

Vembu StoreGrid FreeBSD (for FreeBSD 5.4 and above) Installation Guide

The FreeBSD version (for FreeBSD 5.4 and above) of StoreGrid is available for download at the following URL:
<http://www.vembu.com/storegrid/storegrid-download-form.html>

Download the bin file:

1. For FreeBSD 5.4 : **VembuStoreGrid_2_1_1_SP_FreeBSD.zip**

Vembu StoreGrid FreeBSD installation compiles and installs its own version of Apache, GD and PHP. So before installing StoreGrid in FreeBSD machines, please check that the following packages were installed.

1. **make**, available from <http://ftp.gnu.org/pub/gnu/make/>
2. **gcc**, available from <http://gcc.gnu.org/>
3. **g++**, available from <http://gcc.gnu.org/>
4. **libstdc++5**, available from <http://gcc.gnu.org/libstdc++/>

The following 3rd-party libraries will be used by gd if found by configure. While gd will compile and install even without these, we suggest that at least zlib and libpng are installed, and recommend that freetype and jpeg are installed as well:

1. Data compression library: **zlib**, available from <http://www.gzip.org/zlib/>
2. Portable Network Graphics library; requires **libpng**, available from <http://www.libpng.org/pub/png/>
3. Free, high-quality, and portable font engine: **FreeType 2.x**, available from <http://www.freetype.org>
4. Portable JPEG compression/decompression library: **JPEG** library, available from <http://www.ijg.org/>

To install PHP following 3rd-party libraries are required :

1. **Flex**, available from <http://lex.sourceforge.net/> -- Flex is a tool for generating programs that perform pattern-matching on text.
2. **Bison**, available from <http://www.gnu.org/software/bison/> -- Bison is a general-purpose parser generator that converts a grammar description for an LALR context-free grammar into a C program to parse that grammar.

(OR)

3. **libxml2**, available from <http://www.xmlsoft.org/> -- XML DOM library used by php's xml parser.

To install Apache with HTTPS support, Open SSL libraries are required :

1. To enable https support in StoreGrid, please ensure that openssl is installed on your system before you enable https support. If not, download and install the latest openssl version from <http://www.openssl.org/source/>.

Once you have ensured that the above packages are all available in your FreeBSD machine, follow the steps given below to install StoreGrid:

1. Unzip the downloaded ZIP file.
2. Execute the bin file

VembuStoreGrid_2_1_1_SP_FreeBSD.bin

3. The first step in the installation is to choose the type of installation. You will be given two options:
 - a. You can install StoreGrid in a newly created StoreGrid user account, where the StoreGrid user account will be automatically created with root privileges

- b. You can install StoreGrid in the current user account without root privileges.

Choose option 1, if you want StoreGrid to have root privileges so that it can be configured to backup all the users data, MySQL, System Files etc. Note that StoreGrid will be installed as a daemon process and will automatically start when the system boots up. You can START and STOP StoreGrid by running the command `"/etc/rc.d/storegrid start/stop"`.

Choose option 2, if you want StoreGrid to only backup files in the current user directories. Note that StoreGrid will be installed in the current user directory and has to be manually started every time the machine is rebooted. You can START and STOP StoreGrid by running the script `startStoreGrid.sh` and `stopStoreGrid.sh`

4. If you chose option 1 in the above step, then you will either be asked to give the root password, or the installation will quit and ask you to login as root and start the installation process again. Once you give the root password, you will be asked to provide a password for the StoreGrid user account which will be created. Note that StoreGrid will be installed as a daemon process and will automatically start when the system boots up. You can START and STOP StoreGrid by running the command `"/etc/rc.d/storegrid start/stop"`.

If you chose option 2, then you will be taken to the next step directly. Note that StoreGrid will be installed in the current user directory and has to be manually started every time the machine is rebooted. You can START and STOP StoreGrid by running the script `startStoreGrid.sh` and `stopStoreGrid.sh`

5. Read through the License Agreement carefully. If you agree, enter **Yes** to continue with the installation. If you do not agree, enter **No** to abort the installation.
6. By default StoreGrid will be installed in the "Current Directory". Setup will install StoreGrid under "Vembu/StoreGrid" in the "Current Directory" directory. To install in a different directory, enter the **absolute path** for Vembu StoreGrid installation. Note that setup will create the "Vembu/StoreGrid" directory under the directory you entered.

7. Upgrading from StoreGrid 2.1.1 to 2.2

If **Vembu/StoreGrid** directory is found in the installation path. You will be provided with two update options.

- a. **UPDATE** Vembu StoreGrid by retaining the previous backup data. Note that all backup data in StoreGrid 2.1.1 will be automatically migrated to 2.2 when StoreGrid 2.2 starts for the first time. [Recommended]
- b. **DELETE** previous backup data and continue with updating Vembu StoreGrid. You will lose all your previous configuration and other backup metadata and also any backup data from other users backing up to this computer. [Not Recommended]

8. Configure StoreGrid as :

You need to choose one of the options (Client-Server, Client, Server, Replication Server). The four modes are explained in detail below.

- a. **Client-Server** - This option will configure this StoreGrid installation to run in full peer mode, which means StoreGrid can function both as a client backing up local files/folders to other StoreGrid peers and also as a server which can be used for backing up data from other StoreGrid peers.
- b. **Client** - This option will configure this StoreGrid installation to run only as a client (half peer), which means StoreGrid can backup local files/folders to other StoreGrid peers but cannot accept backup data from other StoreGrid peers.
- c. **Server** - This option will configure this StoreGrid installation to run only as a server (half peer), which means StoreGrid can accept backup data from other StoreGrid peers but cannot backup local files/folders to other StoreGrid peers.
- d. **Replication Server** - Other StoreGrid backup servers can replicate their data to this server for redundancy.

9. Assign A StoreGrid ID:

StoreGrid ID is the unique name with which your StoreGrid installation is identified. By default, it takes your machine name as the StoreGrid ID. But we recommend giving your email id as the StoreGrid ID so that it is globally unique. Here you will be provided with these options:

- o "Do you want to identify your machine name by other than hostname"
- o If you enter "y/Y" then following text will displayed in terminal to enter StoreGrid ID.
- o "Enter StoreGrid ID"

- Enter the StoreGrid ID for your installation. We recommend using your email id for this.

Note: The StoreGrid ID value is case insensitive. Hence, the 'StoreGrid ID' you have entered will be automatically converted to lower case.

Customer Name: Enter valid StoreGrid Customer Name. The StoreGrid Customer name is the 'name' under which your client is categorized (on the backup server). By default, this is set to "Trial Customer". Your service provider can change this at his end, as required. If your service provider has given you a customer name, please enter it exactly as provided. Otherwise, please leave this as the default "Trial Customer".

10. Configure StoreGrid Server backup location:

By default, StoreGrid Server will store the backup data from the clients to the "<INSTALLATION_DIR>/Vembu/StoreGrid" directory. If you want to change the server's default backup location, here you will be provided with these options.

- "Do you want to change the server's default backup location"
- If you enter "y/Y" then following text will displayed in terminal to enter StoreGrid Server backup location.
- "Enter the absolute path for StoreGrid Server's backup location"
- Enter the backup location for this server here.

11. Enable HTTPS based StoreGrid WebConsole access:

StoreGrid supports 'https protocol' to access the StoreGrid webconsole in a secured manner. HTTPS is nothing but a combination of normal HTTP interaction over an encrypted Secure Sockets Layer (SSL) to ensure reasonable protection from eavesdroppers and man-in-the-middle attacks.

StoreGrid uses the TCP port 6061 for https based WebConsole access. Hence if you choose https support, then you can access the StoreGrid WebConsole through "https://<machine_name or IP_address>:6061". And also, if you try to access the StoreGrid webconsole through http://<machine name>:<webconsole port>, then you will be automatically redirected to https://<machine name>:<HTTPS port> url.

Note : To enable https support in StoreGrid, please ensure that openssl is installed on your system before you enable https support. If not, download and install the latest openssl version from <http://www.openssl.org/source/>.

12. Vembu StoreGrid Web Console Authentication:

Since StoreGrid's user interface is browser based you need to configure a username and password to login to StoreGrid Web Console. Note that you can add additional users, delete users, change password etc. from the Web Console UI after the installation.

13. Configure Backup Server Port and UI Communication Port

By default StoreGrid uses the 'Backup Server Port' 32004, which is used for all the client-server communications like Backup/Restore, and the 'UI Communication Port' 32005, which is used for communication between the StoreGrid WebConsole and the StoreGrid Application. If you want to have StoreGrid using other than the default ports, here you will be provided with these options.

- "Do you want to change these ports from default value"
- If you enter "y/Y" then following text will displayed in terminal to enter StoreGrid's Backup Server Port and the UI Communication Port.
- "Please enter a numerical whole number value for Backup Server Port"
- Enter the Backup Server Port value here.
- "Please enter a numerical whole number value for UI Communication Port"
- Enter the UI Communication Port value here.

14. Web Server Port

StoreGrid's user interface is browser based. By default StoreGrid Web server is configured to run on port 6060. From your browser you will have to type http://<Your Machine Name>:6060 to start the StoreGrid Web Console.

15. This installs the product and complete the installation process. After successful installation, you are provided with

an option to start the StoreGrid. After the installation, You can start StoreGrid by executing the script "**startStoreGrid.sh**" from the directory "<INSTALLATION_HOME>/Vembu/StoreGrid/".

Note:

After successful installation, you can open the StoreGrid Web Console from your browser by typing <http://<Your Machine Name>:6060>. You will have to login to the Web Console using the username and password you provided in the "Vembu StoreGrid Web Console Authentication" step during the installation.