Java means DURGA SOFT..

JAVA TOOLS

Material

CVS

India's No.1 Software Training Institute

DURGASOFT

www.durgasoft.com Ph: 9246212143 ,8096969696

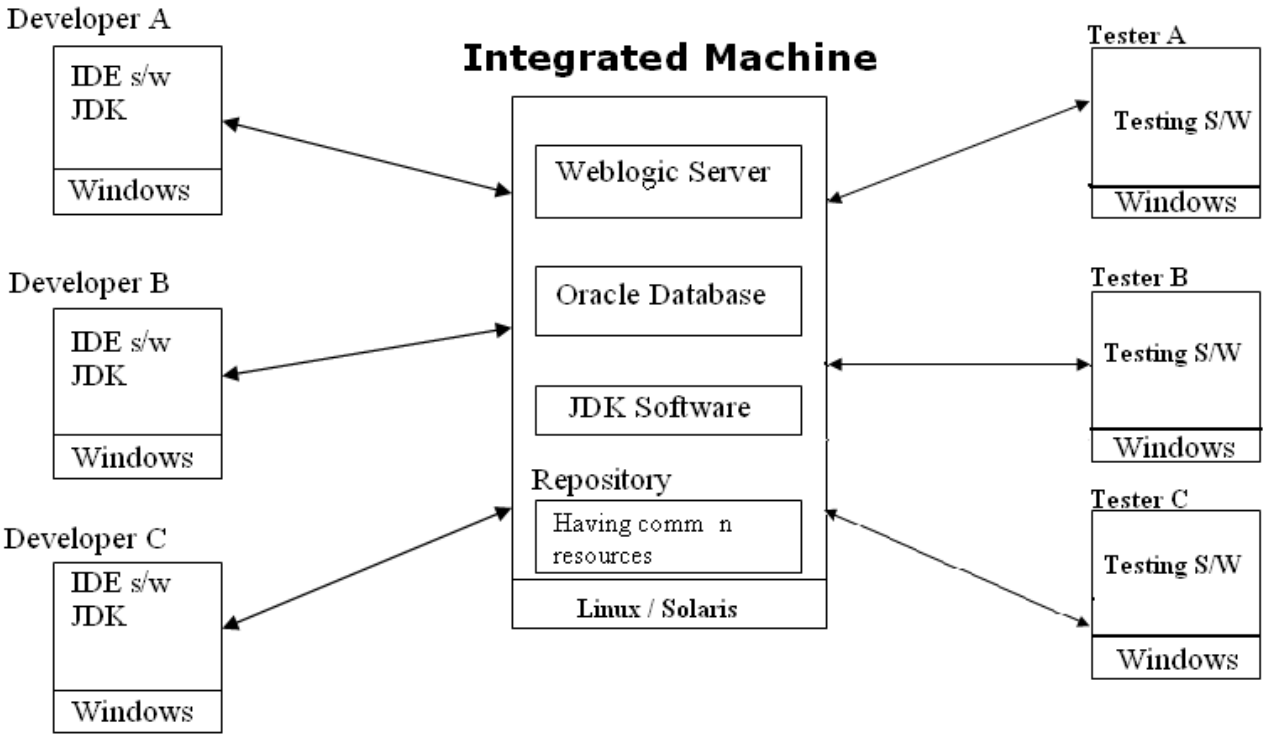
CVS

CONTENT:

CVS (Version Control System)

Introduction:

In real time all developers and testers machines will be there running in windows environment but all these machines will be connected to a common machine of company called **integrated machine.** Generally this integrated machine resides in linux or solaris environment having high configuration and also contains the common software that are required for multiple projects of company.



The multiple projects of company will use the multiple logical databases that are created in database software of integrated machine on one per project basis.

During development mode of the project, the project will be maintained in the CVS Repository or SVN Repository to make the resources of the project visible and accessible for all developers of the project.

Definition : **CVS** is a version control system. Using it, developers can record the history of their source files. This is also called as Source Code Management.

Dick Grune developed CVS as a series of shell scripts in July 1986.

- The CVS repository keeps track of various operations that are done in the files by developers by accessing the files by developers by accessing the files from CVS repository.
- CVS repository keeps track of various modifications done in files by different developers by generating versions.

Ex:

Test.java (Original file)

Test.java 1.1 (after first modification)

Test.java 1.2 (after second modification)

Test.java 1.3 (after third modification)

Benefits of Source Code Management:

- ✓ All code changes are tracked.
- ✓ Avoid losing work due to simple mistakes (Allows you to roller back changes).

- ✓ Codes changes across several developers can be synchronized.
- ✓ Makes it easy to backup your source code.
- ✓ You can work on several different copies of the same application at the same time.
- ✓ Supervisor can see how the code evolved over time.

Terminology:

- **Repository** : area on the server where the files are stored
- **Sandbox** : a local copy of the code which you work on and then commit to the repository
- **Checkout** : Process of collecting resource or project from CVS repository.
- **Commit** : Process of keeping resources back into CVS Repository after doing modifications is called as commit operation or Checkin operation.
- **Update** : getting code changes that have been committed since you checked out the project
- **Merge** : combining changes between two versions of the same file
- **History** : shows a list of commit messages, times and, who committed for a particular file
- **Revision** : cvs assigned version number for a file

Software Description:

Some CVS Repository softwares are

- ✓ CVSNT
- ✓ WinCVS
- ✓ Tortoise
- ✓ ClearCase

❖ The CVS repository software will be installed on the integrated machine and the IDE software of the developer machines will be configured to interact with CVS Repository.

CVS NT :

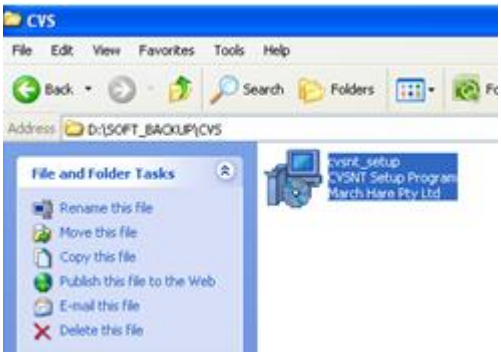
Type : repository software

Version : 2.x

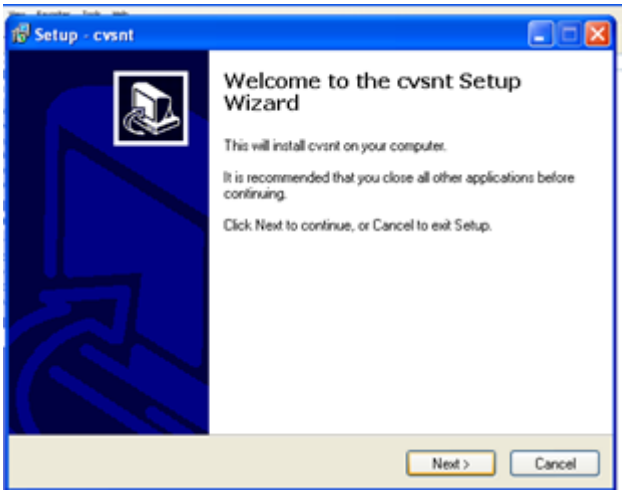
Download from : www.cvsnt.org

CVSNT INSTALLATION:

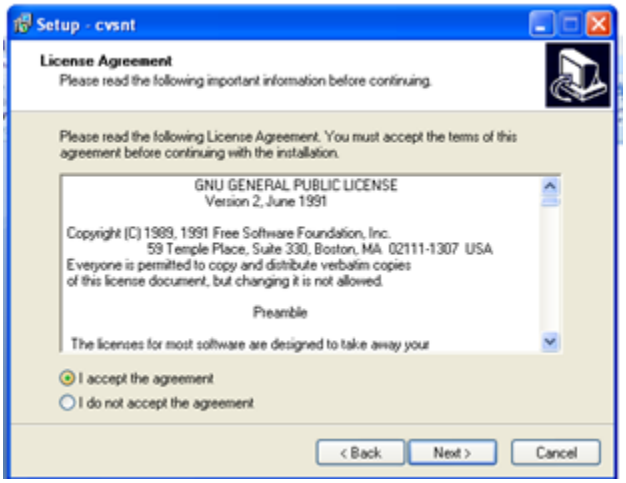
SERVER INSTALLATION STEPS



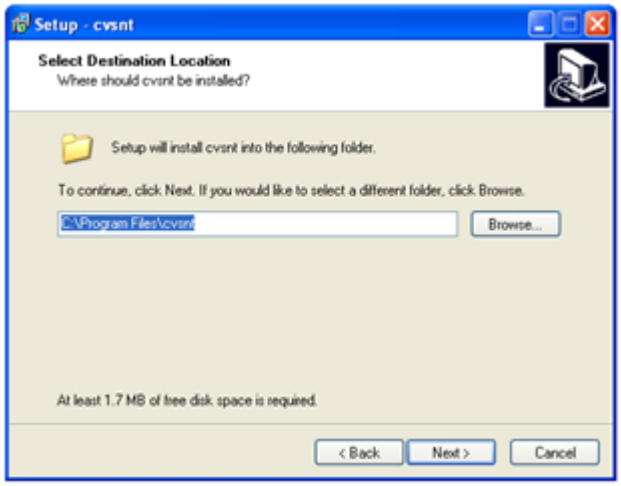
CVSNT setup file.Double Click on the Setup file



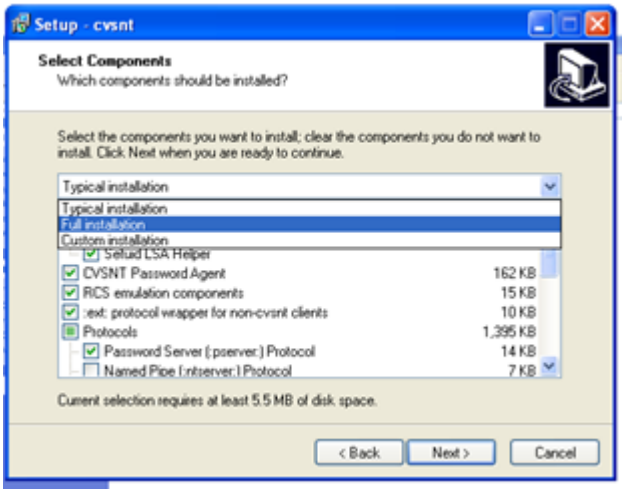
Click on Next



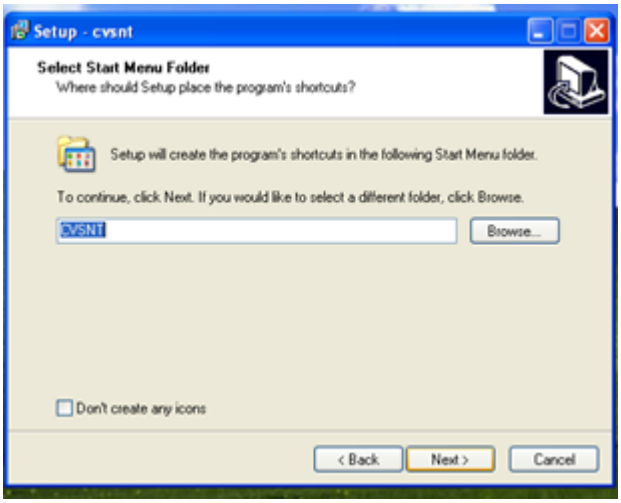
Accept the agreement and click on Next



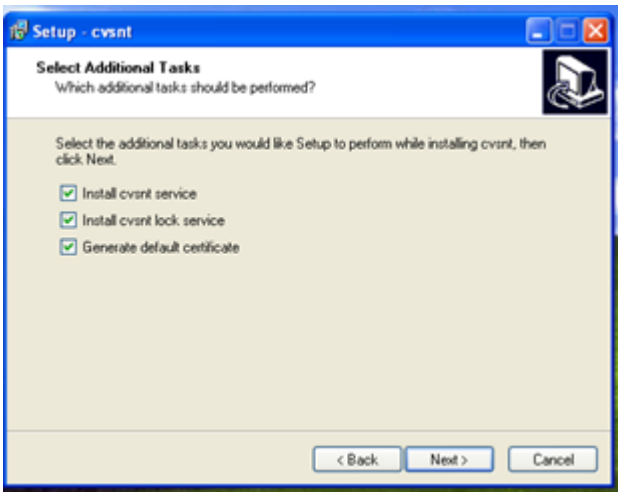
Select the Installation Directory(keep Default Only) and Click on Next



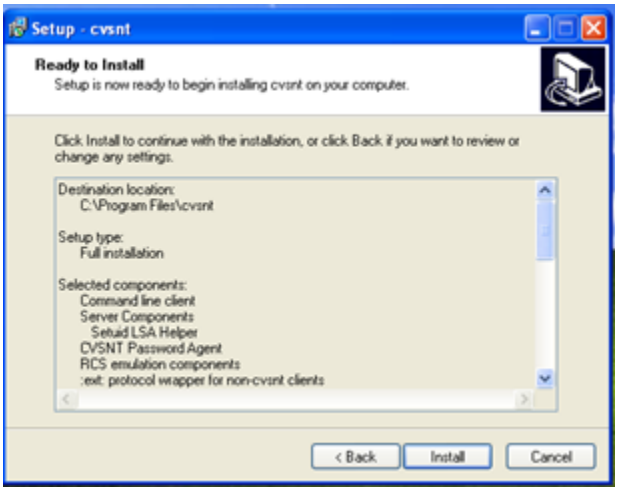
Select Full Installation and Click On Next



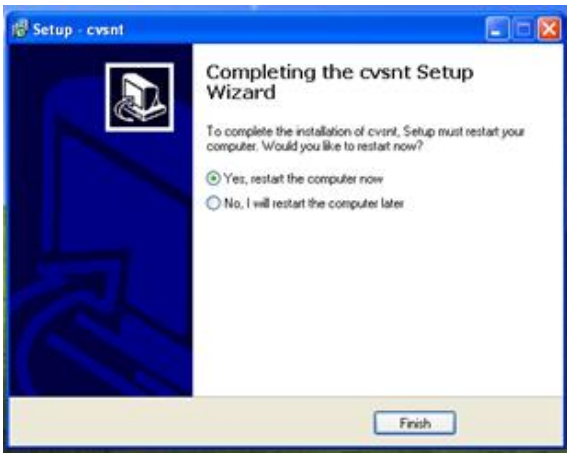
Click on Next



Select All and Click on Next



Click on Install



Click on Finish

Procedure to create CVS NT Repository for certain project / module :

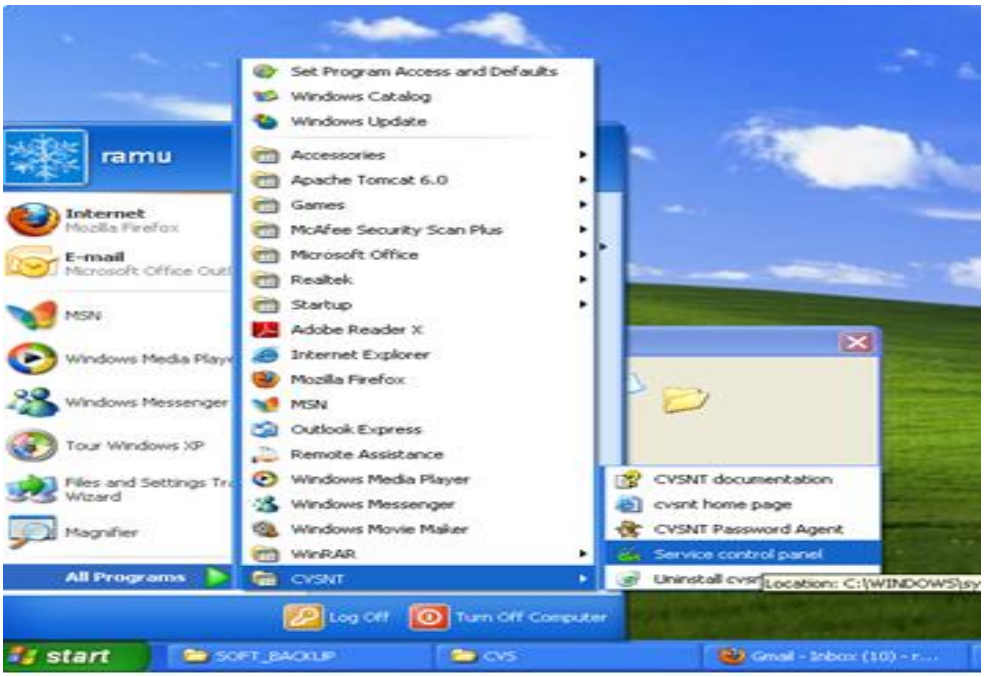
Step-1 : create a directory in computer's file system.

Ex: D:\ CVSRep

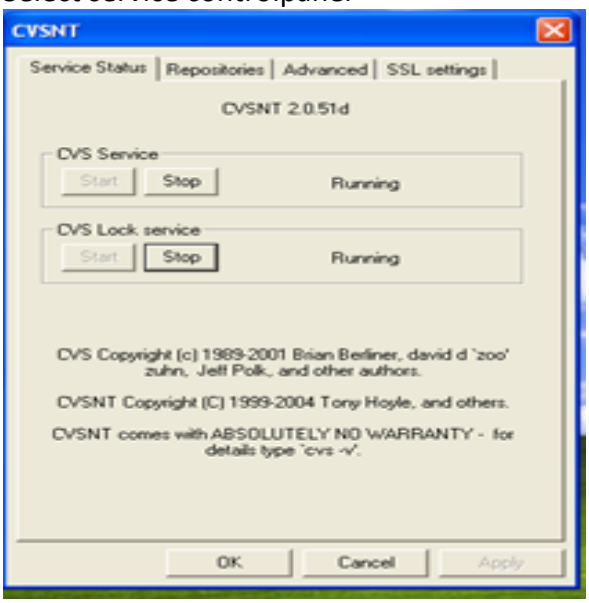
Step-2 : Start the service control panel of CVS NT software pointing to above folder (D:\CVSRep).

" Start → programs → CVS NT → Service Control Panel →click on **start** CVS service → click on **start** CVS Lock Service → repositories tab → add →location →browse & select D:\CVSRep → give logical name for repository (ex: /cvsrep) ('/' mandatory) →ok → click on yes on Do you want to initialize pop up window → apply → ok "

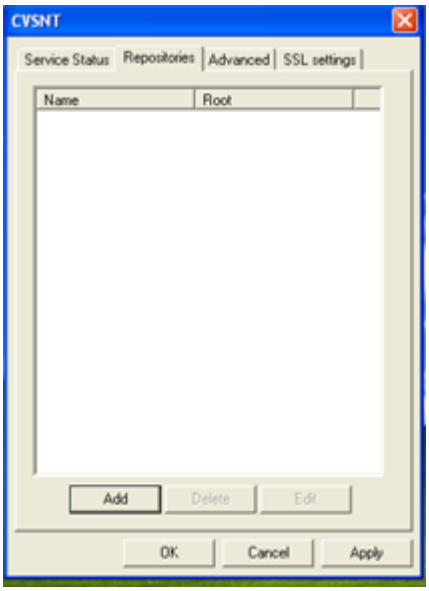
Creating The Repository



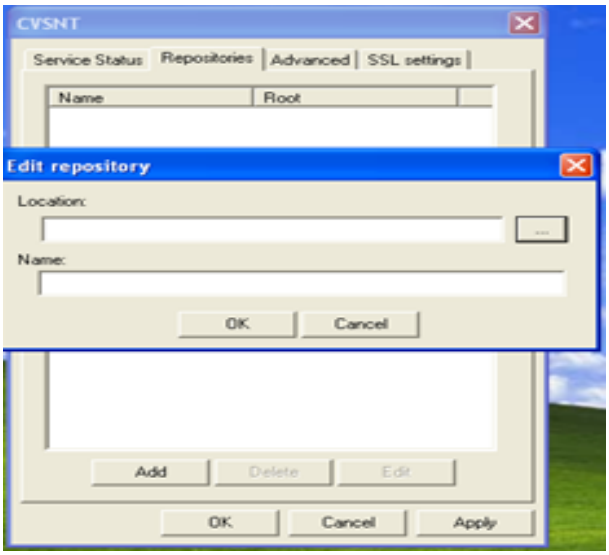
Select service controlpanel



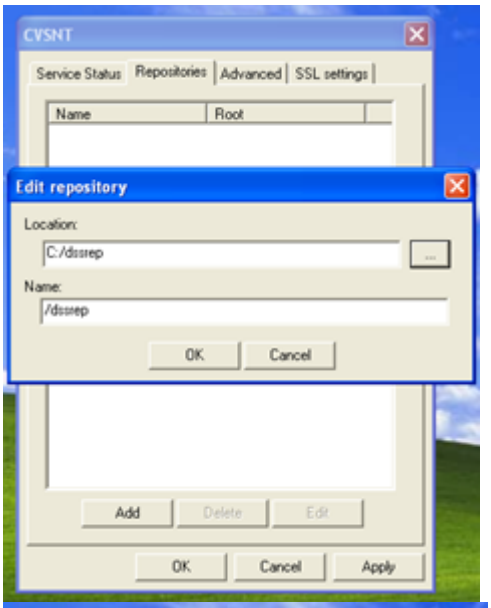
Start the CVS Service and CVS Lock Service and Go to Repositories tab

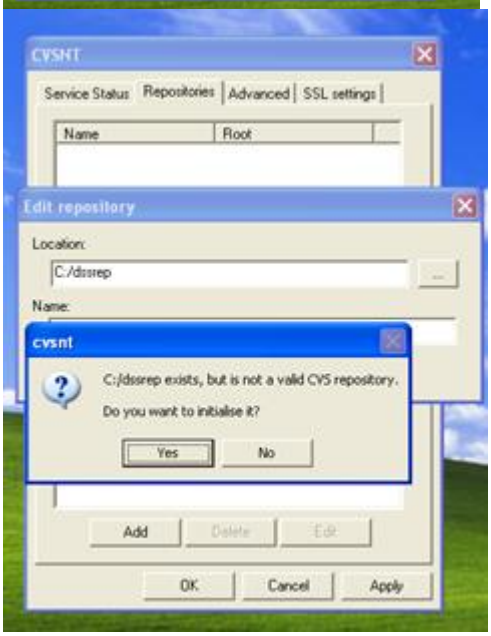


Click on Add Button

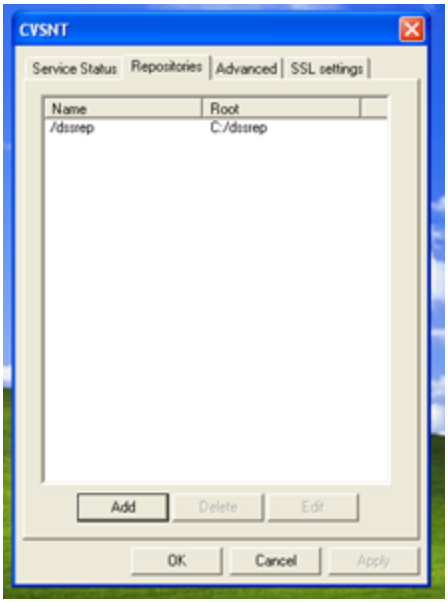


Select the repository Location and Logical Name





Click on Yes It will intialize the CVS Repository



Click on Apply

Click on Ok

The Reppository will be created on the Server machine

Procedure to store project into CVS NT repository from MyEclipse IDE :

Step-1 : Launch MyEclipse having new work space for programmer.

Step-2 : **Configure CVS NT repository with MyEclipse IDE**.

" Window menu → show view → other → CVS → select CVS editors repositories → ok

Go to repositories window → new → repository location

Give details for Host
Repository path
User
Password → finish "

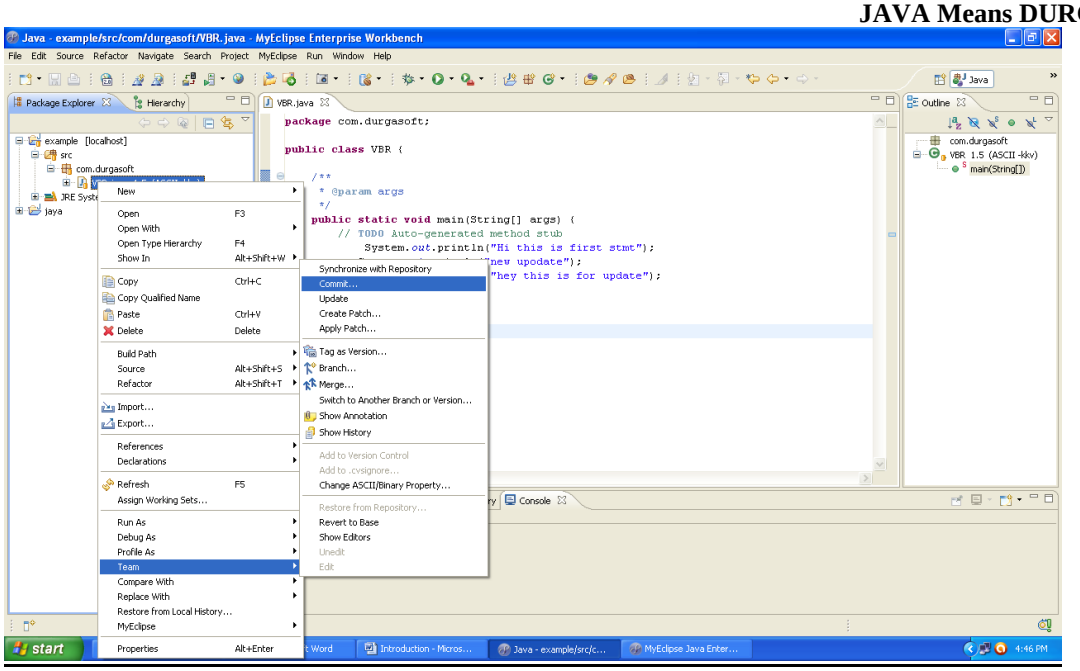
Step-3 : create a project in MyEclipse IDE.

Step-4 : Place the above project in CVSNT Repository (/cvsrep).

" Right click on project → team → share project → select cvsrep repository → next →finish. "

Check in : Keep java source file in CVS repository (/cvsrep) .

" Right click on Test.java → team → commit (checkin) → enter some comment → finish. "



- A new version will create for file when you perform commit operation.

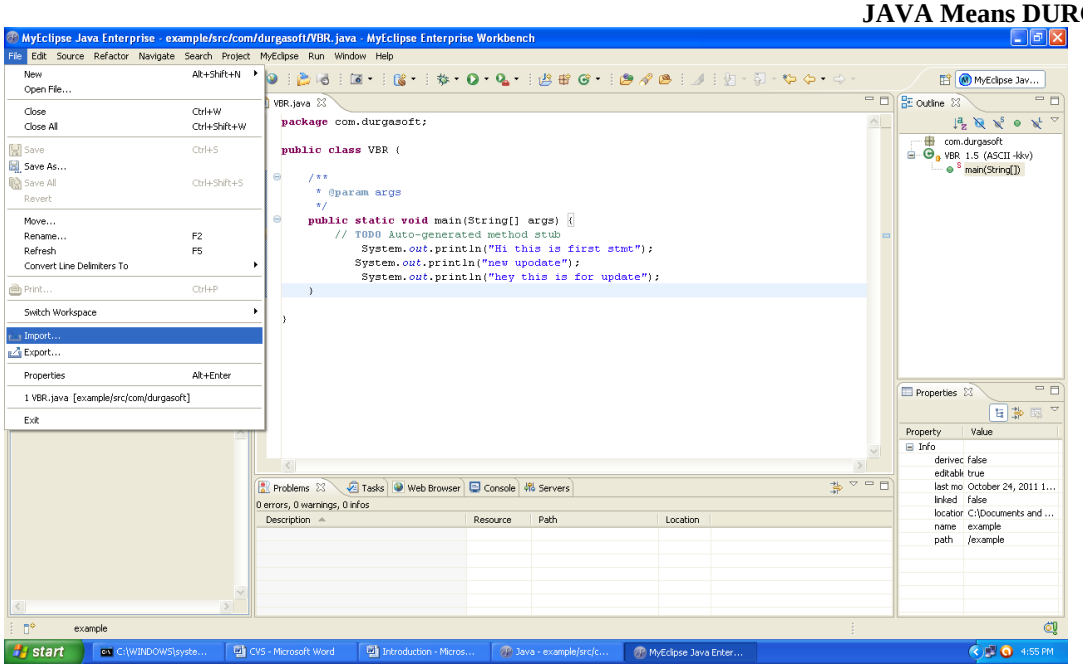
  Ex: Test .java (original file)

  Test.java 1.1 (after first modification)

  Test.java 1.2 (after second modification)

Check out : import/checkout project from cvs repository (for another user).

" File menu → import → cvs → → projects from CVS → next → use an existing module → select your project → next → checkout as a project in the work space → next → finish. "

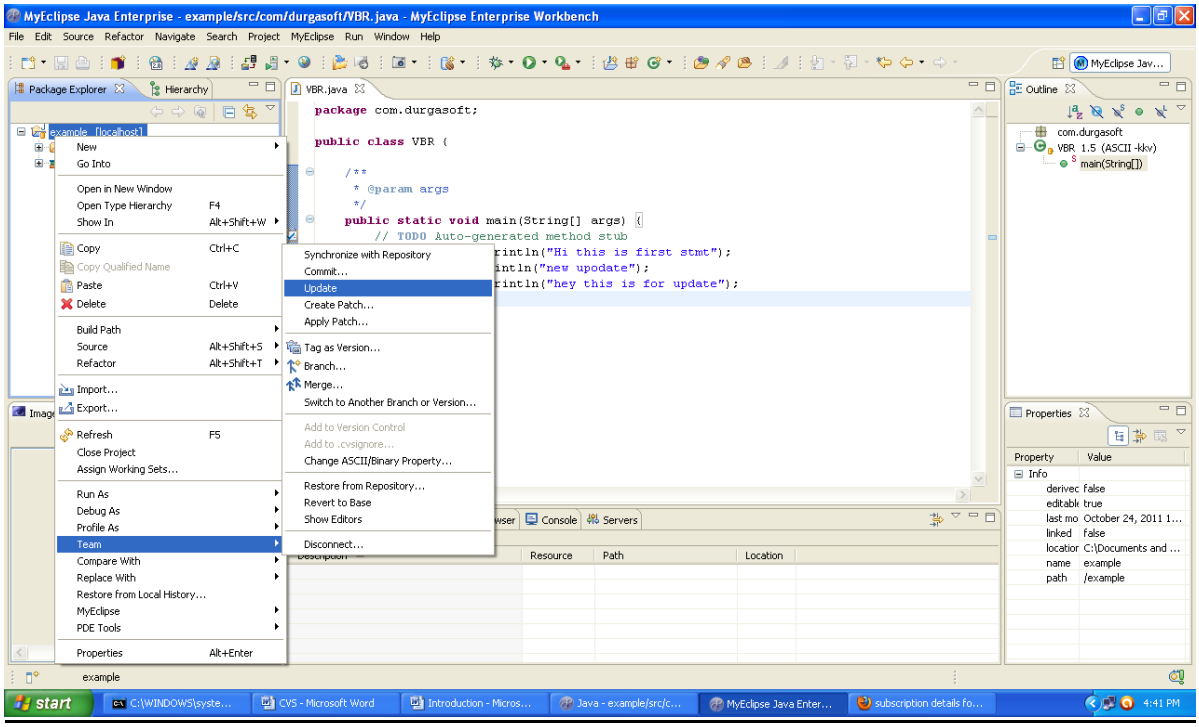


Update : This operation can be used for two purposes.

i) To get the updated version of the source file.

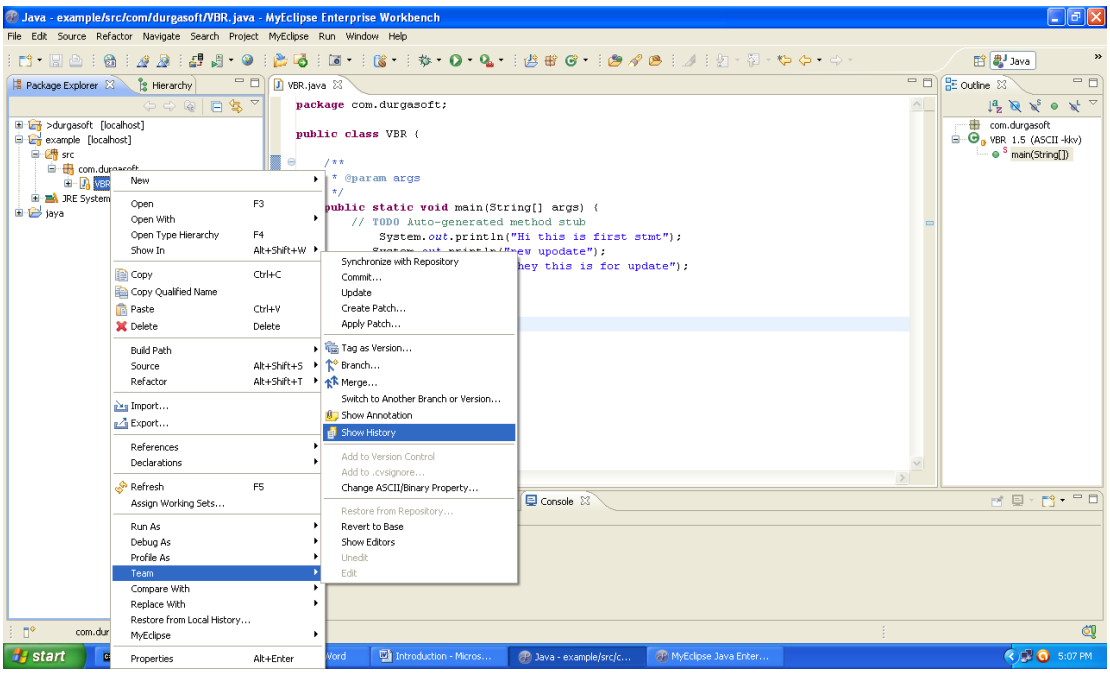
ii) To update the content of current file in cvs repository.

" Right click on file → team → update. "



History : To replace current file content with one of the existing old version of the cvs repository .

Click on .java file →team → show history → Go to history window → double click on version what ever you want.



Compare : To compare code of current version with the different versions in repository.

" Right click on source file → compare with → History → Go to history window select a version for compare "