

A large red circle is positioned in the top-left corner. A light blue shape, resembling a stylized 'L' or a decorative element, is located on the left side of the slide, extending from the top-left towards the bottom.

Software Tools for UML

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Overview

- UML and Modelling Tools
- Features of UML Modelling Tools
- Supporting Cooperative Work



UML and Modelling Tools

- CASE (Computer Assisted Software Engineering or Computer Aided Software Engineering) tools
- Programming-Language Independence
- Strong correspondence between Object-Oriented Languages and UML
- Extensibility



Features of UML Modelling Tools

- UML Diagrams
- Compliance to UML Standards
- The Repository (e.g., objects, attributes, operations, states, etc.)
- Shared Access to the Repository
- Integrity of the Repository
- Version Control
- Traceability and Change Management
- Code Generations
- Model Interchange between Tools (e.g., XMI)
- Document Generation

UML Tools (Programming Environments)

UML features	ArgoUML	Eclipse	NetBeans	StarUML
	0.24	3.3/3.2.2	5.5.1	5.0.2.1570
Plugins	No	Yes ArgoUML Omondo	Yes NetBeans UML	No
Compliance	1.4	1.4 / 2.0	2.0	2.0
Java Code Generation	Yes	Yes	Yes	Yes
Document Generation	No	Yes	No(?)	Yes
Testing Support	No	Yes	Yes	No
Refactoring	Yes	Yes	Yes	Yes
CVS	No	Yes	Yes	No
Model Interchange	Yes	Yes	Yes	Yes



Using Eclipse in Teams

Overview

- Connecting Eclipse to a CVS Repository
- Examining the CVS Repository
- CVS Branches
- Storing a Project in a CVS Repository
- Other CVS operations
- Team Synchronizing view in Eclipse



Connecting Eclipse by CVS

Add CVS Repository

Add a new CVS Repository to the CVS Repositories view

Location

Host: STEVE

Repository path: r:\repository

Authentication

User: Steven Holzner

Password:

Connection

Connection type: pserver

Use Default Port

Use Port:

Validate Connection on Finish

Finish Cancel

Host: cvs.inf.ed.ac.uk

Repository path:
/disk/cvs/<seoc??>

seoc01, seoc02, seoc03,
seoc04 seoc05, seoc06

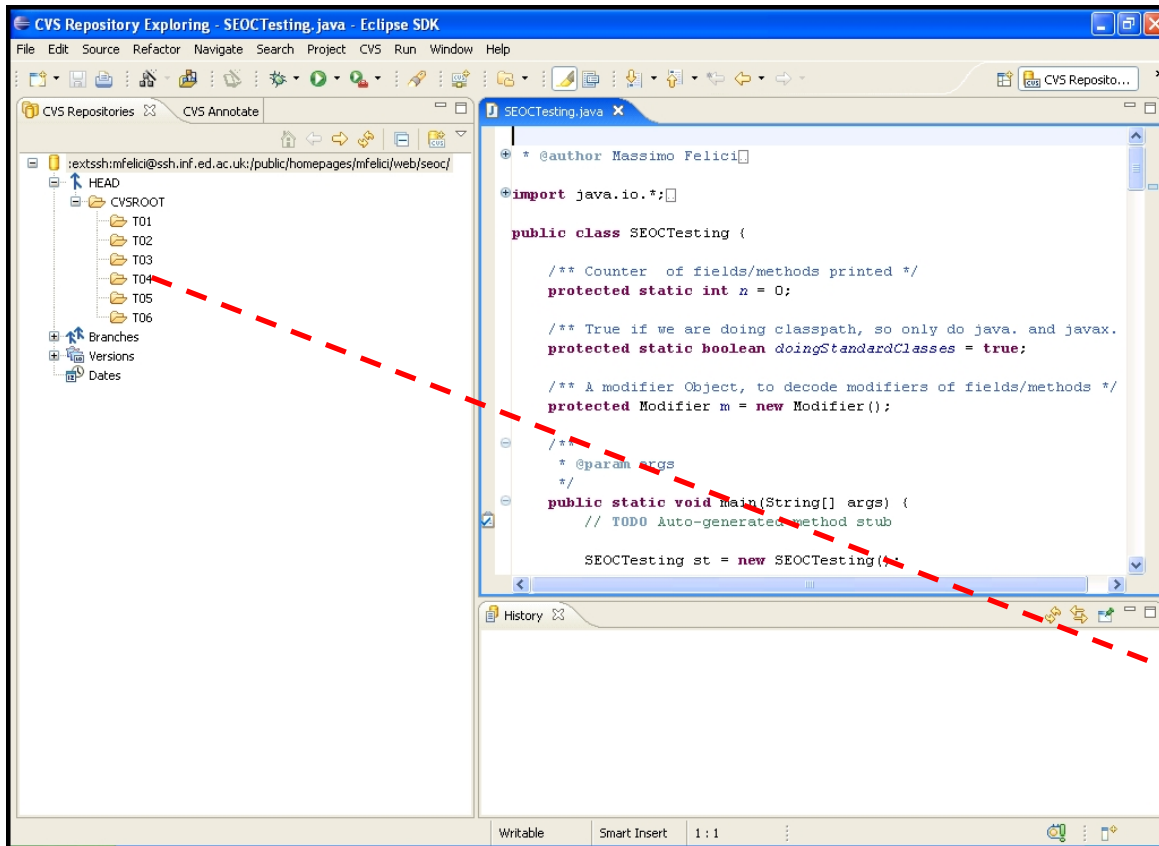
Your DICE authentication

Connection type: extssh

Examining CVS Repositories

Open this perspective by selecting:

1. Window
2. Open Perspective
3. Other...
4. CVS Repository Exploring



**CVS Branches
(e.g., S, L, A)**

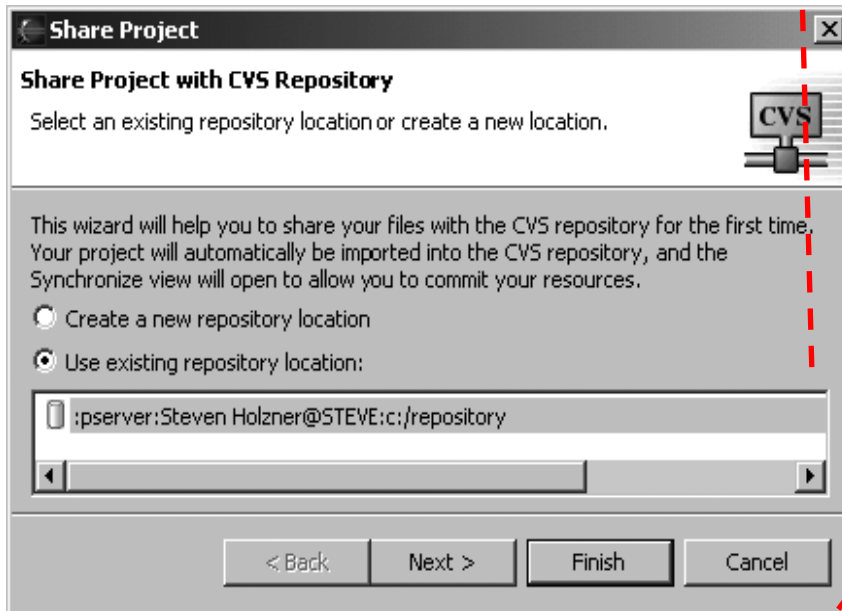
CVS Branches

- CVS also enables you to create new branches in your code's development tree
- Such branches can act as alternate streams of development for your code
 - you might want to develop a new version of your code that uses prompts in another language
 - You might want to organize you development in different teams/groups, e.g., **S**, **L** and **A**

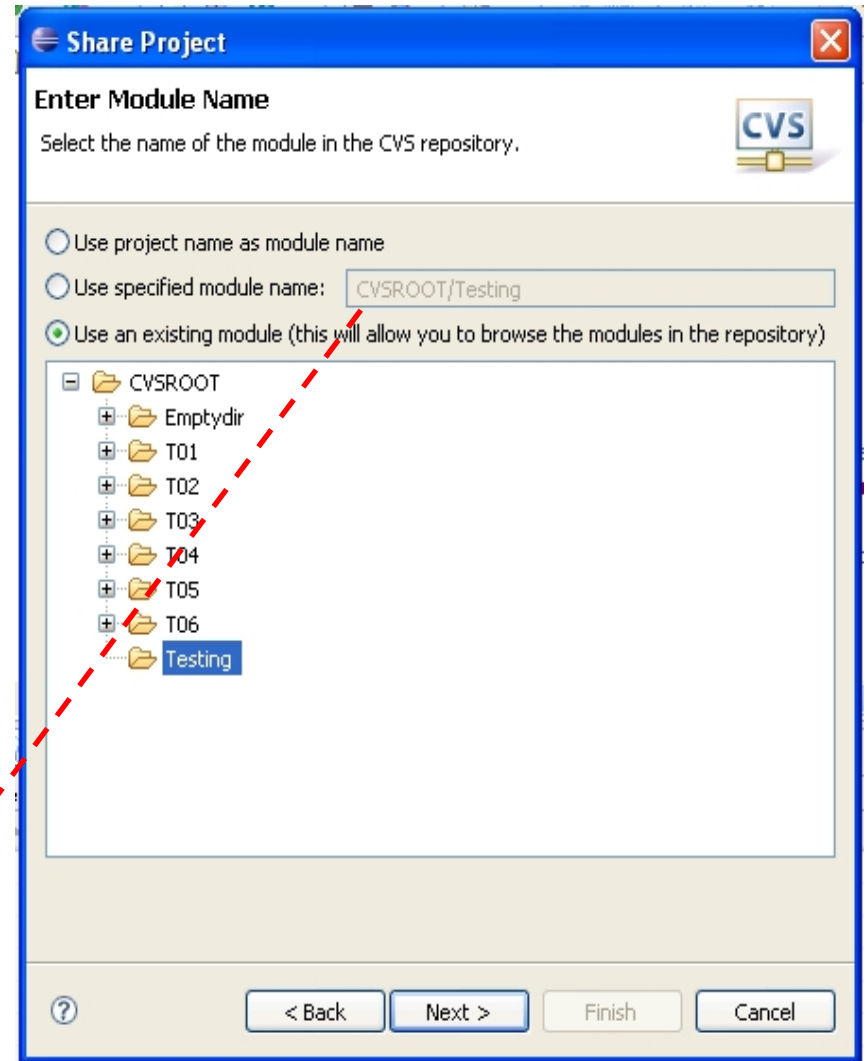


Storing Projects

Use existing repository location:
/disk/cvs/<seoc??>



Use an existing module, e.g., "L",

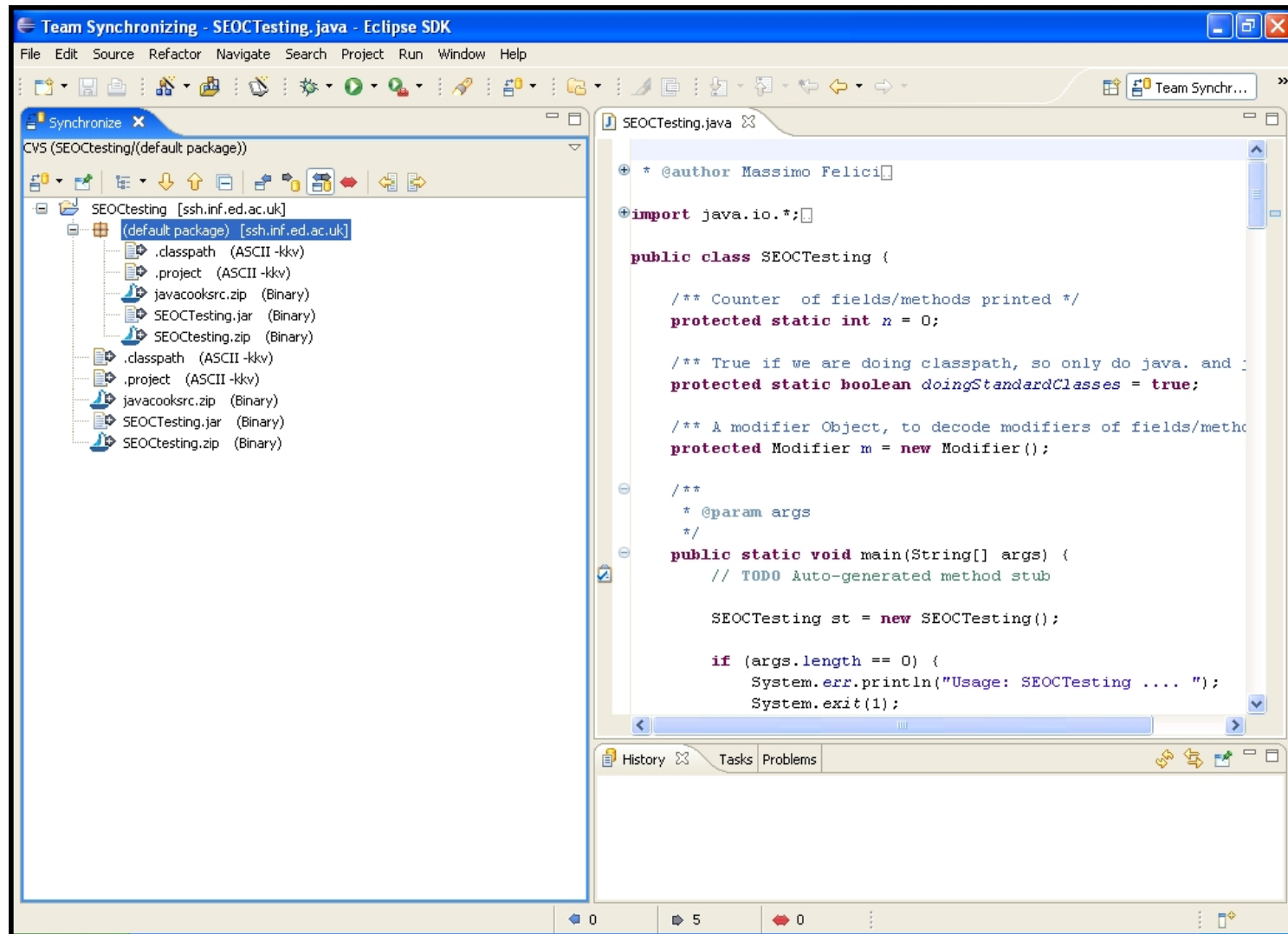


Other CVS operations

- Committing files
- Checking projects out of a CVS repository
- Updating you code from a CVS repository
- Synchronizing your code with the CVS repository



Team Synchronizing view in Eclipse



Readings

- **UML course textbook**
 - Chapter 16 on Software Tools for UML



Summary

- Software Tools for UML
 - UML and Modelling Tools
 - Features of UML Modelling Tools
 - Supporting Cooperative Work
- Using Eclipse in Teams

