

#### **Customer Council**

# Engagement with Open Source

15 October 2002 Cannes, France



# **Agenda**

- Introductory remarks
  - Carl Bunje
- Panel member presentations
  - Ken Linker, DISA
  - Dean Richardson, Boeing
  - Steve Jenkins, JPL
- Panel discussion
- Potential for Open Group involvement
  - Walter Stahlecker, HP



#### Open Source – Are You Engaged?

There is "still an insufficient perception of the value of Open Source to the Customer"

-- Bruce Perens

- How many of you make use of established open source products within your enterprise?
  - Linux, Apache, Sendmail, GNU Toolset, PERL, ...
- How many of you have incorporated open source code into your systems? (internal, embedded, product)
- How many of you have engaged the open source community in the development of your software systems?
- How many of you consider yourselves members of the open source community?



# Potential Benefits Have you realized them?

- Access to extensive technical expertise
- Able to achieve high level of code efficiency
  - Rapid release rate
  - Quick fix & patch release
- Code publicly available
  - Code can be custom tailored to specific needs
  - Code reuse enables focus on developing unique features instead of redeveloping existing code, reducing development time
  - No forced obsolescence, intentional or otherwise
- Second source potential for open source products and support



## Perceived Risks Have you mitigated them?

- Poor code may result from small projects that do not attract enough participation
- Version control and integration
- Code base fragmentation (code forking)
  - Due to poor administration
  - Personality conflicts
  - Conflicting requirements



#### **Consideration of Qualitative Attributes**

- Ability to customize
- Availability/reliability
- Interoperability
- Scalability
- Design Flexibility
- Lifetime
- Performance
- Quality of service and support
- Security
- Level of difficulty/ease of management
- Risk of fragmentation
- Availability of applications

From "A Business Case Study of Open Source Software", Carolyn A. Kenwood, The Mitre Corporation, July 2001



## Some Criteria for Evaluating Open Source engagements

- Lifecycle cost models may be different from traditionally used for COTS software
  - Costs
    - Direct Software price, Formal support, etc.
    - Indirect Downtime, Peer support, Training, Integration, etc.
  - Benefits
    - Operational, performance, scalability, reliability, functionality, etc.
  - Intangibles
    - Perception of reliability, Quality of support, Administration and Management, Procurement and Legal, etc.
- Do indirect costs, operational/performance benefits, and intangibles play a greater role in Open Source than COTS software?



# Project Management Issues

- Requirements management
  - Conflict resolution
  - Integration and consistency
- Source and Version control
  - Homestead Internal or External
- Integration and Testing
- Schedule management
- Licensing and Legal issues
  - Multiple licensing models
  - License "contamination" what is considered to be a "derivative work"
  - Deployment and Distribution



#### **Panelists**

#### Ken Linker

COE Community Process Coordinator DISA

The COE (Web Common Operating Picture) Community Process is a pilot program to determine the effectiveness of developing capabilities to web enable the Common Operating Picture through a community process. Instituting controlled open source software development is a component of this effort.

#### Dean Richardson

Enterprise Messaging Infrastructure Boeing

Dean will discuss some of the Boeing engagements with Open Source, including the Open Group EMA Challenge.

#### Steve Jenkins

Architecture and Systems Engineering Manager Institutional Computing and Information Services JPL

Steve also will discuss a number of different engagements that JPL has made with Open Source.

