Framework and Tools

Trilinos Capability Area

10:15 Tuesday Nov. 1st, 2011 CSRI 90 Jim Willenbring

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Outline

- Overview
- Trilinos documentation
- Recent advancements and changes
- Near-term plans
- Package list



Overview

- General Resources
 - Tools
 - Build and test infrastructure
 - Documentation
- Assist users and developers with using, or learning to use, Trilinos



Trilinos Documentation

- Trilinos Home page: http://trilinos.sandia.gov
- Trilinos Capability Areas:

http://trilinos.sandia.gov/capability_areas.html

- 1. Framework & Tools
- 2. Software Engineering Technologies and Integration
- 3. I/O Support
- 4. Discretizations
- 5. Meshes, Geometry, & Load Balancing
- 6. Scalable Linear Algebra
- 7. Linear & Eigen Solvers
- 8. Embedded Nonlinear Analysis Tools



Trilinos Documentation

Trilinos user documentation:

http://trilinos.sandia.gov/documentation.html

- Trilinos overview document
- Trilinos CMake Quickstart
- Tutorial
- Makefile.export / FIND_PACKAGE(Trilinos)

Other Trilinos documentation

- Package-specific user guides and Doxygen documentation
- Getting started page for new users http://trilinos.sandia.gov/getting_started.html
- Developer resources
 - Policies
 - Process checklists



Recent Advancements and Changes

- Trilinos 10.8 release
- Significant percentage of BSD-licensed packages
- Improved Find_Package(Trilinos)
 - Now uses CMake "targets"
 - Adheres more closely to the standard
- Subpackages (not widely used yet)
- Updated tutorial / WebTrilinos installation
 - http://code.google.com/p/trilinos/wiki/TrilinosHandsOnTutorial
 - On-demand video of user sessions available after TUG



Near-Term Plans

- Move to trilinos.org
- Continue move to BSD licensing
- Subset package distributions
- Improved TPL support
- Windows installer
- Exploring Trilinos VM support through VirtualBox



Package List

Didasko

Trilinos tutorial package

Galeri

Generate distributed linear systems

Teuchos

Set of common tools for Trilinos developers

TriUtils

Utilities for Trilinos packages

