

Table of Contents

Run-time Environment F.A.Q. OBSOLETE.....	1
How to prepare the environment to run an LHCb project.....	1
How to prepare the environment to use an external library/application.....	1

Run-time Environment F.A.Q. OBSOLETE

This page should collect answers to common questions about the run-time environment.

How to prepare the environment to run an LHCb project

To be able to run an LHCb application (like Brunel [↗](#) or DaVinci [↗](#)) you need to prepare the environment for it.

First you need to have a basic LHCb environment. On lxplus.cern.ch it is automatically done, while you can follow simple instructions for windows or for local linux installation [↗](#).

Assuming you want to run DaVinci v19r10 (the latest one at the time this instructions were edited), you simply have to type on the command line prompt

```
# SetupProject DaVinci v19r10
# DaVinci.exe path/to/my/file.opts
```

Note: in some cases, on linux, you have to replace `SetupProject` with `source` `$LHCBSRIPTS/SetupProject.csh` or `.$LHCBSRIPTS/SetupProject.sh` depending on the shell you are using.

If you copied locally and modified some packages in the directory created with `setenvDaVinci`, `SetupProject` will configure the environment to use them instead of the released ones (as long as the application+version you want to use matches the one you have in your local directory).

If you do not specify the version of the application, `SetupProject` will pick up the most recent one.

The script `SetupProject` allows the user to adapt the runtime environment for many special cases without the need of having a local copy of the application main package. Few examples follow:

Give to the application access to external libraries not included by default
for example you may need to use "gfal" to access your data files

```
# SetupProject DaVinci v19r10 gfal
```

Use a version of ROOT different from the one associated with the version of the application you are using
for example ROOT 5.18.00a fixes a bug, but DaVinci v19r10 uses ROOT 5.18.00, so

```
# SetupProject DaVinci v19r10 ROOT -v 5.18.00a
```

Some more information can be obtained with the option `--help`:

```
# SetupProject --help
```

Extensive documentation on `SetupProject` is available at
<https://twiki.cern.ch/twiki/bin/view/LHCb/SetupProject>

How to prepare the environment to use an external library/application

The most common use case for this how-to is to be able to use ROOT or Python with a version compatible with the one used by LHCb software.

One way to do it is to use `SetupProject` (see previous section) with something like

```
# SetupProject Gaudi ROOT
```

which will configure the environment for the latest version of Gaudi, ensuring that you have access to the version of ROOT that is used by it.

If you do not want to have the environment ready for Gaudi (or you do not want to override it), but only for ROOT, you can use the old script `setup_external` (available only on linux). To use it, you have to know from which version of LCG you want to get you external library. For example I want to get ROOT and Python as for LCG version 54:

```
# source $LHCBSRIPTS/setup_external.csh --lcg 54 ROOT Python
```

(or `. $LHCBSRIPTS/setup_external.sh` if you do not use (t)csh).

-- MarcoClemencic - 03 Jul 2007

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