WinstonSoft Weekly Report 2.1

Past Weeks:

- Partial migration of user interface to Qt
- Interfacing with Sqlite in database module
- Code maintenance and cleanup
- Improvements on the auto-sensing modules

Future Work:

- Further improvements on the user interface
- Experimentation and fine-tuning with svmlight library
- Importing project files to CVS

Individual Work:

N.İlker ERÇİN: During the holiday, I have worked on ACCIPP prototype user interface. As the prototype interface was implemented using MFC for Visual Studio 6.0, the adaptation to our aimed library, namely Qt, was needed to be done. Since I do not have Visual Studio 6.0 in my PC, I didn't have the chance to compile the code. So I couldn't finish the reformation using Qt. However I have studied Qt in detail and the steps to finalize the prototype interface and development of future releases are almost clear.

Çağla ÇIĞ: Although in our finalized design report ACCIPP database is fairly finalized, during the holiday I kept working on it. Deciding upon possible queries and refinement of the database constituted the biggest part of my work. In addition to this, I looked for ways to prevent our actual program from detecting the unnecessary SQL server connections. To do that, filtering was considered but found inefficient. Therefore, the research I conducted showed me that we could use sqlite for that purpose, the details of which I haven't finished learning yet.

Can HOŞGÖR: Throughout the holiday, I mainly worked on the auto-sensing module. I have thought about several improvements on the algorithms. However, during the implementation of these features, I have realized that our existing design had some lacking points and required a few minor adjustments in order to be implemented properly. For example, as the auto-sensing modules run concurrently, there are some possibilities of “race conditions” between the threads. Because of that the code required some modifications to be fully thread-safe. Therefore I made use of synchronization mechanisms provided by Windows. In the following week, I am planning to port these new features to Linux.

Elvan GÜLEN: In the prototype, the autosensing mechanisms for the protocols weren't implemented comprehensively. I changed some of the parts of the prototype which are related to the POP3 recognizer. But the implementation of the rule based AI part of it isn't finished yet, since we plan to make the code tidier and improve it to easily work with CVS. I prepared the whole draft of the POP3 (rule

based AI part) but I didn't implement all because of the possible incoming changes of the code organization enforced by the decoder.exe that is going to be supplied by Siemens. Besides, I dwelled on the SWMLight library for Support Vector Machine part of the autosensing mechanism. I planned to use this library and implement the parameters such as payload length and ASCII/all characters to see whether they work compatible with our code. Also after getting the decoder.exe and changing the code organization, hopefully until next week I will finish the rule based AI part of the POP3 recognizer module and start to deal with SVM.