

# Hard- and Software Requirements, Networking, etc. for IPAC'10

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
# Agenda

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- ✦ File Server
- ✦ Software
  - ✦ For proceedings office
  - ✦ Others
- ✦ Hardware
  - ✦ Computers
  - ✦ Other devices
- ✦ Networking

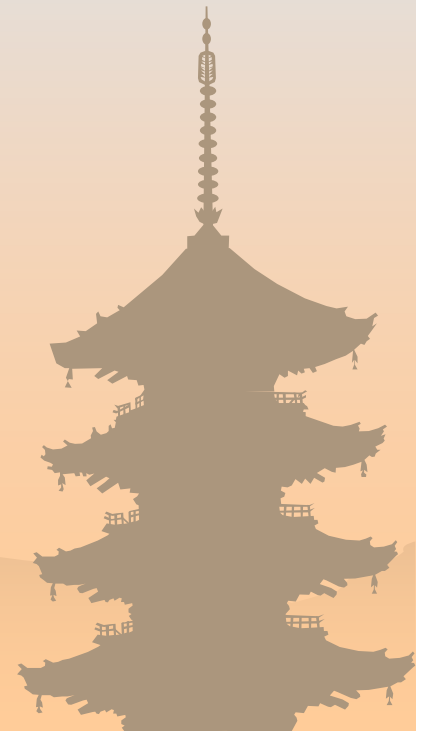


## Just a few notes about IPAC'10 ..

- ✦ Date & Place: 23-28 May 2010, in Kyoto, Japan
- ✦ Contributions: 1568 at final
- ✦ Participants: 1244  THDB03



# File Server



## File Server

- ✦ For proceedings & oral presentation files upload
- ✦ It is set at KEK (one of co-host affiliations)
  - ✦ anywhere reachable via high speed WAN
- ✦ OS: Linux (Ubuntu 9.x)
  - ✦ or Windows is also OK
- ✦ Machine spec: Quad-core 2.6GHz CPU
- ✦ Perl scripts for file upload/download is installed
- ✦ Backup executed regularly
- ✦ Windows File server was also prepared, but somehow 'zip-download' function didn't work. And 'auto-distill' function didn't work for definite reason



## File Server – about ‘Autodistill’

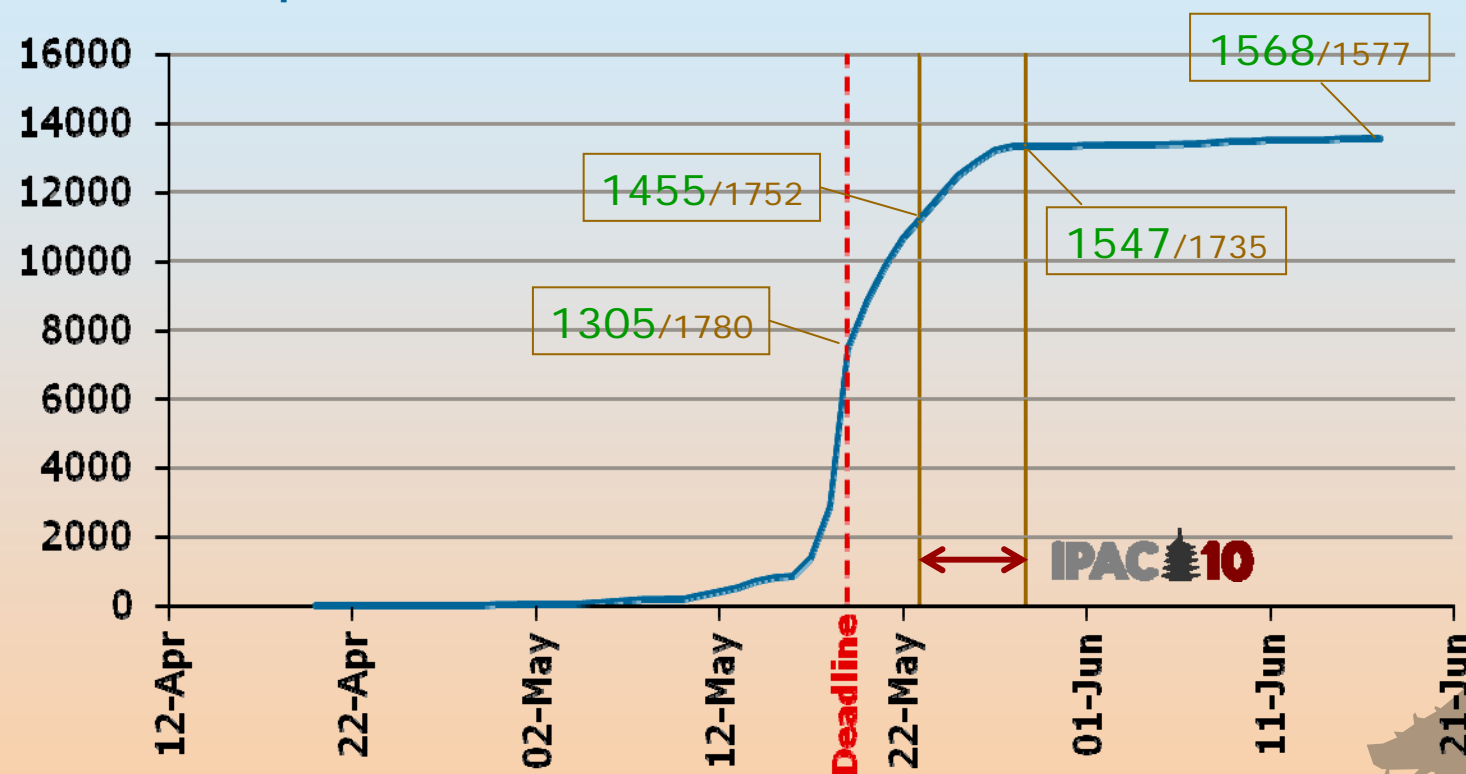
- ✦ “Autodistill” function, which generates .pdf automatically when .ps is uploaded and OK, was implemented at EPAC’08



- ✦ Although it is very convenient, we gave up using it, because
  - ✦ It is executable only on Windows OS
  - ✦ We could prepare Windows 2008 server, on which Acrobat 7 is not executable
    - ✦ ver 7 is currently used in JACoW conferences
  - ✦ We did not have time before the conference to upgrade Acrobat version to 9

## Trend of File Upload

Number of Uploaded Files



- ◆ '1568' shows the number of submitted paper
- ◆ Total of 26.2 GB disk space was used at final phase

# Software





## Software Configuration (1)

Windows for proceedings office (1):

- ✦ Windows XP ([Acrobat 7/8 does not work on Vista/Win7](#))
- ✦ Microsoft Office 2003 or 2007 ⇒ [mostly 2007](#)
- ✦ Internet Explorer
- ✦ Firefox
- ✦ Adobe Acrobat Professional 7
- ✦ Enfocus Pitstop Professional 7.5
- ✦ MikTeX (2.10)
- ✦ WinEdt (5.5)
- ✦ Ghostview, GSView
- ✦ ssh client: e.g. PuTTY / openSSH
- ✦ IrfanView
- ✦ Paint.net
- ✦ SpeedCommander (30-day)
- ✦ Anti-Virus Software (Symantec Endpoint)
- ✦ OpenOffice
- ✦ WinZip



## Software Configuration (2)

Windows for proceedings office (2):

- ✦ Generic Postscript Printer driver
- ✦ Distiller Joboption
  - ✦ 'JACoW-09.joboptions' 
  - ✦ Better to remove other joboptions so that 'JACoW-09' is surely selected
- ✦ Pitstop Actionlist
  - ✦ 'JACoW Media Box.eal' 
- ✦ Backup tool
  - ✦ Mirroring editors' working folder to local NAS



## Software Configuration (3)

Macintosh for proceedings office:

- ✦ Mac OS X (10.5)
- ✦ Microsoft Office 2008
- ✦ Firefox
- ✦ Adobe Acrobat Professional 7
- ✦ Enfocus Pitstop Professional 7.5
- ✦ Anti-Virus Software (iAntiVirus)



## Software Configuration (4)

### Windows for Paper Café:

- ◆ Windows XP
- ◆ Microsoft Office 2007
- ◆ Internet Explorer
- ◆ Adobe Acrobat Professional 7
- ◆ Anti-Virus Software (Symantec Endpoint)

### Windows for Internet Café:

- ◆ Windows XP
- ◆ Internet Explorer
- ◆ Anti-Virus Software (Symantec Endpoint)











## Software Preparation

- ✦ Better to begin preparation for proceeding office PCs well in advance
  - ✦ A lot of kinds of software need to be installed
  - ✦ There are many PCs
- ✦ At IPAC'10
  - ~ 2 weeks before: checked the software list and got them
  - The week before: received 2 PCs from the Conf. Venue and configured 'master' PCs at KEK
  - The day before: cloned PCs (24) at the Venue



## Setup Scheduling

May 2010	Proceedings Office only					IPAC  10					
	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI
	18	19	20	21	22	23	24	25	26	27	28
Hardware setup											
Software setup											
Processing Paper											
Paper Final QA											
Author Reception											

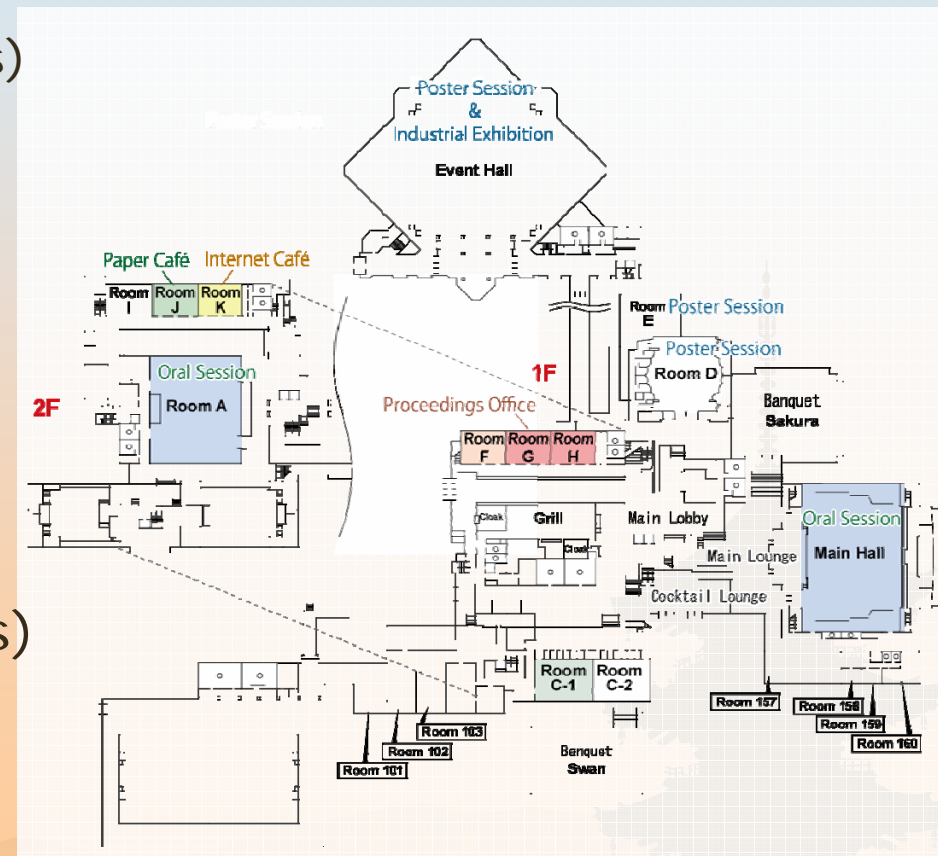
- ✦ Hardware setup was done by Conference Venue
- ✦ Thanks to great help from EPAC'08, LINAC'10, IPAC'11 & '12, software setup for proceedings office was done on Wed 19
- ✦ On Sun 23, Settings for Auditoria, Internet Café, etc. were done

# Hardware



## Computer Needs at the Conference

- ✦ Proceedings office (Editors' room & Author reception)
- ✦ Speaker presentation office
- ✦ Paper café (for participants)
- ✦ Internet café
- ✦ Main hall for oral session
- ✦ Parallel session hall
- ✦ Conference office (LOC)
- ✦ Registration desk
- ✦ Electronic dotting board(s) in the lobby





## Computer Choice

- ✦ Mixture of Windows & Macintosh
- ✦ Windows desktop for proceedings office & Paper Café
  - ✦ Put priority on cost & machine performance
- ✦ Windows laptop for the rest
- ✦ Macbook (with LCD) for proceedings office & auditoria
- ✦ All the computers were rented from the Venue
  - ✦ The cost was higher by 60 ~ 70% compared to an outside company
  - ✦ However, hardware setup was included – Good !



## Printer Needs and Choice

- ✦ 2 postscript printers for proceedings office
  - ✦ of different vendors: Ricoh & HP
  - ✦ as for HP (CP2025dn), it was not 'real' PS, but "HP-PS" (emulated PS)
- ✦ Paper café, IPAC'10 office & tour desk
- ✦ Total of 5 color laser printers
- ✦ For proceedings office, it should be available from both Windows and Macintosh
  - ✦ less choices in finding proper printer, especially English-available type in Japan
- ✦ Rented from the Venue



## Printing Cost

- ✦ Total printed pages: ~ 21,000
  - ✦ including photocopies at IPAC'10 office
- ✦ Total cost was JPY 533,000 – not negligible (machine rental fee is not included)

**Table: Number of printed pages**

	Color	Black & White	Remarks
Proceeding Office	8,600	1,570	1,400 presentations 2 printers
Paper Cafe	461	1,403	
IPAC'10 Office	2,390	6,893	All-in-one printer
Tour desk	2	5	
Total	11,453	9,871	

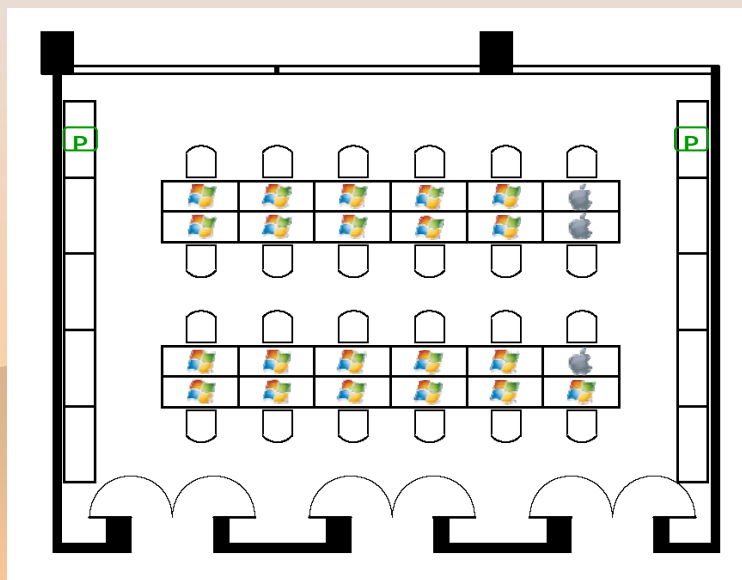
## Number of Computers and Printers

	Windows PC		Macintosh	Printer
	Desktop	Laptop	MacBook	
Proceeding Office	23		3	2
Author Reception	5			
Speaker Presentation Office		3	2	
Auditoria		2	2	
Internet Cafe		20		
Paper Cafe	15			1
IPAC'10 Office	3	2		1
Others		4		1
<b>Total</b>	<b>46</b>	<b>31</b>	<b>7</b>	<b>5</b>

◆ 84 computers & 5 printers in total

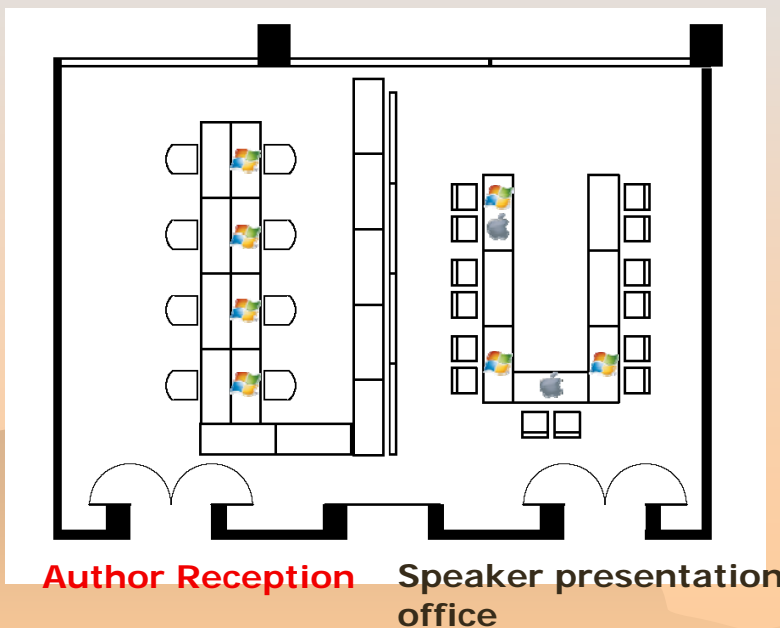
## Proceedings Office - Editors' Room

- ✦ 23 Win Desktop + LCD 19" (including 2 spare set)
- ✦ 3 MacBook + LCD 19" + keyboard, mouse
- ✦ 2 Color Postscript printers (double sided)
- ✦ 1 Local File Server for editors' working folder (← KEK)
- ✦ 26 editors in total
- ✦ There should be enough space and electric outlets for each desk



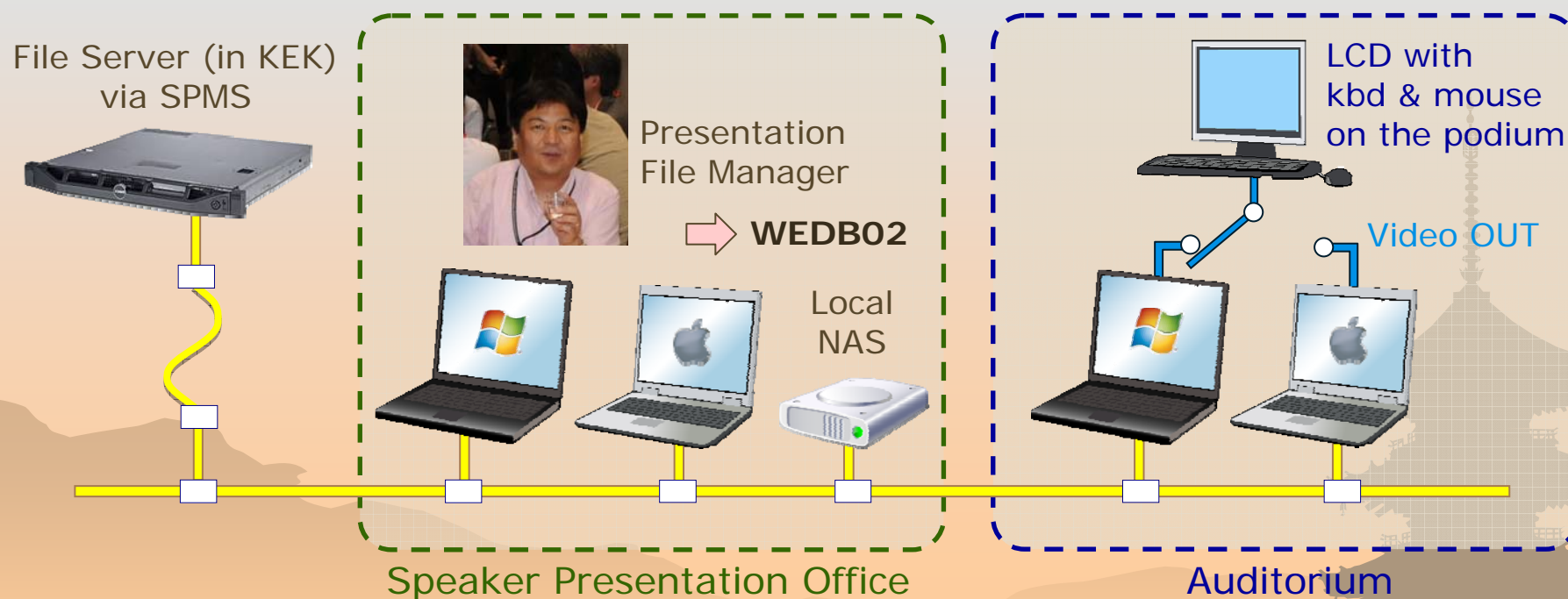
## Author Reception

- ✦ 5 Win Desktop + LCD 17" (including 1 spare set)
- ✦ 4 people
  - ✦ 1 of them is also counted as editor:  
 $26 + (4 - 1) = 29$  JACoW people in total
- ✦ 0.5 room (the other half was speaker presentation office)



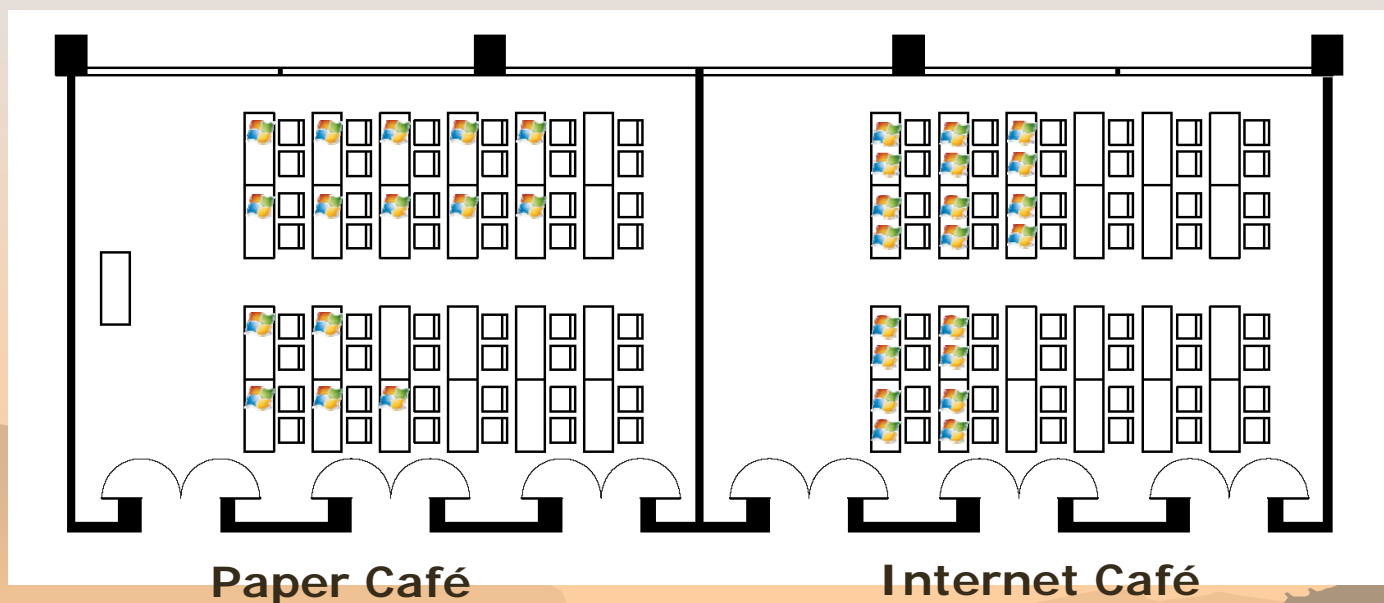
## Speaker Presentation Office & Auditoria

- ✦ Both Windows & Macintosh are set in speaker presentation office and in auditoria respectively
  - ✦ The video output to the podium was switched
- ✦ Could avoid trivial errors which happen in interchanging OS



## Paper Café & Internet Café

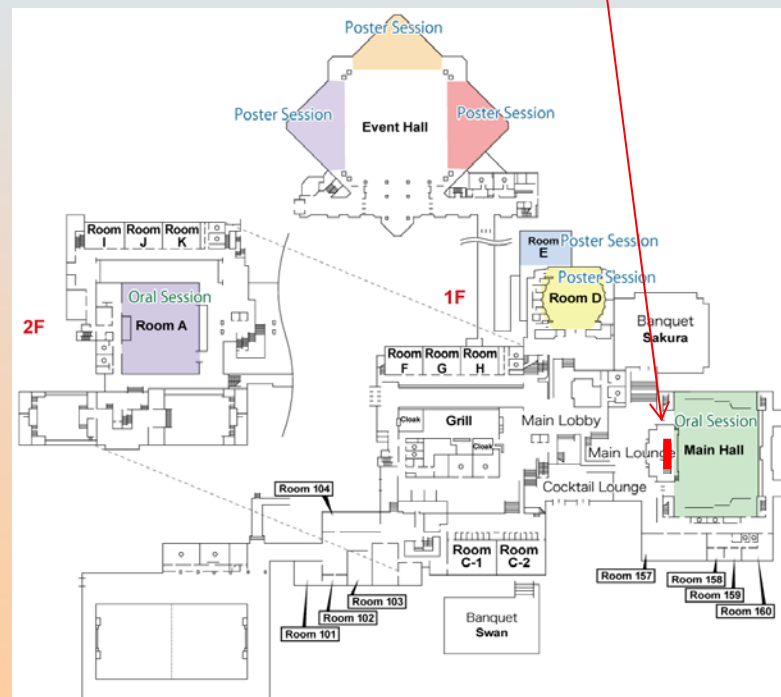
- ✦ 15 Win Desktop + LCD 17" + 1 Printer for Paper Café
- ✦ 20 Win Laptop for Internet Café
- ✦ Wireless LAN was available (for private PCs)
- ✦ Spare electric outlets were also provided





# Electronic Dotting Board

- ✦ 1 Plasma 50" display
  - ✦ We had reserved 2 PDPs
  - ✦ But it was sufficient to have 1 in front of Main Hall, where most of participants pass every day
- ✦ 1 Windows Laptop with wireless LAN access



## Speaker Timer

- ✦ We used 'Specified' Device rented from the Conference Venue
- ✦ Could save space for LCD on the podium
- ✦ Not user friendly procedure – training needed a little



Master controller



Display on the podium

# Networking



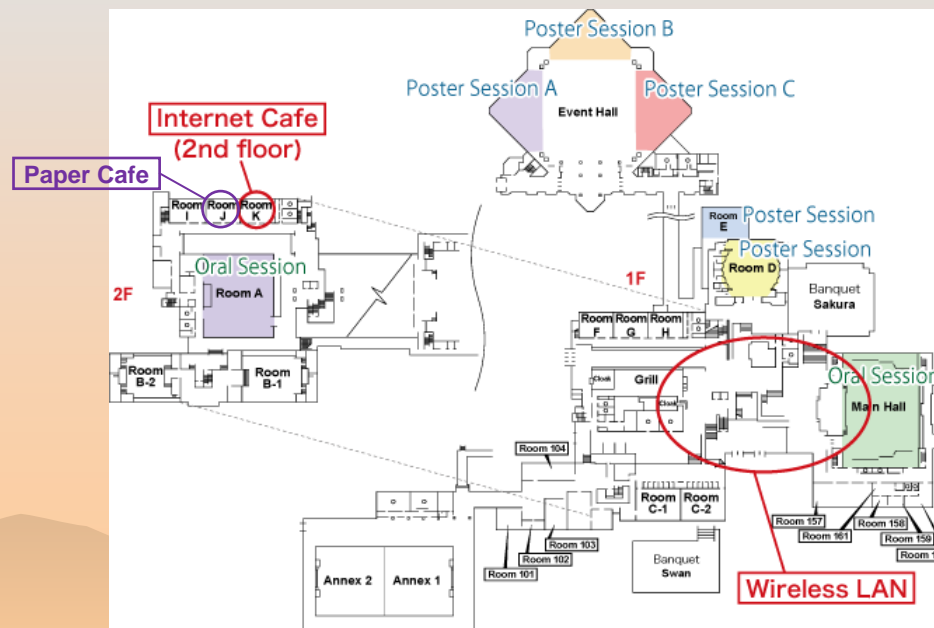
## Network Needs at Conferences

- ✦ High speed & broad-band outgoing network (Internet)
  - ✦ Good access to the academic network, to SPMS & File servers
- ✦ Convenience – Wireless LAN for participants



## Network at IPAC'10 (1)

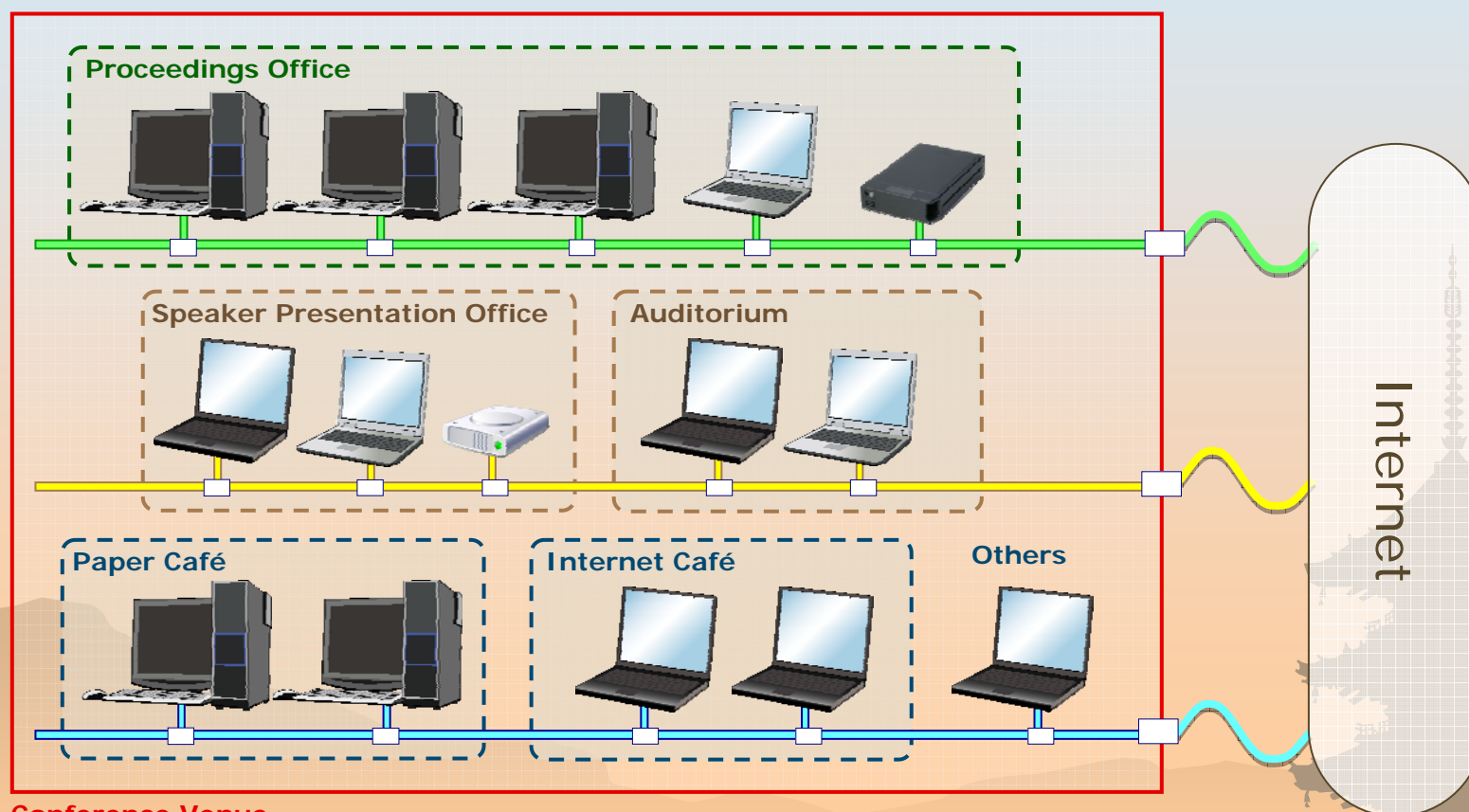
- There were Multiple 100Mbps lines (ISPs) for outgoing (Internet)
- Internal Gigabit lines were configured for multi segments corresponding to each ISP
- Wireless LAN was available in the lobby, Internet Café and Paper Café (but NOT in the Auditoria)



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## Network at IPAC'10 (2)

- ◆ IPAC'10 occupied three 100Mbps outgoing lines (ISPs)
- ◆ The best line was applied to Proceedings office, the 2nd to presentation file management and the 3rd to others



Conference Venue

WECB01, JACoW Team Meeting / November 2010, BNL

## Network Performance

- Measured the network speed from KEK File Server to the Venue by 'tracert' command for the best line at the Venue
- Although the result is not always same, we can expect fast response

Node #	Trial 1	Trial 2	Trial 3	IP address	Place	Speed
1	2ms	<1ms	<1ms	[130.87.x.x]	KEK	1Gbps
2	2ms	<1ms	<1ms	[130.87.x.x]	KEK	1Gbps
3	<1ms	<1ms	<1ms	[150.99.x.x]	Academic-Tsukuba	10Gbps
4	5ms	5ms	5ms	[150.99.x.x]	Academic-Tokyo	10~20Gbps
5	5ms	5ms	6ms	[150.99.x.x]	Academic-Tokyo	10~20Gbps
6	37ms	6ms	6ms	[210.171.x.x]	Bridge	10Gbps
7	6ms	6ms	6ms	[59.128.x.x]	ISP	unknown
8	6ms	6ms	6ms	[203.181.x.x]	ISP	unknown
9	6ms	6ms	6ms	[210.132.x.x]	ISP	unknown
10	7ms	7ms	7ms	[211.134.x.x]	ISP	unknown
11	7ms	6ms	6ms	[211.134.x.x]	ISP (the Venue)	100Mbps

## Summary

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- ✦ File server of Linux OS was set in KEK. We didn't use Auto-distill function as we could prepare Windows 2008 server, on which Acrobat 7 or 8 doesn't work. 26.2 GB disk space was occupied at final phase.
- ✦ We hired 2 Win desktops in advance and set the 'master' configuration for proceedings office. Cloning to 24 PCs was done on the day before we started editing.
- ✦ All of the 84 computers and 5 printers were rented from the Conference Venue including hardware setup. We could save man-power and this is one of the reasons we could set up on schedule.
- ✦ There were multiple 100Mbps Internet connections from the Venue. The network performance was sufficient.

