## Problem

Some RTAI files need root permission and S-bit. But these are lost with a binary installation of ACS

## Solution

Installing the binary ACS package results in the ownership of every unpacked file being that of the unpacking user, e.g. tjuerges.staff, if the user is by any reason not root.

This is the normal behavior of the tar command and is for security reasons.

Some files used for RTAI have to be owned by root and must have the S-bit set in order to work properly.

These settings are lost when installing ACS from the binary distribution.

The affected files are (for ACS 4.1):

- /alma/ACS-4.1/ACSSW/bin/loadLkmModule
- /alma/ACS-4.1/ACSSW/bin/unloadLkmModule
- /alma/ACS-4.1/ACSSW/bin/loadcalibrationTest
- /alma/ACS-4.1/ACSSW/bin/unloadcalibrationTest
- /alma/ACS-4.1/ACSSW/bin/loadswitchTest
- /alma/ACS-4.1/ACSSW/bin/unloadswitchTest

Starting up real time components will result in an error message and a non functional component.

Checking the modules out and rebuilding/installing them solves the problem as well (with the appropriate ssh setup). This is the preferred solution, because it is in any case better to requild on the target machine all kernel/rtai modules.

Changing the ownership back to root.root and chmod u+s for those files makes them work again as well.

-- GianlucaChiozzi - 26 Jul 2005

## 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?