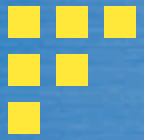
The Antelope Users Group, AUG Web-Site, and Contributed-code repository

Dr. Kent Lindquist

Lindquist Consulting, Inc.

Marrakech Quanterra And Antelope Users' Group Meeting

March 11-13, 2009
Marrakech, Morocco



Outline

1) Introduction
2) AUG web-site
3) Mailing list
4) Open-source code management
5) Future directions

1) The Antelope Users Group

- Informality
- Voluntary effort
- Common interest
  - Robust Antelope-based Monitoring systems, warning centers and scientific research
  - Application of Antelope APIs and extension of platform capabilities
  - Toolkit expansion
    - "tool" = individual piece of the monitoring task
    - Well-understood
    - Configurable
    - Expressed as code

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The Antelope Users Group

- Meetings
- Members
  - Antelope Users Community
  - BRTT
  - Gary Pavlis, Taimi Mulder, Rob Newman, Kent Lindquist, Nikolaus Horn, ….
  - Numerous contributing developers
  - Growing interest

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AUG Goals

- Foster communication amongst Antelope users and developers
- Catalyze community and joint meetings
- Encourage healthy coordination and fusion of Antelope Open-source efforts

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2) AUG Web-site

- Original site at U. Indiana, USA
  - Thx Dr. Gary Pavlis
- Move to antelopeusersgroup.org site
  - Late 2008
- Progressive restructuring
  - Thx Dr. Rob Newman

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Old AUG Web-site

- Was http://www.indiana.edu/~aug
- Set up and run by Gary Pavlis (and K. Lindquist, R. Newman)
  - Original perhaps late 1990's
  - Re-designed 2003
- Current maintenance challenges
- Technically still running
- Will be a re-direct to the new site

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New AUG Web-site URL

- 2008: Registered AUG domain
- http://www.antelopeusersgroup.org
- Maintainable machine established
- Contrib source-code mirrored through new site

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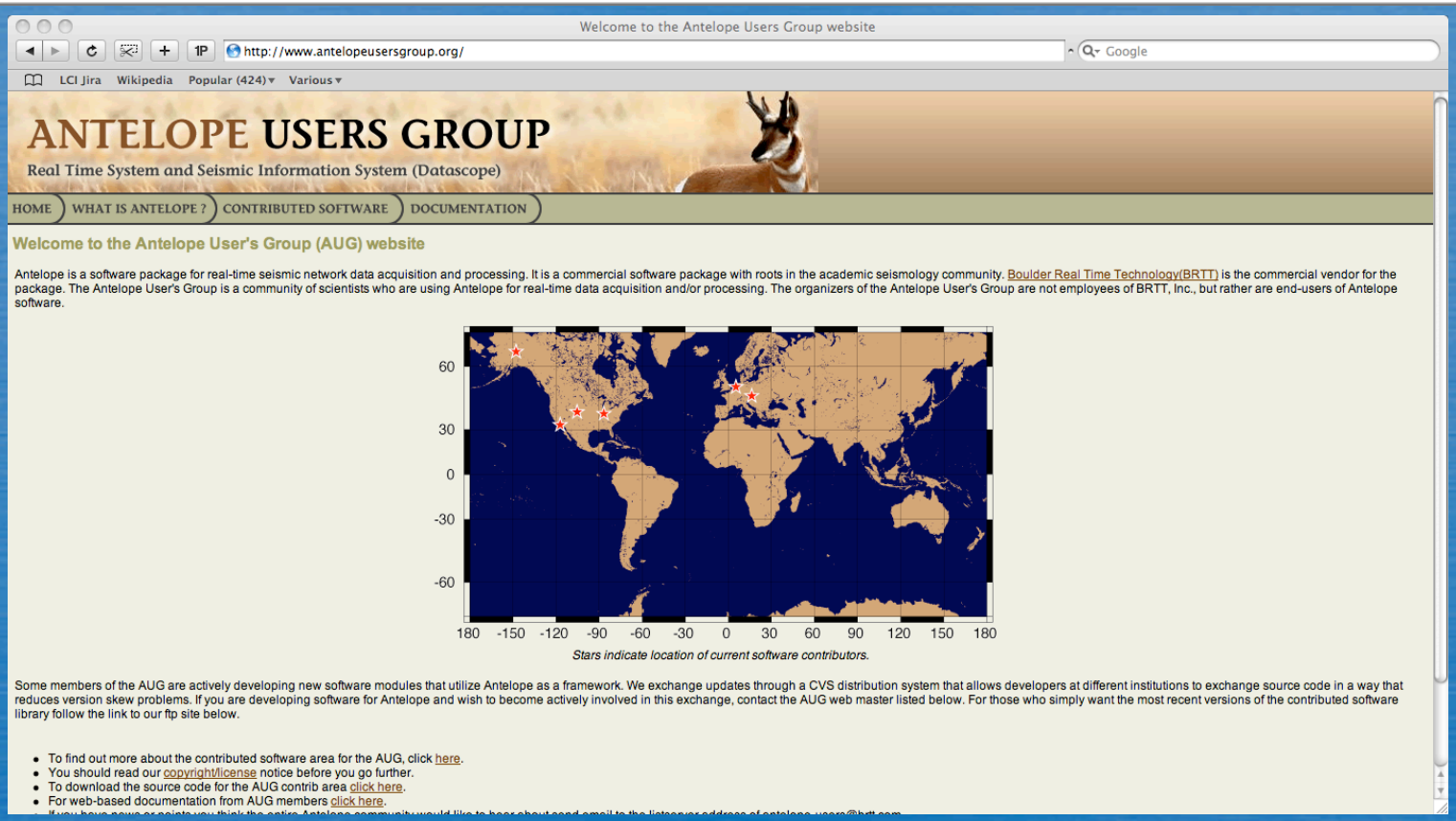
Current AUG Web-site



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Upcoming AUG Web-site

Google Map of contributing institutions

Planned Page for meeting announcements

Links for Contrib-Code access

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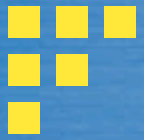

AUG Web-site Current Scope

- Planned for the present:
  - Meeting announcement pages
  - Source-code access points
    - (web browsing, git cloning)
  - AUG Overview
- Not planned for the present:
  - Meeting registration support / dynamic management
  - User-added content
  - Discussion-group blogging etc.
  - Arbitrary content development

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3) The Antelope Users-Group Mailing List

- antelope-users@brtt.com
- Slightly increasing traffic lately
- Good resource for small questions to community
- Voluntary responses from community
- Ideas welcome to catalyze

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3a) AUG Google Group

- Group Homepage:
  - http://groups.google.com/group/antelope-users-group
- Group email:
  - antelope-users-group@googlegroups.com
- New as of March 12, 2009!

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4) Contributed-code repository

- CVS -- Concurrent Version System
- Mirrors
- Anonymous access
- Git
- Doing development locally
- Contributing back

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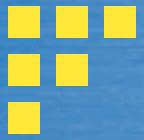

Aside: Building your own tree

- build_sourcetree(1)
- Create
  - /opt/acme/4.10/src
  - /opt/acme/4.10/{bin,man,lib,data}
- Create environment variables
  - ACME
  - ACMEMAKE
- Based on 2005 LCI Technical Report

Old browsable code approach: WebCVS

http://antelopeusersgroup.org/cgi-bin/cvsweb.cgi/contrib/

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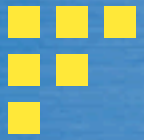
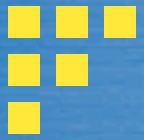


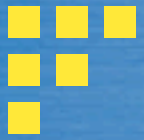
CVS Advantages for AUG

- Was convenient when initially set up
- Some version control better than none
- Clear ‘main’ copy allows BRTT to compile contributions into release
- Small, (nominally) controlled set of contributors allows preservation of group idioms -- e.g. Makefiles, namespaces, documentation, design ideas
- All developers in particular area must coordinate and ‘agree’



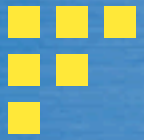
CVS Limitations for AUG

- Inconvenient to add new contributors
- Adding new contributors requires active coordination and system administration
- Hard to maintain parallel development tracks
- All developers in particular area must coordinate and ‘agree’



git mirrors of CVS Repository

- First version:
- % **git clone**
  git://antelopeusersgroup.org/contrib.git
  contrib
- Advantages:
  - Controlled
  - Available initial foray into git
- Disadvantages:
  - Slow
  - Hard to manage forked copies / track other work



GitHub hosted repository

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http://www.github.com

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git mirrors of CVS Repository

- New preferred clone version:
- % **git clone**
  git://github.com/antelopeusersgroup/antelope_contrib.git

  contrib
- Advantages:
  - Built for community coding
  - Mirrors still-authoritative CVS while launching git
  - CVS mirror can ultimately become one ‘contributor’
  - Server clusters better able to support world development community (c.f. one mac mini)

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Current Antelope-contrib mirroring

CVS

(Clone)

CVS

tarballs

Clone
Watch
Fork
Collaborate

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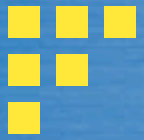

Git Advantages for AUG

- Decentralized repositories allow freeform development
- Multiple approaches possible to same problems
- Flexible, participant-driven entrance into visible developer community

Disadvantages of Git for AUG

- (Temporary): Need strategy for labeling and management of ‘master’ tree
- Git learning curve for new users

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What you can do with github antelope_contrib

- "Clone"
  - git clone….
  - Makes a local copy
- "Watch"
  - Register for a github.com account
  - Add yourself as a watcher of the repository
- "Fork"
  - Make your own modifiable copy on github.com
  - Will be the basis for most User-Group work
- "Collaborate"
  - Make changes to the main copy

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What you can do with github antelope_contrib

- "Clone"
  - If you want to import and compile Antelope contrib tools
- "Watch"
  - If you want to hear about new features as they're added
- "Fork"
  - If you want to add your own tools and modifications
- "Collaborate"
  - If you want to modify everyone's copy
  - (In time we'll hopefully establish branching / submodule mechanisms for smooth integration of different authors' work)

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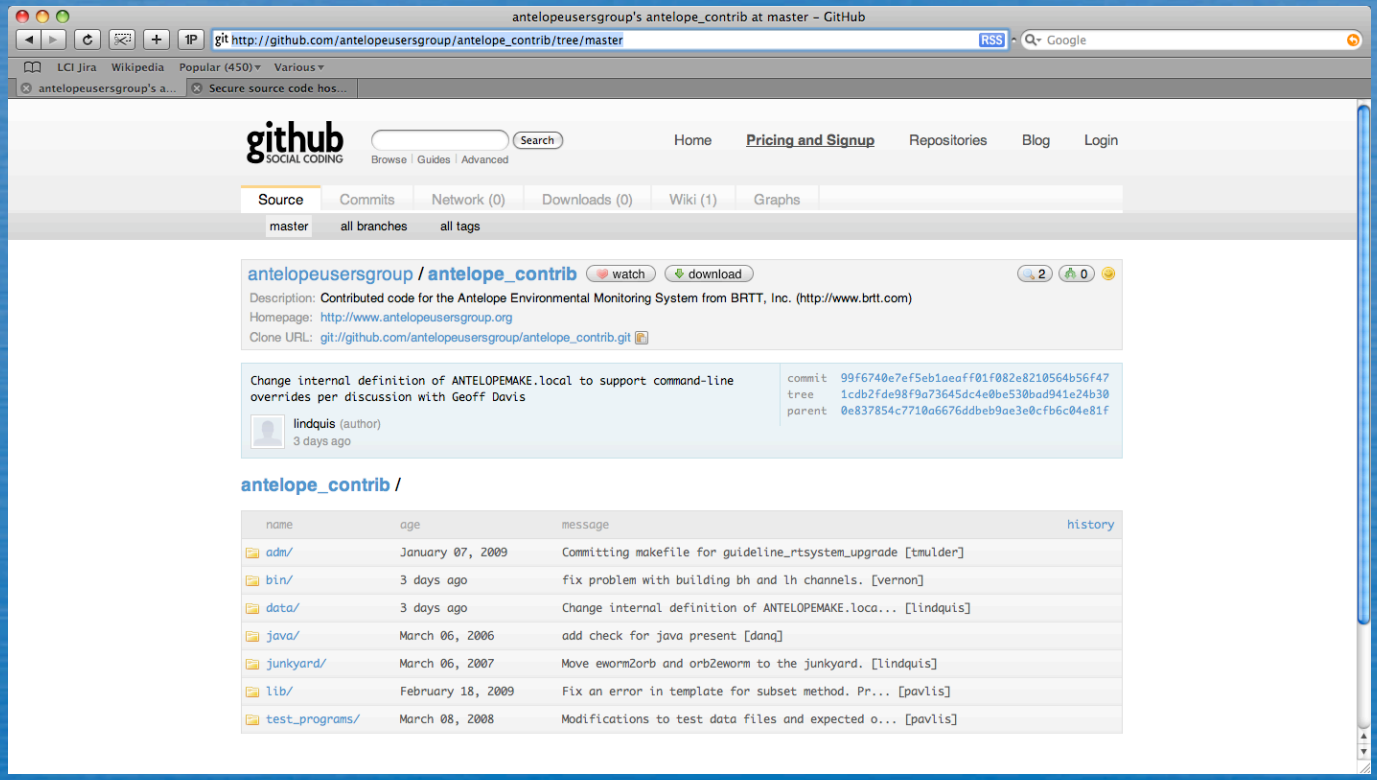
New browsable code approach: gitweb

http://github.com/antelopeusersgroup/antelope_contrib/



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Git commit information

minor edit changes to guideline_dbheli_display

tmulder (author)
about 4 hours ago

bin/usarray/sta_final_prep/sta_final_prep.xpl

```
...  ...  @@ -284,7 +284,7 @@
284  284          @dbschan  = dbnojoin(@dbschan,@dbsensor);
285  285          $nrows    = dbquery(@dbschan,"dbRECORD_COUNT");
286  286          if ($nrows > 0) {
287       -            $line = "\nDatabase problem\n      $sta schanloc has $nrows which do not join with sensor table";
     287  +            $line = "\nDatabase problem\n      $sta schanloc has $nrows channels which do not join with sensor table";
288  288              elog_complain($line);
289  289              print PROB "$line\n";
290  290              for ($row = 0; $row<$nrows; $row++) {
```

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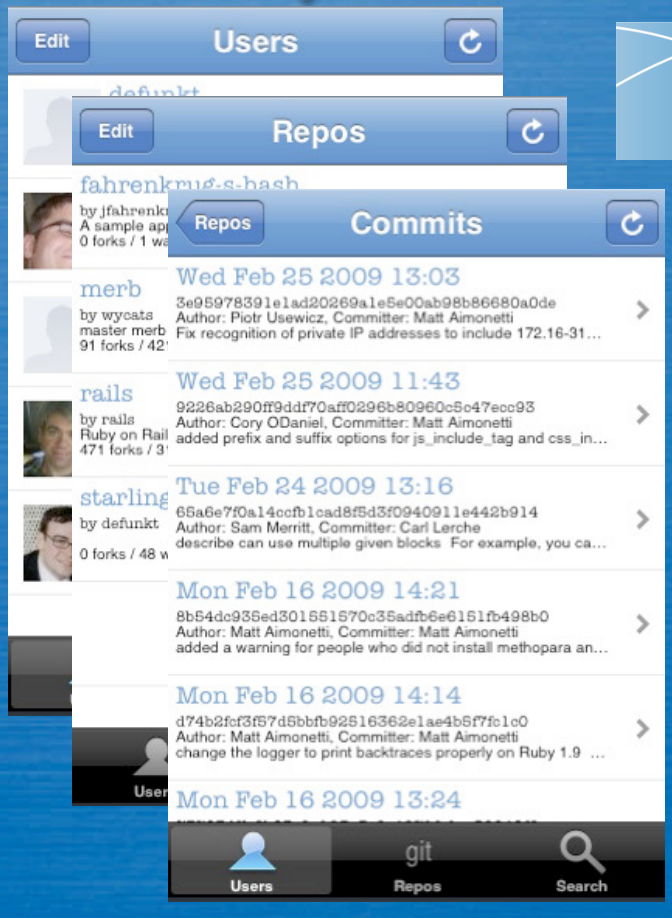
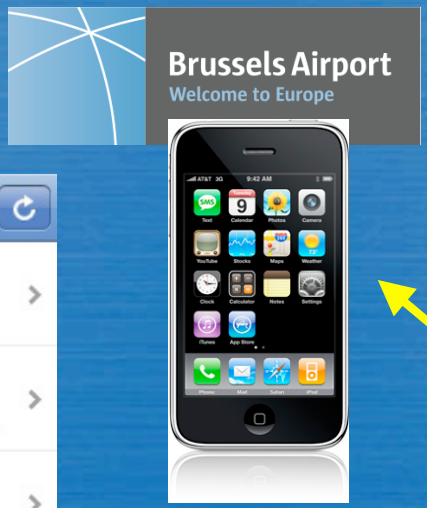
Repository tracking: gittop

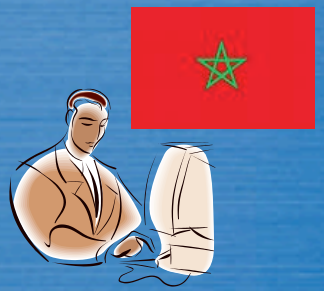
- Gittop iPhone application





K. Lindquist
Brussels

F. Vernon
Rabat



github
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CVS

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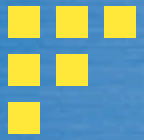

AUG Future

- Web site improvements
- Business rules for contrib development and collaboration under *git*
- Branch structure for contributions
- Git submodules for contributors?
- Better indexing of contrib resources and efforts

Thank You

Feedback / Questions /
Suggestions / Discussion

Welcome!

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