Starting the Core Services

The *core services* of the Common-EGSE are those services that should be running all the time and preferably on the dedicated EGSE server. In the production environment, i.e. when we are actually running the tests in the lab, these services will be started automatically when the system boots [XXXXX make a reference to the server installation procedure Systemd]. During our development and when using the Common-EGSE outside of the Camera Test environment, we can start the core services on our local machine.

When the system is properly installed, you should have an `invoke` command available from the terminal. When you run it with the `--list` option, it will show which commands are available.

```
$ invoke --list
```

```
Available tasks:
```

```
generate-docs    Generate the documentation for this project.
pytests          Run the tests for this project.
start-core-egse  Start the Core Common-EGSE services.
stop-core-egse   Stop the Core Common-EGSE services.
upload-docs      Upload the documentation to GitHub pages.
```

Some of these commands are for development purposes, but the `start-core-egse` and the `stop-core-egse` commands can be used to start/stop the core services.

```
$ invoke start-core-egse
Starting log manager..
Starting storage manager..
Starting configuration manager..
Starting process manager..
Starting synoptics manager..
```

The servers are started in a background job.[1] To see if they are indeed started, you can run the following in your terminal:

```
$ ps -ef|grep _cs
  459800007 64147     1   0  2:25PM ttys001    0:00.42
/Library/Frameworks/Python.framework/Versions/3.8/Resources/Python.app/Contents/MacOS/
  Python /Users/rik/Git/plato-common-egse/venv38/bin/log_cs start
  459800007 64148     1   0  2:25PM ttys001    0:02.73
/Library/Frameworks/Python.framework/Versions/3.8/Resources/Python.app/Contents/MacOS/
  Python /Users/rik/Git/plato-common-egse/venv38/bin/sm_cs start
  459800007 64162     1   0  2:25PM ttys001    0:07.90
/Library/Frameworks/Python.framework/Versions/3.8/Resources/Python.app/Contents/MacOS/
  Python /Users/rik/Git/plato-common-egse/venv38/bin/cm_cs start
  459800007 64171     1   0  2:25PM ttys001    0:03.14
/Library/Frameworks/Python.framework/Versions/3.8/Resources/Python.app/Contents/MacOS/
  Python /Users/rik/Git/plato-common-egse/venv38/bin/pm_cs start
  459800007 64180     1   0  2:25PM ttys001    0:02.94
/Library/Frameworks/Python.framework/Versions/3.8/Resources/Python.app/Contents/MacOS/
  Python /Users/rik/Git/plato-common-egse/venv38/bin/syn_cs start
```

Keep the core services running, they do not harm and other components of the Common-EGSE need these services. But, if you want to stop them anyway at the end of a long working day, just use:

```
$ invoke stop-core-egse
```

[1] After the storage manager started, there will be a short delay of 2 seconds, this allows the service to fully start and initialise before the other services (confman & procman) try to register to the storage.