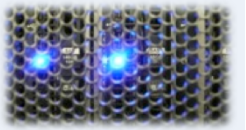
Sciences Division Research Computing



Where to find help with IT

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Harvard University

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Background

The information technology landscape @ Harvard

Who to call, where to go

HUIT and help@fas

Research Computing and rchelp@fas

Information Technology Landscape

- previously many, independent organizations littered the campus, every one for their own!
- Massive overspend, extremely poor quality
- Divide between the haves, and the have nots
- Research computing and HUIT are two groups pulling both $ and talent together from 100's of departments
- "Do no harm", make it better, economy of scale

- Simple right?...

Harvard University Information Technology (HUIT)

- Central help desk (**help@fas**) is all you need to remember from these sides!
- Run the universal desktop program, email, directory, authentication, admin file systems, print queues, phones
- 450+ staff recent combination of FAS and UIS
- IRIS email program, gmail for students
- ATG, academic technology group – (Katie Vale)
  - Media services, iSites, course material help

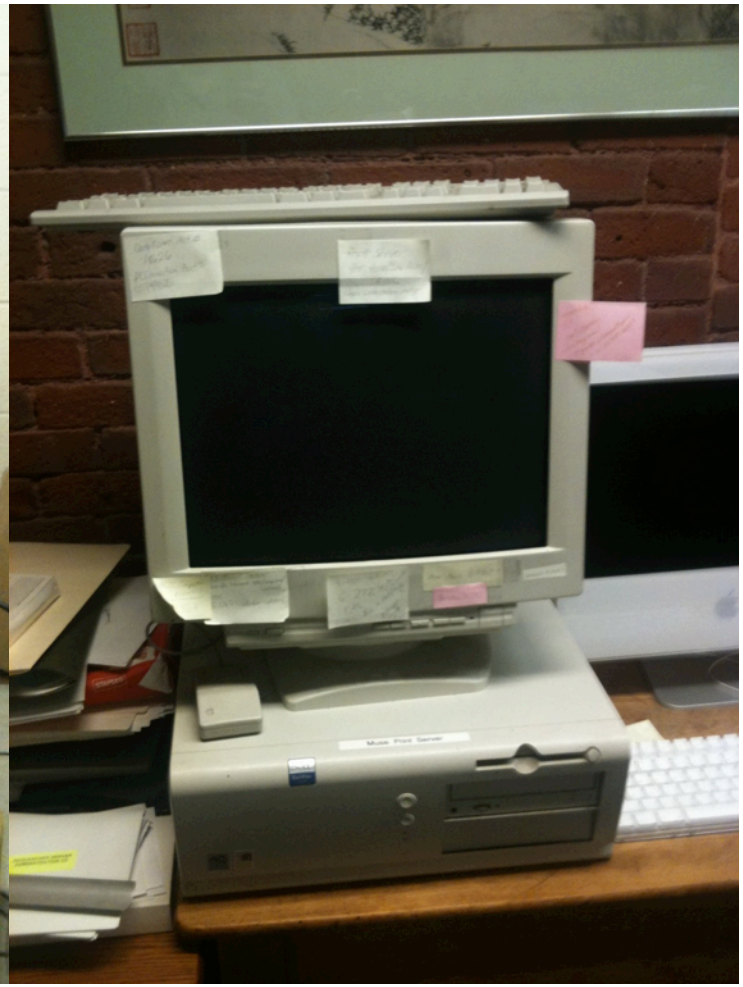
Harvard University Information Technology (HUIT)

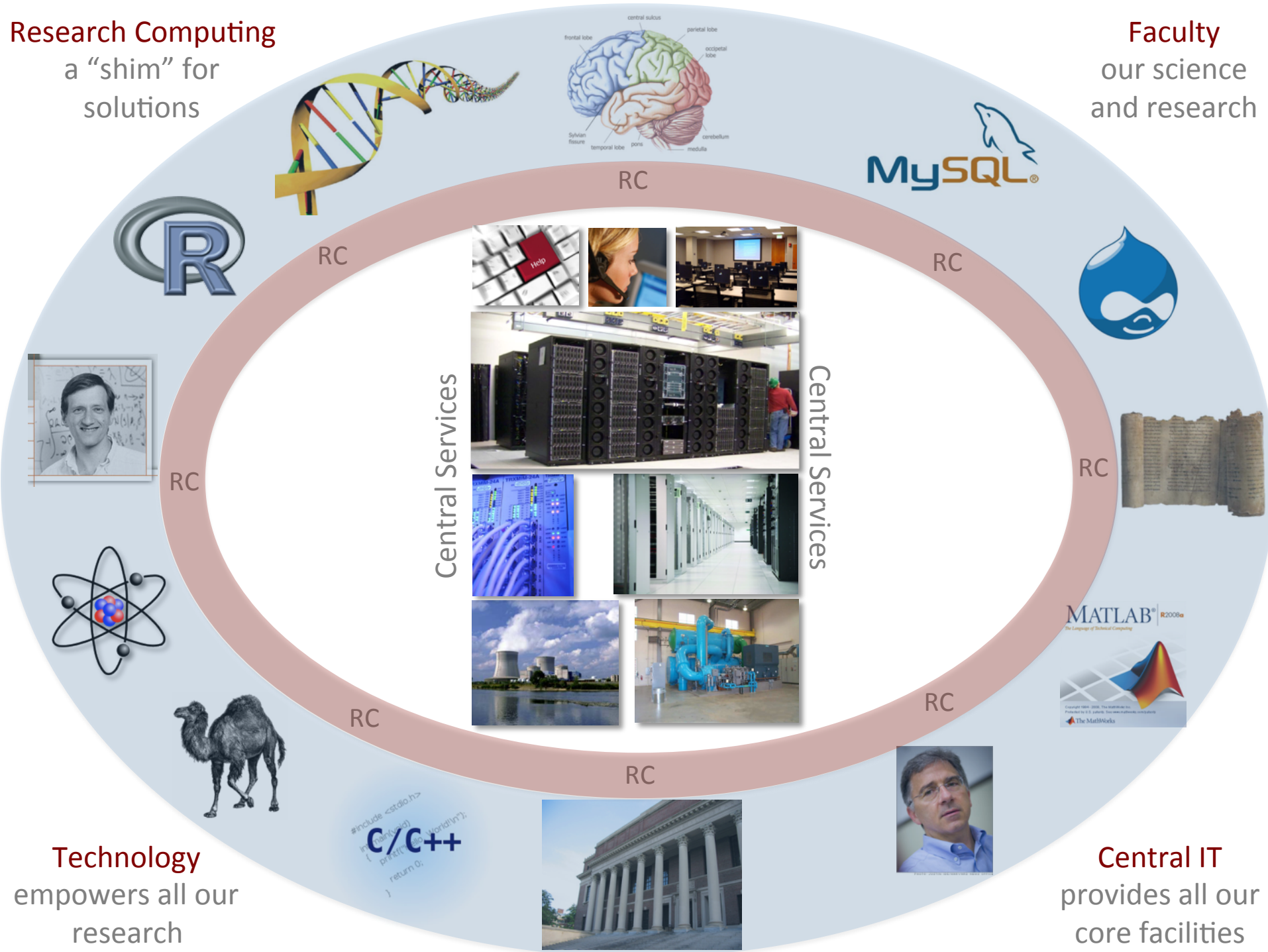
- CTO's office (Jim Waldo)
- CISO's office (Jay Carter) all things security
  - IRB issues, through to data policy, HESP work with RC
- UNSG (Jacques Laflamme) all things network, RC again can help here directly
- computers.harvard.edu (other purchases)
- huit.harvard.edu
  org charts, who is who, full service catalogue

Sciences Division Research Computing

- Grew out of *many* departmental budgets
- Was soup to nuts, email, desktop the whole lot
- Now focused on Research Computing, IT migrated out to HUIT
- We report into the divisional dean, have a faculty advisory group
- We can help with letters of support, and budgets and IT planning
- If you are not sure - give us a call, happy to help!

Cough, splutter!




Research Computing
a “shim” for solutions
Faculty
our science and research
RC
RC
RC
RC
RC
RC
RC
Central Services
Central Services
MySQL
MATLAB
C/C++
Technology
empowers all our research
Central IT
provides all our core facilities

Harvard Research Computing - Today

- ~14,000+ cpu and climbing
- ~3.0PB of storage also climbing
- ~500+ virtual machines
- ca. 1.3MW of research computing equipment
- 20 dedicated research computing staff
- 60% are PhD level

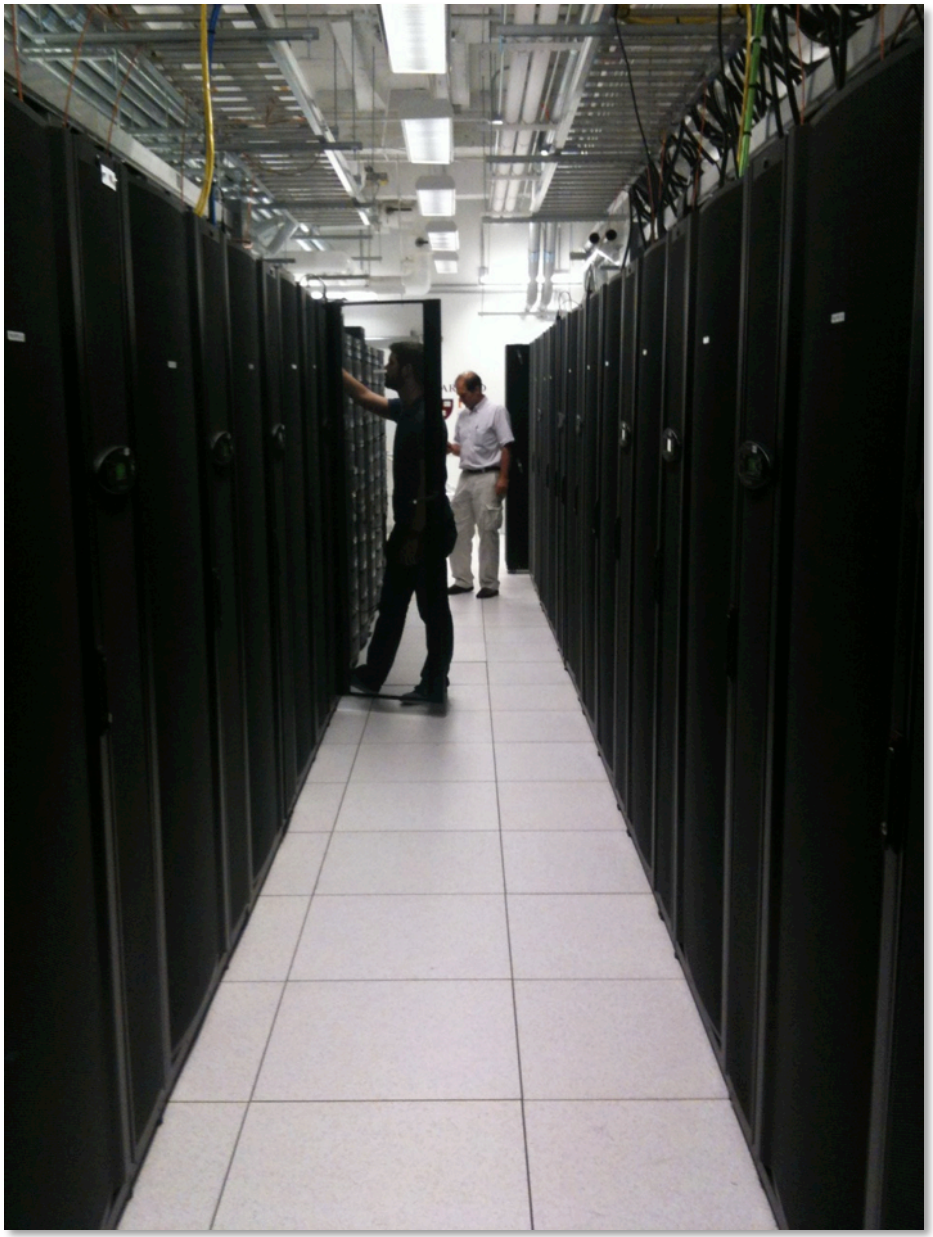
The simple model

- Faculty purchase the “tin” and “silicon”

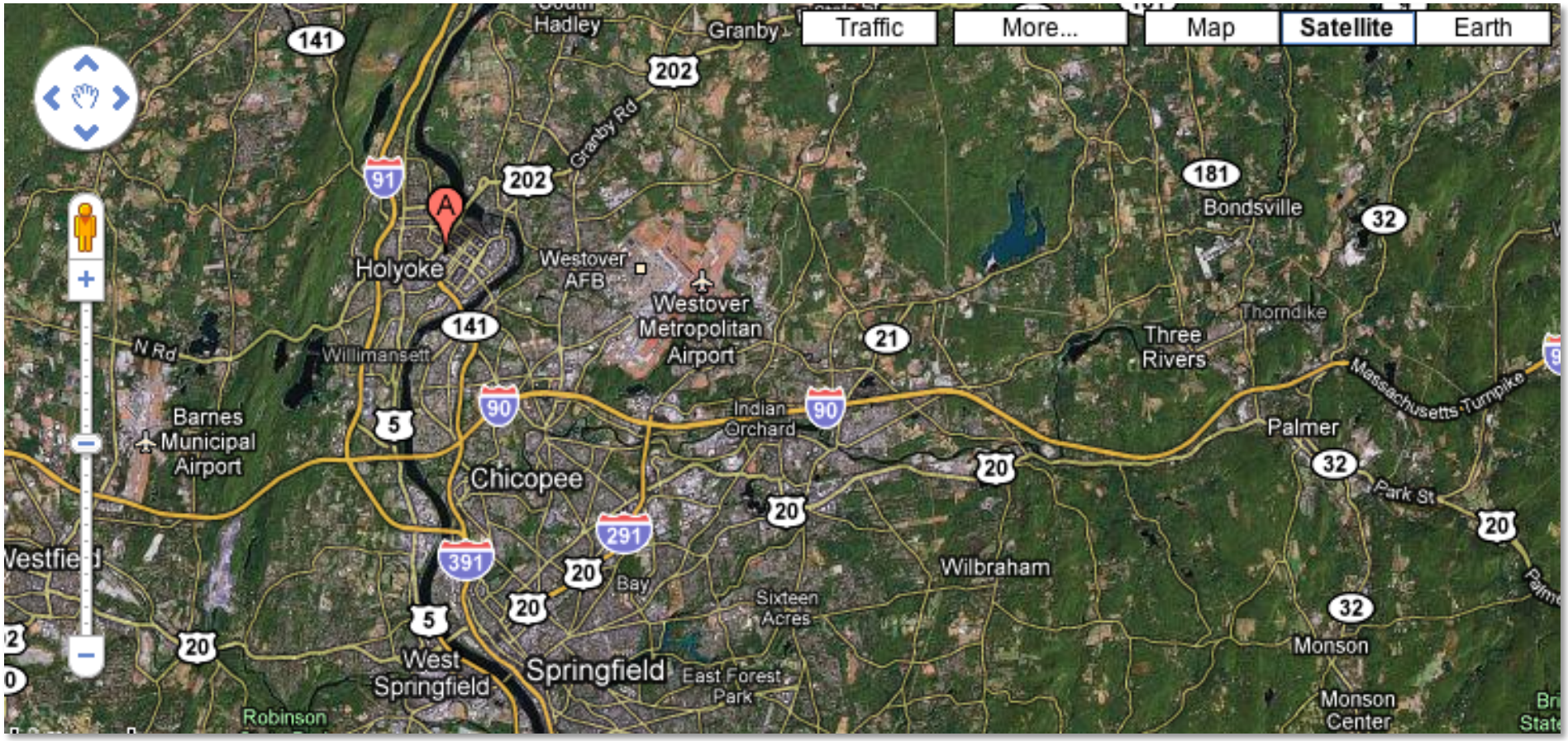
- Sysadm/domain knowledge from RC
- HVAC from RC
- Network from RC
- **$/TB scale-out storage**
- Care feeding from RC
- Scheduling support
- Algorithm support

I swear, if I hear this one more time…

EMC²
EMC²
EMC²



No more power @ 1.3MW moving out to Holyoke…



Don’t worry, it’s just the computers ;-)

Summary

- **help@fas**
  admin related, desktops print, mail etc.

- **rchelp@fas**
  research related, PB storage, clusters
  software for research, think genomics, HPC

- Don't worry if you pick wrong: it will reach the right folk

- If unsure copy both
- or copy me (I get lots, and lots of email, I don't mind a couple more!)

http:/huit.harvard.edu | http://rc.fas.harvard.edu

james_cuff@harvard.edu | http://about.me/jcuff

Questions?