

Framework and Tools

Trilinos Capability Area

10:30 Tuesday Nov. 2nd, 2010
CSRI 90
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Outline

- Overview
- Trilinos documentation
 - ◆ Website
 - ◆ User guides
 - ◆ Getting started webpage
 - ◆ Developer resources
- Recent advancements and changes
- Near-term plans
- Package list

Overview

- Different than most other capability areas
 - ◆ Not capabilities that Trilinos is known for
 - ◆ Resources extend beyond packages
 - Tools
 - Documentation
 - ◆ Assists users and developers with using, or learning to use Trilinos

Trilinos Documentation

- Trilinos Home page: <http://trilinos.sandia.gov>
- Trilinos Capability Area website:
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 link:

<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

- Support for building against Trilinos installations (4 p.m.)
 - ◆ `Makefile.export` for Makefile-built code
 - ◆ `FIND_PACKAGE(Trilinos)` for CMake-built code
 - ◆ `Trilinos/demos/buildAgainstTrilinos`
 - Written by Andy Salinger
 - Illustrates the use of `FIND_PACKAGE(Trilinos)`
- Improved tutorial / WebTrilinos installation
 - ◆ <http://code.google.com/p/trilinos/wiki/TrilinosHandsOnTutorial>
 - ◆ Monday tutorial will be available on-demand via streaming video
- `Trilinos_ENABLE_ALL_OPTIONAL_PACKAGES` on by default

Near-Term Plans

- Continue move to BSD licensing
- Installation/tarball testing
- Expanded set of examples
- Windows support
 - ◆ Nightly testing
 - ◆ Installer

Package List

- Didasko
 - ◆ Trilinos tutorial package
- Galeri
 - ◆ Generate distributed linear systems
- Teuchos
 - ◆ Set of common tools for Trilinos developers
- TriUtils
 - ◆ Utilities for Trilinos packages