NGS

National Grid Service

Connecting to a UI and the Training CA

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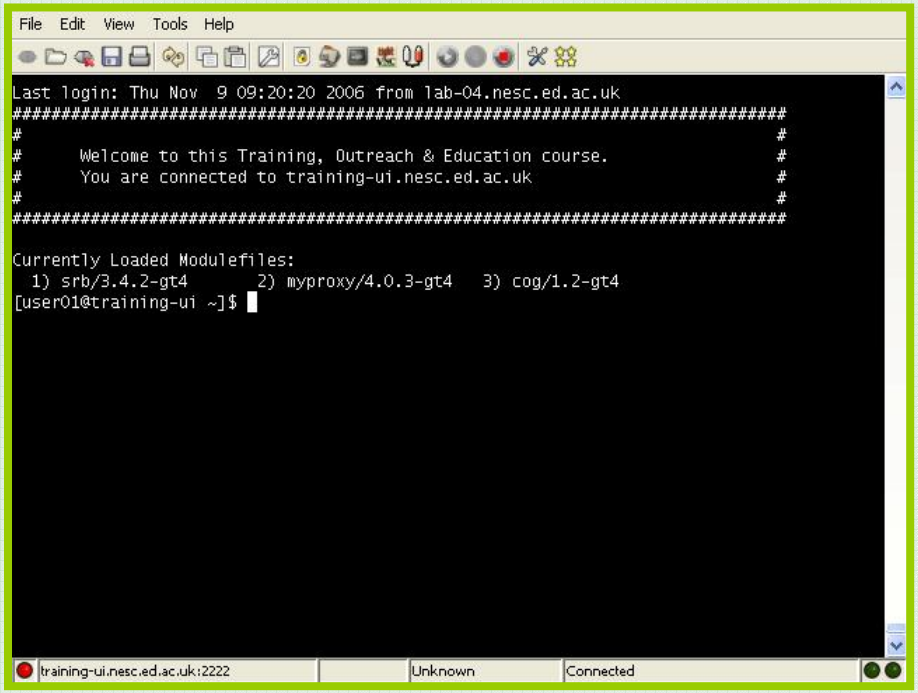
Pre-requisite Software and Configuration

	Win32	Linux	Apple Mac
Web Browser	Firefox (best) IE	Firefox	Firefox (Safari is not supported)
Java	Sun Java SDK 1.5 or above	Sun Java SDK 1.5 or above (gnu java is not supported)	Sun Java SDK 1.5 or above
Xwindows	Exceed cygwin startx	Automatic (when using GUI desktop)	X11 optional component required
Firewall / Security	Outbound ports 80, 443 and 2222 direct to training-ui.nesc.ed.ac.uk (no proxies)		

Java gsissh



- Java ssh tool modified by NGS to include GSI authentication
- Now a sourceforge project
- Run via standalone (easiest), as applet or standalone
- www.iceage-eu.org/gsissh for training version

Apple Macs and X11

- Additional package for X11 support required
- If difficulties encountered with Java gsissh and X11 forwards:
  - Run java gsissh standalone from an Xterm
  - Xterm supports X11 forwarding but Terminal does not.
- Please note the use of Apple Mac's is not supported.

Training Certificates

- To run any practicals, attendees need certificates
- One solution is to require all attendees to have gone through process of obtaining certificates from a CA.
  - Complex process.
  - Difficult to ensure that this has been done by all attendees
  - Attendees would need to bring their certificates with them to event
  - Configuring resource reservation complex.
- Better Solution: the Training CA.

The Training Certificate Authority

- A fully functional certificate authority for issuing low-assurance certificates
- Low-assurance allows:
  - Certificates issued to local organiser and not the attendee.
  - Attendees do not need to sign UK Terms and conditions of use.
  - Identity checks on attendees are not needed.
- No need for the attendee to do anything pre-event.
- All certificate DN's are known pre-event.
- Training CA signs as "/C=UK/O=Grid/O=Test/OU=Authority/CN=Root"

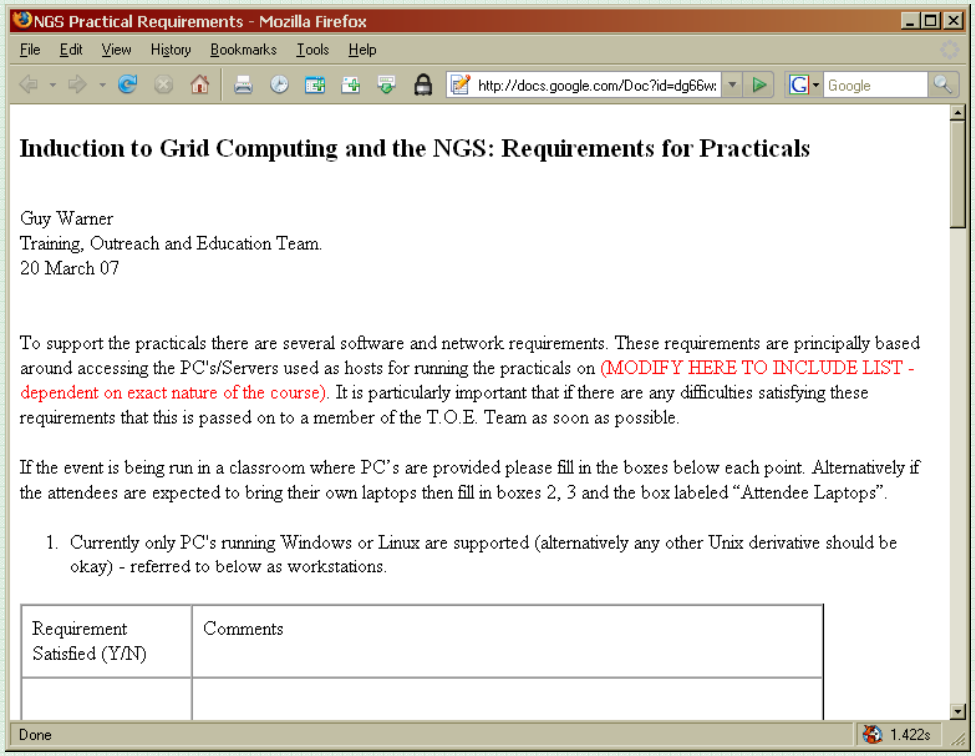
Supporting the Training CA

- To support the Training CA:
  - Download the training CA public key and signing policy from http://homepages.nesc.ac.uk/~gcw/TrainingCA/
  - Install these into their certificates folder
    - Normally /etc/grid-security/certificates
  - Create a pool of local training accounts
  - Map the training certificates to these pool accounts
- Certificate DN's are "/C=UK/O=Grid/O=Training/*"
  - * is normally user00, user01, user02, …
- user00 is reserved for testing by the local organisers/site administrators

Certificate Manager

- Designed for use with java gsissh tool.
- Allows certificates to be distributed to attendees using a secure, traceable method
  - Maps certificates to IP addresses
- Only suitable for use when unique IP address is detectable
  - No proxy or NA(P)T
- Supports multiple concurrent events

Documentation in Google Docs



http://docs.google.com/Doc?id=dg66wx2b_3fk65h2