Instructions for the Geant4 and ROOT courses

We offer two procedures for using the Geant4 toolkit and Root analysis tool. We suggest to try to use the first one and, in case of problem, switch on the second one.

1. Virtual Machine

Work with a pre-configured Virtual Machine (VM), developed with the VMware tool.
In this VM a Linux operating system has been already pre-installed with an installation of the Geant4 toolkit and ROOT analysis tool. Additional graphical libraries (Qt and Xm) have been also installed in order to facilitate the practical sessions of the course. You can download the VM going to the following link:

http://geant4.lngs.infn.it/VirtualMachineGeant4.10.p01.zip

you download that, you can uncompress VirtualMachineGeant4.10.p01.zip with the following softwares:

•WinZip: a trial Version is available here at:
http://www.winzip.com/win/it/index.html

(Only for Windows Operating system)

•7-Zip Open source software.
It is possible to download it at http://www.7-zip.org/download.html for both the Linux operating system that Windows.
or
It is possible to install it directly via "Add/remove software" in your Linux packages administration. The command line to extract VirtualMachineGeant4.10.p01.zip by terminal Linux is:

 unzip VirtualMachineGeant4.10.p01.zip

To run the Virtual Machine, it is necessary to install VMware software (VMware Player for Windows and Linux OS and VMware Fusion for Mac OS), that is the easiest way to run multiple operating systems at the same time on your PC (it is suggested to download and install it before the first lesson).
VMware Player program installer, only for Windows and Linux OS, is available at:

https://my.vmware.com/web/vmware/free#desktop_end_user_computing/vmware_player/7_0

For Mac OS X, a trial (free for 30 days) version of VMware Fusion is available at the following link:

http://www.vmware.com/products/fusion/fusion-evaluation.html

Once you have downloaded the VM, you can open that and login as:

Username:
user
Password:
user

For the practical session of the Geant4 and Root course we suggest to work with the pre-configured "user", avoiding to use "root".In case, for future modification of the VM, you may need to login as "root" user, you can use the following password: **scilinux6.**

2. SSH connection :

For Linux OS : No additional software has to be installed. To connect to the machine, just open a shell and digit:

ssh –X userX@10.0.0.5
from user 1 to user10

ssh -X userX@10.0.0.6
from user11 to user20

and enter the password: geant4user

For Windows OS : work with SSH Secure Shell(or putty) and Xming-mesa (both freeware), to connect remotely to computers where the Geant4 toolkit and the Root analysis tool have already been installed.
Xming-mesa program installer is available at:
http://geant4.lngs.infn.it/corso_infn/Xming-mesa.exe
Additional fonts (necessary only if you want to use emacs as text editor) can be downloaded from here:

http://geant4.lngs.infn.it/corso_infn/Xming-fonts-7-5-0-8-setup.exe
(documentation is at:http://www.straightrunning.com/XmingNotes/).

SSH Secure Shell program is available at:
http://www2.ohlone.edu/downloads/SSHSecureShellClient-3.2.9.exe
Xming server must be launched before starting the SSH connection.
To configure the SSH connection with graphics windows, just open menu
Edit->Settings->Tunneling SSH Secure Client , select "Tunnel X11 connections" option and click OK.
Moreover, we invite participants who are interested on working with the toolkit Geant4 to directly install the toolkit on their own operative system (Linux or Mac).
We will give you all the necessary support to fix eventual installation problems.