University Video Conferencing Systems

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Outline

- -Equipment: codecs, venues, MCUs, and network
- -Bookings, billing, and administration
- -Lectures, Seminars, Meetings
- -Presentation Material
- -Bridging & helpdesk
- -Staffing
- -Room Setup

Equipment

- 50-70 codecs: most current Polycom, all Tandberg, & older VTEL models.
- MCUs: Polycom Accord MGC 100, AARNet's, codecs, (Ezenia & FVC GK)
- Network: IP, ATM & ISDN (IP over ATM into some Hosps/AHSs, MPLS to Lismore/NRAHS via SPT, NAT through firewalls to some Hosps/AHSs, microwave &/or fibre to most sites).

Bookings 1

Complex system required:

- · Fast enough for expert bookers.
- Easy enough for a first timer booking a multisite conference, with presentation material, between a mixture of equipment, at both internal and external sites.
- Polycom and Tandberg scheduling packages capability???

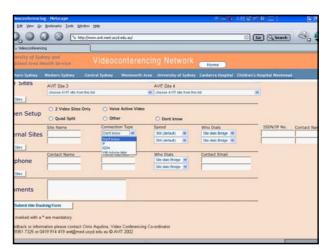
Bookings, Database, & Admin

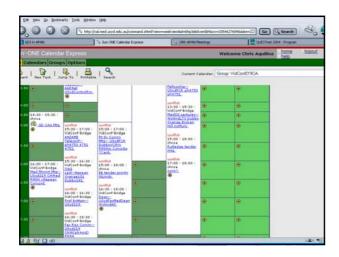
- · Website and phone for info
- Book sites, web booking form (PHP), auto email booking response to booker, HelpDesk, and sites.
- Into mySQL database, into Access DB.
- Confirmation email from HelpDesk to everyone co-ordinating required actions, inc. list of info needed from new sites, sites involved, charging, & testing. 1.5 days/wk.

Web Site

- User friendly: fit on one page; easy like booking a flight; sites to be booked first; help page, or click on any title for clear and thorough help; needs to ask what bookers expect to have to supply.
- Improve every 3 months



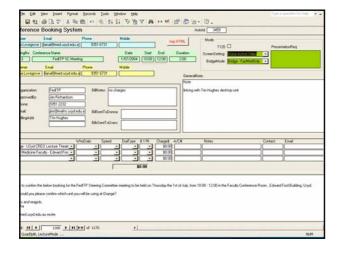




Calendar

- · Web calendar (Sun iPlanet).
- Each site ought have it (room & codec).
- Inserting & viewing bookings policy controlled.
- Can see multiple calendars at once for user or booker.
- Easily recognisable abbreviations.

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Lecturing

- All video, and all audio (except local audience) needs to get to remote sites very clearly.
- Audience audio lecturer repeats questions, paraphrases, or audience member uses mic.
- Operator at lecturing site; or remote operation by bridge operator with phone contact to audience member; or training of lecturer with monitoring at least at beginning of lectures.

Meetings

- Camera, microphone, attendee positioning, muting – be fanatical.
- Local Site Group: advise to talk clearly and pay a lot of attention to remote sites.
- Call HelpDesk as soon as suspect problems.

Presentation Material

Problem:

- Mixed environment: Codec and MCU types: Video, XGA, SXGA, single or dual screen, IP or ISDN, codec brands, MCU screen layout, bandwidth. PC, Mac, Linux – Browsers, web collaboration programs - MS Office, XGA or video visualiser, VCR, DVD, electronic board, white board, black board.
- · Lecturer training, operator cost, and capability.

Presentation Material 2

- Normally no time for training, but training offered, Course Co-ord emails & phones lecturer. Operator briefs lecturer for 1 min.
- · Send Info Sheet to lecturers and students.
- Ideal: Don't use slides of text for multisite lecturers unless have sophisticated setup. Use VCing for humans and motion. Engage with remote sites, concentrate on what VC sites are seeing and hearing.

Presentation Material 3

Solution 1:

 Try and get all presentations from lecturers beforehand and ideally in PPt, and send it to students by email, web, or handout, so they have handouts in front of them to see clearly (B&W, 9/page, double sided, recycled paper);) and annotate. Camera switches between lecturer and presentation. Lecturer gives PPt lecture using lectern PC – no change.

Solution 2:

Ask for all presentations to be on PPt (ideally tested on lectern PC at host venue); input to Polycom or Tandberg enabled for People+Presentation, PC also doing Smart Bridgit web collaboration type application (no IIS, admin rights, full screen XGA, collaborative notations, 1 minute setup, true colour, no natural mouse, 5fps). With accord bridge using CP & People+Content and remote sites setup in a particular way can provide dual screen / single screen + web collaboration.

Presentations - PowerPoint 44

- Dark blue with bright yellow text (better than most).24
- Very large text, very large size. Sentence case.
- · Expand pictures and diagrams to use all of screen.
- · Put motion into VCR or DVD.
- Starting point: follow standard educational guidelines, so PPt can be seen from rear of room with poor vision.
- · Clarity is the goal, not aesthetics or convention.
- Make it big and ugly, unless every audience member will get a handout.
- · Number slides.

Bridging & HelpDesk

- VC Co-ordinator, Admin & backup support person.
 Sites have a booking person, OnSiteHelpPerson, and Computer Support Officer.
- Help during meetings: HelpDesk and attendee can do most tasks, OnSiteHelpPerson can help, and CSO has no involvement unless they are called by me and is asked by HelpDesk to do it immediately.
- Bridge control: Application software, from desk PC, laptop, wireless, web, VNC, backup staff.
- Codec control: web, VNC, telnet, web-telnet, OnSiteHelpPerson.
- Phone: sign & ph at sites; 2 lines on desk phone, diverts to mobile with 3 lines, backup staff.
- Handsfree/conference phones as backup at sites.

Pro forma Emails - eg

Staffing Structure

- · AV mindset and experience required to get video and audio at quality expected by normal users.
- IT mindset for running and developing website, calendar, mySQL & Access database, setup and diagnosing PC and appliance codecs, diagnosing networking - all in real-time like the VC.

Room setup

- · "Every room has an ideal setup for the \$ available."
- 1 or 2 cameras, mics, VCR, DVD, XGA doc camera, PC with web collaboration, colour, lighting. Ad hoc lecture setups.
- Tendering pro forma tender document (containing advice), for USyd (and others?) to use.

Additional

- Future Computer connected to high definition PTZ camera and mics using open source processing of codecs, bridging (or access grid style), and controlling. Digital zooming of audio and video of remote sites.
- Sites don't start on time, and no time for fixes. Pull out and test separately by drag and drop.
 Risky or beginner sites to test at least 20min beforehand using A&V loopback using the MCU (GK).
- AARNet web based comprehensive training course.
- Managing unrealistic expectations.