



ASCE User Forum No. 4
ASCE Futures – Client Server ASCE

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Overview

- Background
- What is client server ASCE?
- Current status
- How to get involved?



Background

- ASCE users typically work in a collaborative environment:
 - Client PC, shared server
 - Sometimes offline
- ASCE employs simple model of collaboration:
 - ASCE files are standalone
 - Can email them
 - Can put on a CD
 - Can put on a shared server
 - ASCE creates lock file to prevent concurrent updates
 - Like MS Word etc
 - ASCE informs you who is editing the file
 - No big surprises – familiar editing model



Limitations of simple model

- Mainly concurrency and coordination issues:
 - Have to wait for colleague to finish before you can do your work
 - Takes longer overall
 - Coordinating the turn taking
 - Large networks > 100 nodes, with multiple concurrent authors
 - Don't necessarily want to lock the whole network anyway
- Workaround - use copy/paste to refactor and reintegrate
 - Replace-Paste in ASCE 3.5 dramatically improves what you can do here
- Does not make use of best practices in authoring and collaboration systems
 - Audit, Traceability, Rollback, etc.



What users say

- "Concurrency is a major issue [when developing safety cases]"

Mark Waddington, QinetiQ

- "We want to get away from from the one-user syndrome.",
"... audit and traceability are major concerns for the MoD",
"we need an open, dynamic, live system, not a static one."

Phil Morris, TES-DOSG MoD

- "One person is in charge of the [master] copy, but it's often not clear who that person is"

Daniel Sheridan, Adelard



What is client server ASCE?

- An internship project run by Adelard with City University to investigate:
 - Feasibility of client server ASCE
 - Technical options
 - Simple prototype
 - Make use of mature technologies where they exist



Client Server ASCE – Status

- First phase completed successfully
- Primarily system and architectural design options
- Builds on experience with source code version management systems
 - Similar issues of collaboration, content locking, editing and merging
 - ASCE network is split into components each of which becomes a collaboration object
 - Possible due to the XML architecture of ASCE file
- Specify areas that are unique to safety case development
 - Mostly straightforward
 - Some issues relating to link editing



Prototype

- Component architecture in Java for cross-platform deployment
- Each component is fully replaceable if needed
- Subversion currently used as content repository
 - <http://tigris.subversion.org>
 - Open Source Configuration Management System
- Simple client written to demonstrate feasibility
 - Software prototype demonstrated internally



How you can get involved

- Let us know what your requirements are
 - User requirements
 - How should it work? What are your expectations?
 - How do we make it as simple as possible to learn and use?
 - What are the existing collaborative systems that you use at the moment? What are their strengths and weaknesses?
 - Any IT infrastructure requirements?
 - Are other features more important?
- What is the business case for this?
 - How urgent is it?
 - For how long can you get by with what you have at the moment?
- Participate in the Beta programme
 - No firm dates as yet
- But let us know if you are interested
 - We will be in touch



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- *The end*

