Weekly Report

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Week Number 21 on 19 July 2010

Summary of activities since last meeting

Week 1:

- Readings for Literature Review
- Literature Review

Week 2:

- Modified the InetVis port to use separate threads to capture packets and to process openGL plotting. - Looked into reading from pcap files and storing to pcap files

Week 3:

- Researched using the pInvoke method call to call unmanaged dll methods from within the .Net framework.
- Decided to stop the port of the openGL component and rather start with a fresh implementation using the openGL control provided by openTK.

Week 4:

- Went to East London

Week 5:

- Tried to create an MDI application which was the initial plan for InetVis but had problems with getting the glComponent to draw. Experimented with other possibilities such as running a separate game window instead of an embedded child form on the isolated thread.

Week 6:

- Looked into an XNA implementation rather than the openGL counterpart. XNA provides better functionality than the openTK openGL wrapper class. An XNA control won't work though, so similarly to openGL, a game window will be the only solution (Whether it be implemented in openGL or XNA).

Last meeting: 26 April 2010 Next meeting: 20 July 2010

Goals and Work targets

Goals for this week

- discussed above

Goals Achieved

- discussed above

Proposed goals for next week

- Draw cube from captured packets (real time)
- Finalise Literature Review

Rate your work performance

- How did you feel you worked? Not enough
- Did you achieve all your goals? No
- What were the issues you had trouble with? openGL component...
- How can you improve your performance? Stick to a rigid plan of action over the next 15 weeks
- Provide a rating out of 10 in addition to the above. 5

Tasks/Learning

- What is the most useful/interesting thing you learned or did this past vac? calling unmanaged methods from within managed code.
- Even bad weeks usually yield something positive

Research

- What is the most useful/interesting paper you read this week? Security Data Visualisation by Greg Conti
- $\bullet\,$ List what you have been doing research wise papers read/written/resources found
 - Network Telescopes: Technical Report David Moore, Colleen Shannon, Geoffrey M. Voelkery, Stefan Savagey
 - NIST Special Publication on Intrusion Detection Systems Rebecca Bace and Peter Mell
 - Network Intrusion Detection
 - Itrusion Detection with Snort
 - Understanding intrusion detection through visualisation
- Research should be ongoing.