Experiences in Architecture Based Development

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Purpose

• Identify key issues that have emerged from experiences with architecture based development
• Discuss approaches for addressing these issues
• Develop a potential research agenda for next steps
Agenda

Panel presentations: 1:00 - 2:00
Identification and discussion of issues (all): 2:00 -2:30
Break and selection of issues for more detailed discussion: 2:30 - 2:45
Discussion of first issue: 2:45 - 3:30
Discussion of second issue: 3:30 - 4:15
Summary and next steps: 4:15 - 4:45
Panel Members

Morris Brill, TRW
Kris Christianson, Joint National Test Facility (TRW)
James Hager, Penn State, SRI
John Ohlinger, National Reconnaissance Office
Jaap Schekkerman, Cap Gemini Netherlands
Template for Discussion

Describe the problem
  • why it is important
  • what are the implications

Current approaches to addressing the problem

Unanswered questions

Next steps
Some Initial Issues: 1

Need for new concept of operations
Connection of software architectures to the business life-cycle
Representation of architectures
Migration strategies for legacy systems
Acquisition strategies that support systematic reuse
Architectural conformance
Organizational leadership
Resolution of conflicting stakeholder views
Some Initial Issues: 2

- Obtaining a cross organizational system wide perspective
- Making tradeoffs between system qualities
- Architectural extraction
- Developing and enforcing policies for architectural conformance
- Architectural evaluations
- Evolving the architecture
- Architectural development phases
- Managing different architectural views