Welcome to FreeBSD!

1. Boot FreeBSD [default]
2. Boot FreeBSD with ACPI disabled
3. Boot FreeBSD in Safe Mode
4. Boot FreeBSD in single user mode
5. Boot FreeBSD with verbose logging
6. Escape to loader prompt
7. Reboot

Select option, [Enter] for default
or [Space] to pause timer 8

Apache2.4, MySQL8.0, PHP8.0 on FreeBSD 13.1 (FAMP) plus Zabbix 6.2.x Server
October 18, 2022 femtopc.com

Synopsys: Most Web content is driven by an Apache Web Server with PHP language and MySQL database server. This document is a supplement to FemtoPC's "Zabbix" installation script file for FreeBSD 12.3, 13.0 or 13.1.
https://www.femtopc.com/shell_scripts/FAMP/Zabbiz/install.gz

Requirements:
1. FreeBSD server, on discrete hardware or running in a virtual machine.
2. Script designed for server with clean FreeBSD install, no other software installed.
3. Disk requirement: After installation, only <3GB are used, including the vanilla FreeBSD installation.
4. Must be run with 'root' access, or as a user that "su -" to root.
5. Server must have Internet access.
6. Script file will only run in /root directory.
7. Depending on Internet speed and server processing power, installation is complete in under 10 minutes.

Step-by-step:
1. Login to FreeBSD server as root, or su - to root.
2. Fetch the FAMP package
```
fetch "https://www.femtopc.com/shell_scripts/FAMP/Zabbix/install.gz"
```
3. Unzip the download
```
tar -xf install.gz
```
4. Run the shell program and answer when prompted.
```
./zabbix.sh
```
5. Script will check to make sure you are running as root, in the /root directory and have Internet access. It will then check for any Apache, MySQL and PHP packages and exit if found. After packages are installed, the configuration will be automatically done. A password will be requested for MySQL root user. Please make it secure. View the logfile.log to troubleshoot any errors.
Then Zabbix will be installed and setup.
This installation will fetch official packages. Zabbix frontend (GUI) is working without errors under PHP 8.0.

Here is a breakdown of the commands that are run in the script.

```
# install Apache2.4
pkg install -y apache24
# install MySQL80-Server
pkg install -y mysql80-server
# install PHP80
pkg install -y php80
# install PHP80-extentions
pkg install -y php80-extensions
# install extra extensions for Zabbix
pkg install -y php80-bcmath
pkg install -y php80-fileinfo
pkg install -y php80-gd
pkg install -y php80-gettext
pkg install -y php80-ldap
pkg install -y php80-mbstring
pkg install -y php80-mysqli
pkg install -y php80-pdo_mysql
pkg install -y php80-snmp
pkg install -y php80-sockets
# install Apache mod_php80
pkg install -y mod_php80

# These are what the configuration routines do
# modify the /usr/local/etc/apache24/httpd.conf file
# make a backup and then edit
cd /usr/local/etc/apache24
cp httpd.conf httpd.conf.original
ee httpd.conf
# set the ServerAdmin, in the script it is set to root. You may also set a webmaster email here.
# set the ServerName to the IP address of server. A domain name could be set here if available.
# set the second time AllowOverride None, where None is capital "N" to All. This will allow .htaccess files to work.
# set DirectoryIndex from just index.html to index.php index.htm index.html to capture PHP files
# create the Alias for Zabbix by adding the following
Alias /zabbix "/usr/local/www/zabbix62/"
<Directory "/usr/local/www/zabbix62">
Require all granted
AllowOverride None
Order Allow,deny
Allow from all
</Directory>
# saves the httpd.conf file
```

```
# setup Apache to run PHP by creating an Includes/php.conf file
cd Includes
echo "<FilesMatch \"\\.php$\">" > php.conf
echo "SetHandler application/x-httpd-php" >> php.conf
echo "</FilesMatch>" >> php.conf
echo "<FilesMatch \"\\.phps$\">" >> php.conf
echo "SetHandler application/x-httpd-php-source" >> php.conf
echo "</FilesMatch>" >> php.conf
# return to our root directory
cd /root
# Now configure PHP
cd /usr/local/etc
# choose a development or a production environment
# development (displays errors in web pages, good for troubleshooting)
cp php.ini-development php.ini
# or production (will not display web page errors)
cp php.ini-production php.ini
# edit the php.ini file
ee php.ini
# find where max_execution_time = 30 and increase to 300
# find where max_input_time = 60 and increase to 300
# find where memory_limit = 128M and increase to 512M
# find where post_max_size = 8M and set to 32M
# find where upload_max_filesize = 2M and set to 1G (or your limit here)
# find where max_file_uploads = 20 and increase to 80
# lastly, find ;date.timezone and uncomment (delete ;) and enter timezone (IMPORTANT!!)
# hint: find your server's setting by doing "cat /var/db/zoneinfo"
# save php.ini
cd /root
# Setup to run MySQL server
# Make Server start automatically when FreeBSD boots.
sysrc mysql_enable="yes"
# start the mysql server for the first time
service mysql-server start
# MySQL 8.0 root user is empty
# change the root to your own password
# put the new password in single quotes.
/usr/local/bin/mysqladmin -u root -p password 'your password'
# Install Zabbix server
pkg install -y zabbix62-server
# Setup Zabbix database and user with password 'zabbix'
cd /usr/local/share/zabbix62/server/database/mysql/
mysql -u root -p
# use your MySQL root password
  create database zabbix character set utf8mb4 collate utf8mb4_bin;
  create user zabbix identified by 'zabbix';
  grant all privileges on zabbix.* to zabbix;
  quit
# Import the schema, images and data
mysql -u zabbix -pzabbix zabbix < schema.sql
mysql -u zabbix -pzabbix zabbix < images.sql
mysql -u zabbix -pzabbix zabbix < data.sql
```

Configure the zabbix server
cd /usr/local/etc/zabbix62
ee zabbix_server.conf
Check/change 4 lines in the zabbix_server.conf file. Look for the lines, DBHost, DBName, DBUser, and DBPassword. We want our values to be

LogFile=/tmp/zabbix_server.log (~line 38)
DBHost=localhost (~line 85)
DBName=zabbix (~line 94)
DBUser=zabbix (~line 110)
DBPassword=zabbix (~line 118)
cd /root
Install Zabbix Frontend (web)
pkg install -y zabbix62-frontend-php80
make the conf folder owned by webserver
chown -R www:www /usr/local/www/zabbix62/conf
Install and configure zabbix62-agent (for FreeBSD)
pkg install -y zabbix62-agent
cd /usr/local/etc/zabbix62
configure the agent
ee zabbix_agentd.conf
# make changes, modify IP and hostname to match your install
LogFile=/tmp/zabbix_agentd.log
Server=192.168.0.63/24 (~line 113)
ServerActive=192.168.0.63 (~line 155)
Hostname=fbsd131.local (~line 166)
# setup services to start at boot
sysrc apache24_enable="YES"
sysrc zabbix_server_enable="YES"
sysrc zabbix_agentd_enable="YES'
Startup our service
service apache24 start
service zabbix_server start
service zabbix_agentd start
at this point we have a working FAMP / Zabbix server

#This completes the FAMP server and Zabbix install and setup. View the default web page at: http://your_server_ip_address/ or the PHP status at http://your_server_ip/phpinfo.php
Enter Zabbix web installer at: http://your_server_ip_address/zabbix/
Follow the prompts, after installation, login the Zabbix server
Default username/password are Admin/zabbix (the "A" in admin is uppercase)
<end>