MicroMagic Setup

Last updated 2/25/19

MicroMagic Setup

- MicroMagic's MAX is a Computer Aided Design (CAD) tool focused on Integrated Circuit (IC) design

- www.micromagic.com

- It runs in Linux

- It requires a license to run
  - Served from an MSOE computer
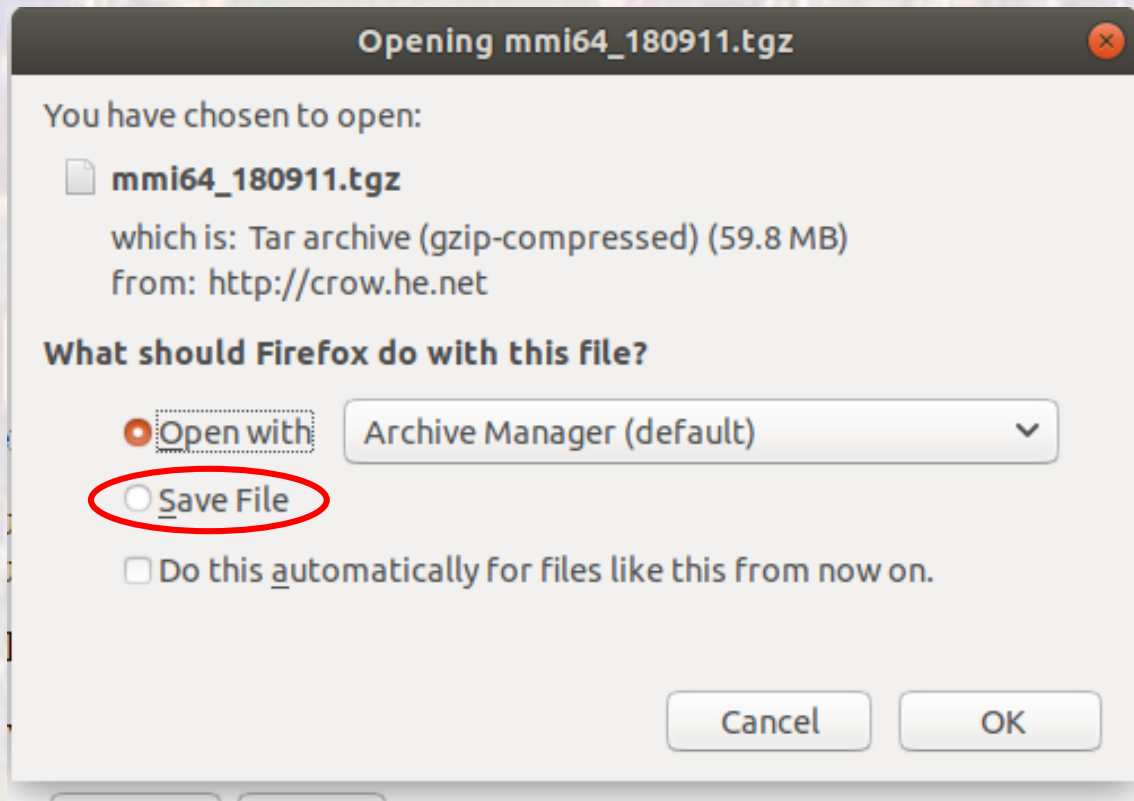 - Must be connected to the MSOE network

MicroMagic Setup

LINUX

- MicroMagic Software Download

  - Open the following web page using the Firefox browser
    - http://www.micromagicdownloads.com/download.html

  - Fill in the form
    - password (see instructor)
    - Linux 64 bit only

  - The mmi64_xxxxxx file will be downloaded

MicroMagic Setup

- MicroMagic Software Download
  - Select Save File
  - Leave the default download location as Downloads

MicroMagic Setup

LINUX

- MicroMagic Software Install
  - Open a terminal in Linux – ctrl+alt+t

```
cd
mkdir  -p  ~/cad
cp  ~/Downloads/mmi64_180911.tgz  ~/cad
cd  ~/cad
tar -xzvf  ~/cad/mmi64_180911.tgz
ln -s  ~/cad/mmi64_180911  ~/cad/mmi
cp -a  ~/cad/mmi/mmi_local.sample  ~/cad/mmi_local
echo "# Setup for Micro Magic CAD tools" >> ~/.bashrc
echo "MMI_TOOLS=~/cad/mmi " >> ~/.bashrc
echo "export MMI_TOOLS " >> ~/.bashrc
echo "PATH=${MMI_TOOLS}/bin.i486-linux:$PATH " >> ~/.bashrc
echo "export PATH " >> ~/.bashrc
echo "export MMI_LICENSE_SERVER=applicense5.msoe.edu" >> ~/.bashrc
```

TRIPLE check before hitting enter on each command

MicroMagic Setup

- MicroMagic Software Install
  - Close the terminal – ctrl+d
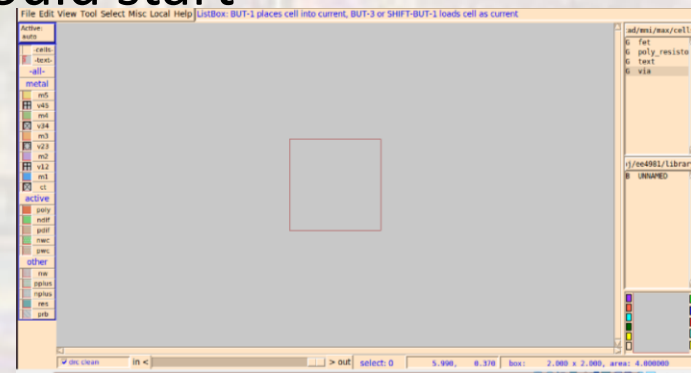
  - Open a terminal – alt+ctrl+t
    - cd ~
    - mkdir ee4981
    - cd ee4981
    - max

  - The MicroMagic software should start
    - Exit Max

MicroMagic Setup

LINUX

- MicroMagic Software Install – MSOE
  - In Firefox - Go to Dr. Johnson's webpage in Firefox (search Johnson MSOE)
  - Go to EE4981
  - Go to Labs
  - Select MSOE 25nm Technology Directory
    - Save Link As – save into Home/cad/mmi/max/tech

  - In Linux terminal – crtl+alt+t
    cd
    cd cad/mmi/max/tech
    tar –xvf msoe25.tar.gz

TRIPLE check before hitting enter on each command

MicroMagic Setup

- MicroMagic Software Install – MSOE
  - In Firefox - Go to Dr. Johnson's webpage in Firefox
  - Go to EE4981
  - Go to Labs
  - Select SRAM bit example
    - Save Link As – save into Home/ee4981

  - In Linux terminal – ctrl+alt+t
    cd
    cd ee4981
    max –tech msoe25 sram_bit

  - The SRAM cell should open in MAX

TRIPLE check before hitting enter on each command

MicroMagic Setup

- SRAM_bit in MicroMagic-MAX