



# Exercise 1: Getting started

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## Logging in and preparing stuff..

- Log in on the CIP Pool with your university account
- Open a shell
- Start a remote session at ZITI with your user name:  
    > `ssh -X username@susnx.ziti.uni-heidelberg.de`  
    (you may have to accept the RSA fingerprint once with **yes**)
  
- If you start for the **first time**:
  - Create a new working subdirectory, for instance  
    `mkdir cadence`
  - Copy *all* files (also the hidden `.*` files) from directory  
    `/shares/designs/UMC/OA/018_1P6M/workdir_template`  
    to the working subdirectory
  - The working directory now contains (mainly)
    - a start script `start.sh`
    - a configuration file `.cdsinit`
    - a file with library paths `cds.lib`



# Starting Cadence

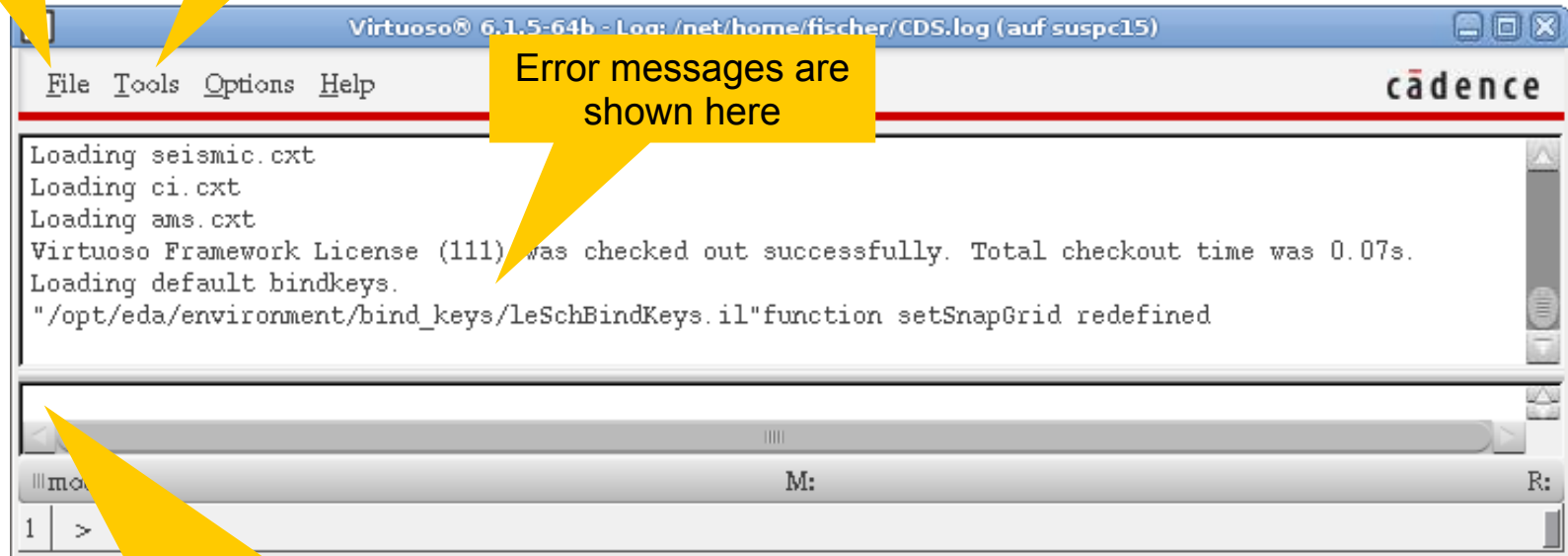
- Start cadence with

- > `./start.sh &`

The usual file menu  
(with 'exit')

Start more stuff from  
here

Error messages are  
shown here



Can type in commands /programs here.  
The language 'skill' is very close to LISP  
Try (plus 3 4)  
or (sqrt 10)



# Opening the Library Manager

- Open the library browser under **Tools** → **Library Manager...**

Categories *can* be used to group cells

Libraries

Devices are here

Cells

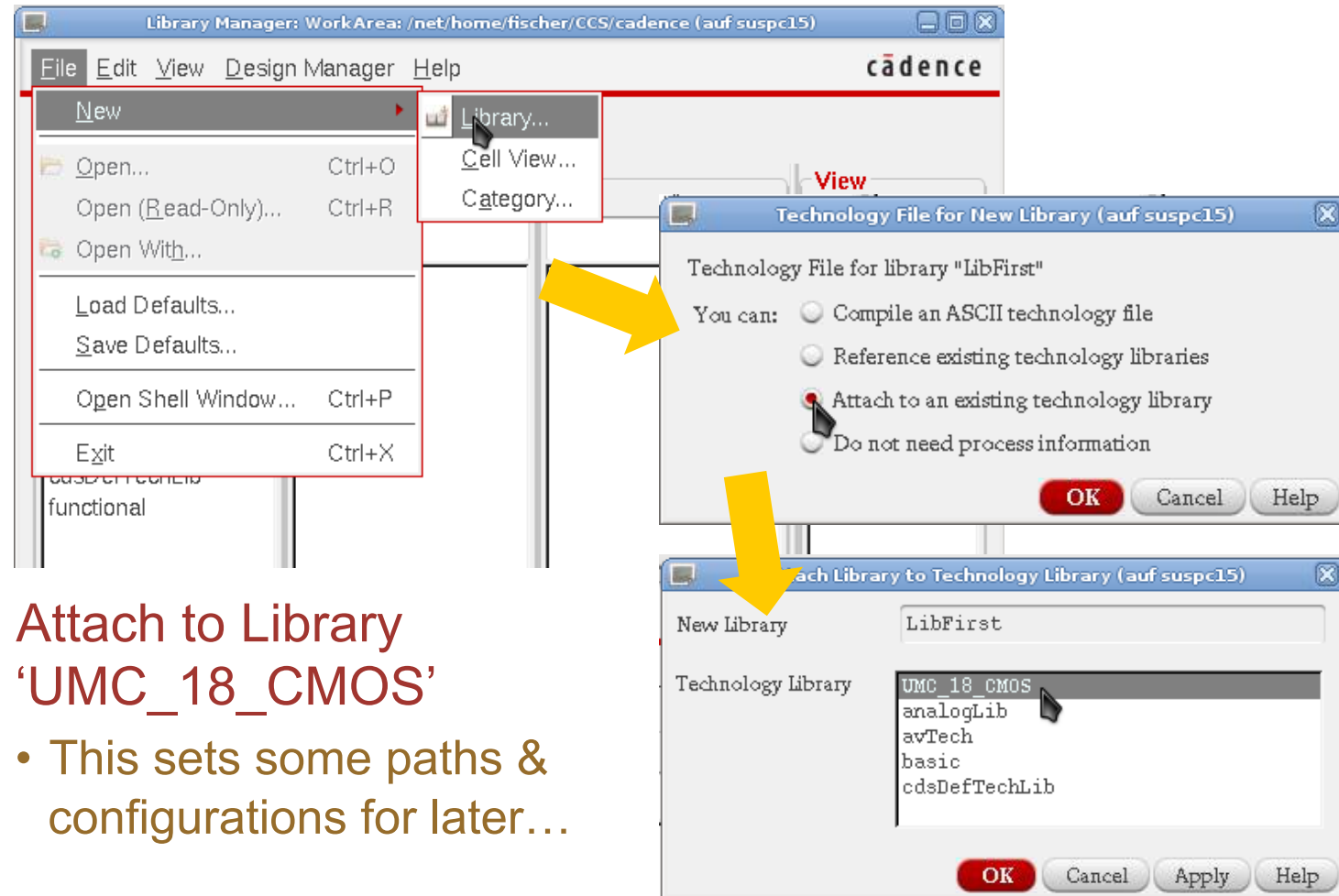
Chose view here (layout / schematic / symbol)

Preview area



# Creating a library

- Create an *empty* library from the Library Manager with **File → New → Library**

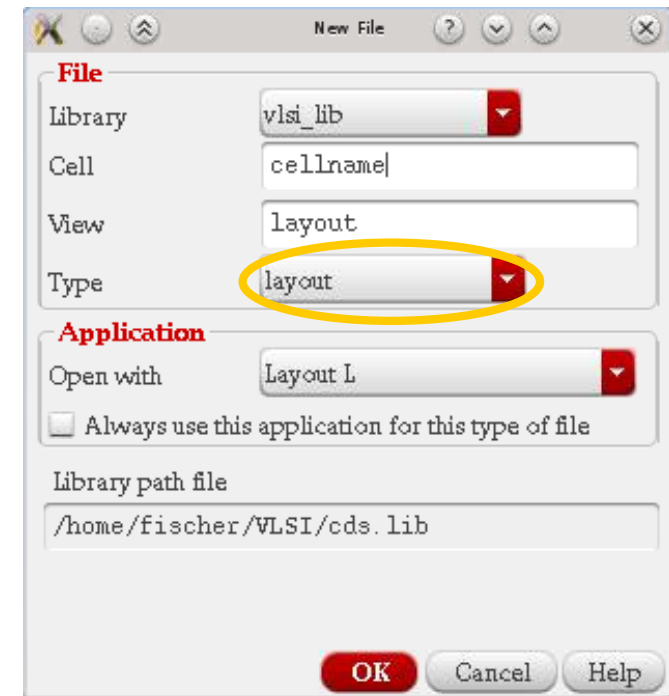


- Attach to Library 'UMC\_18\_CMOS'
  - This sets some paths & configurations for later...



# Creating a new Cell

- Select your library
- Create a new layout with **File** → **New** → **Cell View...**
- Select type 'layout', 'schematic', 'symbol' by selecting from the drop down list
- Give the cell a name
- The corresponding editor opens



- (You can create cell categories to sort your stuff with **File** → **New** → **Category**)