

Is RAIL right for you?

Virtual Classroom and Labs



Denis Spiller & Tony Shortland



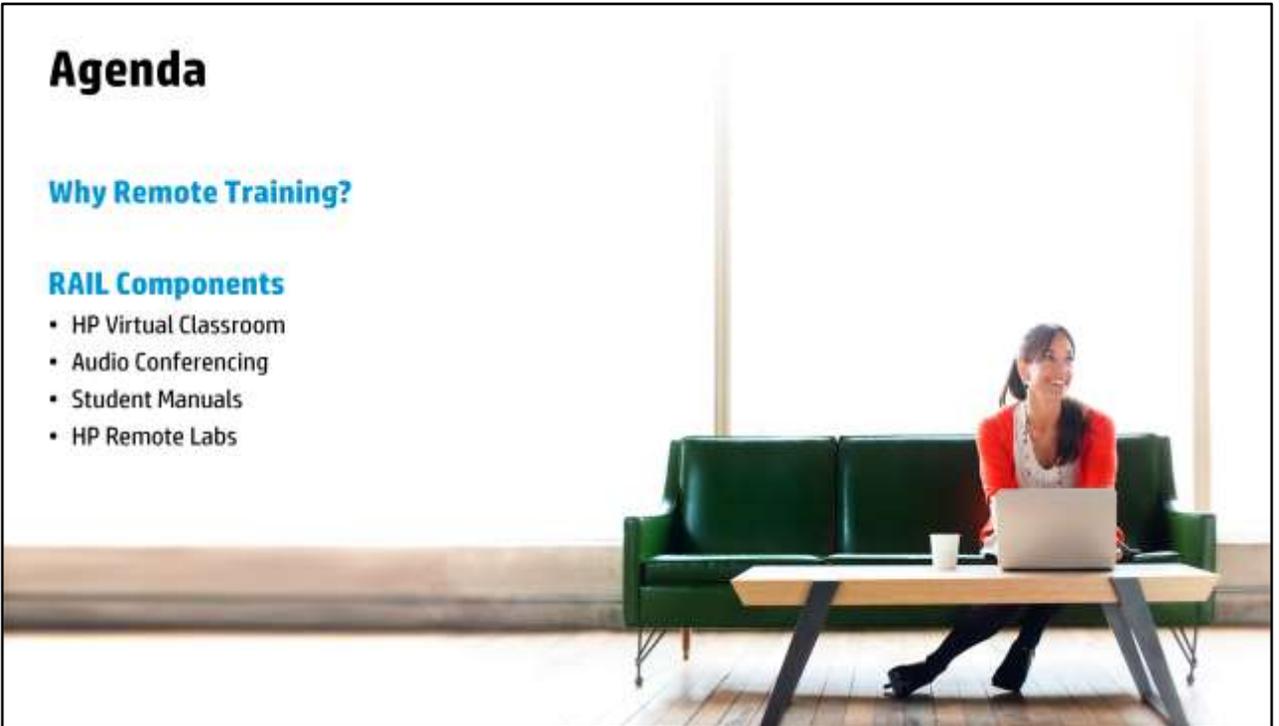
Presentation to CEEdMA conference 18th April 2013

Agenda

Why Remote Training?

RAIL Components

- HP Virtual Classroom
- Audio Conferencing
- Student Manuals
- HP Remote Labs



Why Remote Training?

Benefits for HP Education

- Critical mass on low-fill classes
- EMEA schedule, wider exposure

Benefits for HP customers

- Access to high-value equipment
- More dates, more opportunities

Barriers for HP customers

- English Language only
- Cultural objections
- Mistrust



Benefits for HP Education include:

- The improvement in class fill experienced by spreading the schedule across a much wider customer base than a local country face-to-face delivery
- HP Education are in over 40 countries across EMEA and clearly not every one has the resources to deliver every class locally. Inclusion in a pan-European schedule expands each country's offering.

Benefits for HP Customers include:

- Greater access to high-value equipment. Cost efficient access to high-end systems to individual students (or pairs) anywhere in the world.
- The same economies improve availability of popular classes and result in a fuller schedule.

Barriers for HP Customers include

- Currently English language only. French, German, Spanish and Italian students are conspicuous by their absence because larger countries expect the class to be delivered in local language, so our local remote training will take care of this. Otherwise a relatively straight-forward EMEA schedule is complicated by four or five languages.
- We've found that some countries see training as a beano! Travel, accommodation, team meals, unlimited access to the instructor and equipment and copious free gifts.
- Finally there's a lack of experience in remote training. Misconceptions such as it's a recorded presentation over a set of slides, screenshots of software and little interactivity. One of the things we do to counteract this is run regular demo sessions so potential students can experience the virtual environment.

HP Remotely Assisted Instructional Learning

RAIL in a nutshell

- HP Virtual Rooms web collaboration tool
- HP Remote Labs
- Student manuals and lab guides



RAIL has been developed by HP Education over the past 10 years using the tools and utilities that HP employees use everyday and features:

- The same training as our traditional face to face instructor-led training sessions.
- HP Virtual Rooms live web collaboration tool, where you'll interact in real-time with instructors and fellow students via telephone audio, group chats, forums and instant messages.
- The presentation and lab activities are all delivered within the encrypted, firewall friendly environment.
- The same hands-on lab exercises, on the same live equipment as face to face deliveries via the HP Virtual Labs. There is nothing virtual about our virtual labs. It's real equipment, assigned for the duration of the training in a safe, manageable environment which will allow students to make mistakes. The rule is..."If you break it, you fix it", just like you do during your day job.
- The same course materials, written with the intention of being used as best practice documents and job cards after the course

HP Virtual Rooms

The screenshot displays a virtual room interface. The main content area shows a presentation slide with the following text:

Is RAIL right for you?
Remote training myths exploded

HP logo

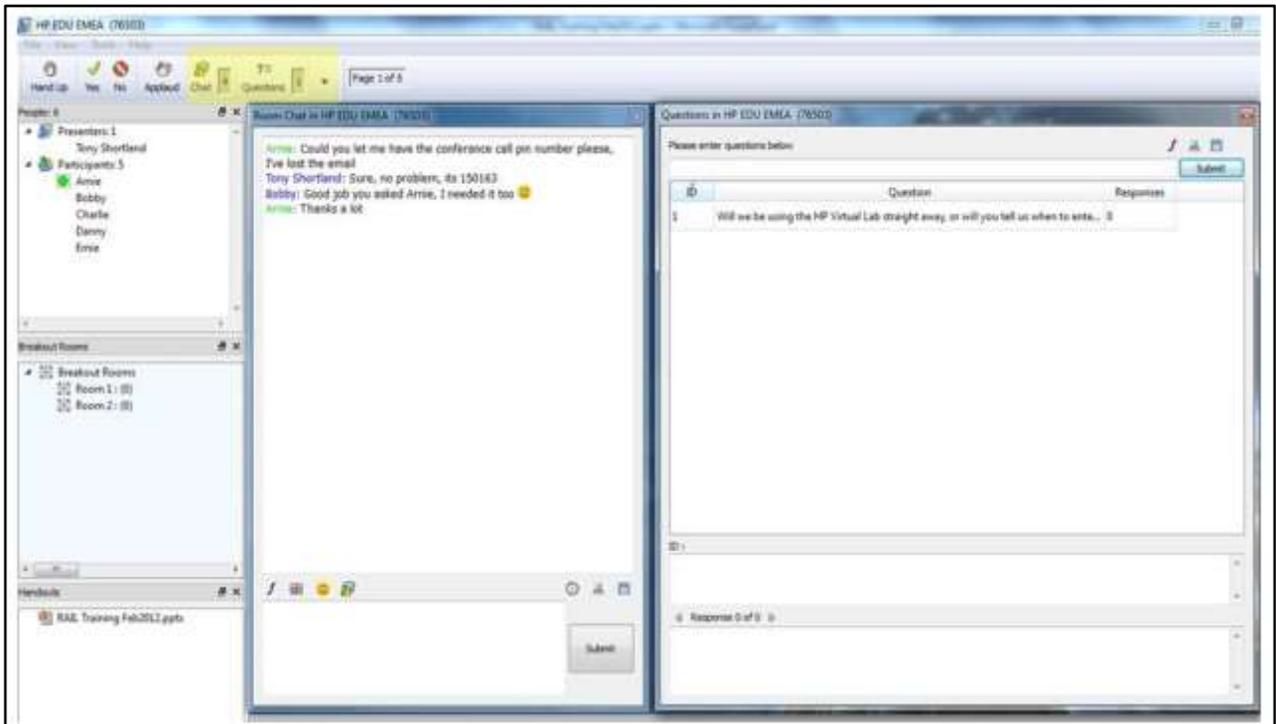
Tony Shortland
EMEA Portfolio Manager
HP Education Services

The interface includes a navigation pane on the left with sections for 'Presentations', 'Participants', and 'Breakout Rooms'. A 'Smaller Windows' tablet is positioned on the right, displaying a ribbon graphic and the year '2010'. The HP logo is also visible in the bottom right corner of the virtual room.

The Virtual Room is HP's collaboration tool used throughout the training to display presentations and enable breakout sessions.

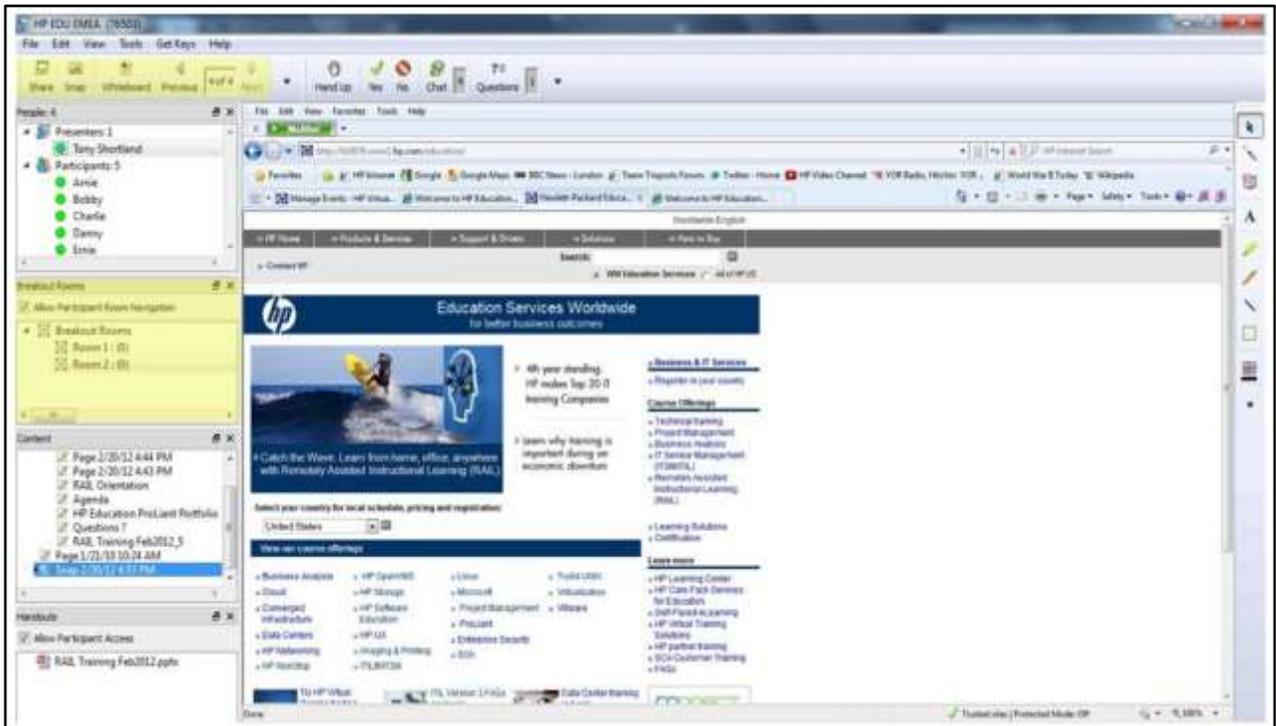
Student Controls include:

- Hand-up – ask questions and attract the instructor, or your classmates attention, just like you might do in a face-to-face session.
- YES/NO buttons to carry out a quick poll of understanding, provide agreement or disagreement.
- The applaud button, if your instructor or classmates provide input worthy of note, you can build up a round of applause by clicking on the button a number of times.
- Handout Manager – Instructors can upload service briefs, white papers and useful documents to make them available to the students for download.



Other Student Controls:

- The CHAT button will launch a dialogue box, enabling public chat for sharing information with the whole group. In addition to the global message, by right-clicking on a individual in the People box, private chat can occur. This is one to one conversation that would be used during breakout sessions where two students may be working together on a lab exercise
- The QUESTION button is used to log questions that might be of interest to the class but are posed during the presentation. It has the benefit of logging questions for discussion later.
- POLLS & SURVEYS (Not Shown) – The Instructor can launch a survey at anytime to investigate understanding, as a learning check or gather information regarding the thoughts or opinions of the audience.



The **Instructor Controls** include:

- Slide Controls
- The Whiteboard
- Laser Pointer, highlighter, pencil
- Line and shape drawing
- A text box for annotation
- A snap and share function which can be used to import applications into the presentation which is excellent for displaying web pages and even running video, assuming that the client connection can also cope with the demand.

The instructor can use **breakout rooms** for lab exercises or small group discussion, for instance when a solution to a design request is sought. Each breakout room will get it's own whiteboard where students can collaborate on a solution before presenting back to the rest of the class. This form of small workgroup can also be useful during hands-on lab exercises, where students not only have the virtual lab location to work together, but also a place to exchange ideas and confirm the completion of each step along the way.

Audio Features

PC Audio

- Newer virtual rooms have audio and video

Telephone Audio

- Freephone and local-call access

Conferencing Benefits

- Operator assistance
- Name announce
- Breakout rooms
- Mute options



© Copyright 2012 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.

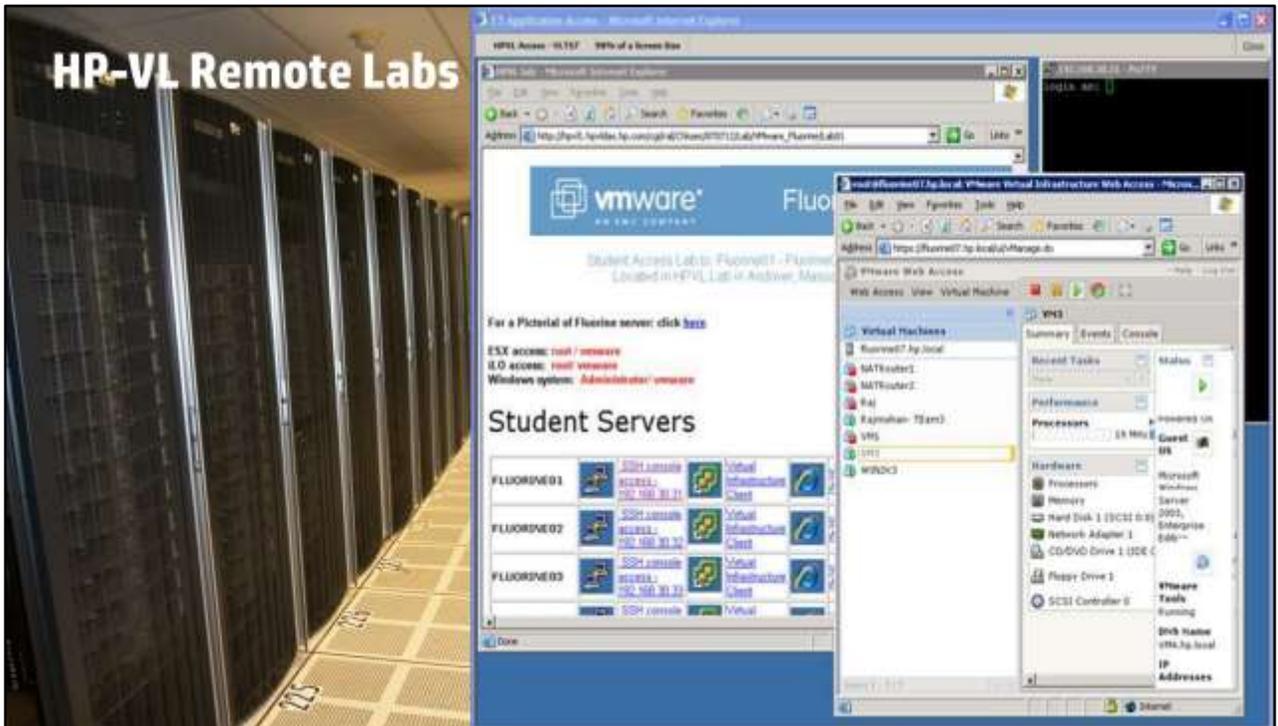
The first audio option is to use PC audio. If the room used has this option included, then functions such as mute-all, or mute individual microphones are useful. Most important, the audio portion is carried across to the breakout rooms.

HP RAIL generally uses telephone conferencing for the audio portion of the training. It gives the greatest flexibility and doesn't tie the student to their laptop like PC audio. The instructor has operator assistance in case of problems. There is a name announce facility on entry and exit which helps the instructor keep track of who is on the call. On occasions, when a student leaves the call, it's important to know they've gone and ensure that they don't miss any of the training. Breakout rooms are created in the con-call in a similar way to the Virtual Room, so separate conversations can go on between pairs of students during lab exercises or small groups during design type exercises.

It's recommended that the student uses a hands-free kit during the training to leave both hands free for the other tasks and also to avoid the physical stress of holding the phone for extended periods.



These days the printing of huge student workbooks and lab guides is reducing as our students become more aware of the impact this has on the environment. To avoid the unnecessary printing and shipping of these volumes, HP has partnered with a global DRM (digital rights management) company to deliver electronic copies of the courseware direct to your desktop, laptop or tablet. The ability to print copies of the manuals still exists if necessary, but the e-book that is used during training can be annotated and highlighted in the usual way. After the training, the lab manual is often used as a guide to support the students in their day job. Now this is even easier as the manuals are far more portable the printed guides.



The HP Virtual Lab is:

- internet-accessible
- automated training environment
- a secure datacentre
- supported 24x7 “hands on” access to the systems in assigned labs

The HP-VL Remote Lab has:

- more than 4000 student-accessible lab systems (Windows, UNIX, Linux, Storage, etc.)
- 350 racks over 12,000 square feet
- automated builds - systems can be quickly rebuilt if accidentally corrupted during a class

The “HPVL Desktop” provides a user-friendly graphical interface (providing command line and web-based management)

All HPVL lab activities take place within the HPVL Desktop, including any lab applications (web management, telnet, CDE, OV, RDP desktop)