

# **YAYA Bilişim**

# **RCSim**

## **CONFIGURATION MANAGEMENT PLAN**

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# **1) Introduction**

## **1.1) The Purpose**

This Configuration Management Plan is explaining the methodology of Configuration Management. This is very important for a software project. Especially in huge projects like our project, this plan brings in time to us. During the development phase, some changes may be needed in the previous code. This is not a wanted situation, but it exists generally. These changes may affect other parts of the code. So, this is very time-consuming. In this plan, we try to define the possible changes, effects of these, and also methods to solve these problems. By this plan, we will be able to change or update our code in smaller time intervals.

## **1.2) The Scope**

The scope of this document is to define and explain all the Configuration Management of Yaya Bilisim's RcSim project. This includes configuration recognition, inspection of the accounting procedures, reexamination enforced to demonstrate the RcSim software configuration. Using this Configuration Management Plan makes recognition, reexamination, identification of items of software configuration of the project unambiguous to all of project team members. We can clarify the control of changes of codes and we can describe more realistic software configuration in terms of time. By all of these, we can preserve the unity of project during the development phase of our project

## **. 1.3) References**

1-) <http://senior.ceng.metu.edu.tr/2007/yayabilisim/>

2-) <http://www.cvshome.org>

## **2) Management**

### **2.1) Project Organizations**

Project organization constitutes an important place in developing a software. For the team Yaya Bilisim to be more efficient, dividing the workload to group members, making sure that every member of the team is informed about the development status of the software and working paralelly with this knowledge is inevitable. Because of that, establishing communication between group members is very crucial for us. For our project, the Configuration Management process is controlled by the Configuration Control Board, which consists of all the group members, because of the very limited number of team members. Since every member's ideas are important and even any small piece of thought can lead to a more clear and efficient solution, all of the team members also participates in the Software Configuration Management. To accomplish the teamwork, we make several meetings per week with all the group members to see the progress of the development phase. In these meetings, -if exists any- the problems are analysed, solutions are developed and if all the team members agree on one solution for a given problem, this solution will be decided to be used. At this time CVS will help the team to show and keep the track of the changes made on the project. For the main configuration management, the tool named as CVS will be used, and this tool will be provided by the department.

### **2.2) Responsibilities**

In our team, every member has nearly the same amount of responsibility. Since we have very limited number of team members and very limited time, every Software Configuration Request is accepted as urgent, and handled immediatly. When an SCR comes, the member who made the request must

inform the other team members by sending an e-mail to the team's e-mail address (that is [yayabilisim@gmail.com](mailto:yayabilisim@gmail.com)), and –if necessary- by phone. After that, an immediate meeting is arranged. After the meeting, the check-in and out activities and comments on the changes are made accordingly. Finally, every member is responsible to finish his task until the deadline indicated in the schedule.(Each member's responsibility is given in the schedule.)

### **2.3) Tools and Infrastructure**

The project is being developed in Microsoft Visual Studio.NET environment. CVS, which is an open source version control system, will be used for keeping the track of the project's materials (past versions of the system, changes, web site, codes etc.). Since CVS enables a developer to check in and check out codes, view the modifications that are made in the software's history, this will come in handy in managing the project. We define versions as <major number> "." <minor number1> "." <minor number2>. Major number defines the functionality level and is zero before the first release (i.e. the fully functional version). Minor number1 indicates a big change (such as adding a component, a big change in the code, etc.). Minor number2 indicates a small change in code (such as small bug fixes, small functionality, etc.). While minor number1 is changing, minor number2 may not be used (such as from 0.1.5 to 0.2 or likewise).

## **3- The Configuration Management Plan**

Main tasks that are included in configuration management plan of Yaya Bilişim can be categorized in four topics as follows:

- a- Identification
- b- Management and Control
- c- Configuration Status Accounting

d- Auditing

### **3.1 Identification:**

Identification of the current state of our product RCSim will be defined in terms of the following items:

#### **3.1.1 Source Code**

CVS will be used as a tool for configuration management of source code.

#### **3.1.2 Documentation**

We give much importance for documentation of our project. A good documentation demonstrates the development process of the project in a detailed way. Moreover, it also gives the chance of improving RCSim for third parties. Because of these reasons, we will keep all the documents in our mail account [yayabilisim@gmail.com](mailto:yayabilisim@gmail.com) . We will also keep the drafts of reports for the cases of emergencies. When the reports are ready for grading, we will put them to our web site.

#### **3.1.3 Baselines**

The development process of the project is determined and given in the living schedule.

It will be upgraded in specific time intervals (one or two weeks) and announced in our web site.

#### **3.1.4 Software**

Compilers, libraries and such tools are included in software title. Changes in these tools are not wanted so much. But, if we have to do so, we will make these changes after careful studies and acceptance of all the team.

### **3.2 Management and Control:**

In RCSim project, each development task is in the responsibility of a member which is given in the living schedule. But, all members will participate in all tasks while the responsible member is leading.

On the other hand, in each task, change requests are usual. Because of this, processing method of these requests should be considered.

Change requests will be discussed in group meetings. In group meetings, requesting member will explain his offer. After that, the member who is responsible for that task will explain the reason why current situation is chosen. Then, other members will tell their decisions. By this process, we will decide the way.

Although we do not want to decide by voting, if there is not a unique decision, we will vote. In case of equality, we will accept Kaan's decision since he is the manager of our group. We can also decide to ask Mr. Alper Kilic who kindly helps us.

Since we are getting together frequently, we do not prefer to communicate by mail account but just decide to get together.

Once we decide to make the asked change, the task's responsible member will start to implement. We will also reflect this change to the living schedule.

### **3.3 Configuration Status Accounting:**

We have the related information about configuration status in CVS and our mail account. We have all drafts of the project reports in our mail account. Gradable versions of all the documents will be in our web site. We will upgrade the living schedule as much as we can. So, one can have enough information about our project's configuration status.

### **3.4 Auditing:**

Determining if our product RCSim is in the supposed level or not, is very important in order not to have a disappointment at the end of the year.

Weekly auditing will be done in our weekly meeting with Mr. Orkan. First release will also be a milestone for our product. Moreover, we will consult with experienced people about our product. In order to do this, we will ask Mr. Kilic and some students from Electric and Electronic Engineering department.

### **4. CM Schedule**

CM Plan Ready	11.3.07
First Release	1.5.07
Final Release	1.6.07

The milestones are defined above, moreover before these milestones we will make several meeting to get successful job.

Besides CM meetings each member is responsible from his part, he should follow the CM process defined above.

Actually we are 4 member groups and our all members are aware of the importance of the CM process, however we should make meetings to be successful.

### **5. CM Resources**

All members are aware of the importance of the CM process and the steps of the project are well known by the group members and the communication between the team is well. Our first resource is our team members.

CVS, meetings, mail group and web page are other helpful resources to manage CM.

## **6. CM Plan Maintenance**

We are only 4 members we do not think that we will need to maintain the CM plan frequently. But some crucial changes should be made by the group, depending on the advices of the instructors and current requirements.