**NAGIOS**

*yum install httpd php -y*

1. **Web Server (httpd)**: Nagios Core, the base monitoring engine, requires a web server to provide a user interface for configuration, viewing monitoring status, and generating reports. Apache HTTP Server (**httpd**) is a commonly used web server in Linux systems and is often used to serve Nagios' web-based interface.
2. **PHP**: The Nagios web interface is written in PHP, a server-side scripting language. PHP is used to create dynamic web pages and process information for the Nagios web interface. Installing PHP enables the web server to execute PHP scripts necessary for the functionality of the Nagios web interface.

*yum install gcc glibc glibc-common -y*

* **gcc(The GNU Compiler Collection)**: It's like a toolbox that helps the system build and create programs from their source code. Nagios might need to be built or customized, and **gcc** provides the necessary tools for that.
* **glibc(GNU C Library)**: This is like the library of functions and tools that many programs, including Nagios, use to perform basic operations like handling files and managing memory. It's an essential part of the system that Nagios relies on.
* **glibc-common**: This package contains extra files that help **glibc** work properly in different languages. It's important for **glibc** to function smoothly in various environments.

*yum install gd gd-devel -y*

1. **GD Library**: GD is a graphics library used to create dynamic images. Nagios uses this library to generate graphs and visual representations of monitoring data. These graphs are essential for visualizing performance data, trends, and status reports of monitored resources like CPU usage, network traffic, and more.
2. **gd-devel**: The **gd-devel** package contains the header files and libraries necessary for developing applications that use the GD graphics library. These development files provide the tools and resources required to compile and link programs with the GD library.

*groupadd nagioscmd*

*usermod -a -G nagioscmd nagios*

*usermod -a -G nagioscmd apache*

* In simpler terms, these commands create a group named **nagioscmd**, and then they add the **nagios** and **apache** users to this group. This group membership allows these users to perform Nagios-specific actions or access resources associated with the **nagioscmd** group while maintaining system security.

*./configure --with-command-group=nagioscmd*

* **./configure**: This command prepares the software for installation by setting up how it will work on your system.
* **--with-command-group=nagioscmd**: This part of the command specifies that a group called **nagioscmd** will have special permissions or access to execute certain commands within the software being configured. This could be Nagios or a Nagios-related tool.

*make all*

*make install*

*make install-init*

*make install-config*

*make install-commandmode*

*make install-webconf*

1. **make all**: This command prepares all the necessary parts of the software so that it can be used.
2. **make install**: After preparing, this command puts the software in the right places on your computer so that you can use it.
3. **make install-init**: It sets up scripts that help the software start and stop automatically when your computer turns on or off.
4. **make install-config**: This command puts in place the settings needed for the software to work properly.
5. **make install-commandmode**: It adjusts the way certain commands work to make sure they can be used correctly.
6. **make install-webconf**: This sets up the necessary settings for the software's web-based interface, if it has one.

*htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin*

* **htpasswd**: It's a command-line tool to manage user authentication files for web servers.
* **-c**: This flag creates a new file for storing usernames and passwords. Be careful, as using this flag overwrites an existing file.
* **/usr/local/nagios/etc/htpasswd.users**: This is the file path where the usernames and encrypted passwords will be stored. It's a common location for Nagios authentication files.
* **nagiosadmin**: This is the username for whom you're creating or updating the password entry.

*chkconfig --add nagios*

* The command **chkconfig --add nagios** is like telling the computer to recognize and manage the Nagios software as a service.
* Think of it as giving the computer instructions on how to handle Nagios when the computer starts up or shuts down. It doesn't start the service immediately; it just makes the system aware of Nagios so that it can be started or stopped automatically when the computer boots up or shuts down later on.