Anthony Cuffe

Overview of Conference IT Systems

JACoW Team Meeting 2014
Melbourne, Australia

JACoW Jefferson Lab

Overview

- ⊙ Motivation

- ⊙ Networking

- ⊙ Hardware

- ⊙ Software

- ⊙ Other Things to Consider

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Motivation – *Why Should IT Be Near Perfect?*

⊙ IT is the foundation of the conference. Getting it right makes the entire conference run smoother.

⊙ The quicker editors can start working and work efficiently, the more free time they will have and the better job they will do.

⊙ IT is a major component of the budget.

⊙ Seamless IT (wireless, A/V, …) drives much of the perception about the success of a conference.

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Networking

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Network Considerations

⊙ Bandwidth Considerations:

o Network infrastructure at a conference site *MUST* comfortably allow for the required bandwidth.

⊙ Things to look for:

o Local Area Network (LAN) - from computer to switch

- Minimum - Fast Ethernet (100 Mbs)
- Recommended – Gigabit Ethernet (1000 Mbs)

o Network Backbone - from switch to switch, switch to router, and router to switch

- Small conferences - Minimum Fast Ethernet (100 Mbs)
- Large conferences - 1 Gbs Ethernet (1000 Mbs)

o Internet Connection – from the router to Internet Service Provider (ISP)

- Minimum - 10 Mbs
- Recommended – 40+ Mbs (Faster the better! ☺)

Network

Wireless Considerations

- A conference venue's wireless capability and it's limitations needs to be clearly understood.
  - Know what level of service they can and cannot offer.
  - Reasonable expectations should be clearly communicated and agreed upon with the facility conference manager.
  - Any guarantees should be in writing.
  - Investigate their hardware and don't always believe their claims about capabilities.
  - Remember that most participants will have more than one device.
- Weaknesses should be addressed in advance!
  - Possibilities Remedies:
    - Adding more access points
    - Using portable access points
    - Consider third party vendor wireless setup
- Wireless devices proven reliable(enterprise grade):
  - Cisco Aironet
  - Ruckus Wireless (Zone Director 1100 and Zone Flex)

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Network

Hardware

Computers – Recommended Hardware

Since this is a moving target, JACoW maintains recommendation and documentation pages:

o Proceedings Office: Recommended Hardware

http://www.jacow.org/index.php?n=Editors.RecommendedHardware

o JACoW Information for Organizers

http://www.jacow.org/index.php?n=Editors.HomePage

o Previous IT Reports

http://www.jacow.org/index.php?n=Editors.ITReportsPreviousExperiences

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Computers

Example – Hardware at iPac'14

◉ Proceedings Office: Editor's Workstation

- ○ Fujitsu Esprimo P720, E90+, Intel Core i5
- ○ 8 GB RAMM
- ○ 256 GB SSD
- ○ 24" Fujitsu B24W-6 LED Display (1920x1200)

◉ Speaker Preparation: Presenter's Laptop

- ○ Fujitsu Lifebook E753 Intel Core i5
- ○ 15,6" TFT, 8 GB RAMM (2560x1600)
- ○ 256 GB SSD

◉ Printers: HP LaserJet M551

✹ Worked Flawlessly

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Hardware

Typical Hardware Depending on Conference Size

- ⊙ Proceedings Office
  - o 10 – 20 Computers
  - o 1- 2 Printers

- ⊙ Author Reception
  - o 2 – 5 Computers

- ⊙ Internet Café
  - o 10 – 20 Computers
  - o Laptop Spaces

- ⊙ Business Office
  - o 2 - 5 computers
  - o 1 Multi-Function Printer

- ⊙ Registration
  - o 1 - 2 Laptops

- ⊙ Presentation Management**
  - o PC and Mac Support
  - o 2 - 4 Windows and 1 Mac Laptop

- ⊙ Auditorium(s)**
  - o 1 PC and Mac support for each auditorium
  - o 1 Spare for each on-hand
  - o 1 Timer for each auditorium

- ⊙ Satellite Meetings
  - o Laptop and Projector as needed

- ⊙ Dot Board
  - ⊙ Laptop and Large Screen
  - ⊙ 1 - 3 Typical

*** Make sure laptops and presentation software used in the Auditorium(s) are identical to those being used in the Speaker Ready room.*

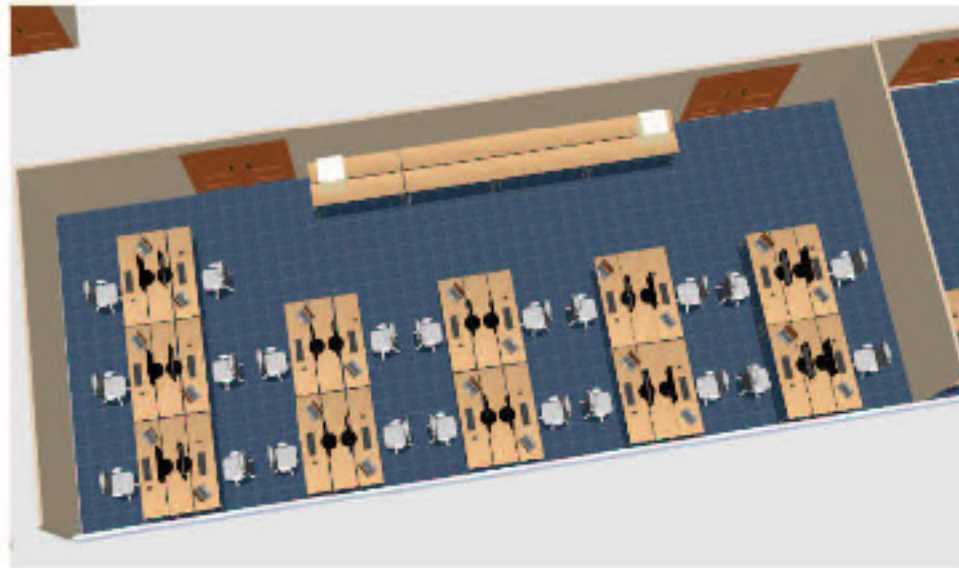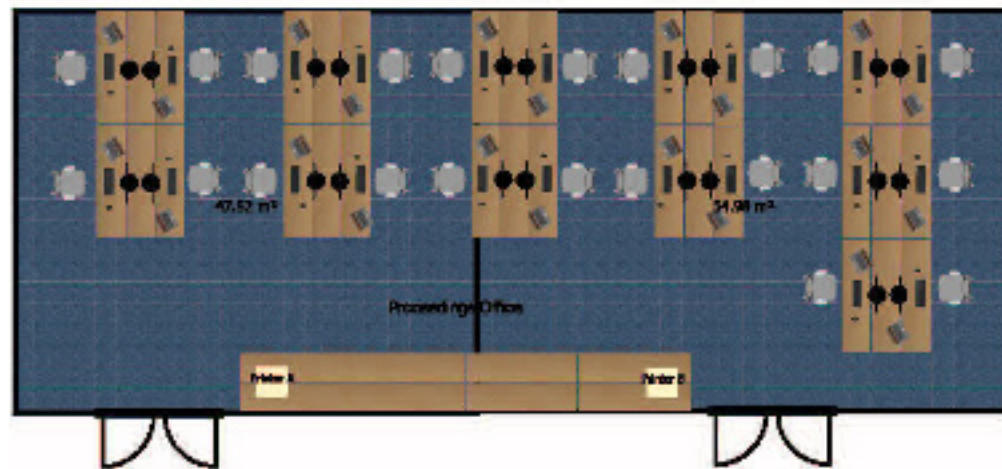**Jefferson Lab**

Hardware

Example – Summary of Computers at iPac'14

⊙ PC Workstations (42)

⊙ iMac Workstation (2)

⊙ 24″ Monitors (1920x1080) (42)

⊙ Windows Laptops (6)

⊙ MacBook Laptops (5)

⊙ Network Switches (10)

⊙ Printers (5)
  ○ HP LaserJet 500 color M551 (3)
  ○ HP Multi-Function (2) – 1 Not used

⊙ Backup Server (1)
  ○ Editor's Workstation with 500GB drive and 16 GB RAM

⌘ Spares

  ○ 24″ Monitors (4)
  ○ Editor's Workstation (6)
  ○ Internet Workstation (2)
  ○ Windows Laptop (2)
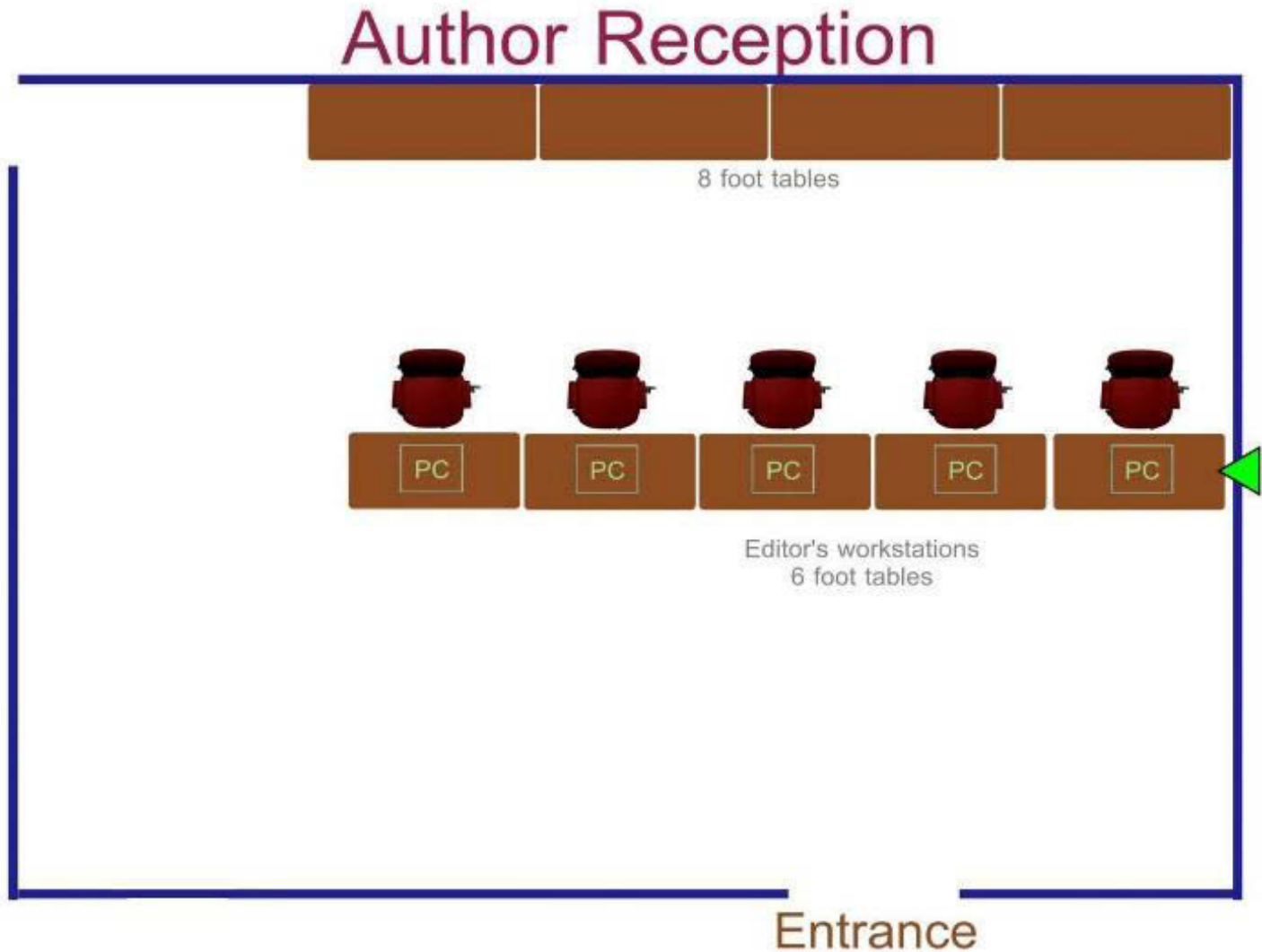 ○ Mac Laptop (1)
  ○ Toner Cartridges for Printer

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Proceeding Offices: iPac'14

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Hardware

Proceeding Offices: iPac'14

Hardware

Author's Reception: iPac'12

Author Reception

8 foot tables

Editor's workstations
6 foot tables

Entrance

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Author's Reception: iPac'12

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Hardware

Speaker Preparation: iPac'14

Hardware

Speaker Preparation: iPac'14

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Hardware
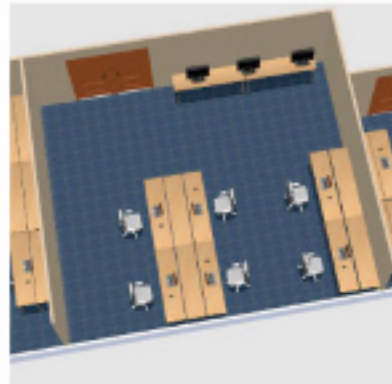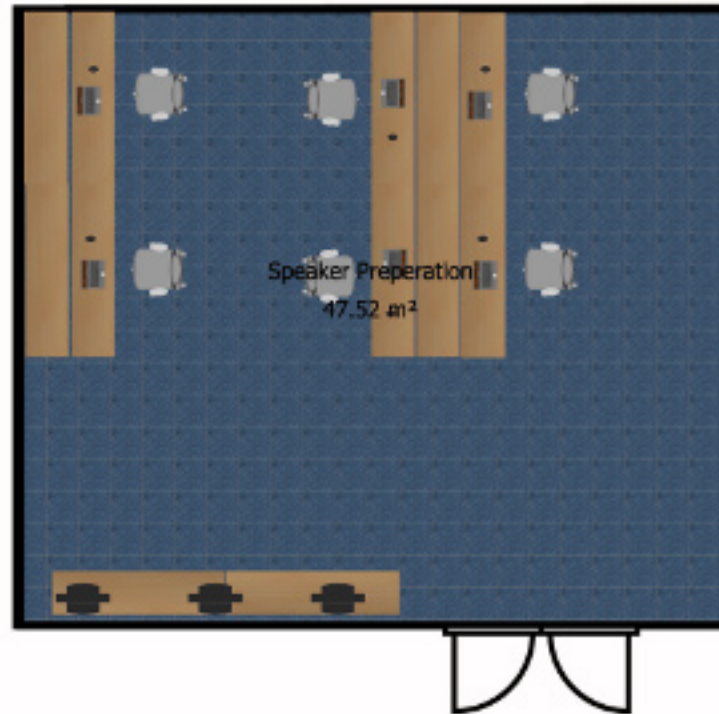
Business Office: iPac'12

Business Office (Rm225)

Entrance

6 foot tables

6 foot tables

8 foot table

Printer

PC

PC

PC

PC

PC

PC

PC

PC

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Hardware

Business Office: iPac'12

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Hardware
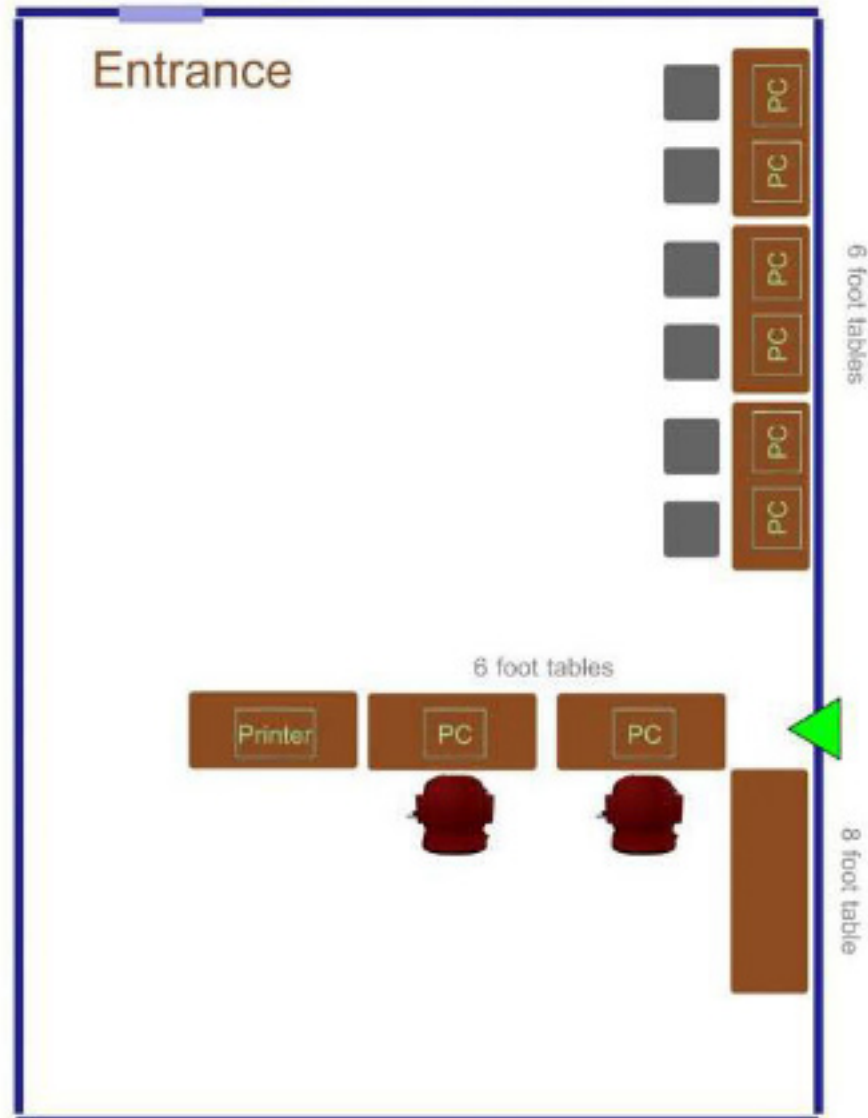
Internet Cafe: iPac'12

Internet Cafe

Entrance

empty tables

20 stations
8 foot tables

| PC | PC | PC | PC | PC | PC | PC | PC | PC | PC |
| PC | PC | PC | PC | PC | PC | PC | PC | PC | PC |

Window

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Internet Cafe: iPac'14

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Software

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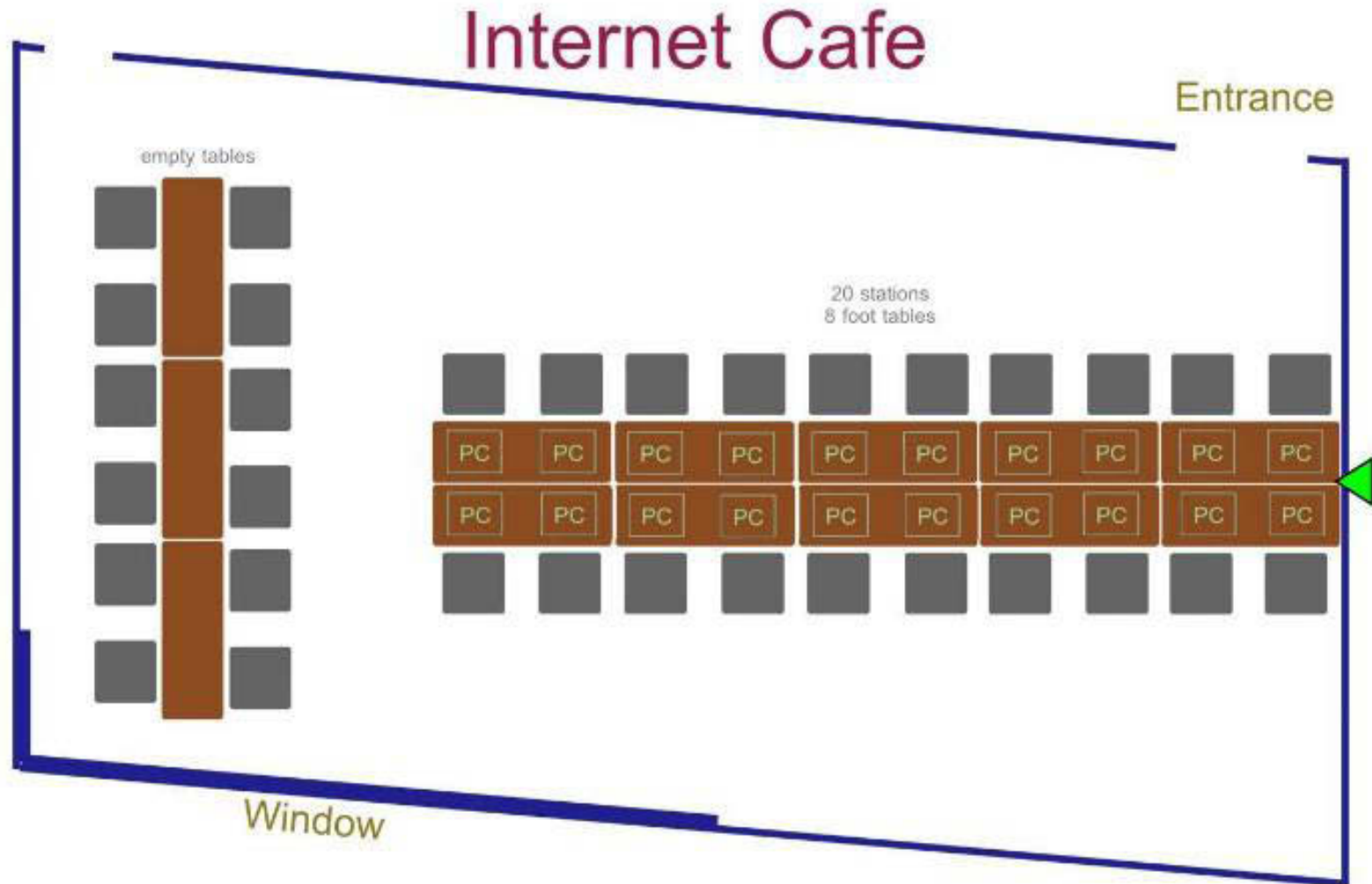
Software

Since this is also a moving target, JACoW maintains recommendation and documentation pages:

- Recommended Software List

  http://www.jacow.org/index.php?n=Editors.RecommendedSotware

- Automatic Software Bundle – Courtesy of Raphael

  http://www.jacow.org/index.php?n=Editors.HomePage
  Made Available by request to JACow Chair

- JACoW Software Licenses
  - Adobe Acrobat Pro 9
  - Enfocus PitStop 11 - 30 day trial licenses

  http://www.jacow.org/index.php?n=Editors.JACoWSoftwareLicenses

Example - Recommended List for Windows

- Windows 7 64 bit (*patched!*)
- Microsoft Office 2010 (*patched!*)
- LibreOffice
- Internet Explorer
- Firefox
- Google Chrome
- Adobe Acrobat Professional 9 (*patched!*)
  - JACoW licenses
  - JACoW Acrobat configuration
  - JACoW Distiller - JobOptions properly installed
- Enfocus Pitstop Professional 11
  - JACoW licenses of 30-day trial
  - JACoW MediaBox ActionList
- Text Editors:
- Gvim for Windows
  - Notepad++
  - WinEdit (30 day trial)
  - EditPlus
- 7-Zip
- Quicktime
- Ghostview, GSView
- Evince (PS/PDF viewer)
- ssh client: e.g., PuTTY
- Anti-Virus software

- IrfanView
- MiKTex
- TeXnicCenter and/or Texmaker and/or TeXStudio as a Tex GUI
- JACoW LaTeX (*class file properly installed!*)
- VLC
- JACoW PS Printer Driver
- GIMP
- Paint.NET
- DoubleCommander (OpenSource) or SpeedCommander (30-Day Trial)

Critical Software

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Software

Other Things to Consider

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Web and File Server Considerations

Participants

iPac'12

- The final months before a conference are the Web and File Server's busiest in terms of load.
- During a conference editors are continually downloading and uploading papers and source files from the File Server.
- *The reliability and connectivity to the Web and File Server from or at the venue is very important!*

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Hardware

NA-Pac'11 – Paper Upload Traffic
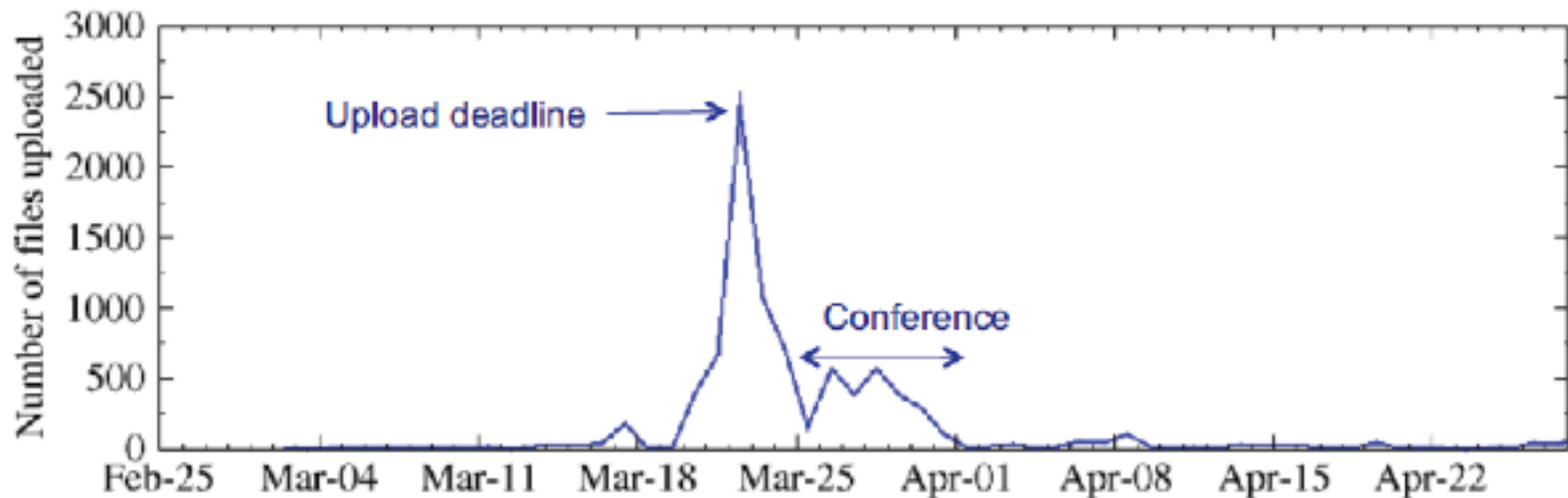
- Server traffic basically flat until ~1 week before deadline.

- Peak traffic was ~250 files/hr. on paper upload deadline.

- Bandwidth was comparable during conference editing.
  o Most files were larger (postscript/PDF, presentation files)

- Occasional uploads during post-conference processing.

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Hardware

Space Planning

- Layouts should be created for all IT spaces.
- Layouts can be created with Sweet Home 3D
  (free interior design application)
- Spaces should be laid out to provide plenty of space for editors.
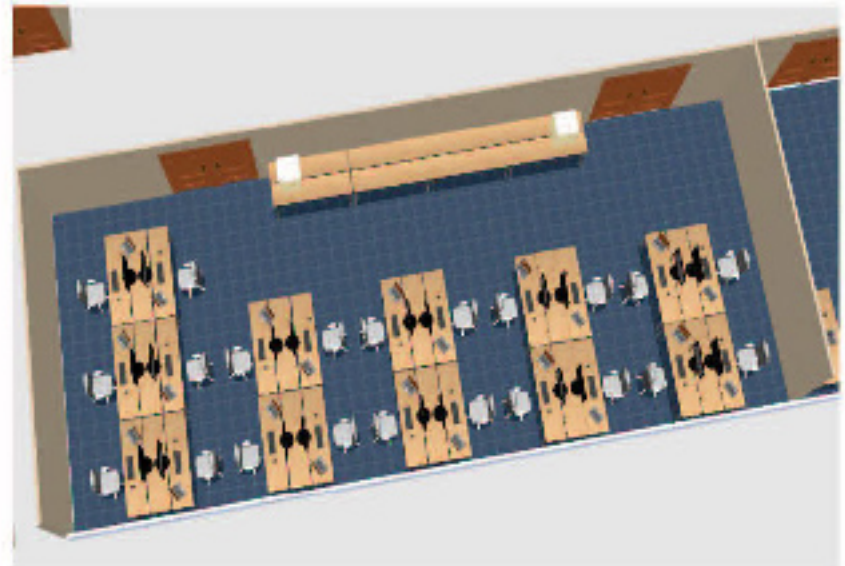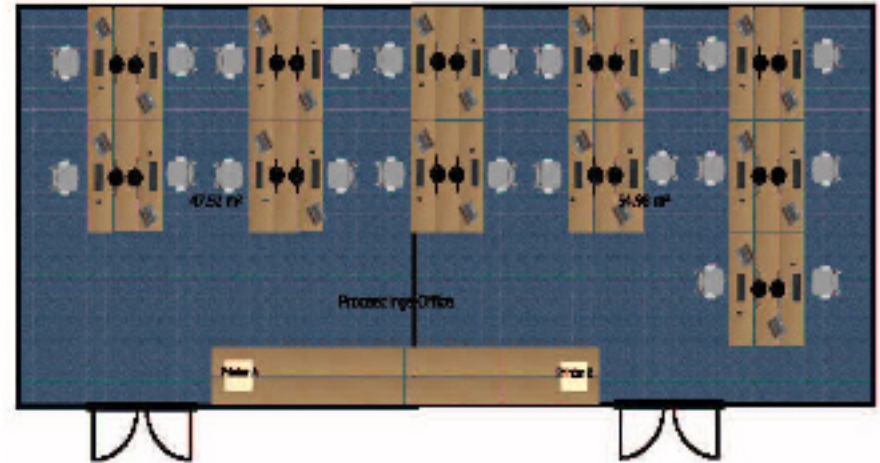
Ergonomics – Proceedings Office and Author's Reception

⊙ **Workspaces**
  o Deep enough to work with printed papers.
  o Enough Space for Laptops and to put other gear.
  o Extra chairs (and space) for visiting authors.

⊙ **Chairs**
  o Ergonomic, height adjustable chairs.
  o Comfortable for Editors to sit for 8-12 hours a day for up to 10 days.

⊙ **Lighting**
  o Bright workspaces for reading papers.
  o Full spectrum lighting if possible.
  o Lots of natural light from windows if possible.

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More Information

- ⊙ JACoW Information for Organizers

  http://www.jacow.org/index.php?n=Editors.HomePage

- ⊙ Previous IT Reports

  http://www.jacow.org/index.php?n=Editors.ITReportsPreviousExperiences

- ⊙ Recommended Software List

  http://www.jacow.org/index.php?n=Editors.RecommendedSotware

- ⊙ Proceedings Office: Recommended Hardware

  http://www.jacow.org/index.php?n=Editors.RecommendedHardware

Setting Up for the Conference
- The Proceedings Office
  - Ergonomics & Logistics
  - Recommended Hardware
  - Recommended Software
  - JACoW Software Licenses
  - Software Settings
  - Upload/Download Scripts
  - Author Reception
  - IT Reports: Previous Experiences
  - Setting SPMS Parameters
- Oral Presentation Management
  - Setup/Introduction
- Poster Session Management
  - SPMS Parameters
  - Poster Session Guidelines
  - Poster Police

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