

Collaborative Tools in CERN-IT [Response to RTAG12]

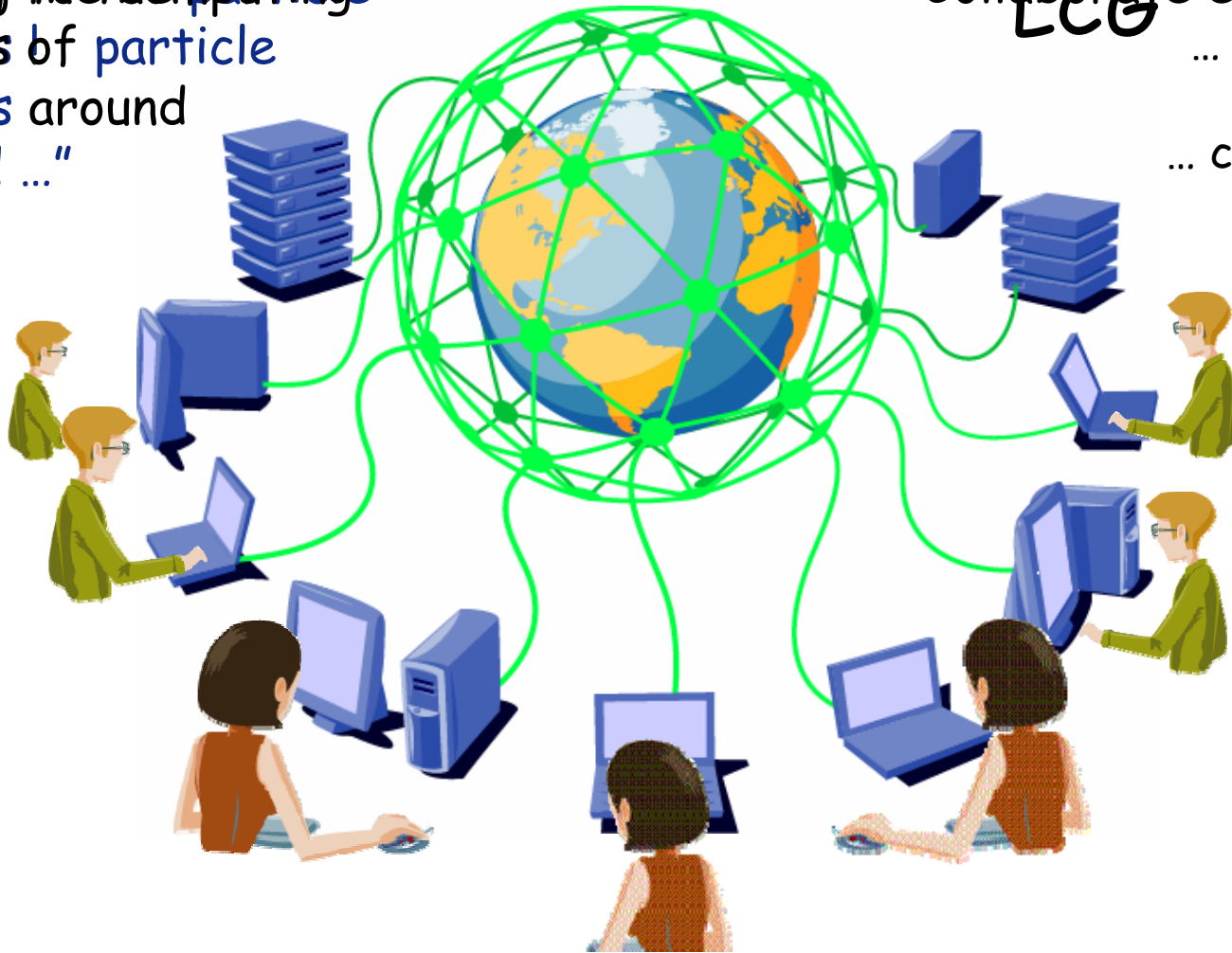
LCG-PEB 28th June 2005

Tim Smith IT/UDS

Vision

“extending the computing resources of particle physicists around the world ...”

Collaborate effectively
LEG
... discussions
... meetings
... conferences



Vision Provisos

- Keen to respond to need, however...
- World-wide activity:
 - CERN as focus but not sole responsible
 - Each centre should build up its own resources, expertise and support
- Collaborative tools - wide scope
 - email; instant messaging; network; VoIP; phone conferencing
 - No need to bring altogether in one team
 - Independent manpower, housed in relevant teams
- Scope: wider than LHC experiments

Audio-Visual Service

- Conferencing - classical **Official meetings**
 - Physical infrastructure **Tutorials, presentations**
 - Rooms, Equipment
 - Service: *24/7 operator-less phone; MCU; reflector*
 - Web go **Indico: Abstract refereeing, proceedings**
 - Integrated scheduling: phone, MCU, VRVS, physical
- Synchronous services **retransmission**
 - Web casting
 - *Document & application* **Audio-visual event capture**
- Asynchronous services **Rushes / Editing**
 - Recording, archival and **CDS Archival and markup**

Actions

- Re-grouped
 - IT-CS Analogue/digital retransmission
 - IT-CS ISDN conferencing service
 - IT-IS VC support & room equip & VRVS service
 - IT-UDS Auditoria service
 - IT-UDS Indico team

- IT-UDS-AVC [Audio-Visual and Conferencing Services]
 - SL: Thomas Baron

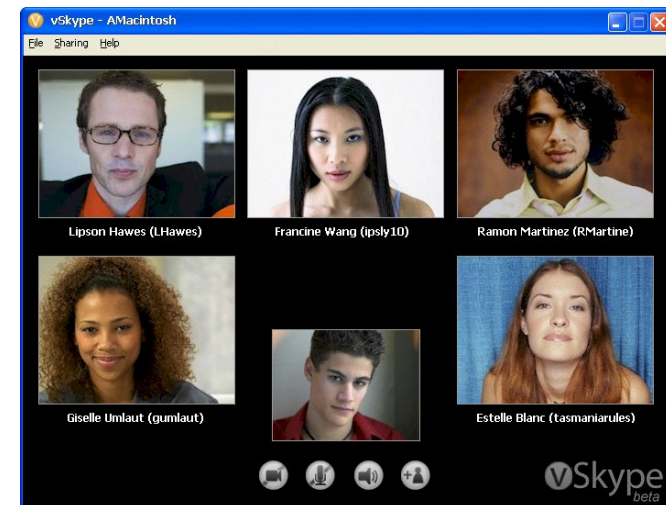


Strategy

- *"Make a world class service" - we would love to!*
 - *Within the limits of available people and skills*
- Room ownerships / responsibilities / funding
 - 25 meeting rooms (+4 equipping, +3 planning) [13]
 - 13 auditoria [7]
- Investigate the ideal room setup
- Build up infrastructure and re-equip rooms
 - Bring out of hibernation: (1999-2001 investment)
 - **Materials investment**
 - **And what about the maintenance budget?**
- Recommended HW / Stores items / Guidelines
 - Buy-in? Exciting field; emerging solutions
 - Who is interested in waiting and adopting technology behind the cutting edge

"Complex solution space"

- Technology emerging from niche
 - Demands and expectations rising
 - General interest - public; industry
 - Public domain SW: GnomeMeeting, ohphoneX
- Start-ups, big telecoms
 - and now *disruptive businesses*



Agenda -> Indico

- Consolidating on one event mgmt tool at CERN: Indico
 - EU project; based on Agenda knowledge + wish-list <http://indicodemo.cern.ch>
- Migration plan
 - July: Move to production server
 - August: IT categories migrated
 - September: Seminars and courses
 - December: All other categories
- EGEE
 - EGEE03 Athens, used Indico
 - EGEE04 Committed to use
 - Lots of valuable feedback being incorporated

RTAG12

- Step through recommendations
 - With comments

R1: Establish a CTS

- A1: AVC Section created
 - Regrouped services with synergies
 - Collaborating services
 - IS for mail, instant messaging
 - CS for telephone conferencing
 - Web portal for guidelines, recommendations, FAQs etc
 - 🗨 *Scope: help for external institutes [...] help desk type facilities*
 - R&D sub-projects + external collaborators

- ? *Oversight from each of LHC collaborations*

R2: VRVS support; MoU

- A2: VRVS status-quo
 - Focus on H323 capture equipment which can also easily be used for VRVS capture
 - Operational aspects: continue with hosting + cofunding CALTECH associate
 - Ensure smooth integration of CERN conference rooms in VRVS conferences
 - 👤 *Scope: [...] entire LHC physics life cycle*
 - Documentation: Not VRVS specific, handle in A1
 - 👤 *Scope: documentation [...] of video conferencing facilities at [...] participating institutes*

- ? *MoU: "access to VRVS remain free"*

R3: H.323 MCU Service

- A3: Local MCU service
 - MoU with Lyon who will host the MCU (joint funding)
 - Global booking system development
 - 👤 *Operation to appear as being under CERN's responsibility*
 - ? *Interoperability with VRVS: Deploy developments by VRVS team*
 - ? *Common interface for VRVS / MCU*

R4: User Support worldwide

- A4: User Support and web portal
 - SW downloads
 - HW recommendations: For CERN desktops
 - Stores
 - On-line support: HelpDesk + 2nd/3rd level
 - Web portal, FAQs: Yes
 - 👤 *VC support [...] at home institutes or elsewhere, including transit*

R5: 24/7 phone conferencing

- A5: e-dial used by Internet2 (bought by Alcatel; being integrated)
 - Web based booking system
 - Remote documentation system
 - CERN originated calls

- VoIP: medium term goal
 - SIP capability with latest Alcatel SW
 - ..time and money...

R6: Room equip and maintain

- A6: M&O activity in mandate of A1
 - Quality audio video: materials investment
 - Share documents
 - Determine directions first...
 - H239 or proprietary solutions
 - VNC (currently VRVS and Codian MCU)
 - Forthcoming technologies (new VRVS video stream mode)
 - Responsibilities...

R7: Web-cast/archive service

- A7: Capture-Recording-Streaming service
 - Fixed equipment in large auditoria
 - *Low priority: Create a recording studio*
 - Portable equipment
 - Record presentations & web archive
 - Careful choice of capture technology
 - Specific locations
 - Operator support on demand, with fee
 - External contracting needs advance warning!
 - Webcast infrastructure and licences
 - Server: Refresh and expand (investment)

R8: Global Collaborative Work Env

- A8: Indico Framework
 - Global audio video conf booking system
 - Meeting management
 - Recording and archival of documents, presentations and sessions
- Plans:
 - Links to physical room booking (CRBS rewrite)
 - Links to VRVS booking
 - Links to MCU booking
 - Links to webcasting
 - Links to launch VRVS client from Indico
 - 🗣️ *Phone conferencing not automated until VoIP*

R9: Grid certificate support

- A9: Into workplan
 - VRVS team to do VRVS
 - Indico investigating possibilities

Resources

- Personnel

- Coordinator ≤ 1 engineer(s) 1
- Conferencing staff 2 technicians 3
- Camera Ops + archive 2(3) tech-engs 3
- SW develop 2(3) temp j-eng 4
- Greater scope, occupied with Ops

- Materials

- O(10-100k) O(1-10M)

Conclusions

- Share vision (not necessarily scope)
- Focused CERN activity
 - Made first positive steps
- Current resources
 - Maintain service
 - Steady SW enhancements $O(\text{years})$
 - Gradual replacement of equipment