TARGET:

Build a "typical" application:

- use the components of the VLT Common SW (benefit from a well established layer of SW)
- follow the rules/guidelines to produce a VLT-compliant application.

-> a workstation-application to move a motor, read out and display some values.

Discover/discuss the various components and issues, following a top-down approach.

PROGRAMMING ENVIRONMENT:

- starting from a system with HP-UX 10.20 and RTAP 6.70 installed
- list of customization tasks: login scripts, etc.
- programming standards (including documentation)
- creation of directory structure for code development
- use of coding templates
- software configuration management

PANEL EDITOR:

- to create a visual front-end (GUI) to a set of C/C++ applications
- first stage: use it to create a mock-up
- add communication with applications afterwards

CENTRAL CONTROL SOFTWARE (CCS):

- the core of the workstation part of the VLT Common Software
- contains various components, providing a set of services:
  - on-line database
  - message system
  - scan system
  - logging system
  - error system

  ....
- includes various components and tools which support a software development relying on CCS features (eccs, dbl, ...)

LCU COMMON SOFTWARE (LCC):

- the core of the LCU part of the VLT Common Software
- contains various components, providing a set of services, similar to CCS:
  - on-line database
  - message system
  - scan system
  - logging system
  - error system

  ....

  and more:
  - I/O signal handling
  - LCU management functions

  ....

MOTOR CONTROL MODULE (MCM):

- layer between applications and the motor device drivers (API)
- supports various types of motors, encoders, amplifiers, etc.
- motei: motor engineering interface

SEQUENCER & BOB:

- glue components together using scripting language (Sequencer)
- write scripts such that they can be executed by the "Broker of Observation Blocks"

DOCUMENTATION ROADMAP:

- how to deal with the VLT SW documentation set
- VLT SW information available via the WWW
- documentation required from SW developers
- testing and software problem reporting