

What's new at BRTT

March, 2013

Antelope User Group Meeting

Muscat



- Personnel changes
- Operational changes
- Antelope 5.3
- Solaris, Linux and Apple
- New products from BRTT

Personnel Changes at BRTT

- Kent Lindquist hired full time January 2012
- Dan Quinlan retired December 2012
- Kent will be responsible for production of new releases
- Kent brings his experience with python and web software into BRTT
- Kent provides BRTT with stability, new blood and increases BRTT's ability to undertake new development
- Kent will no longer be available as a private consultant
- BRTT will either hire a new full-time employee or make use of consultants

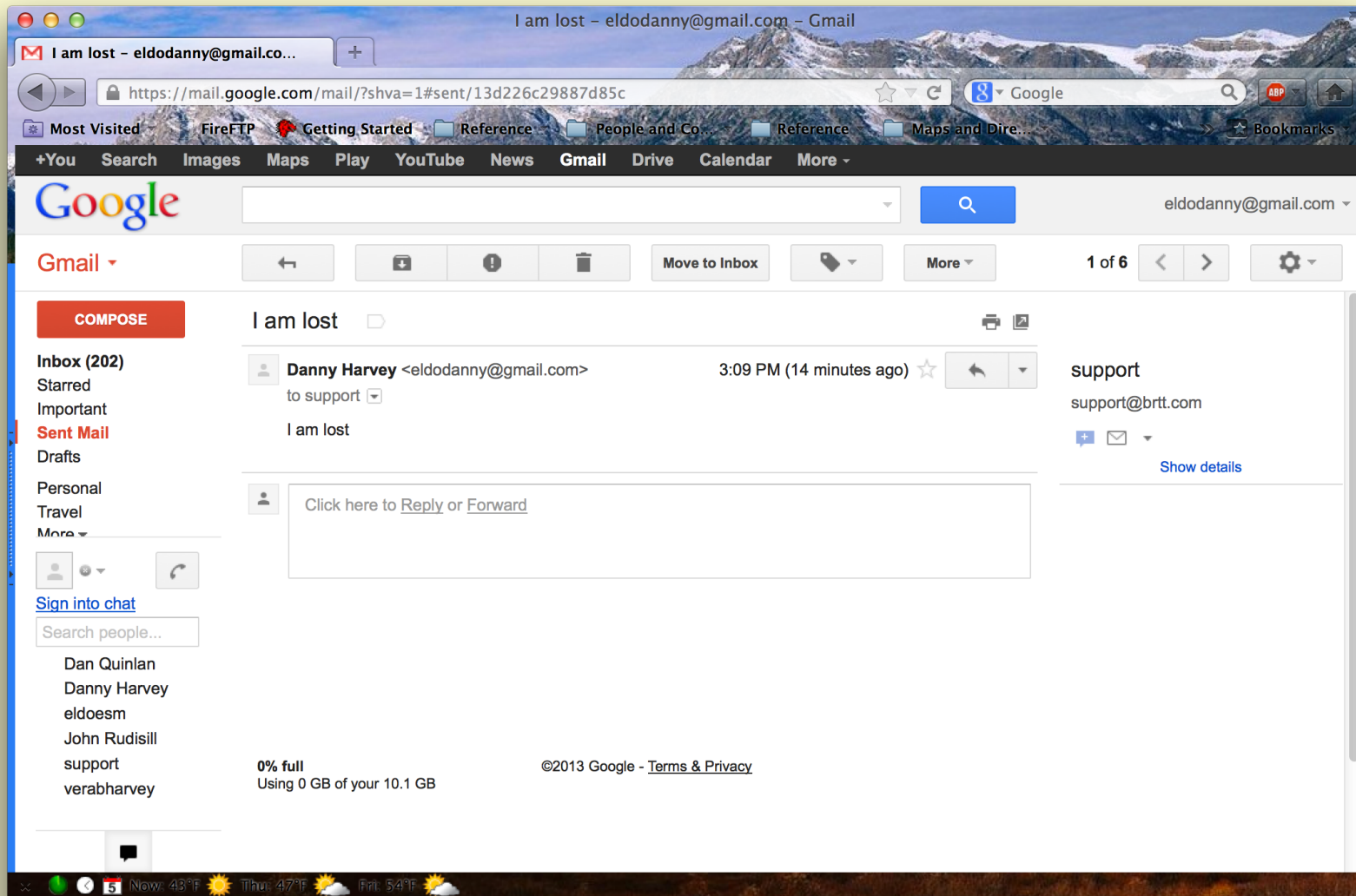
Operational Changes at BRTT: Distribution and Installation

- Lots of problems in 2012 with CD publishing
- We are getting close to the CD size limit
- Kinematics is now responsible for CD (or DVD) publishing
- We have incorporated an automated verification check to identify duplication errors and stop installation
- Installation has been simplified (always installs everything, automatically moves existing directories)
- No more -64 in directory names (e.g. 5.2-64). All software is by default 64-bit.
- For 5.3, no more paper published manuals, including reference guides (they will be web accessible)

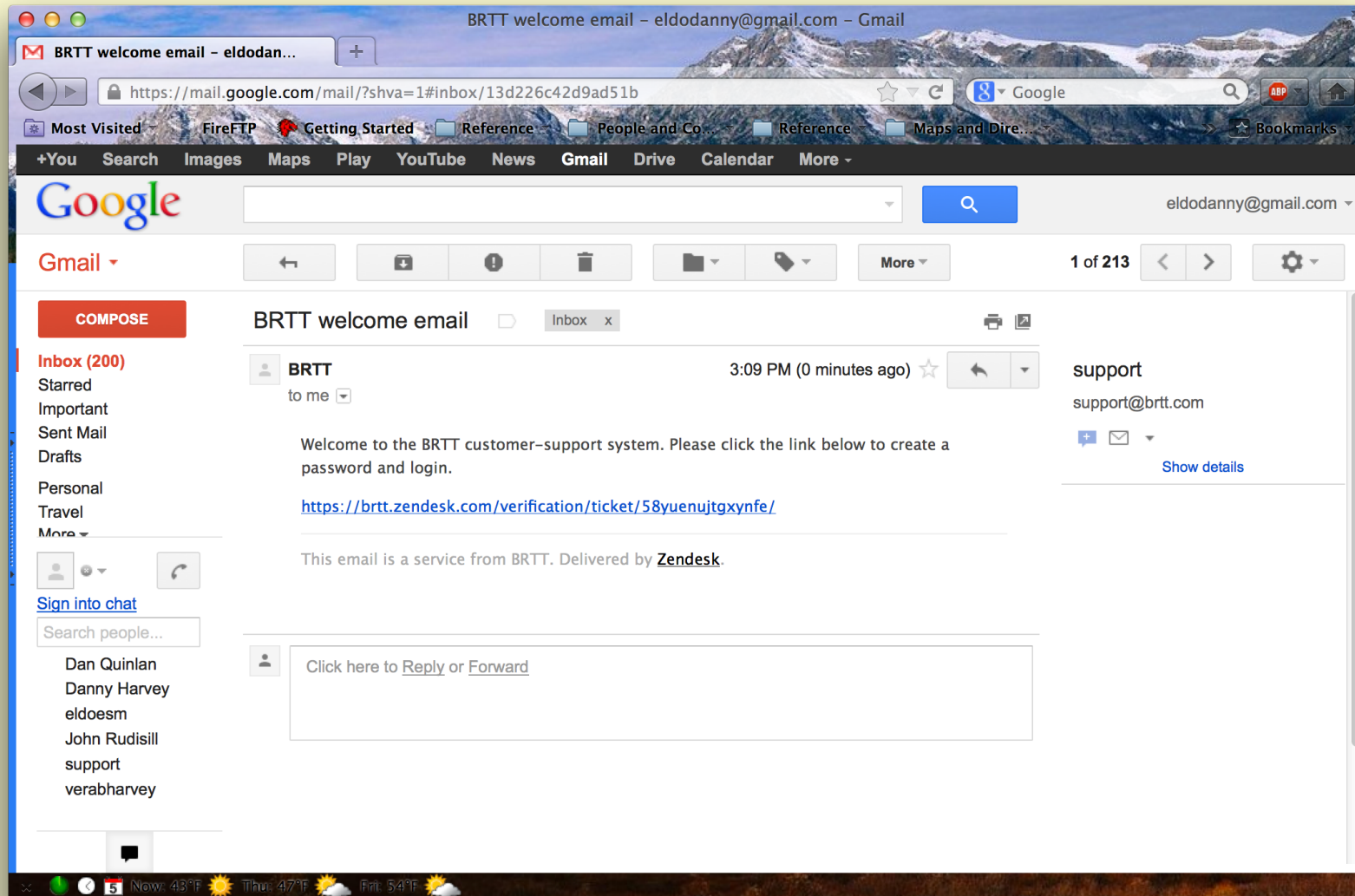
Operational Changes at BRTT: Support

- Improved support responses via email and web <https://brtt.zendesk.com>
- Always get an automated reply with a ticket number
- Provides BRTT staff with coordinated support response tools
- You can go to the web site to see current and old support requests
- You can access your support requests from any web browser
- Our web site (www.brtt.com) describes this in more detail
- **YOU ABSOLUTELY MUST USE support@brtt.com
WE WILL NO LONGER RESPOND TO SUPPORT
REQUESTS TO OUR PERSONAL ADDRESSES**

Operational Changes at BRTT: Support



Operational Changes at BRTT: Support



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Operational Changes at BRTT: Support

The screenshot shows a web browser window with the title "BRTT : Select password." The address bar displays the URL "https://brtt.zendesk.com/verification/ticket/58yuenujtgxynfe/". The browser's bookmarks bar includes "Most Visited", "FireFTP", "Getting Started", "Reference", "People and Co...", "Reference", "Maps and Dire...", and "Bookmarks". The website's header is green with the BRTT logo and navigation links: "HOME", "FORUMS", "SUBMIT A REQUEST", and "CHECK YOUR EXISTING REQUESTS". A green bar at the top right contains links for "privacy and cookies policy", "login", and "sign up". A green checkmark icon and the text "#89 'I am lost' successfully verified" are displayed. Below this, a grey box contains the text "You can create an account to see your request history". The main form area is titled "What password would you like to use?" and includes the instruction "You'll use this password to sign in to your Zendesk (https://brtt.zendesk.com).". A password input field with a green border and a green checkmark icon is shown. Below the input field, the "Password requirements:" section lists "must be at least 5 characters" with a green checkmark icon. A "Verify my email address" button is located at the bottom of the form. The footer of the page states "Support Software by Zendesk". The system tray at the bottom of the screen shows the date "Now: 4:31 PM" and the weather "Thu: 47°F".

BRTT : Select password.

BRTT welcome email – eldodan... BRTT : Select password

https://brtt.zendesk.com/verification/ticket/58yuenujtgxynfe/

Google

Most Visited FireFTP Getting Started Reference People and Co... Reference Maps and Dire... Bookmarks

BRTT

privacy and cookies policy | login | sign up

HOME FORUMS SUBMIT A REQUEST CHECK YOUR EXISTING REQUESTS

✓ #89 "I am lost" successfully verified

You can create an account to see your request history

What password would you like to use?

You'll use this password to sign in to your Zendesk (https://brtt.zendesk.com).

.....

Password requirements:

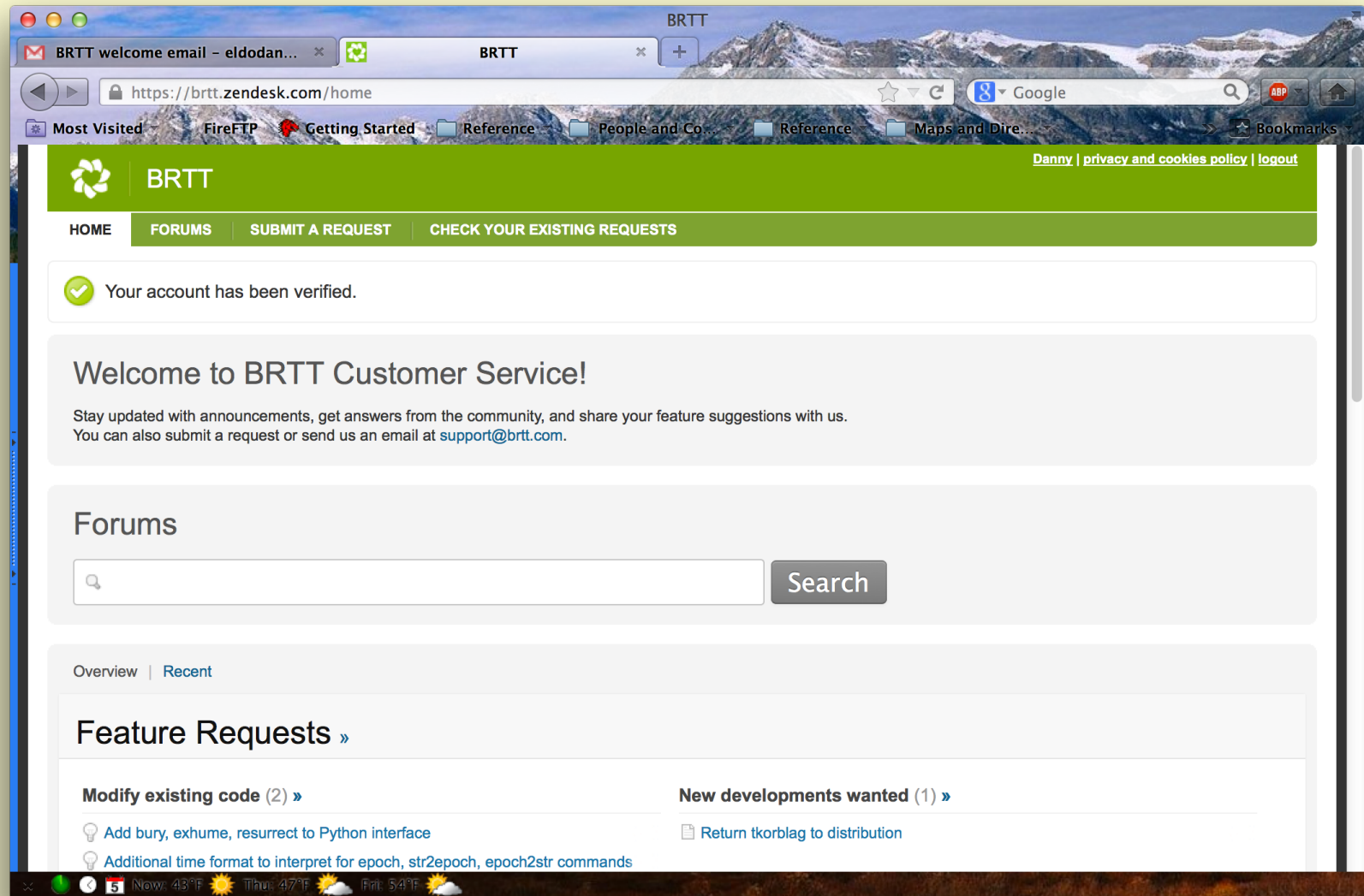
✓ must be at least 5 characters

Verify my email address

Support Software by Zendesk

Now: 4:31 PM Thu: 47°F

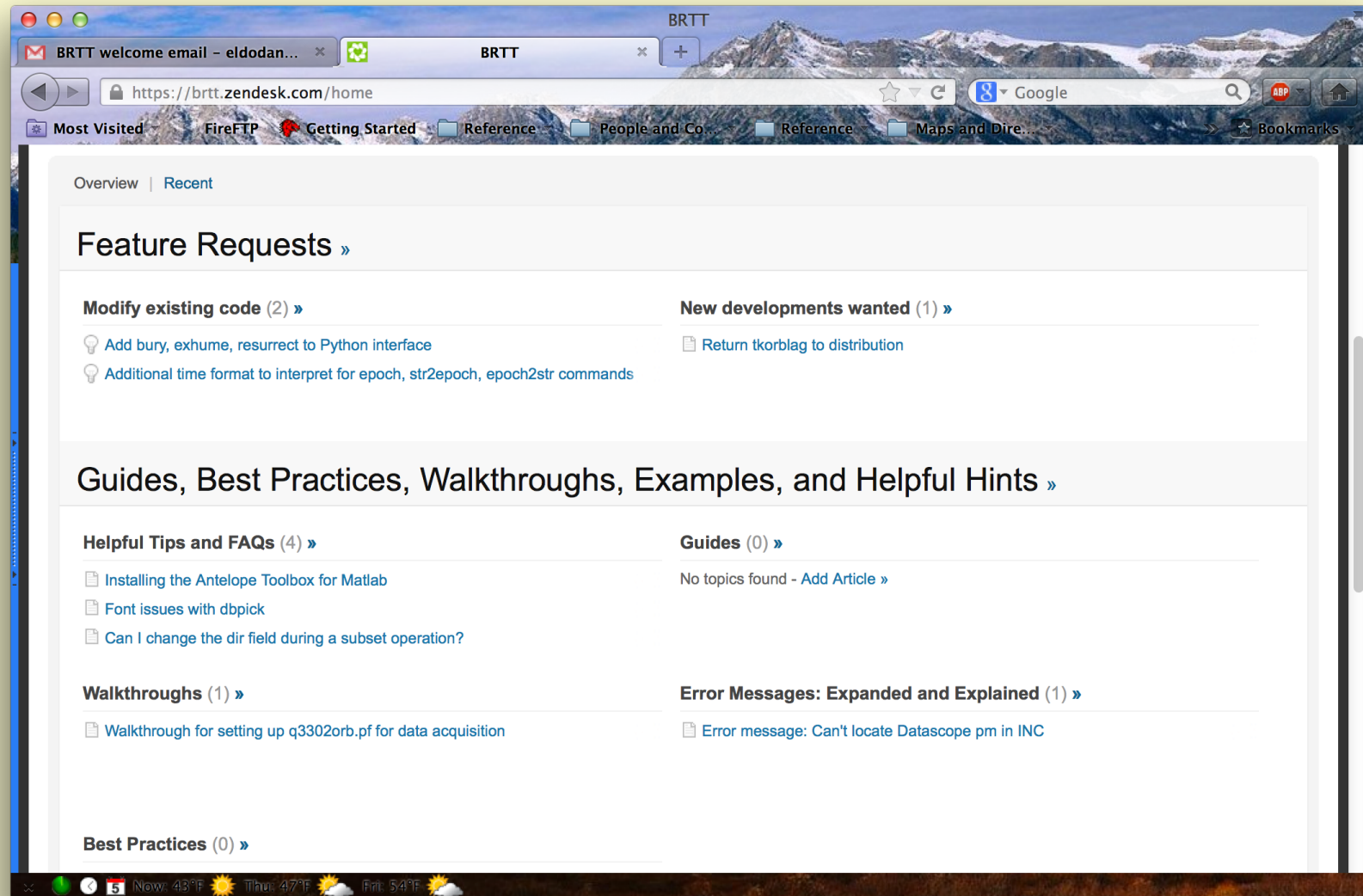
Operational Changes at BRTT: Support



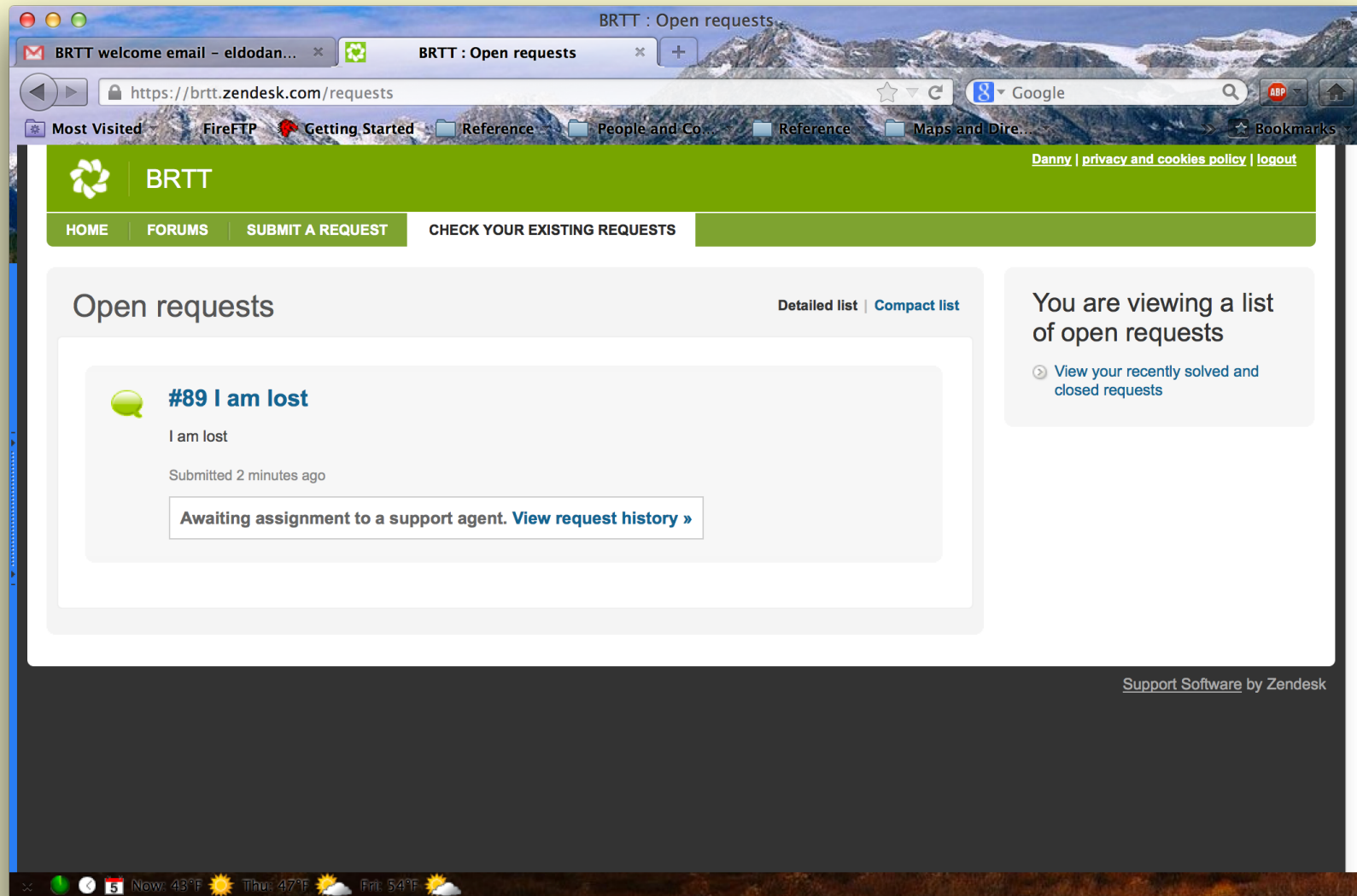
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Operational Changes at BRTT: Support



Operational Changes at BRTT: Support



Operational Changes at BRTT: Licensing

- Current Antelope licensing mechanisms are antiquated, difficult to administer (on both ends) and prone to abuse
- We are in the process of overhauling Antelope licensing mechanisms
(a lot of this will be invisible to our users)
- We will continue to provide node-locked licenses for the foreseeable future
- We are exploring some kind of internet-based license manager daemon as a replacement for subnet licenses. We think this would provide the most convenient and flexible licensing system for our users
- We ask for your patience as we transition into a new licensing system

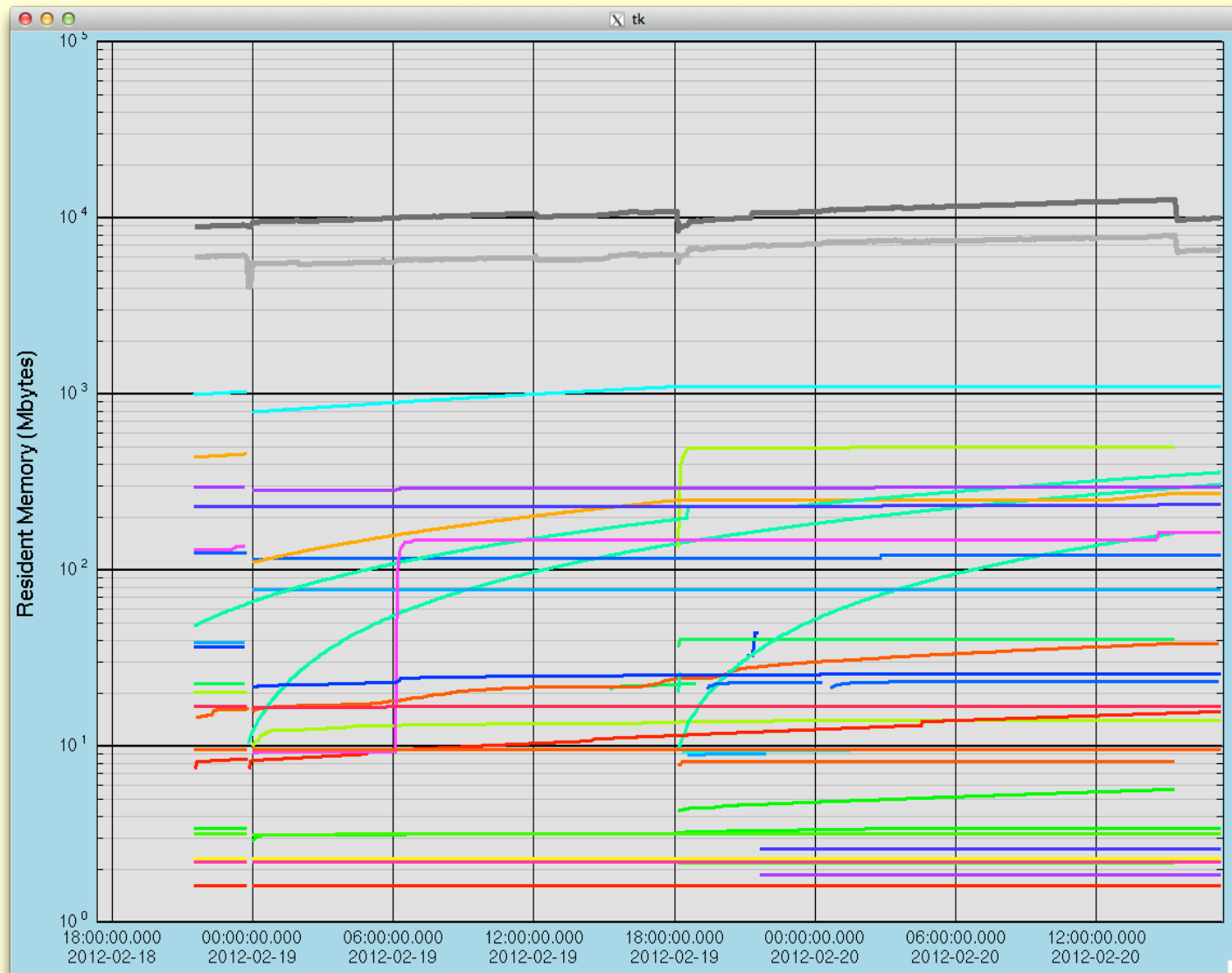
Antelope 5.3: Python

- Standard python 2.7.2 64-bit interpreter in Antelope 5.3 release
- Also included are a set of public-domain python extensions
- Also included are a set of Antelope extensions to python in the same vein as the tcl and perl Antelope extensions
 - “raw” interfaces that closely following C calling syntax and use
 - New OO interfaces that follow standard python paradigms
- Most new GUI tools will be developed using python

Why Bother With Python?

- Heavily used “modern” object oriented scripting language
- Used extensively in Australia and US Antelope communities
- Can find young software developers who know python (not so much the case for perl and tcl)
- Has a large and comprehensive set of public-domain extensions, including scientific/engineering extensions
- Performs similar to perl
- Unlike perl, is inherently OO
- Unlike perl, provides a simple path for tk widget extensions
- Helps to prevent BRTT fossilization

Python-based Tool for Monitoring Memory



Antelope 5.2 **dbpick** Capabilities

- Complete rewrite of underlying data handling middleware
- Overall data access performance increased by a factor of 10+ (with caveats)
- Highly dynamic response to changing underlying database
- New typein commands, **dbrefresh** and **dbreopen**
- New typein command, **batch**, to increase graphics performance and to control display flashing when changing events
- Can keep a **dbpick** window open continuously when running **dbevents**
- First phase toward a complete rewrite of **dbpick**

css3.1 v. 5.2

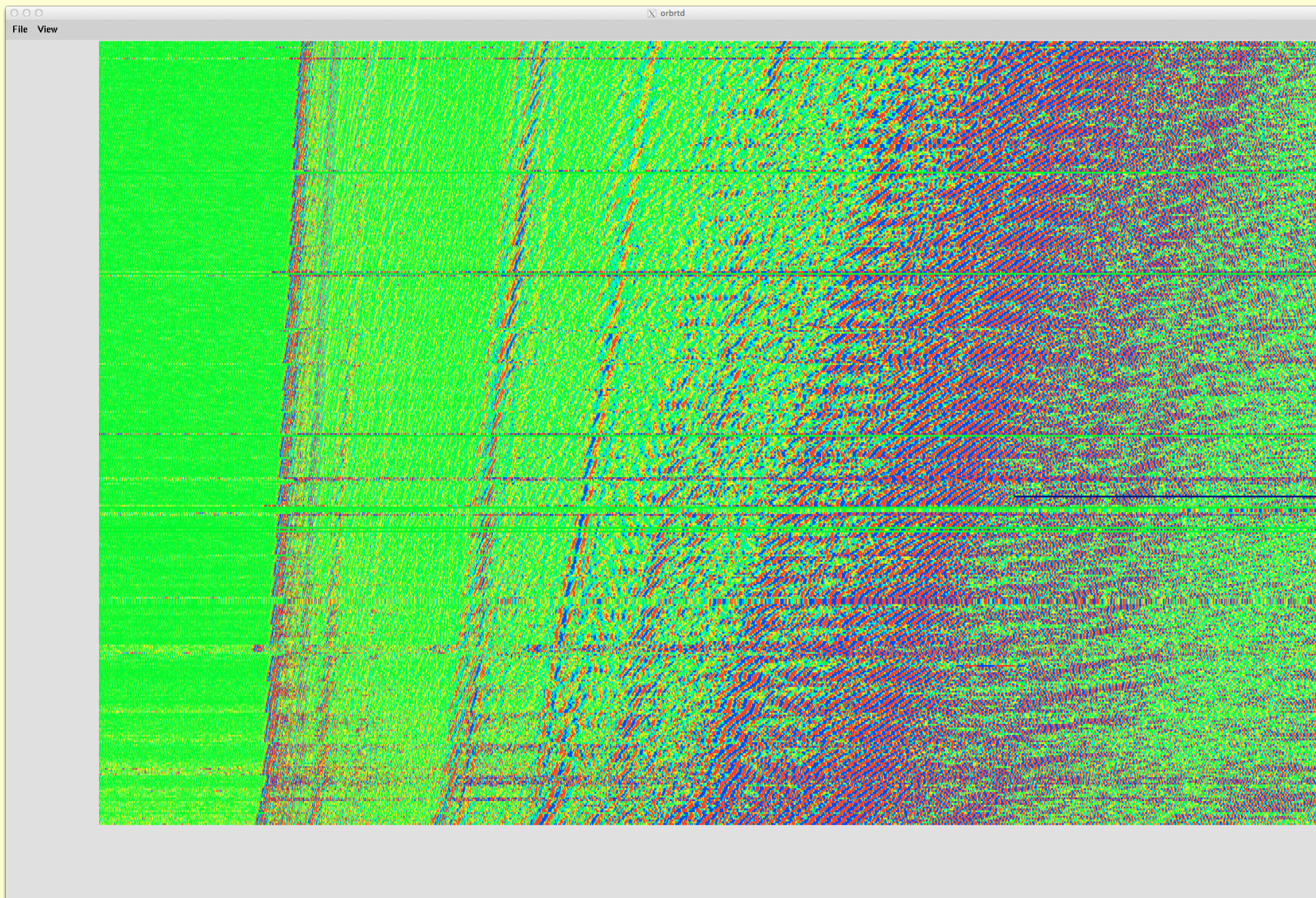
- New incremental changes to **css3.0** as we discussed last year
 - Mainly increased lengths of various attributes
 - All id attributes from 8 to 12 characters
 - All epoch times have microsecond precision
 - dnorth, deast in site have 5 digits precision
 - lat, lon have 7 digits precision
 - Increase dir to 80 characters and dfile to 48 characters
 - Increase sta to 8 characters and chan to 14 characters
- Increased sta attribute size means that SEED to css aliasing can be done with consistent snet_ssta type naming convention
- Intention to use **dbconvert** to convert from **css3.0** to **css3.1**
- New gsn_demo uses **css3.1**
- Addition of prefmag attribute in event table
- Not all critical programs are compatible were compatible

css3.1 v. 5.3

- Lots of problems with initial implementation
- Initial implementation hard wired SEED to css name aliasing and dropped snetsta and schanloc tables
- This insured incompatibility between existing **css3.0** and **css3.1** databases
- Cannot use **dbconvert** to convert from **css3.0** to **css3.1**
- Fixed problems by re-introducing snetsta and schanloc tables. Issues described in **cssconversion(5)** man page. Helper script, **cssconvert**, provided for dealing with changes in SEED to css name aliasing during conversion.
- New gsn_demo now goes back to using **css3.0**
- Now works with all critical programs

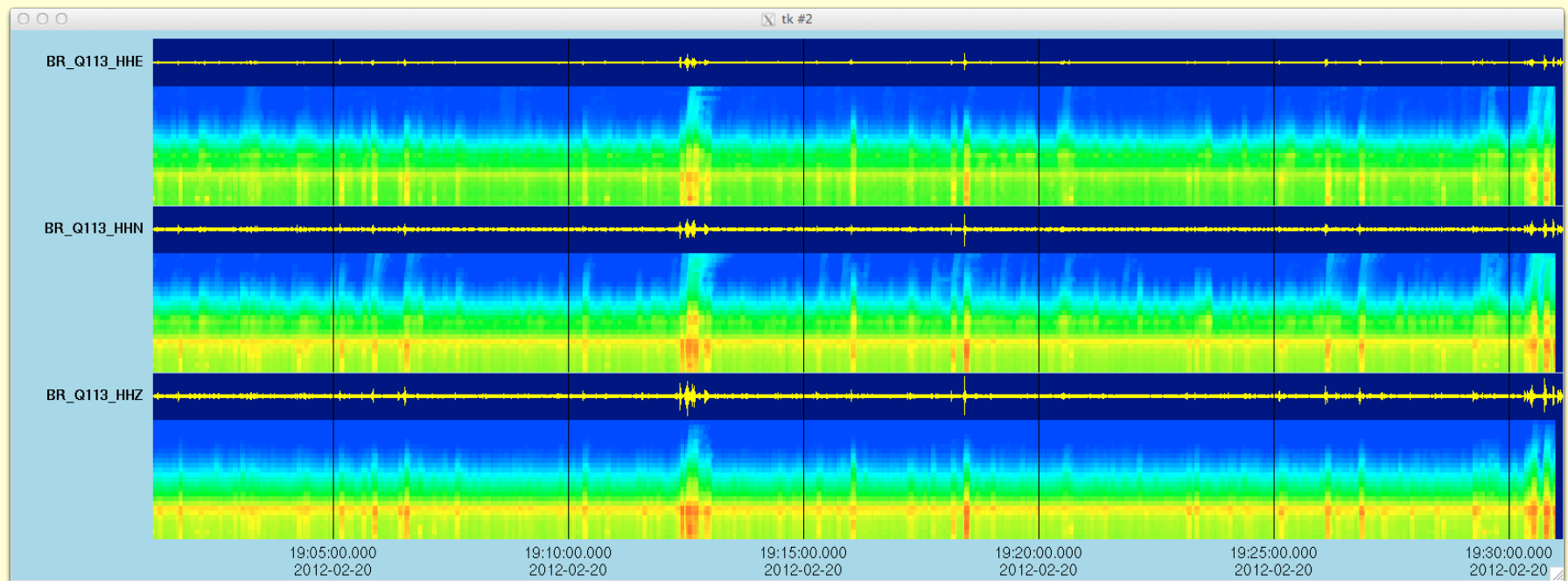
orbbrtd

- **orbbrtd** is a complete rewrite of **orbmonrtd**
- Rewrite of old tcl/tk script as a python script
- Adaptation of buplot bptrace tk canvas item extension available in python
- Provides enhanced trace amplitude plotting options (color, log scales, etc.)
- Provides capability to plot color-contoured spectrogram style time-scrolling spectra plots
- Introduces a number of new features, including dynamic automatic channel configurations
- First stage in converting **dbpick** display graphics



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Solaris, Apple, Linux

- Antelope 5.3 IS THE LAST ANTELOPE SOLARIS RELEASE!
 - Ramp down in Solaris development
 - Solaris support through one year from 5.3 release
- Uncertainty of Apple hardware future
 - Cannot depend on Apple for enterprise-class hardware
- BRTT will fully supports Linux as a platform for enterprise-class systems
 - BRTT will fully support RHEL and CentOS 6.2 in Antelope 5.3 release

Future Antelope Development

- **orbtrd**
 - Add display of arrivals and detections
 - Enhanced autoscaling
- **dbpick**
 - Next phase is to migrate the GUI to our new tk-based graphics extensions
 - Develop new **dbpick** main program as a python script
- **dbloc2**
 - Kent will head a complete rewrite
 - Currently soliciting comments/suggestions for new **dbloc2**
 - Probably a python script with embedded **dbpick** functionality

New Products from BRTT!

Peregrine

Web enhanced version of Antelope

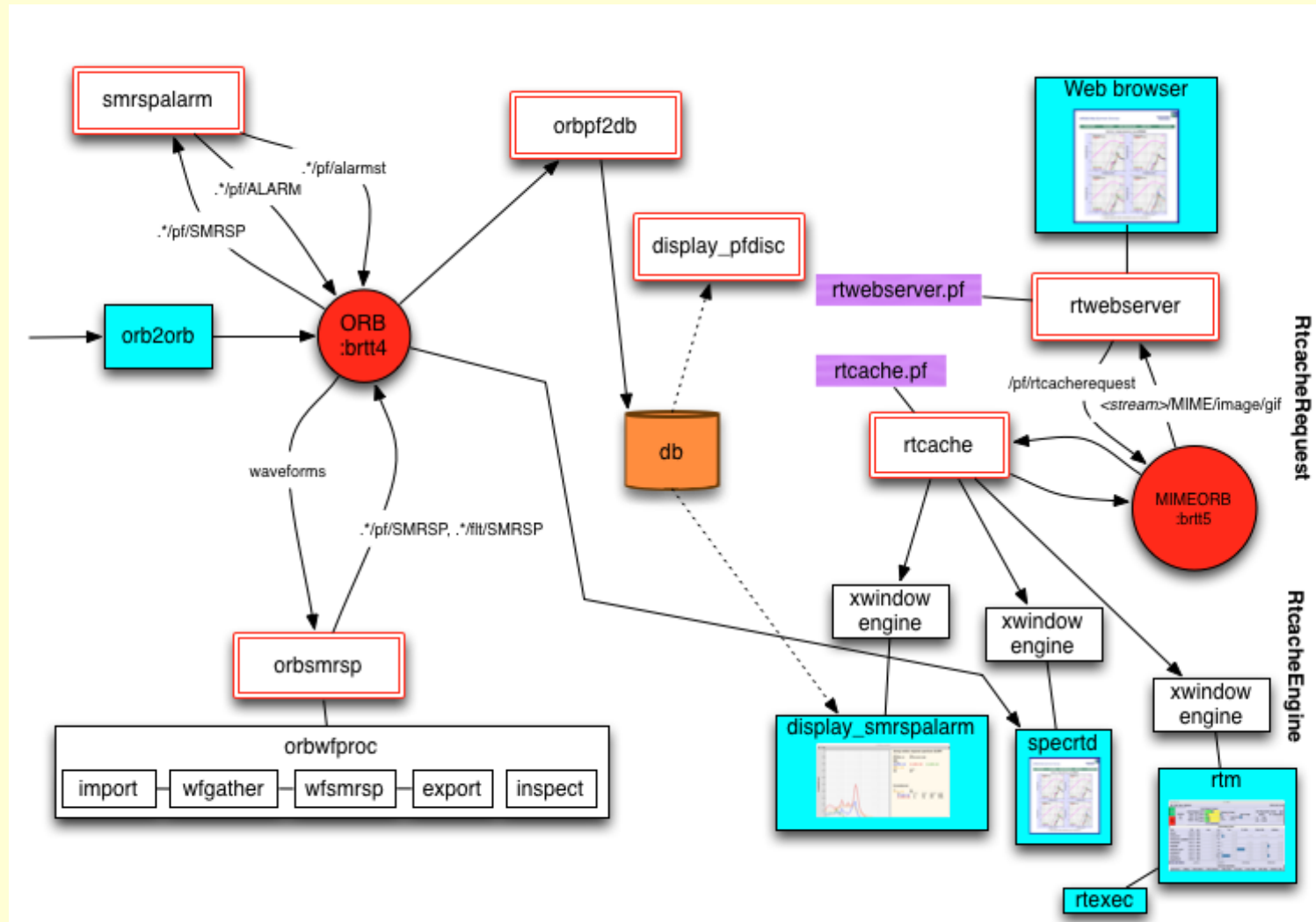
Bighorn

Strong motion/structure monitoring version of Antelope also including web enhancements

Peregrine

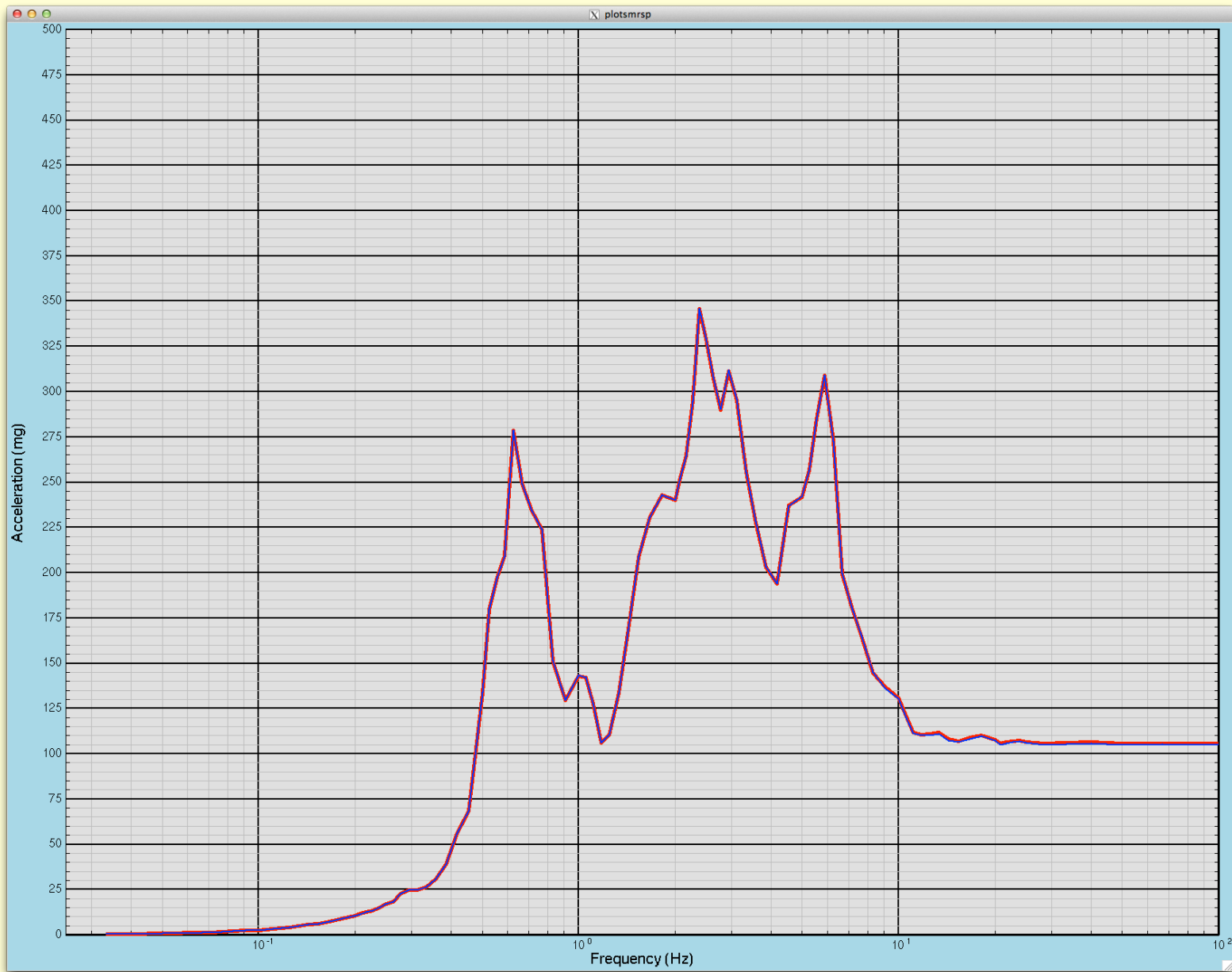
- Python-based web server
- Along with the various python extensions, provides a comprehensive toolkit for developing custom web servers that are highly integrated into the Antelope environment (configuration, connectivity, etc.)
- Along with other components, will be sold as a separate BRTT product or as an addon to existing Antelope site licenses
- Current version is not ready for release. We are probably one year away from a production version.

Bighorn



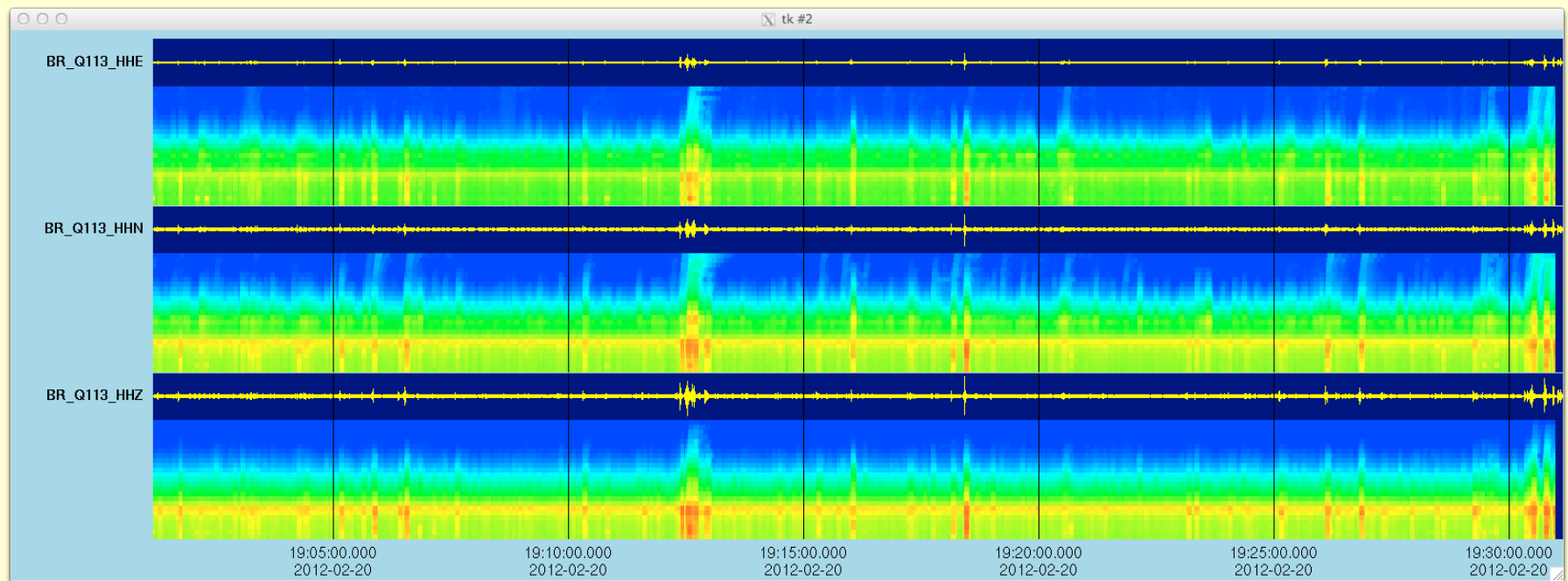
Bighorn - orbsmrsp

- New ability developed for producing continuous time-dependent strong motion response spectra
- Expanded floating point data representations within ORB packets and Datascope waveform files
- Pf ORB packets to represent time continuous strong motion response spectra
- Provides a very fast method for computing continuous time-dependent response spectra for large numbers of channels



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OVERALL

FACILITY MAP

SPECTRA

FACILITY SOH

SMDemo0 FACILITY STATUS: NORMAL

OUTPUT FROM SPECTRD FOR FACILITY: SMDemo0 FACILITY

