Ground System Architectures Workshop

Session 12B

Architecture-Centric Evolution (ACE) Working Group 2011

Sheri Benator, Sergio Alvarado, The Aerospace Corporation
Working Group 12B

Architecture-Centric Evolution (ACE) of Software-Intensive Systems

Chairs
Sergio Alvarado, The Aerospace Corporation
Sheri Benator, The Aerospace Corporation

Team
John Arcos, The Aerospace Corporation
Jeff Estefan, Jet Propulsion Laboratory
Scott Hendrickson, The Aerospace Corporation
Phil Schmidt, The Aerospace Corporation
ACE Working Group Goals

• **Ninth of a GSAW series**
  - Forum for software-intensive system experts, users, developers & researchers to collaborate and elucidate high-level recommendations for improving software architectures representation, development, & analysis

• **Topic**
  - Architecture Techniques & Challenges: Harmonizing new and reuse application and infrastructure software

• **Presentations & panel discussions**
  - Focus on integrating and harmonizing new, reuse, commercial, and open source application and infrastructure software
  - Current applications (including experiences and lessons learned) and Research for future application
ACE Invited Presenters/Panelists (1)

- Harmonizing Experiences and Lessons Learned
  - **Reuse**
    - Reuse: Dealing with the Hand You are Dealt
      » Jonathan Haulund, Los Angeles Air Force Base, SMC
    - Beyond the Code: Lessons Learned in Software Reuse
      » Amanda Ragan, Northrop Grumman
  - **Enterprise Architecture**
    - Integrating Legacy Software: Lessons and Hurdles
      » John Chobani, Aerospace Corporation
    - Architecture: Controlling Chaos by Defining Complex Interdependencies
      » Brian Giovannoni, JPL
    - Ground System as an Enterprise - Software Architecture Considerations
      » Gerald J. Dittberner, Harris Corporation
ACE Invited Presenters/Panelists (2)

- New Research Techniques
  - Cataloging and Detecting Architectural Smells
    - Joshua Garcia, USC
  - Modeling and Evolving Product Line Architectures Using Change Sets and Relationships
    - Scott Hendrickson, UCI