Common Software tools used at PASSCAL

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Category: Brief detail on listing PASSCAL software, other available tools from BRTT and in PASSOFT plus basic troubleshooting.

Objective: Provide a brief listing of software resources commonly used at PASSCAL and by our users, and a guidance on how to proceed when errors.

OWNER	PLATFORM	WHERE TO FIND IT
PASSCAL	Source code	ftp://ftp.passcal.nmt.edu/passcal/software/src
	Linux rpms	ftp://ftp.passcal.nmt.edu/passcal/software/linux/
	MacOS X	ftp://ftp.passcal.nmt.edu/passcal/software/osX/

BRTT: ANTELOPE	This Antelope software runs in Unix environments on four architectures:
	
	  * Linux Intel x86
	  * Apple Macintosh Mac OS X
	  * Linux X-scale processor (embedded in the Kinemetrics Marmot).
		PASSCAL USERS AND OTHER IRIS MEMBERS CAN REQUEST ANTELOPE FROM:
		
		http://www.iris.edu/manuals/antelope.htm
		
		http://www.iris.edu/manuals/antelope_irismember.htm

IRIS	Other Seismology Software and Manuals from IRIS/DMC SEED Tools	http://www.iris.edu/manuals/
ORFEUS	Seismological Software Library	http://www.orfeus-eu.org/links/softwarelib.htm
QUANTERRA	Software and tools for groups who use Quanterra seismic dataloggers	ftp://quake.geo.berkeley.edu/pub/quanterra/
Others	k3b – Free software CD and DVD application for GNU/Linux and other Unix like operating systems	http://k3b.plainblack.com/download

Table 1. Downloads and sources for PASSCAL, IRIS/DMC BRTT and other tools

Troubleshooting PASSCAL software

MOST COMMON ERRORS

a. Old versions of software: please make sure you have the latest PASSCAL software release. To download the most current version please refer to the following link:

http://www.passcal.nmt.edu/content/software-resources

b. Wrong Path or Environment: please follow instructions described in the README that is part of every software release.
c. Version of PYTHON: PASSCAL software is compiled with the proper versions of python; older versions than 2.4.6 or versions alpha releases (2.7) may cause trouble.

Recommendations:

a. Antelope, PQL, and PASSOFT are constantly being updated. It is not recommended you update software in the field on PASSCAL laptops. Our laptops are tested and shipped from PASSCAL with recent versions of software. Keep up to date on your personal machines to ensure you get the latest and greatest, but always test it before you take it into the field!
b. For PASSOFT, PQL, and Antelope to work, your shell environment must be set up correctly. The easiest way to set up your shell environment is to source an environment setup script. It is recommended that you source these setup scripts from your src files so that the software is always available. While there is an environment setup script for the bash shell, csh is the most often used and tested shell with PASSOFT and PQL. We recommended that you use csh with these programs.

Setting up csh
Add these lines to your ~/.cshrc file:
source /opt/passcal/setup/setup.csh
source /opt/antelope/**version number**/setup.csh
(Some versions of OS-X require that you copy the contents of the setup.csh file into your .cshrc file)

Setting up bash
Add these lines to your ~/.bashrc file:
source /opt/passcal/setup/setup.sh
source /opt/antelope/**version number**/setup.sh
(Some versions of OS-X require that you copy the contents of the setup.sh file into your .bashrc file)

Be sure to logout and log back in!

Do some simple tests:

  % which picpython This should return: /opt/passcal/other/bin/picpython

  % lopt This should display a simple digital clock.

If you have any problems contact IRIS PASSCAL passcal@passcal.nmt.edu

  c. Passcal software is fully compiled and contains all required modules and proper versions of python to work. Installing modules or other versions independently may interfere with the compiled software.
  d. File a Bug Report / search through the Bug Reports

Visit the Bug Reports and Support Requests page to search through recent PASSODT updates or file a new bug report if you are having problems with software.