How to run ESO pipelines under Microsoft Windows (*)

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Introduction

ESO supports running its pipelines under recent versions of MacOS and several flavors of Linux. The Microsoft Store for recent version of Windows (10 and above) includes the Windows Subsystem for Linux Version 2 (WSL2). WSL2 allows to run a GNU/Linux environment -- including command-line tools, utilities, and applications -- unmodified directly on Windows, without recompilation or porting, and without the overhead of a traditional virtual machine or dual-boot setup. With the inclusion of WSLg, Windows can be used to run almost any Linux application, including those with GUIs.

Such a Linux environment can be used to run ESO pipelines either from the command line (esorex) or within EsoReflex or EDPS environments. See ESO Data Reduction Pipelines and Workflow Systems for supported installation methods.

FAQs

1. Q: I started an EsoReflex workflow, but it seems to hang without any progress.
   A: In most cases, the reason is that EsoReflex is waiting for input, but the input window is closed. Check the task bar for windows related to EsoReflex and open them.
2. Q: My data are stored in a folder “my_data_dir” on my C: disk. How can I configure EsoReflex/EDPS to use them?
   A: If your files on disk C: they can be accessed from within WSL as /mnt/c/my_data_dir. This path should be specified as EsoReflex’ BOOKKEEPING_DIR either from the command line or on the workflow. For further details, see any of the Reflex tutorials. Similarly this path can be specifed as the inputs path 'in the usual way' for EDPS.
3. Q: The Ubuntu window does not support a feature I use in my Linux terminal emulator. How can I work around it?
   A: Any terminal emulator available under Ubuntu can be installed and used. For example, xterm can be installed from the ubuntu window using “sudo apt-get xterm”.
4. Q: I want to use some other astronomical software to display or examine the files within EsoReflex. How can I do this?
   A: Virtually any software that is available under Ubuntu such as DS9 can be installed and used using the regular Linux installing procedure (e.g. apt-get).
5. Q: When starting ESOReflex, I get the error message "Can't connect to X11 window server using 'localhost:0.0' as the value of the DISPLAY variable." What is going on?
   A: This means that the Xserver is not waiting for input as local display 0.0. Make sure you are using the latest version of WSL2 (which includes the WSLg Xserver).

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