OpenSees Parallel Workshop

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OpenSees Parallel Workshop
Berkeley, CA
Aims of Workshop

• Walk away with at least an understanding of OpenSees and parallel computing and how they could benefit you in your research or work.
• Walk away with the knowledge of how to use OpenSees applications on parallel computers (either your own multi-core machine or Teragrid resources through for example the NEESit portal)
• Walk away with the desire to develop your own or improve upon our applications (and hopefully make these available to the community at large)
Prerequisites

• Based on registration we assume you know nothing about either OpenSees or parallel computing.
Outline of Workshop

• Introduction to OpenSees
• Introduction to Parallel Computing
• OpenSees and Parallel Computing
• OpenSeesSP
• OpenSeesMP
• Running OpenSees Parallel Applications:
  – On a windows multicore machine or windows cluster
  – On a mac multicore machine or mac cluster
  – On a Teragrid machine
• NEESit - Simulation Data & Submiting Jobs to Teragrid machines through Simportal
What Should be Your Expectations?

- OpenSees is a research tool at this time, but fairly stable for regular use.
- It is not bullet-proof.
- The parallel versions are new and not as stable as the sequential version. **PLEASE post any problems/suggestions that arise on parallel forum so that they can be fixed.**
- As with any nonlinear analysis, it requires careful consideration of model and interpretation of results
- It is under continual development by students, faculty and other researchers
- User interface development lags behind computational technology
- An investment of time and learning is required
And If You Get Stuck
Use the Community Forum!

Bookmark the Message Board,
and use it often.
Thanks to:

• NEES Inc.
• NEESit
• National Science Foundation