ESO pipelines on the latest (unsupported by ESO) Fedora release(s)

John Pritchard - 2022-05-20 - Comments (0) - Data processing and analysis software resources

The list of supported OS distributions/versions is specified on the VLT Instrument Pipelines webpage. Supported means we maintain RPM repositories for these versions.

RPM repositories for older Fedora release might still be available, but there is no guarantee and they will eventually disappear. In addition they are no longer being updated with the latest versions of the pipeline software.

Support for newer versions of Fedora (and macOS) will probably be added at the time of the next Public Release cycle, usually annually in May. Exceptionally, support may be added at other times.

So, to install esoreflex and/or the pipelines on a computer running a not-yet-supported newer Fedora version there are several options.

Install scripts method

The install_esoreflex and/or install_pipelinekit script method is the officially supported method for non-supported distributions/release-versions. It is the most reliable, but also the least flexible method. See the dedicated Mini guide to installing ESO pipelines via install scripts Knowledgebase article.

Using RPMs from a previous release

You could try installing the RPMs from a previous Fedora version, generally it is best to use the version closest to yours, which of course generally means the latest version supported.

This method has been successfully used in the past but is not guaranteed -- sometimes the differences between Fedora versions are too great and the packages from an older Fedora version simply will not work on the newer Fedora version.

On the otherhand, this is the most convenient method because it allows you to easily add, remove and upgrade pipeline packages as you need them (with the install script methods above, you need to rebuild the entire software stack each time you want to add/remove/upgrade a pipeline package).

Note: The following instructions should be considered as an experimental procedure that you use at your own risk. It is NOT fully supported and support from ESO User Support can only be given on a best effort basis. Therefore it goes without saying, hence we say it explicitly "ESO takes ZERO responsibility for any loss or damage of any kind resulting from
the following procedure".

Note also we can not guarantee the **scientific efficacy** of software installed in this way. To be 100% certain you should compare the results of processing data (e.g. the demo data packages) with software installed via this method with the results of processing the same data installed on a supported distribution/release-version and/or installed via the instal scripts method.

With all these caveats in mind, here's how you would nonetheless actually do it...

```bash
export supFCver=35  # replace 35 with the latest supported release version
cd /tmp
sed -i -e "s/esorepo/esorepo-fedora${supFCver}/" -e "s/$releasever/${supFCver}/" -e 's/enabled=1/enabled=0/' esorepo-fedora${supFCver}.repo
sudo dnf config-manager --add-repo=esorepo-fedora${supFCver}.repo
```

The older repo should now be installed, but disabled by default (so that once your version is supported the normal installation method will then find and use that distribution, rather than this older one).

You should be able to install the RPPMs for a given instrument `<inst>` with

```bash
export plinst=xshoo   # replace xshoo with the pipeline name of the instrument you want
sudo dnf --enablerepo=esorepo-fedora${supFCver} install esopipe-${plinst}-all
```

Or for a minimal, esoreflex supported install:

```bash
sudo dnf --enablerepo=esorepo-fedora${supFCver} install esopipe-${plinst}-\{wkf,static\}
```

Or for a minimal, (commandline only) esorex supported install:

```bash
sudo dnf --enablerepo=esorepo-fedora${supFCver} install esopipe-${plinst}-\{recipes,static\}
```

Using SRPMs from a previous release

You could try **building** RPMS for your Fedora release from the **source RPMs** of a previous release. For example to use those of the Fedora 35 release:

```
```

This method is much more involved. You would need to download the source RPMs (SRPMs) -- either ALL of them, or or just the ones you need, and then build and install each one in
the appropriate order. I would only suggest this is if using the RPMs of a previous release
doesn't work... (If you are familiar with building RPMs then this method is probably better
than the install script method, but otherwise it has a lot of overhead compared to the install
script method...)