Computing Resources at ICT

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Your Own ...

- Linux account
- Web site, including password protection
- MySQL Database
- Subversion repository
  - Version control, file sharing, backup

ICT vs IT

- There are two different servers:
  - ict.siit.tu.ac.th (Moodle)
  - it.siit.tu.ac.th (SSH, MySQL, website)
- In the past there was only ICT, but some services moved to IT
- username/password originally the same on ICT/IT, but they are not connected
  - Change password on ICT does NOT change it on IT
- Some instructions are out of date
  - May refer to ict.siit.tu.ac.th instead of it.siit.tu.ac.th

Username and Password

- Username
  - 'u' followed by your ID
  - u5000000000
- Password
  - Password for Linux account emailed to you
  - All systems linked to Linux account (same username & password): Moodle, SVN, secure web
  - EXCEPT MySQL database: initially same username & password but not linked ??
  - How to change password: SSH into Linux account and type 'passwd'

Examples

- Linux account
  - Use ssh or PuTTY to login to ICT server
- Personal Web Page
  - Use scp or WinSCP to copy files to ICT server
  - All files in your `public_html` directory are accessible via:
    - http://it.siit.tu.ac.th/~u5000000000/
- Private Web Page
  - Files in `public_html/private` are password protected:
    - https://it.siit.tu.ac.th/~u5000000000/private/

Examples

- MySQL Database
  - Database name: same as your username
  - Access via command line on ICT server
    - mysql -u u5000000000 -p u5000000000

Subversion (SVN)

- Centralised version control system
  - Version Control
  - Online File Storage
  - File Sharing
  - Backup

SVN Concepts

- Files and directories stored in a repository on ict.siit.tu.ac.th
- Initially, a user performs a checkout of a repository, creating a working copy on their own computer
- User creates, edits, removes files in normal manner on their computer
- Commit changes from working copy to repository (upload latest changes to server)
- Update working copy from repository (download latest version from server)

SVN at ICT

- Every student has their own private repository
  - https://it.siit.tu.ac.th/svn/u5000000000
  - Use for own files; NOT for senior project
- A public projects repository:
  - https://it.siit.tu.ac.th/svn/projects
  - Directories will be created for each group
    - https://it.siit.tu.ac.th/svn/projects/2015/senior/bs1
    - https://it.siit.tu.ac.th/svn/projects/2015/senior/bs2
    - ...

Using SVN on Your Computer

- Windows
  - TortoiseSVN
  - Tutorial: http://ict.siit.tu.ac.th/help/subversion
- Linux
  - Command line: `svn`
  - Tutorial: http://ict.siit.tu.ac.th/help/subversion
- Mac OS X
  - Versions, Cornerstone, command line
- Netbeans, Eclipse and others have plugins
- Web (read-only): ViewVC
  - https://it.siit.tu.ac.th/viewvc/

SVN: What To Do?

- Get started:
  - Install a SVN client for your computer
  - Checkout your groups repository
    - https://it.siit.tu.ac.th/svn/projects/2014/senior/XXY
- During project (e.g. once per day):
  - Update your working copy
  - Edit your files on your computer
  - Commit your changes to server

What To Put on SVN

- Your project documents
  - Presentations, proposal, reports
- Your project code
  - Source code that you write
  - Web pages that you create
  - Images that you create

What NOT To Put on SVN

- Object and executable code: .o, .exe, .jar, .dll, .bin, ...
- Generated documents: .pdf, .dvi, LaTeX generated files, ...
- Downloaded documents that others created
- Compressed or archives of files: .zip, .tgz, .tar, .rar
- Downloaded media: .avi, .mp3, .mp4, .jpg, …
- Copyrighted content
- Non-project files