions of bits, all moving simultaneously
THE IMPLICATIONS FOR OSGi

- Where does OSGi fit into this “Brave New World”?:
  - Versus other consortia?
  - In the puzzle?
  - As a major player?
  - With industry partners?
THE IMPLICATIONS FOR OSGi

- The OSGi Unique Selling Proposition (USP)
  - Define the special “things” do you bring to the table—technology doesn't count (it will mutate)
- Confirm the value the industry places on these attributes
- Validate relevance?
  - Niche player (lasting/defensible niche?)
  - Nuisance (who doesn't like you, really?)
  - Market maker/mover?
OUR VIEW

● Need a strategic plan
  – Members have them
    Companies update on a yearly basis
    Contingency plans and options
  – Not about technology
    About the process/forum for technology creation
    About the ability to convince the market to use OSGi

● Survival/Growth plan?
  – What are the indicators?

● Need a clearly defined role in the ‘Internet of Things’
MODEST CONCLUSION

- Standards are a management tool
  - They help to manage evolution and change
  - They are not ends in themselves
- Approach is key
  - No to self-perpetuation
  - Yes to *needed* collaborative solutions and a lively ecosystem
SUN AND OSGi

- We have been involved since the beginning
- We believe that the organization and technology must gain commercial traction
- We want to help define a role in the new “Internet of Things” world
It is not enough that you should understand about applied science. Concern for the man himself and his fate must always form the chief interest of all technical endeavors; concern for the great unsolved problems of the organization of labor and the distribution of goods in order that the creations of our minds shall be a blessing and not a curse.”

Albert Einstein