

caGrid 1.0 Infrastructure Installer

This document describes the steps necessary to download, install, build, and run caGrid.

Prerequisites:

You should have either prior knowledge of installing Java 5 or have Java 5 pre-installed on the user's target machine. (To determine if Java 5 exists on the target machine, search for a Java folder having a JRE subdirectory (e.g., jre1.5.0_06). In order to build and run caGrid you must have the Java SDK installed and the environment variable JAVA_HOME set to the directory in which it is installed.

Instruction Steps:

Target Machine Cleanup

Remove or delete the .gridenv.properties file from the user home directory if it is present. (For example, in Windows XP this directory is C:\Documents and Settings*<username>*)

Download the Installer:

1. Download the caGrid 1.0 Infrastructure Installer, named caGrid-1.0_Installer.jar from the caGrid 1.0 file release section:
http://gforge.nci.nih.gov/frs/?group_id=25&release_id=952
2. To download, right click on the file and Select the 'Save Target As...' option.
3. The File Download window will display and then the Save As window will display with a File name. If the file name ends with .zip rename the file extension to .jar.
4. Select a directory to download the installer to in the Save As window and click on the Save button to save the file to your target machine directory.
5. The download will take a few minutes to complete downloading the 109 MB file. How long is dependent on the target machine's Internet environment. Please be patient.
6. To verify the file downloaded successfully, navigate to your target directory and look for the file.

Launch the Installer:

7. From your target directory, double-click the caGrid-1.0_Installer.jar executable jar file to launch the installer.
8. Wait a few seconds for the installer to start. If it does not start within a minute using this method, then start it from the command line. There will be no visible acknowledgement that the executable is running until the caGrid 1.0 Acknowledgements splash screen displays.

To execute from the command line on a MS-Windows operating system:

1. Select START from the MS-Windows task bar.
 2. Select Run option.
 3. Type 'cmd' in the Run text box, and click on the OK button to initiate the command line prompt.
 4. In the Windows cmd window, change the default directory to point to the target directory in which you downloaded the caGrid-1.0_Installer.jar file.
 5. Type `java -jar caGrid-1.0_Installer.jar` on the command line.
9. When the caGrid 1.0 splash screen displays, the executable will begin file extraction automatically.
 10. When the extraction is complete, the caGrid 1.0 Infrastructure Installation screen will display. Use the Back and Next buttons to navigate through the installation process. Installation will be a one- or two-step process depending on the items you select to be installed.
 11. Follow the prompts on each window to complete the installation process.

ALSO NOTE: Regardless of the directory you tell the installer to use, the installer may use a temporary directory while processing.

Post Installation steps:

The installer will install the caGrid prerequisites, and unzip a caGrid source release in the directory you selected for your “grid home.” Before you can use caGrid, you need to set the relevant environment variables, and build the caGrid source release.

12. Set the following environment variables (examples are shown in the gray boxes):

- a. ANT_HOME = *<the directory you selected for ant>*

```
C:\Documents and Settings\<username>\cagrid-1-0\external\apache-ant-1.6.5
```

- b. CATALINA_HOME= *<the directory you selected for tomcat>*

```
C:\Documents and Settings\<username>\cagrid-1-0\external\jakarta-tomcat-5.0.28
```

- c. GLOBUS_LOCATION= *<the directory you selected for Globus>*

```
C:\Documents and Settings\<username>\cagrid-1-0\external\ws-core-4.0.3
```

13. Open a command line and change directories to the “caGrid” directory in the location in which you installed caGrid.

```
cd C:\Documents and Settings\<username>\cagrid-1-0\caGrid-1.0\caGrid
```

14. Type “ant clean all” (this only needs to be done once, and will build caGrid)
15. caGrid is now built and its tools can be used; consult the caGrid documentation for additional details. You may also type “ant -p” for a short list of available caGrid tools and commands.

Known Issues:

- 1) **Scenario:** User has Certificate Authority in place and wants to create host certificate and key using existing CA
What is required to do: The root CA has to be copied to `${user.home}/.globus/certificates` directory with a `digit` extension manually
- 2) **Scenario:** User has existing host certificate and host key and uses these credentials to configure the container
What is required to do: The user has to copy the signing CA certificate to `${user.home}/.globus/certificates` directory with `digit` extension
- 3) **Scenario:** User wants to configure the existing Tomcat container using installer and Globus already has been deployed non-securely on Tomcat.
What will happen: In this case, the deployed services may not work properly. Certain jar files may be copied to more than one place leading to some exceptions at run time
- 4) **Scenario:** User is running installer behind corporate firewall.
What will happen: If prerequisites are requested to be installed by the installer, it needs to access the Internet, and will fail if proxy settings are needed.
- 5) **Scenario:** During the execution of the installer, multiple windows are opened.
What will happen: On some operating systems, new windows may appear, behind existing windows. If the installer appears frozen, make sure a window is not requesting input.