Project 1 - Network Management

This is a group project to quickly research, evaluate and prototype your chosen network monitoring solution against a few requirements.

Refer to https://en.wikipedia.org/wiki/Comparison_of_network_monitoring_systems and other resources. Select an open source Network Monitoring Solution. This system can be installed on nmon01 (or another server if you prefer).

The internet is rife with misinformation. Guides produced by others are frequently incorrect or for different operating systems. Eye resources with suspicion, you are developing your own build documentation that will be informed by the relevant and accurate information you manage to find.

Some of the systems that appear interesting (don't limit yourself to these!) include:

- nagios(Core only)
- cacti
- sensu
- zenoss
- zabbix
- opennms
- pandora fms

Constraints and Requirements:

- Open Source only (GPL, BSD), not Commercial or Evaluation.
- Consider service that support other protocols and techniques for monitoring and management

1. What Server Monitoring Software are you using, and where did you get it?

Xymon/Hobbit which we got off the Wikipedia page linked in the instructions.

Originally, we tried using Zabbix, but ran into a bunch of difficulties with getting the webpage GUI to work.

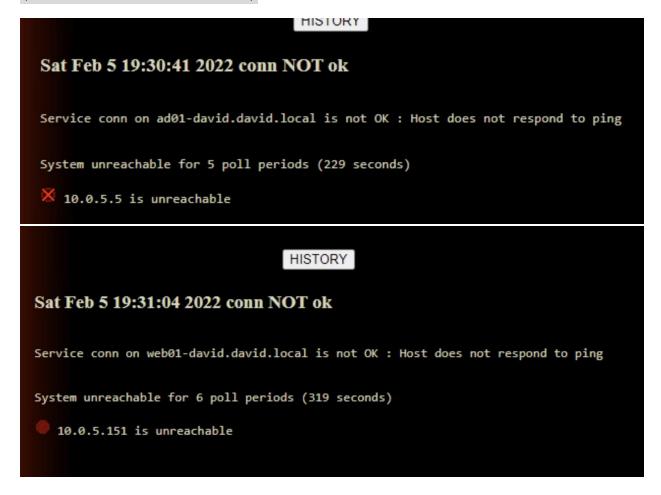
2. Provide the build and configuration <u>instructions</u> for your clients and your Network Management Server Software, such that another SYS265 student can duplicate your installation. A good way to test this is to jointly build the environment in one student's vSphere area and test the documentation on the other students' VMs. The build documentation should be a .pdf or .docx file. Your individual tech journals are probably not suited to this editing but rather sharing a Google Doc among teammates is advised, you can always move relevant content into your wiki at project completion.

Documentation provided

3. Provide a screenshot of your monitored hosts (a dashboard would do it). You should monitor at least the following: Server 2019 Server (mgmt01 or ad01), and a Linux Server. Monitoring fw01 would be a nice touch, but is not required.



4. Develop a test that shows an alert when $\underline{\text{two}}$ of your hosts go down (test on Linux and Windows)



5. Develop a test that shows an alert when <u>one</u> of your monitored assets hard drives passes a threshold (Linux or windows).



6. Lastly, what are the pros and cons of this software, would you recommend it?

The pros of the software is that we managed to get it running and working properly. It was able to monitor all of the devices added, and hand out the error notifications when things went wrong.

The cons of the software was how vague the instructions were when installing and setting it up. We had to do a lot of digging to figure out how to properly configure Xymon.

No, this software while providing an in-depth guide on how to install it is very unclear on how to use the software, add host, problem-solve, and set up alerts. The interface needs to be configured through scripts in vi which can also be very tough to navigate. On top of that when adding new devices, some of the functionality doesn't work and there is no updated documentation on how to fix it as the old solutions require configuring files that don't work.

7. Provide a functional video demo validating your solution. A good way to do this is to record a Google Meet between teammates.

Video Provided