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| Group 5 – B.J.S. INC.Monitoring and Remote Logging Services |  |
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|  | 5/2/2022CIT-470-001-2022-030Prepared by: |
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# INTRODUCTION

Our team was assigned to create configuration scripts to monitor services and processes on a local machine. The scripts come as follow, ***configure\_monit***, ***testclient***, and ***testserver***. The scripts are located in the html of the apache server that is implemented on the server. The ***configure\_monit*** script is used to install, configure, and setup the monitoring system and syslog remote logging. The ***testclient*** script will check the necessary processes and turn off these services on the client machines to show our monitoring system in effect. The ***testserver***  will monitor the processes on the server and will turn on the services for the monitoring system to take effect.

The automation process of our programs allow users to implement monitoring systems on any client and to administer remote logging to the necessary server. This automation process allows little command inputs to lessen the chance of any errors to occur while monitoring systems are implemented and for the remote logging process to the server. Through our scripts we have an implemented web base that updates with the client machine and alerts if any processes or services go wrong.

# PROCEDURE

**Server Setup**

1. Power on **Server Machine**
2. Login as **Root**
3. Use the command **wget https://raw.githubusercontent.com/CIT470Group5/Monitoring/main/a3.zip (Reference 1.1)**

Reference 1.1

1. Use the command **unzip -j a3.zip -d /var/www/html/ (Warning: Package unzip must be installed prior to running this command. Use “yum install unzip” if necessary) (Reference 1.2)**

Text

Description automatically generated

Reference 1.2

1. Use the command **cp /var/www/html/server\_monitrc /etc/monitrc (Warning: Package monit must be installed prior to running this command. Use “yum install monit” if necessary) (Reference 1.3)**

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Reference 1.3

**Installing/Configuring Monit on Client**

1. Power on **Client Machine.**
2. Login as **Root**
3. Use the command **wget 10.2.6.89/configure\_monit (Reference 2.1)**



Reference 2.1

1. Use the command **chmod 755 configure\_monit (Reference 2.2)**



Reference 2.2

1. Run the script ***configure\_monit*** by running the following command **./configure\_monit (Reference 2.3),** the script will run and should take no longer than a minute, a monit table will appear and the command line will reappear.



Reference 2.3

# DESIGN ELEMENTS

The purpose of the designed solution was to configure a monitoring solution for different services, remote logging, and monitor computer hardware usage. We wanted to make sure that by using our script that there would be a minimal amount of command line usage to fully configure the monitoring system.

The design of our scripts introduces web base monitoring which allows users to have access monitoring of any client that updates as the monitoring system works. We wanted to create simplistic monitoring so that customers can easily swap between Web Tabs to monitor any machine that is configured with the ***configure\_monit*** package.

**Client Web Base Monitoring**

Graphical user interface, application

Description automatically generated

# Graphical user interface Description automatically generatedServer Web Base Monitoring

# ACHIEVEMENTS

Our solution for this Monit configuration and installation set of scripts meets or exceeds all requirements in the scope laid out. Each member of B.J.S. Inc. Group 5 had input on all areas of the required deliverables and how the solution was formed into a final product. Nothing was coded, written, or decided upon without full agreement of all members of the team. Any changes to the scope as written were approved by the customer before any changes were made. All members were courteous to each other's time and work put into the entire product and each meeting was orderly.

The Monit client configuration file to load client machines will be placed into the Apache server public\_html for each client to install. The installation files will be available for download on our public Git repository. When running, the Monit client configuration script will automatically set up the capability and all required tools necessary to monitor the services and client status. The admin will see printouts to the console of each section of the install that is accomplished with no need for any input from the installer aside from the Host IP address. The creation of the Monit script was headed and created by Brian Solomon, Johnny Rivera, and Spencer Klump. All the script files were tested and checked for accuracy by Brian, Spencer, and Johnny.

# CONCLUSION

Our Monit Automation product has been developed to give a quick and easy installation setup for your system administrator. This product will save time and in return also save your business money as your admin can focus on other tasks and less time will be spent on errors that are more likely returned doing manual configurations on every client. Using Monit configuration script we provide you will be able to setup monitoring services on your client’s machines with remote monitoring enabled. The host machine of your choice will be able to monitor all the clients that are configured using the script. Your system administrator can load everything in a few simple steps and this automation will lessen the chances of any user input error. This product has been tested and validated to work with the procedure as written.