

Antelope Development

a whirlwind tour

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Antelope provides

- * database operations
- * orb interface
- * time calculations
- * packet stuff/unstuff
- * parameter file interface
- * miscellaneous utilities
- * waveform i/o
- * response calculations
- * travel time calculation

- * Basic functions are coded in c
- * Relatively complete documentation in man pages
- * interfaces to these functions are also provided in other languages.

Antelope languages

* c

* perl

BRTT

* tcl/tk

* shell

* matlab

Kent

* pfp

* python (limited distribution)

Passcal

Too many choices?

- * Best all around choice: perl
 - * most general
 - * best string manipulation
 - * powerful
 - * scripting language => easy
 - * widely used

Can't use perl? Don't like perl?

- * heavy duty computation, or interface not available in perl: use c
- * maps & graphs: use tcl/tk

- * sophisticated graphics and higher math functions: use matlab
- * web pages: might like php (perl also a choice)
- * know/prefer some other language: it's up to you.

Getting Started

- * Learn basics
 - * time
 - * parameter files
 - * databases
- * Datascope Tutorial
- * Software Development Tutorial
- * Reference Guide

Try something.

- * something simple
- * look at examples and modify
 - * `$ANTELOPE/examples`
 - * `http://www.indiana.edu/~aug/contrib.html`

Extremely simple example

- * Put a message on the screen

% template

Standard Antelope templates:

Distfile	perl	xpls
MAKE	ptk	xppl
Makefile	sh	xtcl
cs	simple.c	xvish
dbsimple.c	trsimple.c	xwish
manpage	<u>web.html</u>	xwish8
mx	xcdpl	
orbsimple.c	xpl	

```
% template xpl > note  
% template ptk >> note  
% chmod +x note  
% vile note  
... a little editing
```

```
: # use perl
eval 'exec $ANTELOPE/bin/perl -S $0 "$@"'
if 0;

use lib "$ENV{ANTELOPE}/data/perl" ;

use Tk ;
use ptkform ;

$MW = MainWindow->new ;

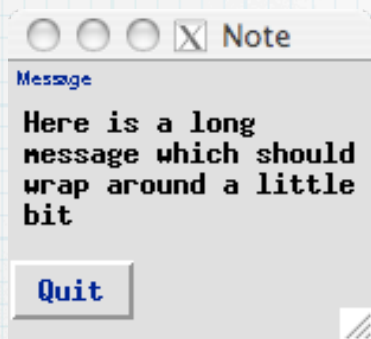
my @specs = <DATA> ;
ptkform($MW, \%var, \%widget, @specs) ;

$widget{Quit}->configure(-command=>sub {$MW->destroy}) ;
$var{msg} = "@ARGV" ;

MainLoop ;

__DATA__
message msg      - 0,0 Message {message from the command line }
button  Quit     - +,0 Quit {I've seen enough }
```

```
% note Here is a long message which should wrap around a little bit
```



Further reading

- * Programming Perl
- * Perl/Tk Pocket Reference
- * perl-widget
- * man ptkform
- * man bookshelf
- * [\\$ANTELOPE/antelope.html](#) / other man pages