Software Configuration Management

Approach:

- module based: <module> <version>, all files of the module are checked in/out at the same time
- only one person at time can modify a module.

```
cmmModify <mod>
   --> modifying <mod> <x>.<y>
       ....editing, compiling, etc....
cmmArchive <mod> <comment>
   --> module <mod> archived as <x>.<y+1>
```

- branches are supported
- one central server, several clients (LAN).

Tools

- cmm: customized interface to RCS

```
cmmModify, cmmCheckForArchive , cmmArchive,
cmmWhat, cmmHistory, cmmCompare, cmmCopy,
cmmLast, cmmCancel, cmmWho
```

- Software Problem Report tracking

See Page 15/16 of the

VLT-MAN-ESO-17200-0888, Issue 1.0

VLT Common Software Overview

(*) you can get a postscript copy from:

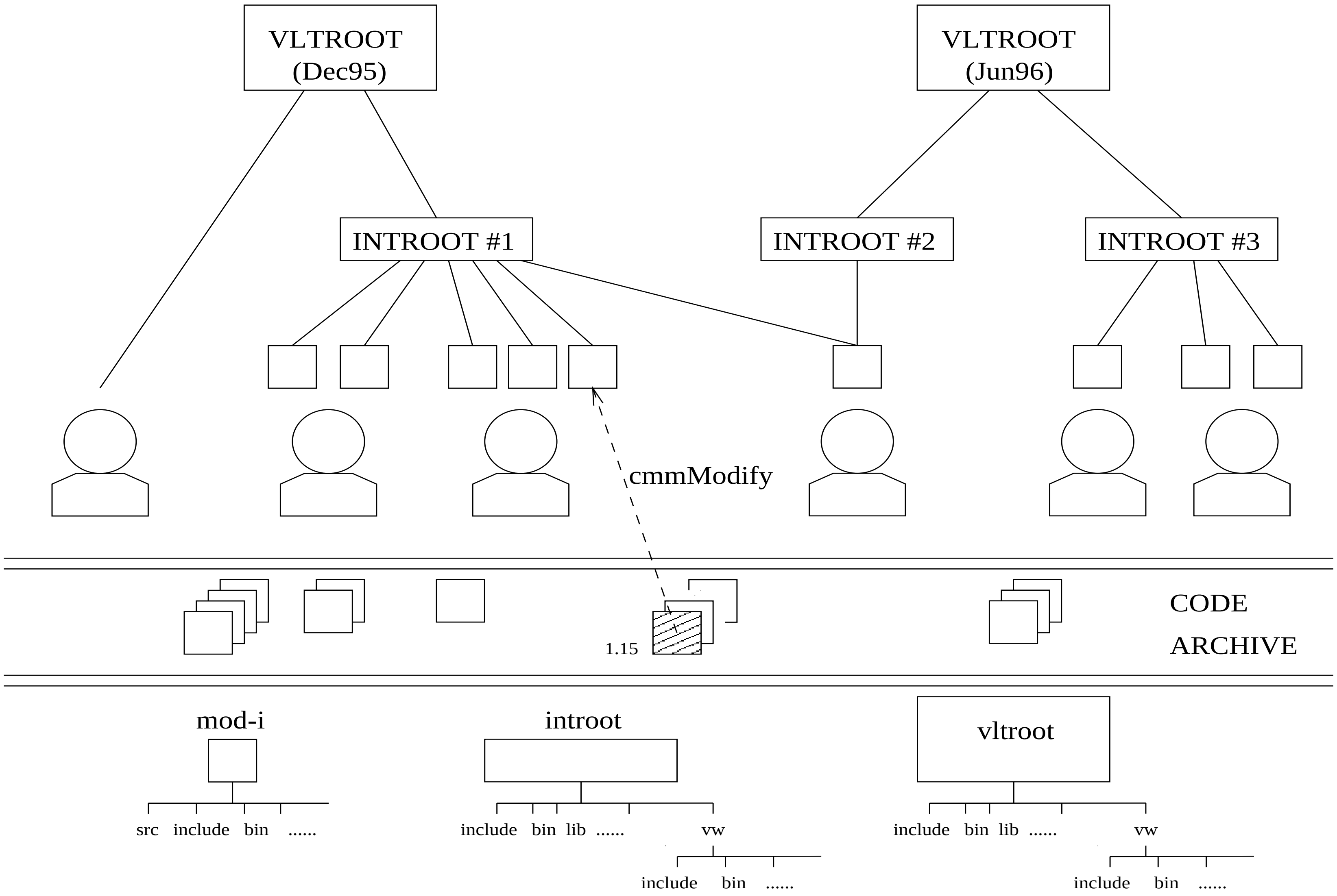
http://www.eso.org/projects/vlt/sw-dev/wwwdoc/dockit.html

Code templates, Man-pages

```
te49

dbOpen(3)                                                    dbOpen(3)
                    VLTSW-DEC95 31/01/96-19:29

NAME
     dbOpen -  Opens a connection to the database of the specified
     environment.

SYNOPSIS
     #include "db.h"

     ccsCOMPL_STAT dbOpen( const ccsENVNAME  envName,
                                 ccsERROR    *error)

DESCRIPTION
     Opens a connection to the database of the specified environment.

     envName     <IN>   Name of the database (environment). If the first
                        character is an '@', it is ignored.
     error      <OUT>   Error structure.

     The routine establishes a connection to the database referenced by the
     environment name

     The routine opens a connection to the local database (the one specified by
     th environment variable RTAPENV if the environment name is ccsLOCAL_ENV.

     The type of environment is determined by the first letter of the environme
nt
     name, such as :

     - 'l'  defines an environment running on a LCU
     - 'w'  defines an environment running on a WS

     All others make the routine exit with an error.

RETURN VALUES
     SUCCESS .

     FAILURE and error returns :

        ccsERR_ENV_NAME   ,  Wrong environment name.
        ccsERR_DB_OPEN    ,  Cannot open database.
        ccsERR_DB_NO_RTAP   ,  Failure when calling RTAP with CCS LITE.

EXAMPLES
     ccsERROR     error;

     if (dbOpen(ccsLOCAL_ENV,&error) == FAILURE)
        {

                                  - 1 -        Formatted:  April 22, 1996

dbOpen(3)                                                    dbOpen(3)
                    VLTSW-DEC95 31/01/96-19:29
Lines 1-71
```

```
File  Edit  Search  Format

/*********************************************
* E.S.O. - VLT project - 1993
*
* dbOpen.c
*
* HISTORY
*
* who            when              what
* ---------     ------------      ---------------
* M.Comin       23/05/93          First version
*
* M.COMIN       21/01/94          Modification f
* G.CHIOZZI     29/09/94          The environment
*                                 character, but
*                                 the actual env
* -------------------------
*
* M.COMIN       15/02/95          Implemented re-
* M.COMIN       20/02/95          rtOpenDatabase
* J.I.LEON      23/05/95          Add conditiona
* T.EBERT       19/06/95          Forced initial
*                                 linkTable-array
* T.EBERT       19/07/95          Check environme
*                                 (-> CCS-LITE)
*
*/
/*********************************************
*
*   NAME
*
*   dbOpen -  Opens a connection to the databa
*
*   SYNOPSIS
*
*   #include "db.h"
*
*   ccsCOMPL_STAT dbOpen( const ccsENVNAME   e
*                               ccsERROR     *
*
*   DESCRIPTION
*
*   Opens a connection to the database of the
*
```

vltDirectoryStructure (5)



Implementation Standards

Programming Standard:

- Software Module
- Directory Structure (INTROOT, VLTROOT)
- Naming Conventions
- C & C++ Language
- Unix
- VxWorks
- vltMakefile
- Code templates

Tools

- GNU (gcc, make, emacs, etc)
- standard environment

VLT Common Software

After installation (Installation Manual & Tapes):

Operating System (HP-UX or Solaris)
GNU, Tcl/Tk
WxWorks (TORNADO)
RTAP
MIDAS
VLT Common Software

Possible configurations: Full-CCS, CCSlite, NOCCS

Disk(s) layout: /vlt /vltdata /data

Standard Environment (see FEB99/Release Notes):
/vlt/System/config/<host>.cshrc
~/config/<host>.cshrc.local
~/.cshrc.local

The Verification process, as part of the Installation, provides a "guided tour of the VLT Common Software"

Other information on the "VLT Common Softare Overview" and in the Release Notes, available on WEB
http://www.eso.org/projects/vlt/sw-dev/vltsw/