

# Lab 1 Setup and Synthesis Flow

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## 实验步骤

按照要求修改文件common\_setup.tcl如下：

```
set ADDITIONAL_SEARCH_PATH      "../ref/libs/mw_lib/sc/LM .rtl/ .scripts/" ;#  
Directories containing logical libraries,  
  
# logical design and script files.  
  
set TARGET_LIBRARY_FILES        sc_max.db ;# Logical technology library file  
  
set SYMBOL_LIBRARY_FILES        sc.sdb;# Symbol library file
```

在Design Compiler的终端输入如下命令进行验证：

```
dc_shell> source common_setup.tcl  
dc_shell> source dc_setup.tcl  
dc_shell> read_verilog rtl/TOP.v  
dc_shell> source scripts/TOP.con  
dc_shell> compile_ultra  
dc_shell> report_constraint -all_violators  
dc_shell> report_timing  
dc_shell> write -format verilog -hier -output mapped/TOP.gv  
dc_shell> write -format ddc -hier -output mapped/TOP.ddc
```

## 实验结果

成功输出了设计文件TOP.gv和TOP.ddc。

## 思考题

1. What is the Link library?  
\* sc\_max.db
2. What is the Target library?  
sc\_max.db

3. What is the Symbol library?

sc.sdb

4. What user directories have been added to the Search path?

../ref/libs/mw lib/sc/LM ./rtl . /scripts