

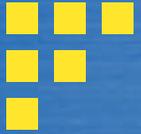
RECENT ADVANCES IN ANTELOPE CONTRIBUTED CODE

*Dr. Kent Lindquist
Lindquist Consulting, Inc.*

*Prague Quanterra
And Antelope Users'
Group Meeting*

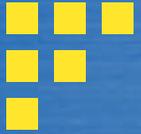


*March 22-24, 2010
Prague, Czech Republic*



Outline

- 1) Official switch to Github
- 2) Certify tests
- 3) Python OO error handling, & dbwfserver
- 4) Prototype db2sql
- 5) MATLAB 64-bit
- 6) Twitter L_C_I

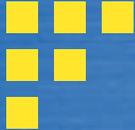


1) Antelope-contrib on Github

- Antelope-contrib source-code is now officially hosted on GitHub



<http://www.github.com>



Git Advantages for AUG

- Flexible, participant-driven entrance into visible developer community
- Decentralized repositories allow freeform development
- Easier code browsing and download

Browse and Download Code

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

antelopeusersgroup's antelope_contrib at master - GitHub

github SOCIAL CODING

antelopeusersgroup / antelope_contrib

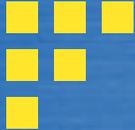
Source Commits Network (8) Fork Queue Issues (0) Downloads (0) Wiki (5) Graphs

Contributed code for the Antelope Environmental Monitoring System from BRIT, Inc. (<http://www.britt.com>)
<http://www.antelopeusersgroup.org>

document new pfaorph modification of "opt" parameter in orbldstat2xml and orb2rrdc

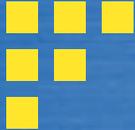
kentlindquist (author) 1 day ago

name	age	message	history
.gitignore	March 05, 2010	Expand Antelope Python interface with new ElogE... [kentlindquist]	
Makefile	October 21, 2009	Add 'makes' directory to top-level contrib Make... [kentlindquist]	
ada/	September 11, 2009	*** empty log message *** [Taimi Mulder]	
bin/	1 day ago	document new pfaorph modification of "opt" para... [kentlindquist]	
data/	March 05, 2010	Add test case from Juan Reyes to unit tests for... [kentlindquist]	
java/	September 28, 2009	Automated merge of epicenter_cvs into master [Antelope Users Group]	
junkyard/	September 22, 2009	Moved ipd2 to junkyard (replacement is dcba2orb) [davis]	
lib/	2 days ago	Make db2sql certify tests more robust [kentlindquist]	
makes/	January 08, 2010	Add .gitignore files for contrib compile products [kentlindquist]	



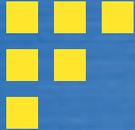
Receive email about Antelope-contrib changes

- Group Homepage:
 - <http://groups.google.com/group/antelope-users-group>
- Group email:
 - antelope-users-group@googlegroups.com



Antelope-contrib wiki tutorials

- Main Wiki
 - http://wiki.github.com/antelopeusersgroup/antelope_contrib/
- Tutorials on:
 - Downloading source code
 - Cloning the repository
 - Submitting code
 - Switching from CVS to Git for Antelope-contrib



Cloning the Contrib Repository

```
% mkdir $ANTELOPE/src  
% cd $ANTELOPE/src  
%
```

Make sure you have the 'git' source-code management tools from git-scm.com installed on your system. Now clone a copy of the Antelope-contrib git repository onto your own machine:

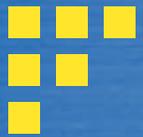
```
% git clone git://github.com/antelopeusersgroup/antelope_contrib.git contrib  
%
```

That's it! If you want to compile the entire distribution, type

```
% cd contrib  
% make Include  
% make install
```

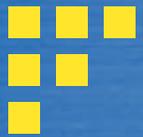
If you want to update your checked-out copy of the source-code with the most recent editions to the Antelope contributed-code repository, use the 'git pull' command:

```
% cd $ANTELOPE/src/contrib  
% git pull
```



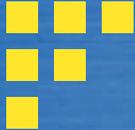
2) Certify tests in Antelope-contrib

- We are starting to implement certify tests for some Antelope-contrib code
 - “build-and-smoke” test architecture (DanQ)
 - man certify(1)
 - Start monitoring quality of some contributed-code elements
 - Additional examples of how to use library functions



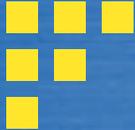
3) Python interface enhancements

- The Antelope Python interface has been enhanced with Object-Oriented exception-throwing capabilities supporting Antelope elog(3) facility
- (Antelope-Python ported to 64 bit on the way)



Python Elog Classes

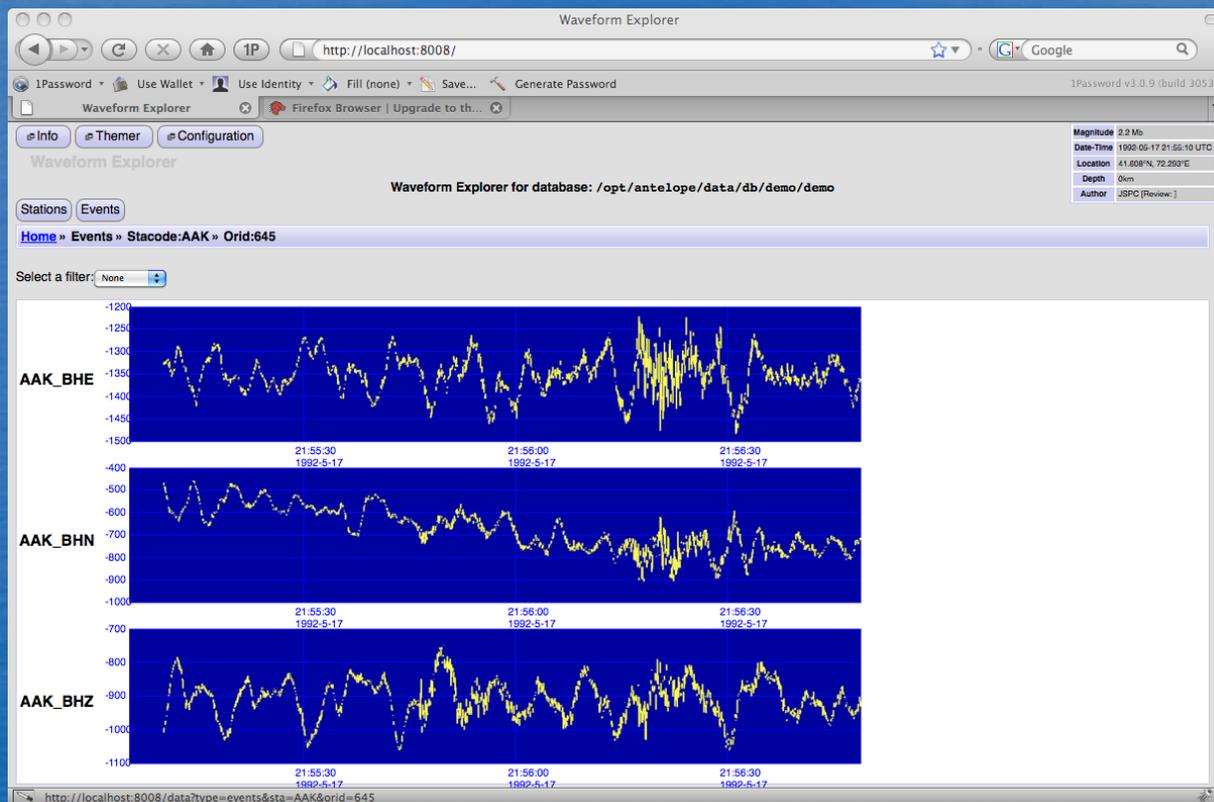
- Class ElogException
 - Class ElogLog
 - Class ElogNotify
 - Class ElogComplain (etc...)
- Standard Python *try:...except:* clauses
- All Antelope-python functions throw these exceptions



Dbwfserver application

- Juan Reyes, Rob Newman (UCSD), K.L.
- Interactive waveform exploration from Datascope, on the Web
- `dbwfserver /opt/antelope/data/db/demo/demo`
- <http://localhost:8008/>

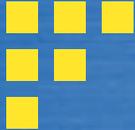
dbwfserver



4) Prototype db2sql

- Load Datascope into MySQL
- Keep updated in near-real-time
- Prototype Application
- Now in Antelope-contrib





db2sql: why

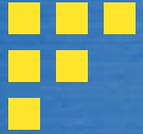
- UCSD High-Frequency Radar program
- Interorganizational collaboration
- SQL-based programmers
- Processing applications
- MySQL scalability solutions
- One more tool suite in the set



db2sql: how

- *libdb2sql*:
 - Database-view translation capability
- *libdbmon*:
 - Datascope table change detection
- *Datascope::db2sql* and *Datascope::dbmon*
 - Perl wrappers
- *db2sql*
 - Perl driver program
 - Perl DBI Drivers





5) 64-bit Antelope Toolbox for Matlab

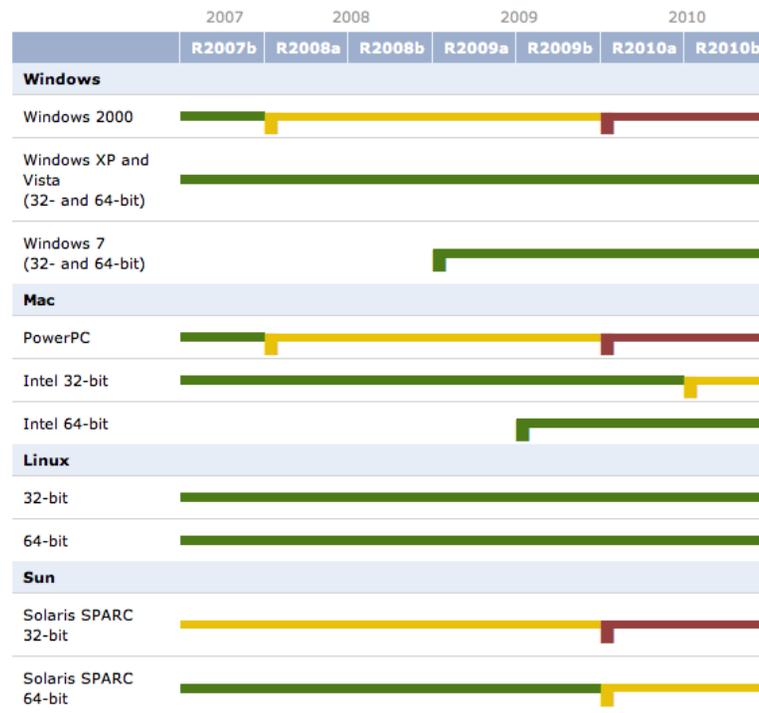
- The Antelope Toolbox for Matlab is ported to 64-bit Antelope for Mac and Solaris

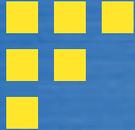
Mathworks Inc. Matlab Roadmap

Platform Support Road Map

- New releases available, and technical support provided
- No new releases, but technical support provided
- No new releases, and only online technical support available

[See details](#)

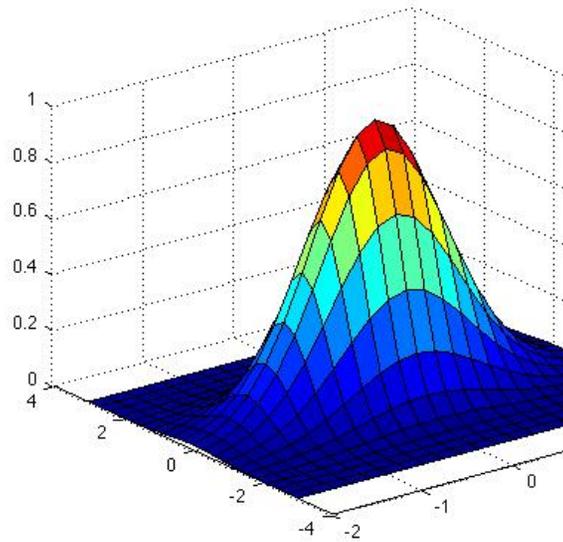




Matlab-Antelope accompanying changes

- Interface in
 - `$ANTELOPE/data/matlab/<release>/antelope`
 - Avoid version-skew clashes
- New setup file
 - `$ANTELOPE/setup.m`
 - Auto-switches amongst versions
- Several new functions (*parsepath* etc.)
- Fixed *elog_notify*, *elog_complain*

Matlab Antelope Toolbox



11/20/09 11:30 AM
1/4/10 2:10 PM

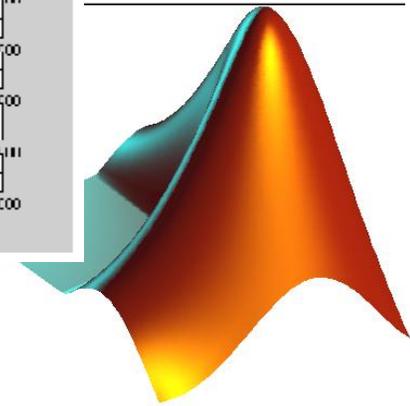
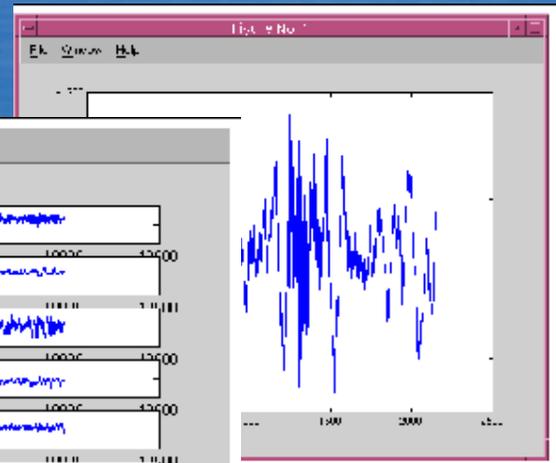
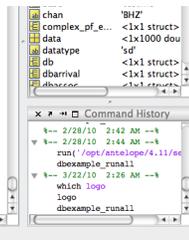
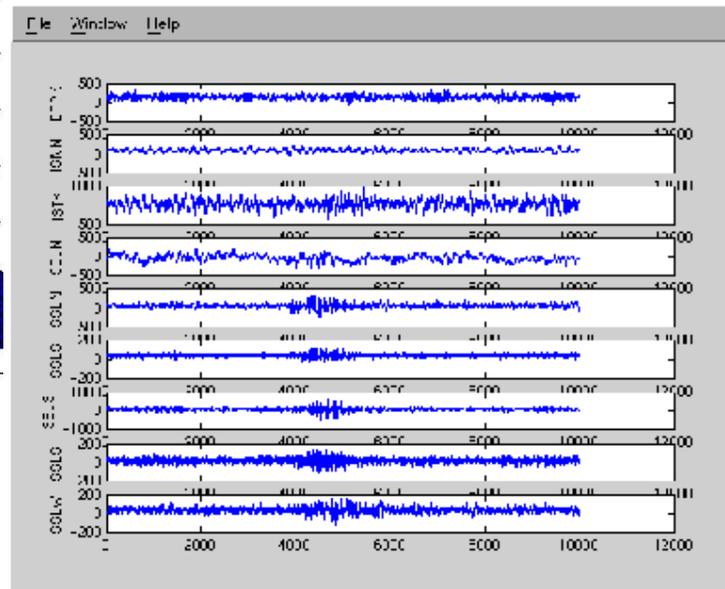
```
19173027
echo off
Running dbexample_epoch2etr
mytime = str2epoch('9/30/02 11:15 AM')
mytime =
    1.0333845000000000e+09

epoch2etr(mytime, 'd kWhrM s', 'US/Alaska')
ans =
    9/30/02 03:15:00 AKDT

epoch2etr(mytime, 'hA, M s', 'US/Pacific')
ans =
    Monday, September 30 2002

epoch2etr(mytime, 'G h p', 'GMT+2')
ans =
    2002-09-30 3 AM

echo off
Finished running dbexample_runall.
```



6) LCI is now announcing to Twitter

http://twitter.com/L_C_I

Hey there! L_C_I is using Twitter.
Twitter is a free service that lets you keep in touch with people through the exchange of quick, frequent answers to one simple question: What's happening?
Join today to start receiving L_C_I's tweets.

Join today!
Already using Twitter from your phone? Click here.

L_C_I
Name Lindquist Consulting
Web <http://www.lindquist.com>
Bio Specializing in the Antelope Environmental monitoring system from <http://www.brtt.com>

14 following 9 followers 0 listed
Tweets 21
Favorites
Following

#Antelope-contrib Python interface to #Antelope enhanced to throw new ElogException exceptions upon errors
<http://tinyurl.com/y8b76uu>
14 minutes ago via web

#Antelope-contrib isi2orb(1) enhanced to allow user configuration of ISI debug level and IACP timeout parameter
<http://tinyurl.com/ybjpc6>
10:46 PM Mar 2nd via web

#Antelope-contrib isi2orb(1) enhanced to support 64-bit compilation
<http://tinyurl.com/y9sdo2w>
1:42 PM Mar 1st via web

64-bit version of #Antelope Toolbox for #Matlab released for Solaris 10 and Mac OSX 10.6
<http://tinyurl.com/yfhro4l>
4:24 AM Feb 28th via web

Fixed small problem with python trdatabins() function pointed out by Juan Reyes <http://tinyurl.com/ybds5pz>
9:45 AM Feb 18th via web

The initial release to #Antelope contrib of the db2sql executable with supporting db2sql, dbmon libraries is at <http://tinyurl.com/yelc2wc>
5:53 PM Jan 20th via web

L_C_I

New tutorial page added to #Antelope-contrib wiki:
<http://tinyurl.com/yzztugj> (how download the repository once, and compile)
8:21 PM Mar 10th via web

smartpick(1) command expanded to support dbpick(1) *sas off/on* commands (assoc coloring) in #Antelope-contrib
<http://tinyurl.com/yis886r>
3:47 PM Mar 6th via web

#Antelope-contrib Python interface to #Antelope enhanced to throw new ElogException exceptions upon errors
<http://tinyurl.com/y8b76uu>
2:42 PM Mar 5th via web

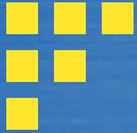
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THANK YOU

- Feedback / Questions / Suggestions / Discussion Welcome!

