

## Problem

What targets and options are available in the ACS subsystem Makefile?

## Solution

The ACS Subsystem Makefile follows the standard defined for all ALMA Subsystems, but has some extra targets that can be used for more flexible build and or testing of ACS.

The most important targets are:

- *build*. Builds the whole ACS. As required for this standard target, does not clean after having built a module. Therefore it uses lot of disk space
- *build\_clean*. As build, but also cleans, saving disk space
- *test*. Runs all modular tests
- *rebuild*. Make a complete rebuild of ACS in an existing ACSROOT directory structure, i.e. without creating a new empty structure.

The following targets provide finer control over the build process:

- *checkModuleTree*. Check all modules for a complete directory structure. It is a step of build. Since the 'cvs co' command does not create empty directories, this target loops over all modules to create the missing directories. The ACS Makefile is being modified to make this step unnecessary.
- *prepare*. Is the first step of build. Before being able to cleanly build and install ACS I need to have available
  - the directory tree
  - the Kit modules: vlt doc acs acstempl
  - doxygen
- *show\_modules*. List all modules that the Makefile will handle in all targets that iterate of modules. The modules variable is built on top of the Makefile and can be overwritten passing to make the MODULES='value' option. This is useful to build/test a subset of the ACS modules. See [this FAQ](#).
- *update*
- *update-clean*. Comes after prepare in the build procedure. The actual build and install of the modules The difference is the same as between build and build\_clean. Use this target if you want to rebuild without destroying the current ACSROOT

## Related articles

- [How can more people do development with ACS on the same machine without disturbing each other?](#)
- [Which ports are used by ACS?](#)
- [Problems connecting to ACS servers on a remote machine: bad /etc/hosts](#)
- [Why does the getComponent method of ZLegacy/ACS.ContainerServices return an object of type None?](#)
- [Why are some of my print statements not showing up in the container output section of acscommandcenter?](#)