

**CSE 552 – Network Management
Fall 2004 (Term 041)**

Assignment 1

Date: Monday, September 13, 2004

Network Management Tool Presentation

Due date: Saturday, Sept. 18, 2004, 6:30 pm (in class)

Notes:

- Late submissions are not acceptable.
- This assignment is based on hands-on experience with at least one publicly available network management tool.
- A list of URLs is given at the end of this assignment from where some tools can be accessed.
- Students can work in groups of two students for each tool, which is to be selected after consultation with the instructor. You should send your choice to the instructor ASAP but no later than Wednesday, September 15, 2004. (The instructor will assign the tools on First Come First Served basis).
- This assignment has two parts: (1) downloading, installation, and experimentation with selected tools; and (2) presentation of the tool to the rest of the class
- Each student, regardless of working in a group, will be graded individually and is expected to understand all related aspects of installation and use of assigned tool.
- In case of groups of two, overview of tool can be presented by one student while the other presents the use of tools with examples.

Question # 1: Network Management Tool

Download the assigned tool from WWW and install it on an appropriate platform where that tool works (Windows/Linux/Solaris, etc.) on your PC. You can also use an evaluation copy with limited usage time (e.g., 30 days). Some tools are available only in executable binary forms (especially those that run under Windows) while others are available with source code. You should build the tool from source code following developer's instructions on your platform (typically Linux). Each tool comes with some documentation about its use and a few examples. Execute at least two such examples and comment on the results provided by the tool.

Question # 2: Presentation

Present an overview of the tool to the class. This overview should minimally include an introduction to the input used by the tool and types of application for which it is suitable. Second part of the presentation should walk through some examples of the use of the tool. Each student has 5 minutes for the presentation. You need to send your prepared slides to the instructor 2 hours before your presentation.

Areas of interest include but are not limited to:

- Topology discovery
- Performance Management (statistics collection, throughput, link utilization)
- Reachability
- Capacity planning
- Traffic monitors and analyzers
- Fault Management
- General purpose NMS (Network Management System)

List of Selected URLs:

1. <http://www.caida.org/tools/>: The CAIDA Tools site contains CAIDA tools and software as well as a taxonomy of available research and visualization tools.
2. <http://www.simpleweb.org/software/>: The SimpleWeb Network Management Software site provides links to commercial and freely available SNMP (and other) software packages.
3. <http://www.topology.org/comms/netmon.html>: Network monitoring
4. <http://www.castlerock.com/>: SNMPC
5. <http://manageengine.adventnet.com/products/opmanager/download.html>: ManageEngine opManager
6. <http://www.paessler.com/products/prtg>: PRTG
7. Others of your own.