ROSE Issues

• Attendees: Dan Quinlan, Al Malony, Laksono Adhianto, Philip Roth

• Three issues:
  – EDG C/C++ parser
  – ROSE performance annotations from HPCToolkit
  – Automatic generation of Modeling Assertions expressions
ROSE Issues (2)

• EDG C/C++ parser
  – Licenses
    • Both TAU and ROSE use EDG
    • TAU has commercial EDG license, ROSE has academic/research license
    • Possibility of unifying licenses – will be explored in near future
  – OS X: parser binaries no longer provided in ROSE tarball, downloaded as part of configuration step

• ROSE AST performance annotations
  – HPCToolkit API has changed
  – ROSE needs to adapt
  – Will fix issues in separate meeting once others arrive later in the evening (e.g., Craig Rasmussen, LANL)
  – TAU could also be used to provide performance annotations
ROSE Issues (3)

• Automatic generation of Modeling Assertions (MA) expressions
  – Simple use case presented to clarify MA needs
  – A while ago, Dan built an example using ROSE that auto-generates expressions and uses MAPLE to simplify expressions
    • Handles loops (nested and sequential) and some inter-procedural propagation of expressions
    • Sounds like partial solution to MA needs
    • Require further investigation/development to handle conditionals and some other constructs