

B Running *verds*

To start the model checking tool *verds*, the following command may be used:

```
system_prompt> verds [command line options] [input-file] RET
```

Verification of a hierarchical (or concurrent) discrete system model: the model and the properties must be specified in the input-file. The truth of the specified properties or a chosen one (specified by the command line options) in the system is evaluated.

Verification of a C-program: one must use the option “-c” to specify a C-program file for verification, and “-sp” to specify the safety property of the program.

The options are explained as follows.

-ck all	Checks all specified properties (default: -ck all)
-ck 0	Prints the list of the properties in the model
-ck i	Checks the i-th property ($i \geq 1$)
-help (-h) (-?)	Prints the command line help
-v varfile	Uses the variable ordering from file varfile
-bcc	Uses bcc (qbf-based/sat-based bounded checking)
-QBF	Uses bcc (qbf-based bounded checking)
-SAT	Uses bcc (sat-based, for ACTL properties)
-bound k	Sets the <i>bound</i> variable, used by bcc
-qbfsolver solver	Sets the <i>qbfsolver</i> variable, used by bcc
-satsolver solver	Sets the <i>satsolver</i> variable, used by bcc
-c cfile	Check the given C program for safety property
-sp spfile	Uses the specified safety property for the cfile
-fsp fspfile	Uses the additional assumption-guarantee specs