

DIVISION OF TECHNOLOGY, INFORMATION AND LEARNING SUPPORT
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QUT

Cooperation, Collaboration & Consolidation

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Queensland University of Technology
Brisbane Australia



- Manage a fleet of 10,000 machines
 - 6000 Staff PCs
 - 4000 Student labs/MELT PCs
- Locations:
 - Gardens Point, Kevin Grove, Caboolture, Canberra, RBWH , MERF

In the past

- Client Systems Infrastructure (SOE team)
 - Ghost & SMS 2003
 - Base apps installed automatically
- Learning Environments (Lab team)
 - Rembo & Deepfreeze
 - Monolithic image – updated manually, customised configurations - 43 images



Previous lab technology



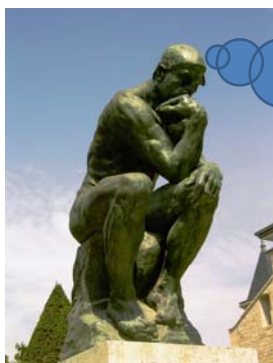
- PXE (pre boot technology). Works before windows has loaded
- File based only. No interaction with operating system.
- Large scale changes mean re-imaging is easiest option.
- Images are hardware dependent
- Supports older Windows, Linux. Did not support Windows 7
- Not used in staff space

An imperfect process



- All software requests must be collated
- Last minute re-imaging of labs/MELTS
- **EVERY** software request is on the critical path
- Late software requests difficult to accommodate
- Changes to the images difficult to accommodate
- **Staff Burnout**

Addressing the Problem



How do we manage the labs and MELTS for 40000 students, 5000 staff and keep the environment well maintained?

How do we provide applications and updates in a responsive way?

The Approach

Work smarter not harder

- Use common technology across staff and student spaces
- Well managed environment
- Dynamic updating & software installation
- Staff input to process
- Improved Lab team work practices



Technologies to use..

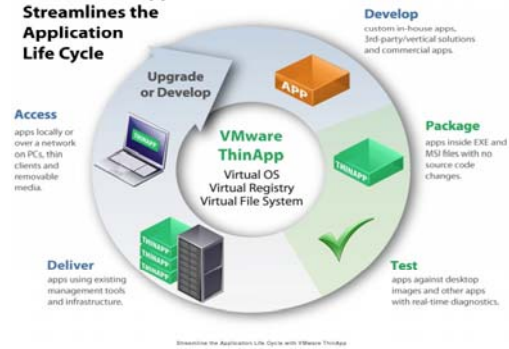


- SCCM
 - Automatic OS installation
 - Package installation
 - Windows configuration
 - Repeatable configurations
 - Automated configurations
 - Hardware independent

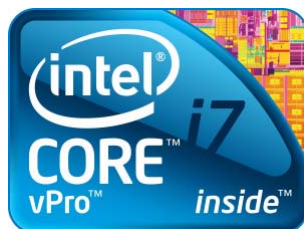
Technologies to use..

- Virtual Applications
 - VMware ThinApp
 - Microsoft App-V
- Automated Installs
 - 'Hands off' installation
 - Silent

VMware ThinApp Streamlines the Application Life Cycle



Technologies to use..



VPro

Every machine connected to power & a network port is manageable, **whether switched on or not.**

Technologies to use.. (student labs only)



- 'Reboot to restore'
- Allows users to be administrators. Changes are removed at next boot.
- Reduces support calls/costs to fix incorrect configuration changes
- Prevents dynamic updating (unless thawed)

Challenges for the new direction

- Approx 650 applications
- Printer drivers and Windows 7 64-bit
- New Director

Challenges – The Melbourne Cup Day Incident

Note to self: SCCM OSD is very very very very very very very efficient.

Be very very very very very very very very very careful!



Expect the unexpected



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Semester 1 2011 success !!

SCCM much more robust than previous solution
Greater cooperation from ITS departments in troubleshooting
By week 1, all labs deployed less BEE Faculty labs by request



Post-install challenges

IE default security settings higher than expected on internal sites

Thinapp Firefox unstable with some filetypes

Slow logins

Printer mapping inconsistent

Current status

- Well managed environment
 - Security updates / non-critical applications applied during regular maintenance
 - Urgent applications can be installed immediately (30 minute max contact time)
- Teaching staff
 - Call for software no longer required
 - Existing packages deployed within 24 hours
 - Applications requiring packaging 1-2 weeks lead time
- LE staff
 - No start of semester panic – planned rollout of applications, not images
 - Able to be responsive to changes
 - Work/life balance

Thankyou

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