

Swinburne University of Technology
School Faculty of Information and Communication Technologies

HIT8066/HIT3066 Software Tools

Semester 2, 2009

Assignment 2

Software Tools: Pilot Project Deployment

MEMORANDUM

To: Software engineers in the HIT8066 Information Technology Department

From: Project Manager

Dear software engineers,

I am pleased to announce that the management was very satisfied with all the submitted technical reports (Software Tools: Proposal and Selection Criteria). Therefore we have decided cautiously to start deploying software tools in our projects (initially on one pilot project), and also build the necessary software tools expertise. On the basis of the reports recommendations, and negotiation with tools vendors we have made a decision to use Rational Suite from Rational Software. As a result of that the following software tools will be deployed for the designated software areas:

Software activities	Rational software tool to be used
Software requirements management	RequisitePro
Software requirements object-oriented modelling using UML	Rational Rose
Software configuration management	ClearCase
Software memory leaks	Rational Purify
Debugging	Free C++ or Java debugger

The major objectives of your reports are that within the topic:

- You describe your pilot project
- Describe major functions which will be automated (and anticipated benefits of automation)
- Provide a recommendation which functions are worth or not worth automating
- Conclusion together with deployment recommendations to projects

There is no strict requirement about the Technical Report, but it may consist of:

- a) Executive Summary (go/no-go recommendation for the management describing the tools rationale and “bottom-line”, functions worth and not-worth automating)
- b) Pilot project description; describe your pilot project which you are using to demonstrate the software tools. In the case of RequisitePro and Rational Rose such pilot project may encompasses requirements, requirements updates, change requests, and defects for a current and next build. In the case of other topics a small VB/Java/C++ or even Access application (having few forms, tables, modules etc) can be used. You should have two builds with changes in order to demonstrate tools functions. The objective is to demonstrate the software tool functions, not the quality of your application/code!
- c) Description of functionalities automation, describe all the major functions that you are automating providing a function selection rationale. You will try to implement all these major functions using the software tool but like in a real project situation you may not have the time to do that fully. Having problems with the Labs I envisage problems that some groups will not be able to implement some functions, however I like to be advised of such difficulties early so we shall be able to ask for help and mitigate such circumstances early (I am not sympathetic toward last minute notification that “this major tool function does not work”). In that case we shall negotiate “implementation” of such function(s) to be described from manuals, citing the difficulties and renegotiated changes!
- d) Recommendation for functionalities worth automating, are all the software activities worth automation? Is there any recommended priority list?
- e) Conclusion, how professionals from other project will be using, any recommendations? “How to make the thing (software tools deployment) happen for other project”?

Note: The Rational manuals can be found: from Swinburne web site! <http://manuals.it.swin.edu.au/rational>; or using the Labs shortcut "Rational Suite Online Documentation" created on the lab machines (EN305, EN310, SB102, SB104 and SB205) - Start Menu -> Programs-> Programming -> Rational Suite Enterprise.

The document will have between 40 and 50 pages (tables, figures, appendices are included). Only major screenshots will be added, for more trivial parts menus/forms navigations will be sufficient. The minimum number of references is 10, paper hyperlinks are fine (hyperlinks to tools information and vendors white papers information are included). You will submit a printed technical report, attaching a 3.5 inch diskette or CD with the document written in Word for Windows.

The following marking schema will be applied:

Section	Marks
Executive Summary	2
Pilot project description	2
Description of functionalities automation	10
Recommendation for functionalities worth automating	2
Conclusion	2
Overall clarity and extras	2

The students who work on the topic ClearCase need to contact me with student names and IDs so I can request creation of private VOBs.

A high level distinctive quality work such as very clear facts, rational and critical evaluation is required in order to get distinctive marks such as D and HD!

Description of the user manual(s) only is considered work of a technical writer, and therefore it is very well below pass marks!

Note: The following applies only if students request individual marking!

Marking: I encourage the students to equally share the workload and have respect for other team member's opinion and share the marks. I am pretty sure that it is highly unlikely that any Master degree student will be not contributing to the team work adequately! All members of the team will be given the same mark, unless there have been formal complaints from some team members about lack of contribution by others. Any such complaint must be made to the lecturer well ahead of the end of the assignment milestone, or it will be ignored. There must be time for a positive intervention by the lecturer in case of problems.

There is no ideal solution for team members who are not contributing to a team work that is hard even for project managers to detect. PMs are sometimes misled by "nice-talkers who are not working well". In a serious case, where there are claims and problems of a team member not contributing adequately to the assignment, the following procedure will apply:

I shall mark the submitted assignment milestone

- Each team member will submit a list describing his/her work tasks performed
- I shall prepare a written examination for each team member consisting of questions relevant to the claimed performed tasks
- I shall mark each written examination and apply adequate marks correction (addition or subtraction) of the marked worked for each team member!

Assignment due: Week 12, 5:30pm Monday, November 2