

# ESO

## Esi and Eso

Traces of Esterel-programs are usually given as Esi and Eso file. Esi files only specify inputs, Eso files contains also the outputs. Since the outputs are given as special comments, every valid Eso file is also a valid Esi file. For a given Esterel program prog.strl, there are two ways to generate the resulting Eso file:

### via Esterel Studio

- Using the command line, we first have to create a new project

```
estudio --create-project prog.etp
estudio --insert prog.strl prog.etp
```
- Now we have to set the main module. Lets assume, that the main module is called prog, as the file.

```
sed 's/<configuration>l4<\/configuration>/<configuration>l4<\/configuration>\n<\/Prop>\n<Prop id="17"
name="@ESTUDIO_COMPILATION:main_module">\n<value>prog<\/value>\n<configuration>l4<\/configuration>\n<\/
\/Prop>\n<Prop id="18"
name="@ESTUDIO_TESTBENCH:esifile">\n<value>prog.esi<\/value>\n<configuration>l4<\/configuration>/' prog.
etp > /tmp/prog.etp
mv /tmp/prog.etp > .
```
- Now we can generate a scenario

```
estudio --v5 -cs prog.etp
```

The file ./Default/Simulation/Scenarios/missing.esi is generated.

- The next step is to generate a executable for the esterel file:

```
estudio -y --v5 -g prog.etp
estudio -y --v5 --simul GenExe prog.etp
```

This generates ./Default/Simulation/prog.exe.

- The resulting output file is for the scenario is generated by ./prog.exe -nographic -signal\_dump=ESI,prog.eso missing.esi