Computing in the College of Engineering and Computer Science
Introduction

• The CECS has lots of computing resources, many of which have been paid for with the Student Technology Fee.

• Windows PC labs
• Linux PC labs
• Multiuser systems
• CECS UNIX accounts
• Things to Remember
• Printing
• Licensed Software
• Other resources about which you may have heard
• Resources not covered here
Windows PC Labs

• **152B and 152D** - 24 hour open labs
  – Use your campus username (w123abc) to authenticate
  – Access is granted by semester when at least 1¢ is paid toward tech fee
  – Microsoft Office, Matlab, Solid Works, more

• **152A, 152E, 122, 203, 243, 319, 411, 413, 426, 434, 439** – access restricted to specific classes

• Every lab has Office and Matlab
Linux PC Labs

- **141** – “wilbur” machines, restricted to MME classes
  - Ansys/CFX/Fluent, Matlab, Mathematica, NAG Fortran Compiler, Nastran/Patran, OpenOffice

- **323 & 333** – “vlsi” machines, restricted to EE classes
  - Cadence (virtuoso), Matlab, Mathematica, OpenOffice, Synopsys (Saber), Xylinx

- All use CentOS, equivalent to Red Hat
Dual-boot PC Labs

• **323 & 333** – “vlsi” machines, generally restricted to EE users
• Have the ability to boot into either Linux or Windows
• Linux side has capabilities of Linux workstations, Windows side has a selection of Windows-based software
Multiuser Systems

- thor
  - 12 cores, 128GB RAM, RHEL 5
  - everything 141 and 333 has, just no console access
- Any CECS UNIX account can login
CECS UNIX Accounts

• **Class accounts**
  – only exist for duration of course and are distributed by faculty
  – can be extended by faculty if needed for an incomplete or a follow-on course

• **Named accounts**
  – Obtained by filling out a “UNIX Account Request Form” in department office, aka “the green form”
  – lasts until student graduates
  – username is same as campus username, but it’s still a different account

• **15GB disk quota standard, can be increased if needed**
Things to Remember

- CECS computers are in the “cs.wright.edu” domain, not “wright.edu”
- Pretty much everything is accessible from off campus via the VPN client (contact CaTS)
Printing

- PrintWright printers available in 152 and 323
- Printers, toner, and paper paid for with tech fee: printing is NOT free! Students pay for it, so when it is abused, the students have to wait longer for the purchase of other equipment (new PCs, new lab equipment, etc.). The abusers are being subsidized by everyone else!
- Most small labs have printers for use in that room
Licensed Software

- Abaqus
- Ansys/CFX/Fluent
- Cadence (virtuoso, many others)
- Cradle (SC/Tetra, SC/Stream)
- Labview
- Mathematica
- Matlab
- Microsoft Office

- Microsoft Visual Studio
- NAG Fortran Compiler
- Nastran/Patran
- Solid Works
- Synopsys (Saber)
- Xylinx (ISE & Vivado)

- Others that are licensed specifically to a certain faculty or research group
Other Resources About Which You May Have Heard

• **cradle cluster** – 45 node/180 core HPC cluster used by Dr. George Huang’s research group in MME department

• **unixapps1** – University RHEL machine; contact CaTS

• **desch** – supercomputer administered by CS&E department
Other Resources About Which You May Have Heard

• Ohio Supercomputer Center – statewide resources; many large HPC clusters; great resource for running large simulations
  – http://www.osc.edu