WinstonSoft Weekly Report 2.3

This Week:

- Moved to new class structure.
- Rule based matchers for text-based protocols are almost completed.
- User interface improved.

Next Week:

- Rule-based matchers will be completed.
- SVM module will be initiated.
- Database module will be initiated.

Elvan GÜLEN:
First of all, we worked as a group on converting the code into class structure for improving the code with the guidance of Can. All the protocol matcher classes are derived from the generic matcher class and Can implemented the SMTP matcher class beforehand. Taking this as an example, I reimplement the POP3 Matcher class. Since some unforeseen problems arose with the states and there were some overlooked issues, I had to write the code from scratch. Only one function has left for the rule based part of the POP3 matcher. Next week, I’m planning to finish the rule based part and head towards the SVM related parts with Can.

Çağla ÇIĞ:
Since I was having problems using CVS in cases such as committing and adding new files to the repository, first I worked on fixing these problems. The aforementioned problems were mainly about read/write locks, however finally I could manage to configure it correctly. Then after checking out our project from the repository, I participated in separating the prototype code into distinct classes. Using inheritance, GenericMatcher class was formed as the base class and SMTPMatcher and POP3Matcher classes as derived ones. Following this, Iker and I designed and implemented the FTPMatcher class after reviving the related RFC documentation. To do this, we used rule-based AI and FSM. This week I am planning to fully integrate FTPMatcher class to the Connection class and user interface. Also, ACCIPP database is nearly ready to use. Therefore, I am going to run the CREATE TABLE statements necessary for setting up the database and then with my team mates decide upon whether to insert the data caught in the network protocol directly to the database or doing the insertion in regular, modifiable time intervals. If we come up with a decision, I am planning to implement the database module with the help of my friend, Ilker. If all goes well, at the end of this week the implementation of the text-based protocols will be finished at the basic level.

Nazif İlker ERÇİN:
This week, after reorganizing the prototype code using class structure, I (with Çağla) have worked on the FTP recognizer module and to do this, we have skimmed the FTP rfc document. FTP recognizer is almost finished. Additionally we have reconsidered the database structure. Next week, I (and Cagla) will finish the FTPRecognizer and start working on the database module.

Can HOŞGÖR
This week, me and my friends tried to convert the existing code base into a more reusable class hierarchy. We have designed the GenericMatcher class, which is an abstract class that all other
protocol matchers derive from. In addition to that we have designed a Connection class that holds connection related information (such as ip addresses) and manages the protocol matchers for that connection. After the base classes were designed, I reimplemented my SMTP recognition code to be conformant to the class structure we designed before. Besides, I worked on the user interface and added a few features to it (for example, more descriptive "Device Selection Dialog"). Currently I'm trying to divide the user interface related code and auto-sensing related code into different modules/files. Next week, after I complete these maintenances, I'm planning to start working on the SVM integration.