

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



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



AUG Goals

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



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



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



New AUG Web-site URL

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

Current AUG Web-site



Welcome to the Antelope Users Group website

http://www.antelopeusersgroup.org/

LCI Jira Wikipedia Popular (424) Various

ANTELOPE USERS GROUP

Real Time System and Seismic Information System (Datascope)

HOME WHAT IS ANTELOPE? CONTRIBUTED SOFTWARE DOCUMENTATION

Welcome to the Antelope User's Group (AUG) website

Antelope is a software package for real-time seismic network data acquisition and processing. It is a commercial software package with roots in the academic seismology community. [Boulder Real Time Technology\(BRTT\)](#) is the commercial vendor for the package. The Antelope User's Group is a community of scientists who are using Antelope for real-time data acquisition and/or processing. The organizers of the Antelope User's Group are not employees of BRTT, Inc., but rather are end-users of Antelope software.



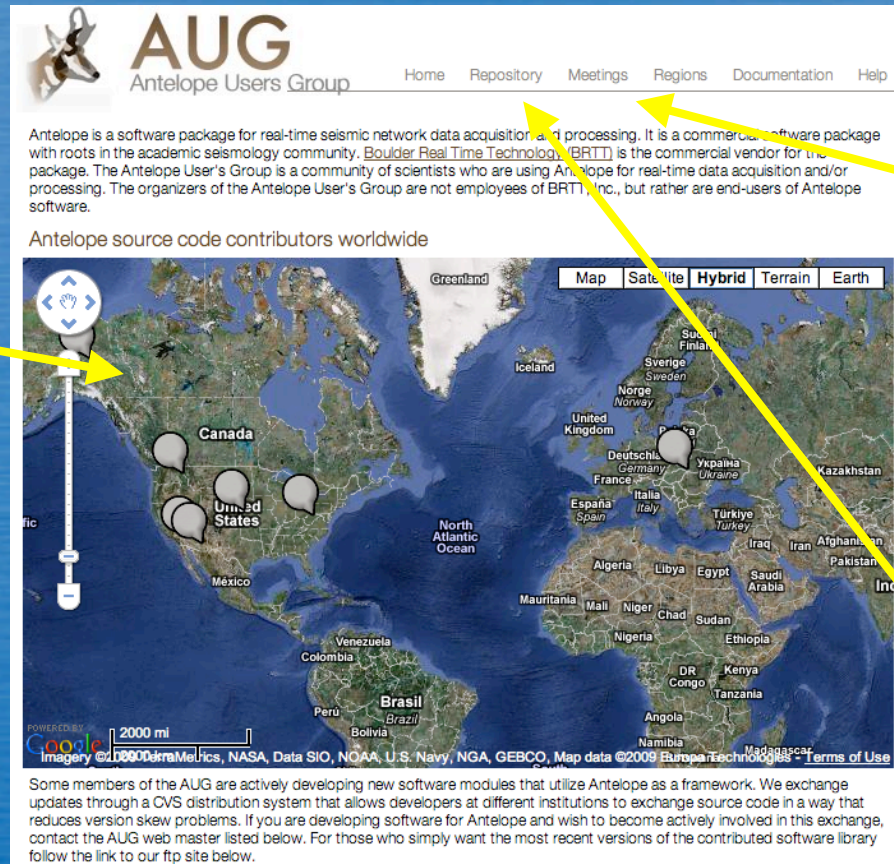
Stars indicate location of current software contributors.

Some members of the AUG are actively developing new software modules that utilize Antelope as a framework. We exchange updates through a CVS distribution system that allows developers at different institutions to exchange source code in a way that reduces version skew problems. If you are developing software for Antelope and wish to become actively involved in this exchange, contact the AUG web master listed below. For those who simply want the most recent versions of the contributed software library follow the link to our ftp site below.

- To find out more about the contributed software area for the AUG, click [here](#).
- You should read our [copyright/license](#) notice before you go further.
- To download the source code for the AUG contrib area [click here](#).
- For web-based documentation from AUG members [click here](#).

If you have news or stories that the entire Antelope community would like to hear about, send email to the listserve address of antelope-users@btt.com

Upcoming AUG Web-site

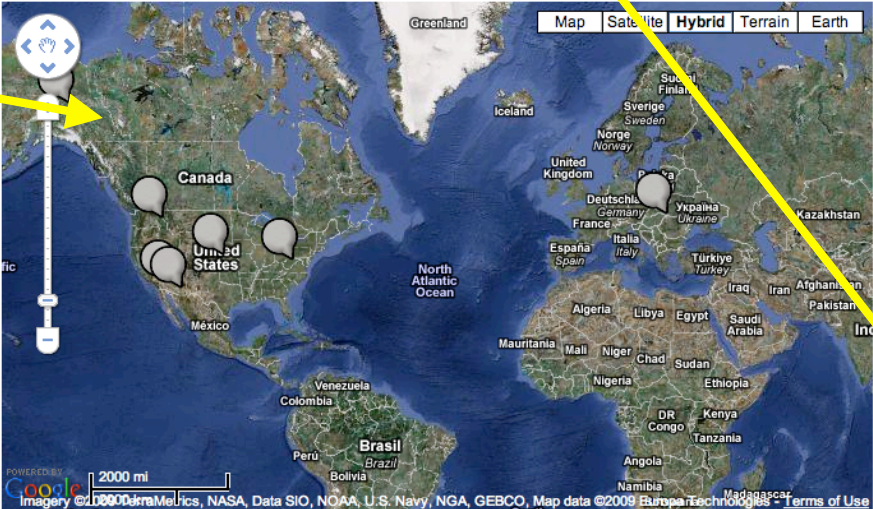


AUG
Antelope Users Group

Home Repository Meetings Regions Documentation Help

Antelope is a software package for real-time seismic network data acquisition and processing. It is a commercial software package with roots in the academic seismology community. Boulder Real Time Technology (BRTT) is the commercial vendor for the package. The Antelope User's Group is a community of scientists who are using Antelope for real-time data acquisition and/or processing. The organizers of the Antelope User's Group are not employees of BRTT, Inc., but rather are end-users of Antelope software.

Antelope source code contributors worldwide



Map Satellite Hybrid Terrain Earth

Some members of the AUG are actively developing new software modules that utilize Antelope as a framework. We exchange updates through a CVS distribution system that allows developers at different institutions to exchange source code in a way that reduces version skew problems. If you are developing software for Antelope and wish to become actively involved in this exchange, contact the AUG web master listed below. For those who simply want the most recent versions of the contributed software library follow the link to our ftp site below.

Google Map of contributing institutions

Planned Page for meeting announcements

Links for Contrib-Code access



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



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



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!



4) Contributed-code repository

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



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/>

contrib/

Click on a directory to enter that directory. Click on a file to display its revision history and to get a chance to display diffs between revisions.

Current directory: [Antelope Contrib] / contrib

File	Rev.	Age	Author	Last log entry
Parent Directory				
adm/				
bin/				
data/				
java/				
junkyard/				
lib/				
test_programs/				
Makefile	1.9	3 months	lindquis	Add new 'adm' directory for instructive administration man-pages

Show only files with tag: Module path or alias:

General options

Sort files by: , case-insensitive: Hide files in Attic:

Sort log by: Show line numbers:

Diff format:

Legal Notices | © 1995-2008 The FreeBSD Project. All rights reserved.
www.freebsd.org
2007/03/17 22:28:31



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



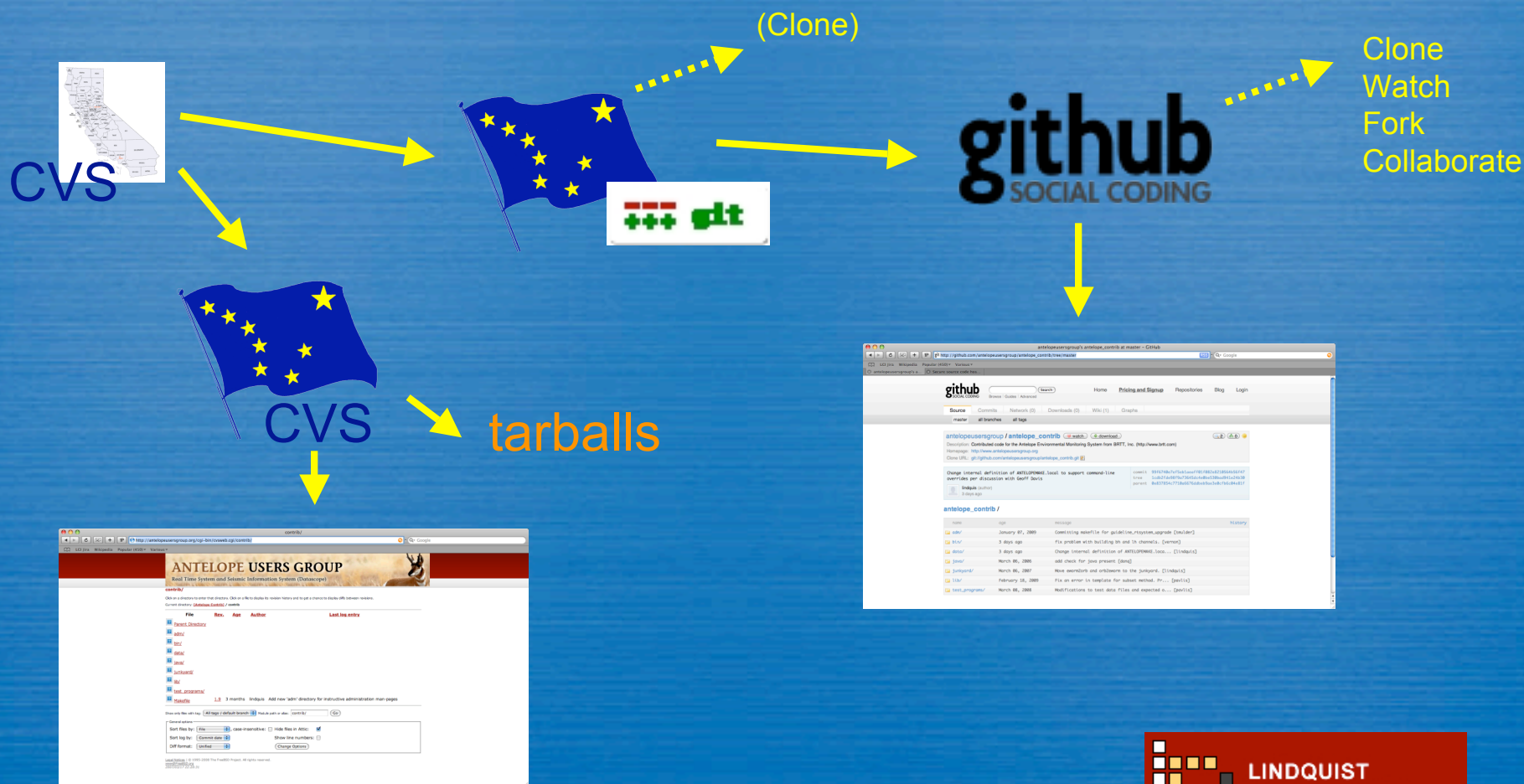
<http://www.github.com>



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)

Current Antelope-contrib mirroring





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



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



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)

New browsable code approach: gitweb

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

The screenshot shows a web browser window displaying the GitHub repository page for 'antelopeusersgroup/antelope_contrib'. The browser's address bar shows the URL 'http://github.com/antelopeusersgroup/antelope_contrib/tree/master'. The page features the GitHub logo and navigation links such as 'Home', 'Pricing and Signup', 'Repositories', 'Blog', and 'Login'. Below the navigation, there are tabs for 'Source', 'Commits', 'Network (0)', 'Downloads (0)', 'Wiki (1)', and 'Graphs'. The 'Source' tab is active, showing the repository name 'antelopeusersgroup / antelope_contrib' with a 'watch' button and a 'download' button. The description of the repository is 'Contributed code for the Antelope Environmental Monitoring System from BRTT, Inc. (http://www.brtt.com)'. The homepage is 'http://www.antelopeusersgroup.org' and the clone URL is 'git://github.com/antelopeusersgroup/antelope_contrib.git'. A commit by 'lindquis' is highlighted, with a message: 'Change internal definition of ANTELOPEMAKE.local to support command-line overrides per discussion with Geoff Davis'. Below this, there is a table listing the repository's directory structure and commit history.

name	age	message	history
adm/	January 07, 2009	Committing makefile for guideline_rtsystem_upgrade [tmulder]	
bin/	3 days ago	fix problem with building bh and lh channels. [Vernon]	
data/	3 days ago	Change internal definition of ANTELOPEMAKE.local... [lindquis]	
java/	March 06, 2006	add check for java present [dana]	
junkyard/	March 06, 2007	Move ewormZorb and orbZeworm to the junkyard. [lindquis]	
lib/	February 18, 2009	Fix an error in template for subset method. Pr... [pavlis]	
test_programs/	March 08, 2008	Modifications to test data files and expected o... [pavlis]	

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

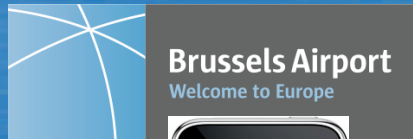
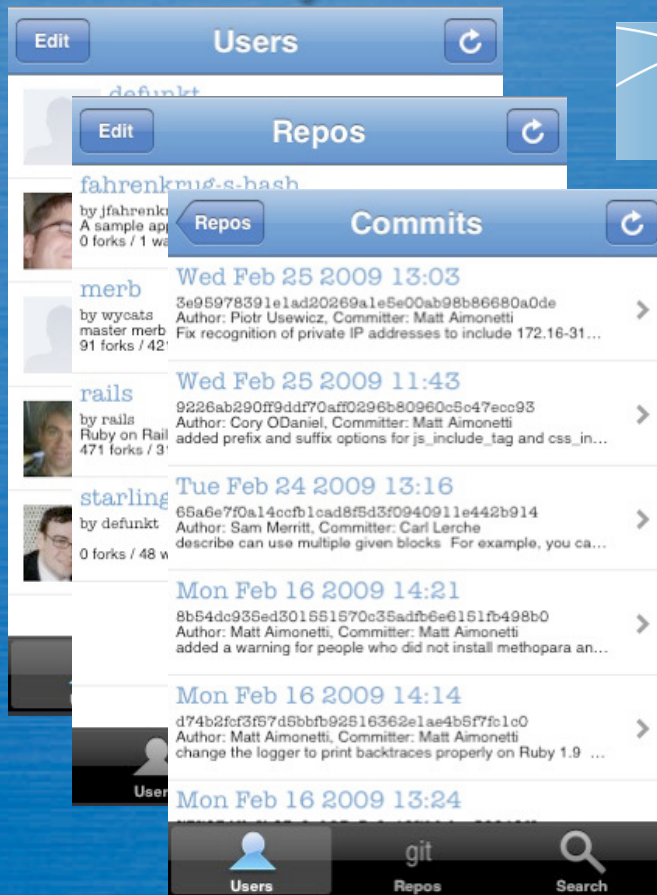
```
... .. @@ -284,7 +284,7 @@
284 284     @dbschan = dbnojoin(@dbschan,@dbsensor);
285 285     $nrows = dbquery(@dbschan,"dbRECORD_COUNT");
286 286     if ($nrows > 0) {
287     -     $line = "\nDatabase problem\n      $sta schanloc has $nrows which do not join with sensor table";
287     +     $line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



LINDQUIST
CONSULTING
INCORPORATED

Repository tracking: gittop

- Gittop iPhone application



K. Lindquist
Brussels

F. Vernon
Rabat



github
SOCIAL CODING



CVS





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!