RTSJ Profile for DO-178B How do we move forward?

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Agenda

- Landscape
- RTSJ Status
- Proposal

Landscape

- Two real-time efforts
 - ◆ Java: JCP and RTSJ
 - ◆ Java-like: J-Consortium and RT-Core
- USAFRL and Boeing
 - ◆ Wish to investigate Java for DO-178B
 - ◆ The existence of two specifications is problematic

RTSJ Status

- Final Ballot 11/2001
- RI and TCK available 1/2002
 - ◆ www.rtj.org
- Activities
 - DARPA grant (aspect programming and (possibly) open source RT-JVM)
 - ◆ Sun Microsystems Laboratories and NASA's Jet Propulsion Laboratories
 - ◆ MDS* on RTSJ
 - * Mission Data System



Proposal

- Sun would like one RT specification
- Sun will participate in a merger between RTSJ and RTC if:
 - ◆ The final result is through the JCP
 - ◆ The Open Group is the spec lead
 - ◆ Industry recognizes only one specification
 - ◆ Reference implementation and test suites are royalty-free
 - * JCP now encourages open source RI and TCK licenses

Proposal

- In addition:
 - ◆ Sun will participate in a JSR for a safetycritical profile of the RTSJ if:
 - the Open Group is specification lead
 - RI and TCK royalty-free
- I suggest we start this first and see how a merger fits in as we make progress

Proposed Result of JCP Effort(s)

