Pre-Conference Editorial Infrastructure Prep Upload Server and Editorial Room Setup Experiences from NA-PAC'11

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(Presented by Raphael Mueller: thanks, Raphael!)

Paper Upload Server

- Services upload/download requests of papers, talks, and all supporting files for scientific program
  - Web server with PHP and/or perl CGI script support
    - LAMP (Linux, Apache web server, Perl/PHP) works fine
  - **Excellent worldwide web connectivity**
    - Can get bandwidth limited during peak editing and paper submission deadline
    - Dual network cards were a real benefit
  - Disk space for complete conference proceedings/talks
    - Modest: <20 Gb even with sizeable complicated talks
  - Software to support auto-distill if desired (not NA-PAC'11)
- NA-PAC'11 system was probably overkill
  - New 4 Gb RAM, 2 Tb RAID-5, dual power supply, dual Xeon cpus
  - Repurposed for use by BNL RHIC controls after conference end
    - But a real advantage: charged to BNL, **no cost to conference**

Paper Upload Server Security / Location

- Took advantage of extensive BNL RHIC sysadmin help
  - Very secure server configuration
    - OpenBSD, apache running in chroot environment
    - Remote login required ssh, key exchange, passwords
    - RAID disk redundancy plus mirrored to remote location daily
    - Bill Eisele (BNL) documenting configuration for IPAC'12/Paul Jines
  - Permitted use of excellent main BNL network connectivity
  - Also permitted relocation to conference venue
    - Moved to conference location Sat PM before conference start
    - Meant to insulate editorial room from networking problems
      - May well have been more trouble than it was worth
      - Challenge to make visible to both world **and** secure editorial network
      - Wireless at conference couldn't contact upload server for **days**
   - But allowed some fast "sneaker-net" fixes and backups

A JACoW Paper Upload Server?

- Could JACoW invest in a hosted JACoW upload/download server?
    - A comparable server plan from a hosting provider is ~$100 US/ year (e.g. netfirms)
    - Costs easily amortized among participating conferences
    - Reliability/bandwidth comparable to best lab support
    - Each conference can have separately configured upload and download scripts for independence
- Advantages
    - No need for separate server security/setup for each conference
    - Overhead for new conference comparable to new SPMS config
    - No need to repurpose server after conference
- Disadvantages
    - Remote user support, modest cost, cannot move server to conf

NA-PAC'11 Paper Upload Server Traffic
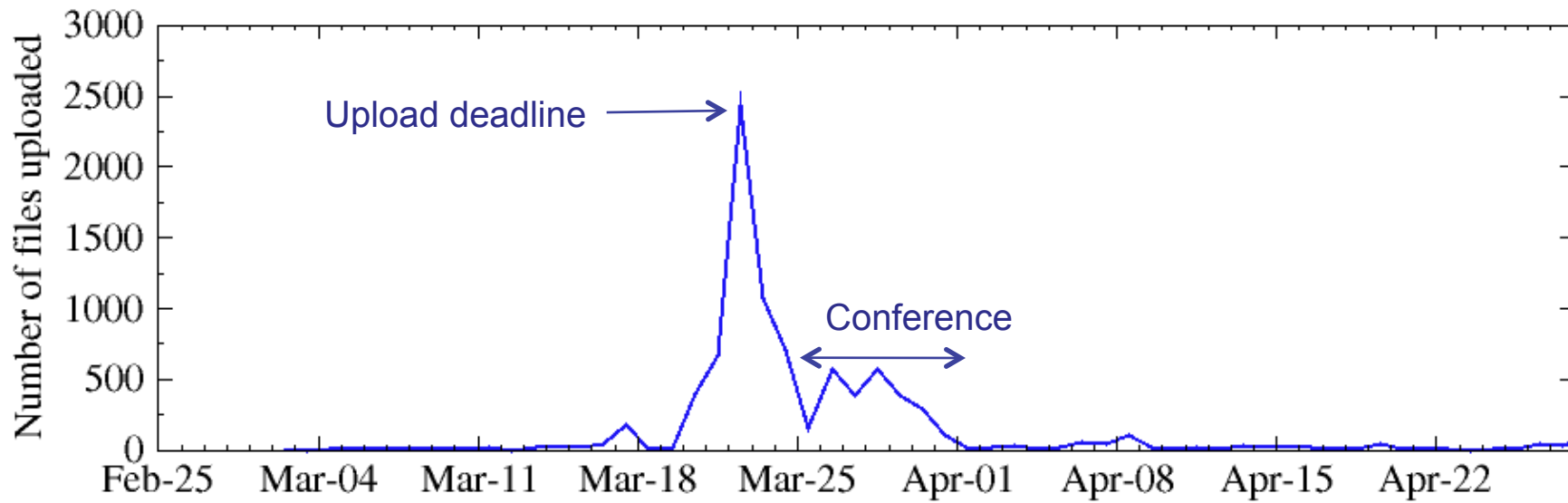
- Server traffic basically flat until ~1 week before deadline
- Peak traffic was ~250 files/hr on paper upload deadline
- Bandwidth was comparable during conference editing
  - Most files were larger (postscript/PDF, presentation files)
- Occasional uploads during post-conference processing

NA-PAC'11 Pre-Conference Editorial Room

Pre-Conference Editorial Room

- At BNL, not at conference location in NYC
    - Saved some costs but incurred some inefficiencies
    - Had to move equipment, editors Sat before conference
    - Had to have two "shakeout" periods to get work started
        - Lesson: Better to set up early and do pre-editing/editing at venue
- 10 early arrival editors, 4 local editors for ~1000 papers
- 14 beautiful Dell 24" widescreen monitors
    - Borrowed from RHIC control room upgrade inventory
        - Lesson: Big, clear monitors are a real win for editorial work
- 2 color printers borrowed from BNL RHIC inventory
- Laptop computers rented from IEEE
    - Originally insufficient memory, CPU for our needs
    - Delivered upgraded units hastily just before work started
        - Lesson: Get computing set up and tested well before work starts
        - Lesson: Account for author reception room needs too!

Pre-Conference Editorial Room

- Networking/computing support was exemplary
    - Installed Windows XP, Acrobat, PitStop, drivers on short lead
    - We had networking/proxy issues with Adobe/PitStop updates
    - Overlooked some needs (SpeedCommander, A4/Letter drivers)
        - Lesson: Get dedicated networking support on your team!
        - Lesson: Set up a tested software installation procedure early
- Some power breaker problems
    - Had to put printers on separate power feed
        - Lesson: Compute, check, and reinforce power needs with venue
- Daily breakfast, lunches, snacks
    - Pre-conference editing food, however, was not very good…
    - Easy to overlook – but an army travels on its stomach
        - Lesson: Provide healthier, more diverse food to editors
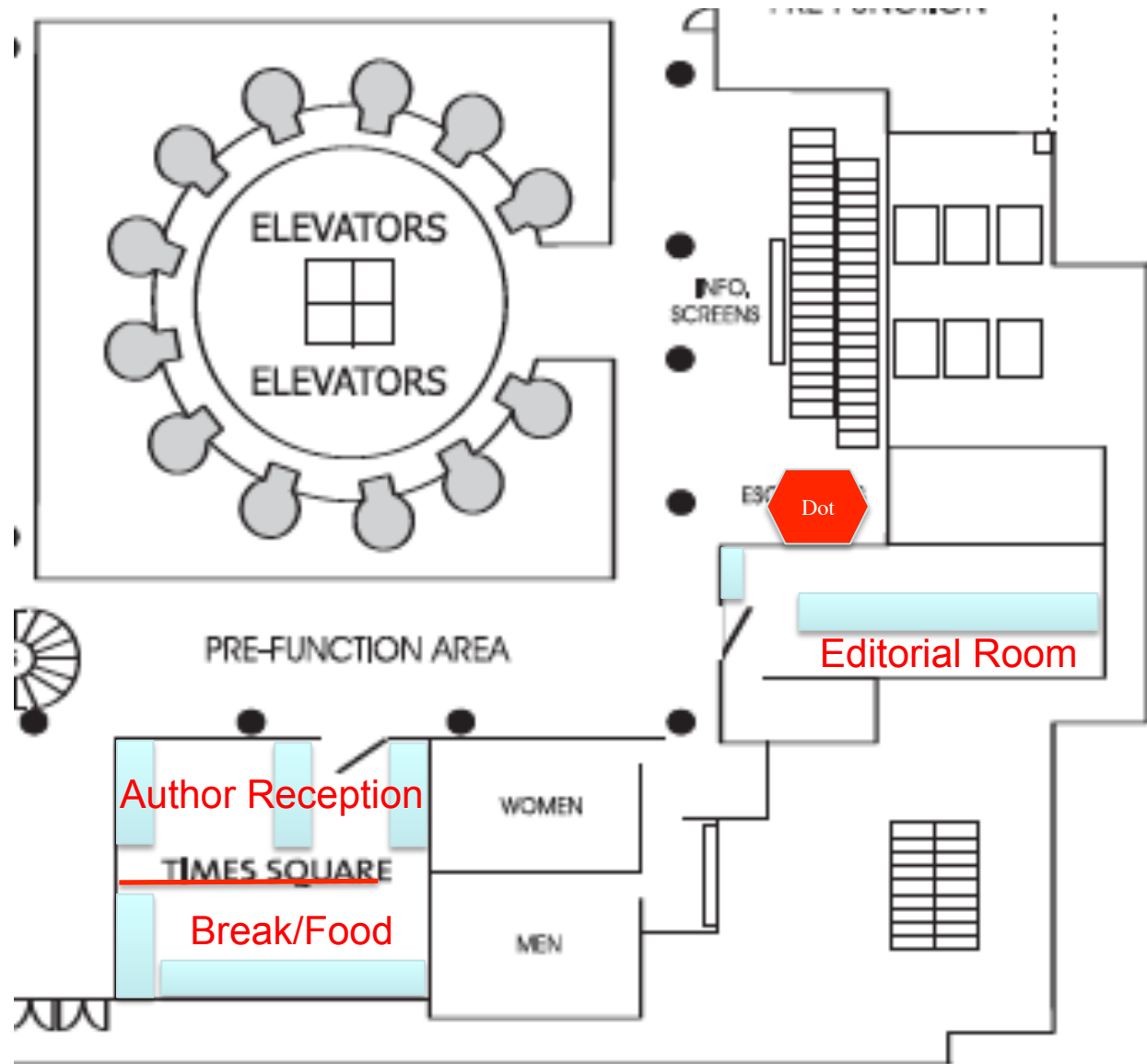
NA-PAC'11 Conference Editorial Room

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NA-PAC'11 Conference Editorial Room

7th floor of Marriott Marquis

ELEVATORS

ELEVATORS

INFO, SCREENS

Dot

Editorial Room

PRE-FUNCTION AREA

Author Reception

TIMES SQUARE

Break/Food

WOMEN

MEN

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Conference Editorial Room

- Visit venue early, identify an editorial room with windows if possible
  - Requirements also include decent power (4+ circuits), proximity to author reception, near traffic but not in traffic
    - Lesson: a view would have been nice at NA-PAC'11!
- Author reception and editorial rooms should be proximate
  - Authors need to interact with editors for red dot papers
- Maintain full support staff throughout at least mid-week
  - Network, sysadmin, software, and power issues will occur!
  - Pressure generally eases up about mid-week
    - Lesson: fortunate to have our own good network/sysadmin staff

Network, Network, Network

- Networking issues seem to be a regular challenge
- NA-PAC'11 problems included
  - large network bandwidth use from vendors
  - difficulty isolating editorial, conference networks
  - inability for conference network to communicate with relocated upload server
- Editors were only moderately insulated from problems
  - would have been worse if upload/download server was remote
  - even with isolation, hotel external network bandwidth was a choke point
    - Lesson: Establish clear networking plan early (including vendors!)
    - Lesson: Isolate editorial network from conference network
    - Lesson: Establish dedicated bandwidth from hotel network to remote upload/download server if necessary

Other Sundries

- Electronic dot boards
    - 3 large (30") displays located near escalators
    - Driven by small Apple Minis, loaned via Apple sponsorship
        - Lesson: Electronic dot boards need not be near author reception
- The editorial office needs a bunch of office equipment
    - Power and network distribution equipment (including laptops)
    - Paper/toner for printers
        - Lesson: Estimate needs for printing total expected papers twice
    - Colored dots: red, yellow, green (brown…)
    - Electronic staplers and staples
    - Sleeves and binders for hardcopies
        - Lesson: IEEE will also accept uploaded scans of copyright forms
    - Pens, pencils, paper pads, recycle bins
    - Comfortable chairs!

Lunchtime!

- Food provided at hotel was **much** improved over that provided by BNL cafeteria in pre-conference editing
  - Lesson: Another reason for pre-conf editing at conference location!

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Proceedings Office Setup Summary

- Paper upload server
  - Fast machine, fast network, decent disk area with backups
  - A single JACoW file upload server?

- Pre-conference/Conference editorial room setup
  - Computing requirements: editors/author reception/dot boards
  - Check leased computing power/setup as early as possible
  - Big clear monitors make a real difference in productivity
  - Pre-edit at venue: avoid setting up editorial room twice
  - Co-locating upload/download server is not an obvious advantage
  - Have plenty of paper and other office equipment

- Intangibles that end up being very tangible
  - Be prepared to fight network troubles at start of conference
  - A nice working environment and good food make for a happy and productive editorial team!