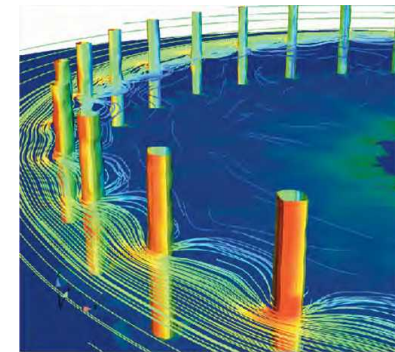


Exceptional service in the national interest



*Geometric Partitioning in
ChemCell Modeling*



**Trilinos enables
simulations of
complex
Magneto-Hydro
Dynamics (MHD)
for Sandia's Z-
machine using
the Sandia
ALEGRA code**

Trilinos Website Design Proposal

TUG 2013

Outline

Web site Design

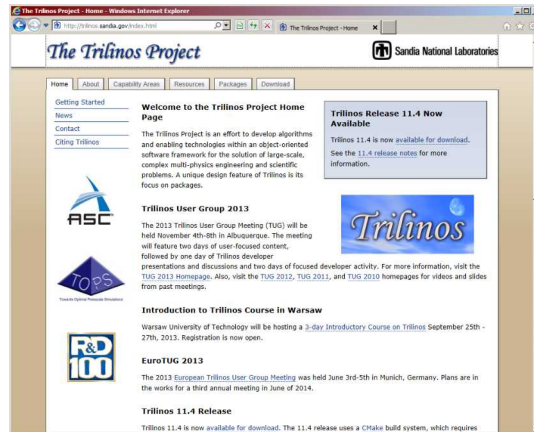
- Where we are
- Where we want to be
- Guiding principles
- Tools
- Phased Deployment

Parameter List

- Parameter List Demo
- Developer Requirements

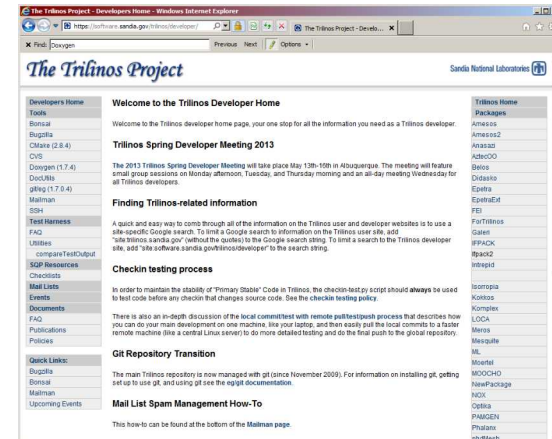
Current Design

Trilinos Static Web Pages



- <http://trilinos.sandia.gov>
- PHP pages
- Primarily static info
- Maintained primarily by Trilinos framework team
- Updated in TrilinosWeb repository

Developer Site



- <https://software.sandia.gov/trilinos/developer/index.html>
- HTML pages
- Maintained primarily by Trilinos framework team
- Updated in TrilinosWeb repository

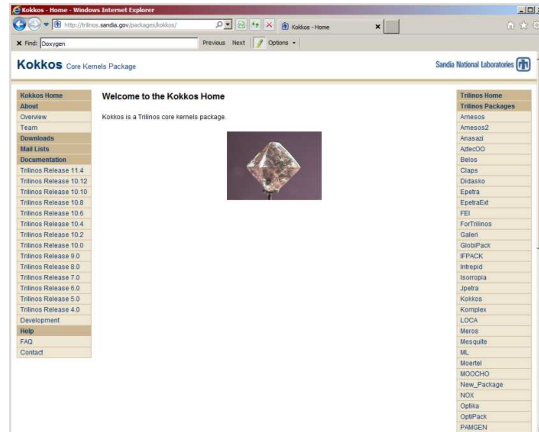
Guidance for
developer contribution

Contribute to the Trilinos Site

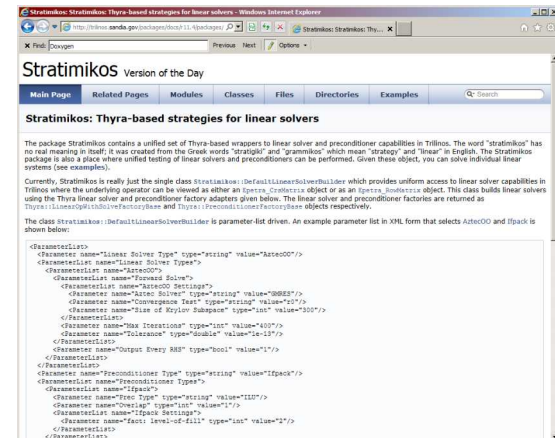
Developers, is there a page, article, link, or 'Quick Link' that you would like to see on the Trilinos or Trilinos Developer site? Send an email to the [Trilinos Framework](#) mail list describing what it is you would like to see added or changed. If you are able to contribute an article, include the article in any format convenient for you.

Current Design

Static Package Information



Doxygen-generated Pages



- <http://trilinos.sandia.gov/packages/<package-name>/>
- Updated in TrilinosWeb repository
- Package team responsible for:
 - <package> Home content
 - About – Overview
 - About - Team
- Changes made to files in TrilinosWeb repository
- Changes pushed to the repository automatically updated on Trilinos web site regularly

- <http://trilinos.sandia.gov/packages/docs/r11.4/packages/<package-name>/doc/html/index.html>
- Changes made to source code in Trilinos git repository
- Documentation changes pushed to the repository automatically updated on Trilinos web site daily

Guiding Principles

- Usability for Trilinos users & developers
- Improve ease of maintenance for developers

■ Common look and feel

- ❑ http://trilinos.sandia.gov/capability_areas.html
- ❑ <http://trilinos.sandia.gov/CapabilityWebpages/SoftwareEngineeringTechnogiesAndIntegration/html/index.html>
- ❑ http://trilinos.sandia.gov/CapabilityWebpages/GeomMeshLoadBal/GeomMeshBal_Capability.html
- ❑ <http://trilinos.sandia.gov/packages/kokkos/>
- ❑ <http://trilinos.sandia.gov/packages/teuchos/>
- ❑ <http://trilinos.sandia.gov/packages/pytrilinos/>

■ Eliminate redundant and/or stale information

- ❑ <http://trilinos.sandia.gov/packages/kokkos/team.html>
- ❑ <http://trilinos.sandia.gov/team.html>

■ Improve searching

- Consolidate and organize information
- Apply metadata (tags, categories)

Guiding Principles

- Usability for Trilinos users & developers
- Improve ease of maintenance for developers

- Provide easy way to update information
 - News, upcoming events
 - Publications
 - Team information
 - Fix broken links
- Dynamically display same information in multiple locations
- Provide mechanism for adding metadata (tags, categories) to improve search capabilities
- Provide infrastructure for support of Trilinos tutorials

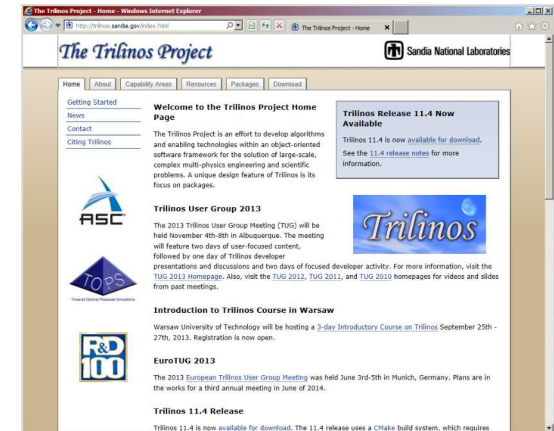
Content Management Systems

- Basic features
 - Web-based publishing (WYSIWIG)
 - Format management (look and feel made easy)
 - Revision control
 - Index, search, retrieval (e.g. documentation for how to use Tribits)
- Choosing a CMS (Top 10 Most Usable CMSs: <http://net.tutsplus.com/articles/web-roundups/top-10-most-usable-content-management-systems/>)
 - WordPress: easy for beginners, known for PHP blogging, + documentation
 - Drupal: more pure CMS, forums, blogging, taxonomy, GUI DB creation, views
 - Assessed by the SEMS team for capabilities needed by SEMS, Dakota, Trilinos, Peridigm

Phased Deployment

GOAL: Refactor Trilinos Web presence on trilinos.org

- I. Move static Trilinos pages
 - Timeframe: January 2014
 - Tool: concurrent work on WordPress & Drupal
 - Motivation: Maintenance done by Trilinos staff; need to be able to support tool



Phased Deployment

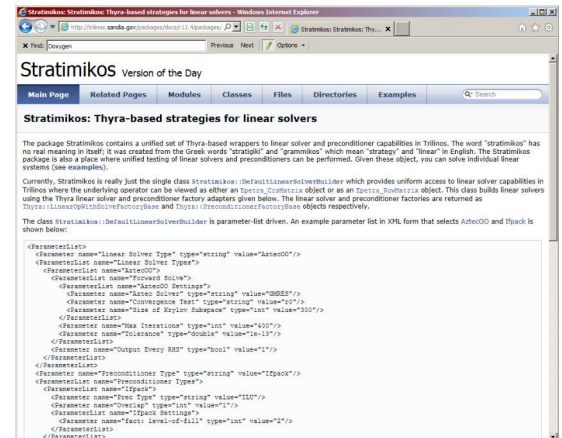
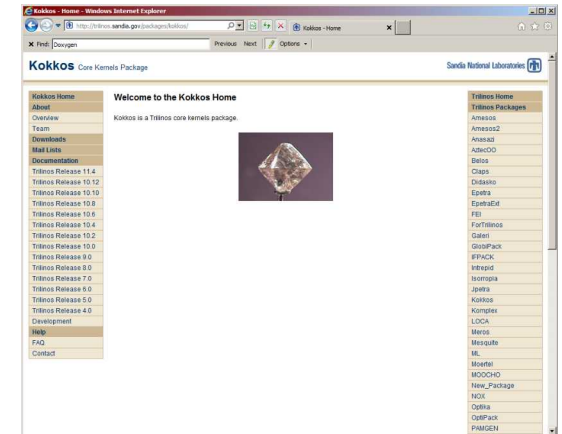
GOAL: Refactor Trilinos Web presence on trilinos.org

I. Move static Trilinos pages

- Timeframe: January 2014
- Tool: concurrent work on WordPress & Drupal
- Motivation: Maintenance done by Trilinos staff; need to be able to support tool

II. User pages

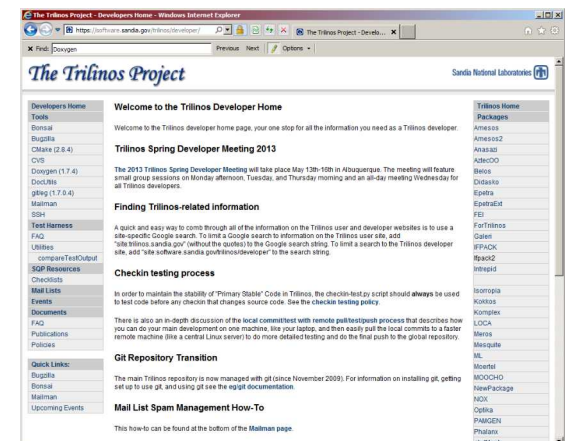
- Interface for update of dynamic data (e.g. team info)
- CMS for static package content?
- Common look & feel with Doxygen pages?
- CMS tool will be decided



Phased Deployment

GOAL: Refactor Trilinos Web presence on trilinos.org

- I. Move static Trilinos pages
 - Timeframe: January 2014
 - Tool: concurrent work on WordPress & Drupal
 - Motivation: Maintenance done by Trilinos staff; need to be able to support tool
- II. User pages
 - Interface for update of dynamic data (e.g. team info)
 - CMS for static package content?
 - Common look & feel with Doxygen pages?
 - CMS tool will be decided
- III. Developer site
 - Trac or CMS for issue tracking?
 - Trac or CMS for static content?
 - Other needs



Parameter Lists

- Need code to generate default ParameterList
 - Method
 - Executable that constructs class, calls method, writes parameter list
- Need to run code to create XML file
- Need to make XML file available
- In Doxygen comments, add:

```
* \htmlonly
* <iframe src="simple_stratimikos_example.options.xml" width="90%"height="400px"></iframe>
* <hr />
* \endhtmlonly
```