

NA HW5 - SNMP

Demo Time: 2015/06/29 Mon ~ 2015/07/01 Wed

Discuss with your classmates and TAs on IRC if you have any question.

Part 1 - SNMP (30%)

- net-snmp
- community Access Control. (10%)
 - On bsd1-6.
 - narouser can read the SNMP info while public can't.
- IP address Access Control. (10%)
 - Use narouser community.
 - On bsd1-6 can read .1.3.6.1.2.1.25.3.2.1.3 while linux1-6 can't.
 - HOST-RESOURCES-MIB::hrDeviceDescr
- Write Access Control (10%)
 - On bsd1-6.
 - Set 1.3.6.1.2.1.1.4.0 to the value given at demo.
 - SNMPv2-MIB::sysContact.0
 - narwuser can set the value, while narouser can't.

Part 2 - RRD (20%)

- rrdtool
- Draw your file system usage graph.
 - Use df command to get your file system usage.
 - Monitor one of the file system. Update it every minute.
 - Draw the graph in the past 1 hour.
 - Output file should be in PNG format.
- Example: <http://i.imgur.com/bMd3NU4.png>

Part 3 - cacti (50%)

- cacti
- Show localhost CPU loading info graph. (15%)
- Show localhost network traffic graph. (15%)
- Show the other computer's network traffic graph. (20%)

Bonus - Make your own graph

- Make your own data template, graph template, and draw your own graph.
- What graphs you can make:
 - Calculate the memory used instead of memory free.
 - Calculate the times of login failed.