ASSIST2CCM: Requirements

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Required software modules

We describe below the software tools needed to develop a CCM component, which will encapsulate an ASSIST program:

1. **Bash shell**
   
   Our scripts are designed to be used with this shell. Other shells are not supported.

2. **ASSIST 1.2 (last version, as of September 2004)**
   
   The ASSIST compiler (*astCC*) is used to compile ASSIST applications.

3. **Multi-platform CLAM**
   
   The standard CLAM, provided with ASSIST, is not suitable. In order to launch ASSIST applications wrapped as CCM components, the multi-platform CLAM is needed, which is able to manage data-exchange using the CDR coding and to support the execution of two different instances of assistrun. Please note that the old CLAM is no longer supported by the ASSIST compiler; the multi-platform CLAM tested with the CCM wrapping is the one within the ASSIST compiler source distribution, version 1.2 rc2.

4. **OpenCCM, version 0.8.0 or 0.8.1**
   
   OpenCCM is the framework we chose to realize our CCM components. It is completely written in JAVA and it needs a compatible ORB in order to run correctly. We tested two versions:
   
   - Version 0.8.0 (on our cluster *c1*).
   - Version 0.8.1 (on our cluster *pianosau*).

   We installed OpenCCM version 0.8.1 in order to test OpenORB version 1.4.0.BETA1 which should support SSL connection. Unfortunately, our tests failed: the SSL layer does not seem to work as expected.

5. **JAVA**
   
   We tested two different versions of JAVA:
   
   - Version 1.4.2_02 (cluster *c1*).
   - Version 1.4.2_03 (cluster *pianosau*).

   As soon as we will be able to use the SSL connections offered by OpenORB, the JAVA JSSE package will be also needed.
6. **OpenORB, version 1.3.1 or 1.4.0.BETA1**

We tested two OpenORB versions:
- Version 1.3.1 was tested with both OpenCCM 0.8.0 and 0.8.1 (on cluster `c1`).
- Version 1.4.0.BETA1 was tested with OpenCCM 0.8.1 (on cluster `pianosau`).

7. **ASSIST2CCM 1.0**

This tool analyzes a source ASSIST program and creates the files needed to encapsulate the application within a CCM component. In the distribution, the user can find a `taskccm` directory, which contains the supporting scripts. They compile the IDL3 files, the stub and skeleton files, the component source code. In the same directory, a script called `assist2ccm.sh` compiles the final application and the wrapping component starting from an ASSIST application.