**Source Control**

**Questions to companies:**

* What is the current source control server for undergoing projects?
* Is the new project developed on single or multiple platforms?
* How many people will interact with the revision repository of the new project?
* Are developers going to work in one site or different sites?
* Why are there two shell interfaces for Git, Cygwin & msysGit?

Cygwin is a Linux shell, msysGit is a Windows shell.

* Cygwin **VS** msysGit?

|  |  |
| --- | --- |
| Cygwin | msysGit |
| **Support Chinese input and display perfectly** | Need specific configuration |
| Command line shell | **Provide visual shell TortoiseGit which integrated msysGit and windows file management** |

* Traits of distributed revision control system comparing with centralized revision control system.
* Revision repository is placed under the root of workspace.
* To secure repository, clone the repository and enable auto push.
* Editable username and email are not secure. Server repository can set up authentication (Gerrit).
* Why are alias used in Git?

Make it easier for CVS & SVN users to use CVS/SVN alike command in Git.

* Primary commands of creating repository

git init / git add / git commit / git config

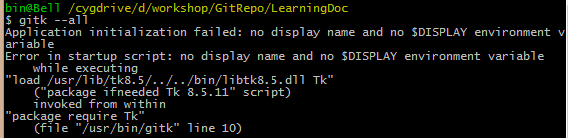
* Benefits of Stage in Git
* Traits of repository implementation
  + Tree structure
  + Pointer reference
  + Stage
  + SHA1 hash
* Why not use index to mark submitting in Git?

Submitting is not in sequence in distributed revision control system, only universal unique number can identify submitting occurred at any time in anywhere.

* Visual user tool for Git
  + Why not use gitk, gitg, qgit? – They requires Linux or QT environment.
  + Why choose TortoiseGit? – Familiar to SVN users; free SW in windows; easy to port SVN repository to Git.
  + Install TortoiseGit
    - Read and follow setup instruction in <http://code.google.com/p/tortoisegit/wiki/SetupHowTo>, prerequisites: Windows Installer and Git for Windows. Check if the computer already installed Windows Installer: run->command window->msiexec.
    - Download installation package in <http://code.google.com/p/tortoisegit/wiki/Download> and execute it.
    - Refer to instruction in Youdao notes.
  + Install gitk
    - Much easier way is installing it in the Cygwin installation, just tick the “tcl –tk: Tcl X11 toolkit” in the package list.
    - The other way is downloading ActiveTcl Community Edition at <http://www.activestate.com/downloads#4> which is for windows and free.
    - Run the .exe to perform installation.
    - An error during installation, not sure to what extent it would affect the function, note down it here for future reference:



* Troubleshooting of running gitk
  + Run “$ gitk –all” in Cygwin, below error is displayed:



To solve this issue, install “XInit” in Cygwin installation by selecting the “XInit” package. Refer to Youdao notes for details.

* Source control tool cooperates with requirement and bug track tool?

Redmine?

**Chapter 7 – Git Reset -- unread.**

**Chapter 8 – Git Checkout – brief read.**

**Chapter 9 – Resume progress – brief read.**