

Install Instructions for SAS Clinical Standards Toolkit in SAS V9.1.3

Document Version 3.0

Pre-requisites

The installation uses Apache Ant scripts to move and edit files. Prior to following the instructions below, you should have the following installed and accessible on your system.

- Apache Ant V1.7.1, available from <http://ant.apache.org>. Select the **binary** version of ant as this is pre-compiled and ready to run with your Java Environment. Please make sure that your Java Environment meets the pre-requisites for ant.
- Ant-Contrib V1.0b3 or higher available from <http://ant-contrib.sourceforge.net>.
At the time of writing the latest was labelled **1.0b3** on the download page (see screenshot at the end of the document). Expanding this selection allows it to be downloaded as source code or a pre-compiled version. The precompiled version was named **ant-contrib-1.0b3-bin.zip**.

Perform the following steps on your local pc, realizing your steps may vary some from those documented here. Download the precompiled zip file to your system and expand the zip file. Within the directory created there will be a file called ant-contrib-1.0b3.jar. Copy this file to the \lib directory of your ANT installation (e.g C:\apache-ant-1.7.1\lib).

You should have downloaded the Clinical Standards Toolkit zip file also.

Information to know prior to starting

In the following scripts, the following “tags” will be used.

<global_library_path>

The directory that you would like the installation procedure to create and use as the global library. The SAS-supplied standards will be installed within this location. The default will be C:\cstGlobalLibrary

<cst_temp_dir>

The directory that you have downloaded the installation zip file to.

<sas_install_dir>

The main installation directory for SAS. If you have installed SAS in the default windows location (C:\Program Files\SAS\SAS 9.1), the value for this will be C:\Program Files\SAS. You should **not** include the SAS 9.1 directory. If you have installed SAS somewhere else, C:\SAS TEST\SAS 9.1 SP4 for example, the value will be C:\SAS TEST.

<sas913_install_dir>

The actual directory for SAS V9.1.3. If you have installed SAS in the default windows location (C:\Program Files\SAS\SAS 9.1), the value for this will be SAS 9.1. If you have installed SAS somewhere else, C:\SAS TEST\SAS 9.1 SP4 for example, the value will be SAS 9.1 SP4.

Installation on Windows

Altering where the install script looks for SAS

The installation script installs the modules in the main SAS directory and then executes configuration scripts from there. By default, this location is set to "C:\Program Files\SAS". If your version of SAS V9.1.3 SP4 is in a different location then you will need to make changes prior to running the installation "bat" file. These are outlined in step 3 below. **It is important that you follow these instructions to ensure that the installation scripts and post installation process will work correctly.**

Installation Steps

1. Unzip the CST-SAS913-windows.zip file within <cst_temp_dir>. You should see two directories called *mva* and *vertical*.
2. Confirm that you are running the correct version of Apache Ant by opening a command window and typing "ant -version" and pressing <enter>. You should see:

```
C:\>ant -version
Apache Ant version 1.7.1 compiled on June 27 2008
C:\>
```

If you do not see the Ant version displayed, something is incorrect and you should recheck the pre-requisites section of this document.

3. In the same command window, change directory to <cst_temp_dir> and then type "ant -f test-foreach.xml". This is a test file that confirms the ant-contrib files are available by printing out lines for each file in C:\. The output will look like:

```
C:\temp\cst-downloads\site>ant -f test-foreach.xml
Buildfile: test-foreach.xml

init:
    [echo] Ant is running from: C:\test\apache-ant-1.7.1\bin\..

taskdef:

mainTarget:
    [echo] This should print out the files in C:\

echoName:
    [echo] c:\AUTOEXEC.BAT

echoName:
    [echo] c:\BOOTSECT.DOS

echoName:
    [echo] c:\CONFIG.SYS

echoName:
    [echo] c:\DRVSPACE.BIN

echoName:
    [echo] c:\IO.SYS

echoName:
    [echo] c:\MENUPREF.BAT

echoName:
    [echo] c:\MSDOS.SYS
```

```
echoName:
  [echo] c:\NTDETECT.COM
...lines omitted...
echoName:
  [echo] c:\x.txt
BUILD SUCCESSFUL
Total time: 1 second
C:\temp\cst-downloads\site>
```

If you see the following (taskdef class cannot be found), there is something incorrect with your installation of ant-contrib. Do not proceed further until this is resolved:

```
C:\temp\cst-downloads\site>ant -f test-foreach.xml
Buildfile: test-foreach.xml
init:
  [echo] Ant is running from: C:\test\apache-ant-1.7.1\bin\..
taskdef:
BUILD FAILED
C:\temp\cst-downloads\site\test-foreach.xml:11: taskdef class
net.sf.antcontrib.logic.ForEach cannot be found
Total time: 0 seconds
C:\temp\cst-downloads\site>
```

4. ***IF YOUR INSTALLATION OF SAS V9.1.3 SP4 IS IN A NON-DEFAULT LOCATION (not C:\Program Files\SAS 9.1) then you should perform the following steps:***

Update the bat file that runs the programs:

- Edit the file <cst_temp_dir>\install-913.bat.
- Change the following line to point to the directory that your version of SAS is installed in:
set MAINSASDIR=C:\Program Files\SAS
This would be the value specified above in <sas_install_dir>.

If the value you entered for <sas913_install_dir> is not the default SAS 9.1 then you will need to perform the following steps:

- Open up your home directory, on windows this will be C:\Documents and Settings\your_userid.
- Create a file called cstinstall.properties and add a single line (replacing <sas913_install_dir> with your value.
sas.dirpath.winnt.sasFoundation.913=<sas913_install_dir>
- Create a file called cstpostinstallconfig.properties and add a single line (replacing <sas913_install_dir> with your value.
this.dirpath.sas.foundation=../<sas913_install_dir>

Performing the above steps will ensure that the installation scripts and post installation process will work correctly.

5. Double click on the "install-913.bat" file.

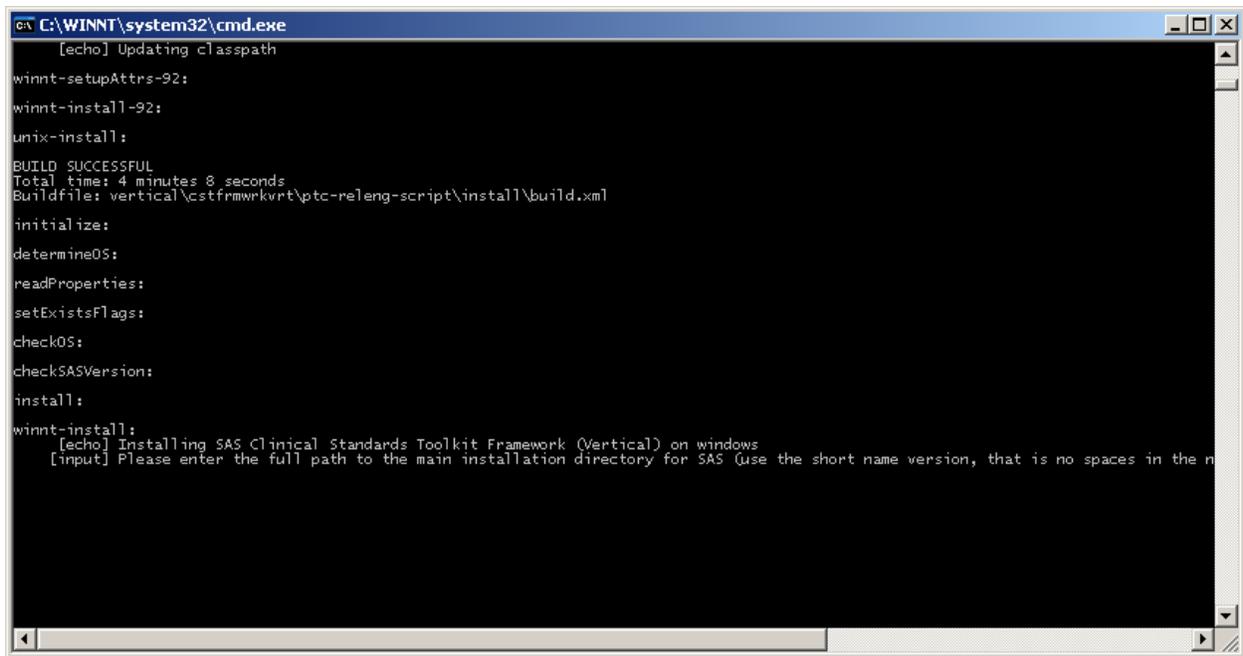
A window will open which will execute the individual ant installation and configuration files for all the modules. You will be asked to enter various pieces of information, sometimes multiple times. This is because the standards are built as individual components with standalone installation procedures.

During this time, you will see various labels and informational messages scroll on the window, similar to:

```
Buildfile: mva\cltoolkt\ptc-releng-script\install\build.xml
initialize:
determineOS:
readProperties:
setExistsFlags:
checkOS:
checkSASVersion:
install:
winnt-install:
  [echo] Installing SAS Clinical Standards Toolkit Framework (MVA) on windows
  [input] Please enter the full path to the main installation directory for SAS
```

CST-FRAMEWORK (Base SAS)

6. A prompt will ask for the full path to the installation directory for SAS. **If you used the default location (C:\Program Files\SAS) you can hit <enter> and continue.** Otherwise enter the value for <sas_install_dir>. You will see more messages scroll in the window. When the next input is required, you should be able to see a BUILD SUCCESSFUL message approx 20 lines up in the console.



```
C:\WINNT\system32\cmd.exe
[echo] Updating classpath
winnt-setupAttrs-92:
winnt-install-92:
unix-install:
BUILD SUCCESSFUL
Total time: 4 minutes 8 seconds
Buildfile: vertical\cstfrmwrk\ptc-releng-script\install\build.xml
initialize:
determineOS:
readProperties:
setExistsFlags:
checkOS:
checkSASVersion:
install:
winnt-install:
[echo] Installing SAS Clinical Standards Toolkit Framework (Vertical) on windows
[input] Please enter the full path to the main installation directory for SAS (use the short name version, that is no spaces in the n
```

CST FRAMEWORK (vertical, library definition)

7. A prompt will ask for the full path to the main installation directory for SAS. Use the same answer you used in step 3 and press <enter>.
8. A prompt will ask for the full path to the location of the SAS Clinical Standards Global Library. The default "C:\cstGlobalLibrary" will be provided. If you want to use this, press <enter>. If not, type in the value for <global_library_path> and press <enter>.
9. A prompt will ask if you want to skip initialization of the CST Global Library. At this point you should take the default of "N" by pressing <enter>. Log lines will scroll and you should also see SAS execute 3 times as it imports the framework tables, initializes the global library and registers the framework to the global library.
10. Once the next prompt is displayed, you should see a "BUILD SUCCESSFUL" line further up in the log.

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11. A prompt will ask for the full path to the main installation directory for SAS. Use the same answer you used in step 3 and press <enter>. Log lines will scroll and you should also see SAS execute 2 times as it imports the tables and registers the standard to the global library.

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12. A prompt will ask for the full path to the main installation directory for SAS. Use the same answer you used in step 3 and press <enter>. Log lines will scroll and you should also see SAS execute 2 times as it imports the tables and registers the standard to the global library.

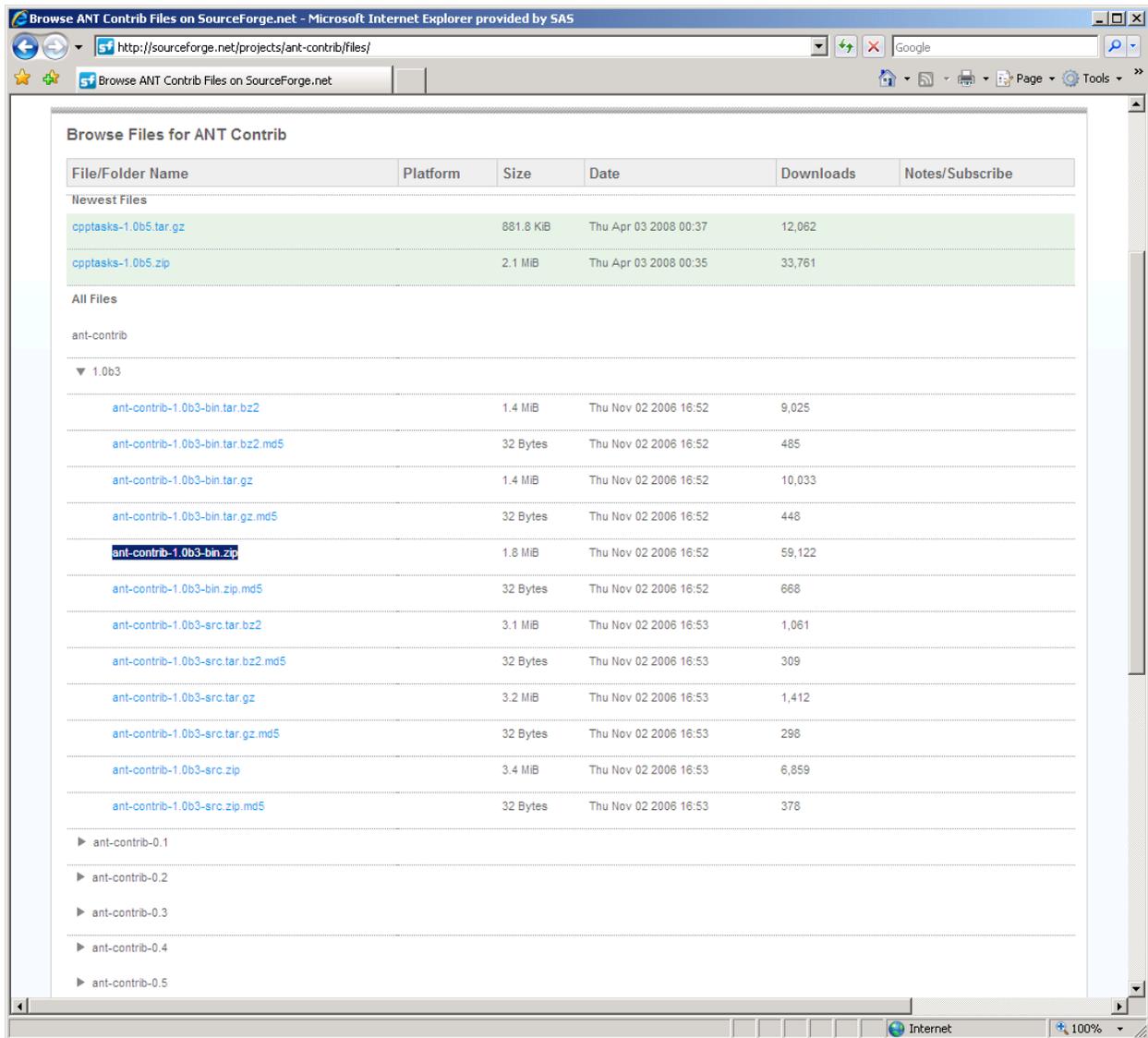
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13. A prompt will ask for the full path to the main installation directory for SAS. Use the same answer you used in step 3 and press <enter>. Log lines will scroll and you should also see SAS execute 2 times as it imports the tables and registers the standard to the global library.

The command window will then disappear. The installation and configuration of Clinical Standards Toolkit is complete.

Screenshots

Ant Contrib download page at the time of writing with the pre-compiled version highlighted.



The screenshot shows a Microsoft Internet Explorer browser window displaying the SourceForge project page for ANT Contrib. The browser's address bar shows the URL <http://sourceforge.net/projects/ant-contrib/files/>. The page title is "Browse Files for ANT Contrib".

File/Folder Name	Platform	Size	Date	Downloads	Notes/Subscribe
Newest Files					
cpptasks-1.0b5.tar.gz		881.8 KiB	Thu Apr 03 2008 00:37	12,062	
cpptasks-1.0b5.zip		2.1 MiB	Thu Apr 03 2008 00:35	33,761	
All Files					
ant-contrib					
▼ 1.0b3					
ant-contrib-1.0b3-bin.tar.bz2		1.4 MiB	Thu Nov 02 2006 16:52	9,025	
ant-contrib-1.0b3-bin.tar.bz2.md5		32 Bytes	Thu Nov 02 2006 16:52	485	
ant-contrib-1.0b3-bin.tar.gz		1.4 MiB	Thu Nov 02 2006 16:52	10,033	
ant-contrib-1.0b3-bin.tar.gz.md5		32 Bytes	Thu Nov 02 2006 16:52	448	
ant-contrib-1.0b3-bin.zip		1.8 MiB	Thu Nov 02 2006 16:52	59,122	
ant-contrib-1.0b3-bin.zip.md5		32 Bytes	Thu Nov 02 2006 16:52	668	
ant-contrib-1.0b3-src.tar.bz2		3.1 MiB	Thu Nov 02 2006 16:53	1,061	
ant-contrib-1.0b3-src.tar.bz2.md5		32 Bytes	Thu Nov 02 2006 16:53	309	
ant-contrib-1.0b3-src.tar.gz		3.2 MiB	Thu Nov 02 2006 16:53	1,412	
ant-contrib-1.0b3-src.tar.gz.md5		32 Bytes	Thu Nov 02 2006 16:53	298	
ant-contrib-1.0b3-src.zip		3.4 MiB	Thu Nov 02 2006 16:53	6,859	
ant-contrib-1.0b3-src.zip.md5		32 Bytes	Thu Nov 02 2006 16:53	378	
▶ ant-contrib-0.1					
▶ ant-contrib-0.2					
▶ ant-contrib-0.3					
▶ ant-contrib-0.4					
▶ ant-contrib-0.5					