

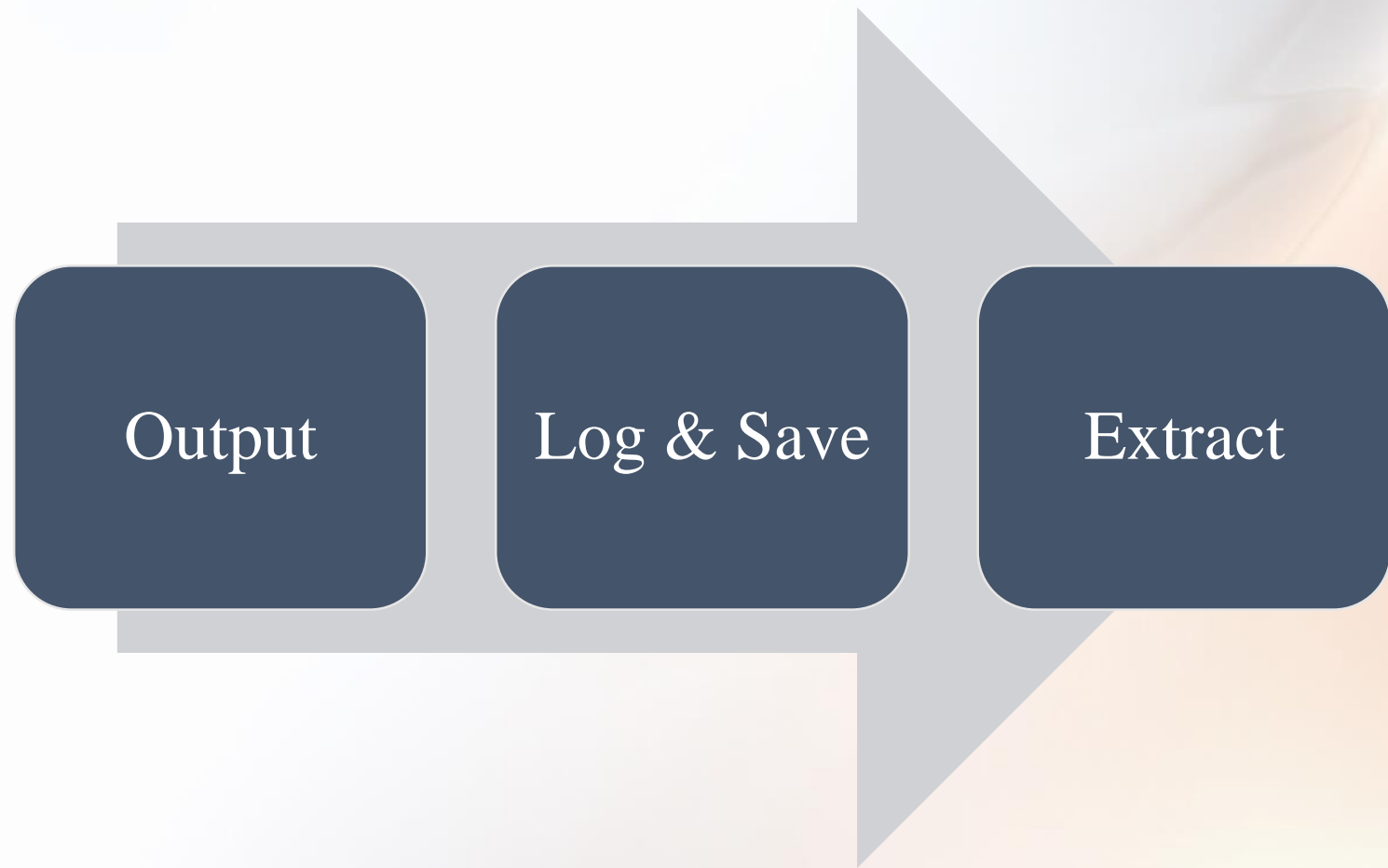
Atlas

Interpreting The Results

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Interpreting The Results



Output

- Several quantities are saved by default within a structure file. You can also specify additional quantities by using the OUTPUT statement (before the relevant SAVE).
- Example, conduction and valence band potentials:

OUTPUT CON.BAND VAL.BAND



Log

- Log files store the terminal characteristics calculated by ATLAS.
 - LOG OUTF=<FILENAME>
- Outputs of all SOLVE statements after the LOG statement until the next LOG statement are saved to this file.



Save

- Structure files provide an image of the device at a particular bias point (from doping profiles and band parameters to electron concentrations and electric fields):

`SAVE OUTFILE=<filename>.str`



Extract

- The EXTRACT command is provided within the DECKBUILD environment.
- EXTRACT operates on the previous solved curve or structure file.
To override this default:

EXTRACT INIT INF="<filename>"



Extract

- Example 1, Threshold voltage of a MOSFET:

```
EXTRACT NAME="nvt" INTERCEPT(MAXSLOPE(CURVE  
(V."GATE", (I."DRAIN")))-(AVE(V."DRAIN"))/2.0)
```

Example 2, FORWARD CURRENT GAIN:

```
EXTRACT NAME="PEAK GAIN" MAX(I."COLLECTOR"/  
I."BASE")
```



More about Silvaco TCAD

<http://ucourse.ir/open-courses/silvaco/>