Installation for the Samba/Tango code compilation

A. Preliminaries

1. Have **Xcode** installed **BUT NOT RUNNING**.
2. Open a shell session with Terminal.
3. Choose a top directory, if possible your home directory. This directory will be called **\<TopDir\>** from now.
4. Copy **CompileSamba.tar** inside, **cd** to **\<TopDir\>** if necessary, and untar it
   - this creates 2 main directories in **\<TopDir\>;**
   - one is **Prgm**, dedicated exclusively to *compilation*, particularly to build new versions of Samba or Tango;
   - the other is **Acquis**, dedicated exclusively to *run data acquisition* (simulated or not), including the user's experiment setup, also to run data analysis.
5. **cd** to **\<TopDir\>/Prgm/**

B. Quick installation

6. Run **./full_install** (macOS < 15) or **./full_install_64** (macOS ≥ 15)
7. Report directly to the paragraph E, <u>Running Samba</u>.

C. Compiling projects separately

8. Run **./install_xcode**
   - this defines some Xcode-wide settings, of which some are rather important.
9. Run **open std/librairies/compil/Xcode2.4/Librairies.xcodeproj/**
   - this should start Xcode with the project **Librairies**
10. On the top toolbar of Xcode, select **Librairies** (macOS<15) or **Lib64** (macOS≥15)
11. From the menu bar, click on **Product > Build**
    - this should compile all the libraries needed at some time by Samba, Tango and auxiliaries;
    - if the settings are set as requested in (8), there should be a very few warnings, excepted when compiling the files **wnd.c** and **ellf.c** (nothing serious).
12. From the terminal, again from **\<TopDir\>/Prgm/**, run:
    - **open edw/compil/Xcode2.4/Samba/Samba.xcodeproj/**
    - this should start Xcode with the project **Samba**
13. On the top toolbar of Xcode, select **Samba** (macOS<15) or **Gasol** (macOS≥15)
14. From the menu bar, click on **Product > Build**
    - this should create the application **Samba.app** or **Gasol.app**
    - if the settings are set as requested in (8), there should be *no* warnings.
15. You may compile Tango as well, like told on (12), (13) and (14), but replacing all "**Samba**" by "**Tango**" (macOS<15) or **Gigas** (macOS≥15).

D. Getting an experiment definition

16. From the terminal, **cd** to **\<TopDir\>/Acquis**
17. Move the contents of the **Top_for_news** directory to the current directory (**\<TopDir\>/Acquis**)
    - You can run **open .** then **open Top_to_news** to be able to move easier the files with the mouse.
18. Run **./install_samba** (macOS<15) or **./install_64** (macOS≥15).

E. Running Samba

19. You got 3 permanent icons in your Dock:
    - **`StartSamba`**: if you click on it, Samba or Gasol is started, using the parameters listed in **`SambaArgs`**, whose location is given in the first line of **`$(HOME)/.samba_top`**;
    - **`VersionSamba`**: allows you to change the version in service, significantly to go back to a previous version, when the last one is deficient;
    - **`ReportSambaCrash`**: if you click on it, it should send me the last Apple's System Crash Report of Samba.

20. You can then immediately click on the Dock icon **`StartSamba`** and begin to play with Samba/Gasol. You should have a sphere emulation running. From the popup menu "**`Display`**" in the menu bar, click on **`Oscilloscope`**, and don't forget to activate the **`Pulser`**..

21. Beyond this, it's a good idea to add permanently to the environment variable PATH, in your shell, the following directories:
    - **`<TopDir>/Acquis/executables`**
    - **`<TopDir>/Acquis/executables/utils`**

22. Also, to define (permanently again in your shell) the following aliases, *for macOS<15*:
    - **`alias samba \`**
      `<TopDir>/Acquis/executables/Samba.app/Contents/MacOS/Samba`
    - **`alias tango \`**
      `<TopDir>/Acquis/executables/Samba.app/Contents/MacOS/Tango`

23. Aliases *for macOS≥15*:
    - **`alias samba \`**
      `<TopDir>/Acquis/executables/Gasol.app/Contents/MacOS/Gasol`
    - **`alias tango \`**
      `<TopDir>/Acquis/executables/Giga.app/Contents/MacOS/Giga`

24. Once you are done with (21) and (22), start a new shell. You can just enter **`samba`** even from your home directory. It's the same as clicking on the Dock icon (20).

F. Running Tango or Gigas

25. Running Tango or Gigas is only from a shell. Indeed, you have to add, as a parameter of the command, the name of the event file generated by Samba/Gasol.