

Proposal for organization of the CACTUS repository

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The CACTUS Subversion repository is meant to contain technical documentation, firmware, and software source code for common and custom components of the CMS upgrade project. The repository can be located at:

<https://svnweb.cern.ch/trac/cactus/browser>

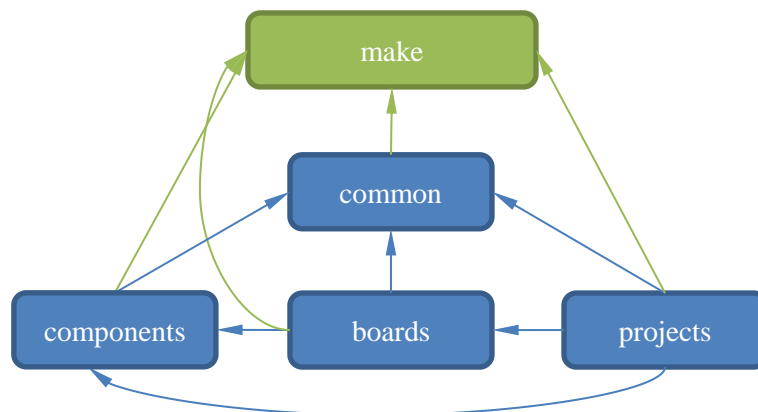
The repository will have the following structure:

- tags
- branches
- trunk
 - Makefile
 - config
 - Makefile.macros
 - firmware_builder
 - scripts
 - ...
 - doc
 - ...
 - cactuscore
 - extern
 - uhal
 - ts
 - components
 - ipbus
 - jtag
 - i2c
 - ...
 - boards
 - mp7
 - fc7
 - ...
 - projects
 - gt
 - gmt
 - dttf
 - ct11
 - ct12
 - ...

Where:

- *Makefile* should compile all the software in the repository and create the corresponding RPMs.
- The *firmware_builder* package is a utility to simplify the assembly and compilation of different firmware modules. It is not, in itself, a component, in the same way that the program “make” and the Makefiles are not components. As such, it may be more appropriate for it to be within the config directory with the Makefile macros.
- The *common* directory should contain common software which has been standardised for CMS.
- The *components* directory should contain common firmware and software which is independent of the hardware. These are meant to be small pieces of “utility” code for standardizing routine tasks.
- The *boards* directory should contain common firmware and software that depends on the specific hardware. Only experts in their particular board should ever need to change what is in here.
- The *projects* directory should contain the end-user’s custom software and firmware.

The software dependencies are then, thus:



And the firmware dependencies are, similarly:

