Building APE

- 2.8

2.8

1. Download heasoft source from: http://heasarc.nasa.gov/lheasoft/download.html
2. Unpack the tarball
3. cd BUILD_DIR
4. ./configure --prefix=blah --with-components="heacore" >& config.out &
5. make heacore >& build.log &
6. make install

2.6

These are instructions for building APE 2.6 for the various supported OSes.

redhat5-i686-64bit-gcc41

These instructions should be performed as the glastrm user on a machine running rhel5 in 64bit mode (noric15 as of this writing).

1. Obtain APE 2.6 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit-gcc41/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit-gcc41/ape
3. Unzip and Untar the file ape-2.6-src.tar.gz
4. Change directory to ape-2.6
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit-gcc41/ape/2.6/gcc41
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.6 directory

redhat5-i686-32bit-gcc41

These instructions should be performed as the glastrm user on a machine running rhel5 in 32bit mode (bldlnx09 as of this writing).

1. Obtain APE 2.6 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit-gcc41/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit-gcc41/ape
3. Unzip and Untar the file ape-2.6-src.tar.gz

4. Change directory to ape-2.6
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit-gcc41/ape/2.6/gcc41
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.6 directory

redhat4-x86_64-64bit-gcc34

These instructions should be performed as the glastrm user on a machine running rhel4 in 64bit mode (noric14 as of this writing).

1. Obtain APE 2.6 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape
3. Unzip and Untar the file ape-2.6-src.tar.gz
4. Change directory to ape-2.6
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape/2.6/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.6 directory

Windows-i386-32bit

1. Obtain the source from James Peachey or from /afs/slac/g/glast/ground/GLAST_EXT/srcExtLibs
2. Unzip and Untar
3. Create bin and lib directories - otherwise the resulting binaries will not be stored in the appropriate directories and will be written under the vc7 or vc8 directory.
4. Open the vc7 sln solution file in Microsoft Visual C++ 7.1 or open vc8 solution file for Visual Studio 9
5. Set to Release mode
6. Set Multi-threaded for all libraries and executables
7. Build the solution resulting in the apelib and associated applications
8. Create a new zip file containing bin, doc, include, and lib

redhat4-i686-32bit-gcc34

These instructions should be performed as the glastrm user on a machine running rhel4 in 32bit mode (noric09 as of this writing).

1. Obtain APE 2.6 source code from James Peachey or from /afs/slac/g/glast/ground/GLAST_EXT/srcExtLibs and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit-gcc34/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit-gcc34/ape
3. Unzip and Untar the file ape-2.6-src.tar.gz
4. Change directory to ape-2.6
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit-gcc34/ape/2.6/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.6 directory

tiger-i386-32bit-gcc40

These instructions should be performed as the glastrm user on a machine running tiger in 32bit mode (bldmac01 as of this writing).

1. Obtain APE 2.6 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit-gcc40/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit-gcc40/ape
3. Unzip and Untar the file ape-2.6-src.tar.gz
4. Change directory to ape-2.6
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit-gcc40/ape/2.6/gcc40
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.6 directory

2.5.3

These are instructions for building APE 2.5.3 for the various supported OSes.

redhat5-i686-64bit

These instructions should be performed as the glastrm user on a machine running rhel5 in 64bit mode (noric15 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit/ape

3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat5-x86_64-64bit/ape/2.5.3/gcc41
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

redhat5-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel5 in 32bit mode (bldlnx09 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape/2.5.3/gcc41
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

redhat4-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel4 in 32bit mode (noric09 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape/2.5.3/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

redhat4-x86_64-64bit

These instructions should be performed as the glastrm user on a machine running rhel4 in 64bit mode (noric14 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape/2.5.3/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

redhat3-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel3 in 32bit mode (noric02 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape/2.5.3/gcc32
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

leopard-i386-32bit

These instructions should be performed as the glastrm user on a machine running leopard in 32bit mode (bldmac02 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape/2.5.3/gcc40

6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

tiger-i386-32bit

These instructions should be performed as the glastrm user on a machine running tiger in 32bit mode (bldmac01 as of this writing).

1. Obtain APE 2.5.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape
3. Unzip and Untar the file ape-2.5.3-src.tar.gz
4. Change directory to ape-2.5.3
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape/2.5.3/gcc40
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.3 directory

Windows-i386-32bit

1. Obtain APE 2.5.3 source code from James Peachey
2. Unzip and Untar the file ape-2.5.3-src.tar.gz
3. Open the Visual Studio solution in the vs8 dirctory, using Visual Studio 2008.
4. Allow Visual Studio to upgrade the solution for Visual Studio 2008.
5. Build apelib and all the associated applications
6. Copy the files into the directory structure expected by Fermi, creating a lib directory for apelib, bin for the applications, and copying over the includes from the source.
7. Copy onto the V: drive in V:\Glast_Software\Toaster\GLAST_EXT\Windows-i386-32bit
8. Create a compressed file and store in /nfs/farm/g/glast/u05/extlib/VC90

2.5.1

These are instructions for building APE 2.5.1 for the various supported OSes.

redhat5-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel5 in 32bit mode (bldlnx09 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat5-i686-32bit/ape/2.5.1/gcc41
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

redhat4-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel4 in 32bit mode (glastlnx14 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-i686-32bit/ape/2.5.1/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

redhat4-x86_64-64bit

These instructions should be performed as the glastrm user on a machine running rhel4 in 64bit mode (noric13 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1

5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat4-x86_64-64bit/ape/2.5.1/gcc34
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

redhat3-i686-32bit

These instructions should be performed as the glastrm user on a machine running rhel3 in 32bit mode (noric02 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/redhat3-i686-32bit/ape/2.5.1/gcc32
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

leopard-i386-32bit

These instructions should be performed as the glastrm user on a machine running leopard in 32bit mode (bldmac02 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape/2.5.1/gcc40
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

tiger-i386-32bit

These instructions should be performed as the glastrm user on a machine running tiger in 32bit mode (bldmac01 as of this writing).

1. Obtain APE 2.5.1 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape if it doesn't already exist
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape
3. Unzip and Untar the file ape-2.5.1-src.tar.gz
4. Change directory to ape-2.5.1
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/tiger-i386-32bit/ape/2.5.1/gcc40
6. Execute make
7. Execute make install
8. Leave and erase the ape-2.5.1 directory

Windows-i386-32bit

1. Obtain APE 2.5.1 source code from James Peachey
2. Unzip and Untar the file ape-2.5.1-src.tar.gz
3. Open the Visual Studio solution in the vs8 dirctory, using Visual Studio 2008.
4. Allow Visual Studio to upgrade the solution for Visual Studio 2008.
5. Build apelib and all the associated applications
6. Copy the files into the directory structure expected by Fermi, creating a lib directory for apelib, bin for the applications, and copying over the includes from the source.
7. Copy onto the V: drive in V:\Glast_Software\Toaster\GLAST_EXT\Windows-i386-32bit
8. Create a compressed file and store in /nfs/farm/g/glast/u05/extlib/VC90

2.3-gl1

These are instructions for building APE 2.3-gl1 for the various OSes supported.

leopard-i386-32bit

These instructions should be performed as the glastrm user on a machine running leopard (bldmac02 as of this writing).

1. Obtain a APE 2.3 source code from James Peachey and save to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape if it doesn't already exist.
2. Change directory to /afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape
3. Unzip and Untar the file ape-v2r3-src.tar.gz

4. Change directory to ape
5. Execute ./configure --prefix=/afs/slac/g/glast/ground/GLAST_EXT/leopard-i386-32bit/ape/2.3-gl1/gcc40
6. Execute make
7. Execute make install
8. Leave and erase the ape directory