

# AI-02066 BookStack in Ubuntu

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Tags	Project
Created time	@September 4, 2025 2:06 PM

**Tell me more about BookStack Application in Ubuntu Server. Can I run it in Azure? Create a Step by Step instructions for BookStack installation in Ubuntu Server from start to finish.**

**BookStack** is a free and open-source platform for creating documentation and wikis. It's built using PHP (Laravel framework) and uses MySQL/MariaDB for its database. It's designed to be simple to use and self-hosted, making it a great choice for internal documentation, knowledge bases, or even public-facing wikis.

## ✔ Can You Run BookStack on Azure?

Yes, you can absolutely run BookStack on **Azure**. You can deploy it on an **Ubuntu Server VM**, use **Azure Database for MySQL**, and optionally integrate with **Azure Active Directory** for authentication. Azure provides flexibility in scaling, backups, and security, making it a solid choice for hosting BookStack.

## 📖 Step-by-Step Guide to Install BookStack on Ubuntu Server

Here's a complete walkthrough for installing BookStack on an Ubuntu Server (e.g., Ubuntu 22.04 LTS):

### Step 1: Update Your Server

```
sudo apt update && sudo apt upgrade -y
```

### Step 2: Install Required Packages

```
sudo apt install git unzip curl php php-cli php-mbstring php-xml php-common  
php-mysql php-tokenizer php-curl php-zip php-bcmath php-gd php-intl php-  
mysql mysql-server nginx composer -y
```

### **Step 3: Configure MySQL**

```
sudo mysql_secure_installation
```

Then log into MySQL:

```
sudo mysql -u root -p
```

Create a database and user:

```
CREATE DATABASE bookstack;  
CREATE USER 'bookstackuser'@'localhost' IDENTIFIED BY 'your_secure_pass  
word';  
GRANT ALL PRIVILEGES ON bookstack.* TO 'bookstackuser'@'localhost';  
FLUSH PRIVILEGES;  
EXIT;
```

### **Step 4: Install BookStack**

```
cd /var/www/  
sudo git clone https://github.com/BookStackApp/BookStack.git --branch relea  
se --single-branch bookstack  
cd bookstack  
sudo composer install
```

### **Step 5: Configure Environment**

```
sudo cp .env.example .env
sudo nano .env
```

Update the following lines:

```
APP_URL=http://your-server-ip
DB_DATABASE=bookstack
DB_USERNAME=bookstackuser
DB_PASSWORD=your_secure_password
```

## Step 6: Set Permissions

```
sudo chown -R www-data:www-data /var/www/bookstack
```

## Step 7: Run Migrations

```
php artisan key:generate
php artisan migrate
```

## Step 8: Configure Nginx

Create a config file:

```
sudo nano /etc/nginx/sites-available/bookstack
```

Paste this:

```
server {
    listen 80;
    server_name your-server-ip;

    root /var/www/bookstack/public;
    index index.php index.html;
```

```
location / {
    try_files $uri $uri/ /index.php?$query_string;
}

location ~ \.php$ {
    include snippets/fastcgi-php.conf;
    fastcgi_pass unix:/var/run/php/php8.1-fpm.sock;
}

location ~ /\.ht {
    deny all;
}
}
```

Enable the site:

```
sudo ln -s /etc/nginx/sites-available/bookstack /etc/nginx/sites-enabled/
sudo systemctl restart nginx
```

## Step 9: Access BookStack

Open your browser and go to:\

**<http://your-server-ip>**

Default login:

- **Email:** `admin@admin.com`
- **Password:** `password`

Change this immediately after logging in.

## Optional Enhancements

- **SSL:** Use Let's Encrypt for HTTPS.
- **Backups:** Automate MySQL and file backups.

- **Azure Integration:** Use Azure VM, Azure Database for MySQL, and optionally Azure AD for SSO.

Would you like a guide for deploying BookStack on **Azure VM with Azure Database for MySQL** and **SSL setup**?

Gemini Version

**What is BookStack? What is the story of the company? What are the fundamental pillars of the BookStack development? What problems BookStack developers trying to solve? How do you synthesize the BookStack concept into "other uses" of the applications? Is BookStack free forever? Tell me more about BookStack Application in Ubuntu Server. Can I run it in Azure? Create a Step by Step instructions for BookStack installation in Ubuntu Server from start to finish.**

BookStack is an open-source, self-hosted wiki software designed to be simple and easy to use. It organizes content using a metaphorical system of **books, chapters, and pages** to structure information logically. BookStack is built on the Laravel PHP framework and is released under the MIT License.

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## The Story of BookStack

BookStack was started in 2015 by **Dan Brown** who needed a documentation platform for his workplace. He found most existing solutions were either expensive, with per-user costs, or lacked a good design and usability out-of-the-box. As a result, he built his own solution. The project was initially announced on Reddit and has since grown into a popular open-source project with a community of contributors.

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## Fundamental Pillars and Problems Solved

The core development of BookStack is driven by a focus on its primary audience and a few key principles:

- **Simple Usability:** The primary goal is to provide a user-friendly platform, especially for mixed-skill teams, who might not be comfortable with complex

markup languages. BookStack uses a WYSIWYG (What You See Is What You Get) editor at its core to make content creation accessible.

- **Hierarchical Structure:** The "books" and "chapters" system is a fundamental pillar that solves the problem of information sprawl in traditional wikis. It provides a clear, logical way to organize and find content.
  - **Security and Control:** BookStack addresses the need for secure documentation by offering features like role-based access control, allowing administrators to manage who can create, edit, or view content.
  - **Performance:** BookStack is designed to be lightweight and fast, avoiding the bloated, slow performance often found in other enterprise-level wiki solutions.
  - **Portability:** The platform stores content in a standard HTML format, which makes it easier for users to migrate their data away from BookStack if they ever need to.
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## Other Uses of BookStack

While designed as a documentation platform, BookStack's core concept of organizing information into books and chapters makes it versatile. It can be synthesized into various other applications, such as:

- **Personal Knowledge Base:** Individuals can use it to store notes, ideas, and personal projects.
  - **Team Knowledge Management:** It's an excellent tool for companies to create internal knowledge bases for IT documentation, human resources policies, or project guides.
  - **Educational Resource:** Teachers or students can use it to build structured course materials or study guides.
  - **Recipe Book:** A user can create a "book" for different cuisines and "pages" for individual recipes.
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## Is BookStack Free Forever?

**Yes, BookStack is free and open-source forever.** It is released under the **MIT License**, which allows anyone to use, modify, and redistribute the software at no cost. The project's creator, Dan Brown, has committed to keeping the platform fully open source with no paid features, "open core," or in-app upsells. The project is financially sustained through donations and paid support offerings, not by selling the software itself.

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## BookStack on Ubuntu Server and Azure

BookStack is well-suited for a self-hosted environment, and an Ubuntu Server is a common choice for this. The application is built on PHP and relies on a database (like MySQL or MariaDB) and a web server (like Apache or Nginx).

**Yes, you can run BookStack in Azure.** It can be deployed on an Azure Virtual Machine (VM) running an Ubuntu Server. You can also find pre-packaged solutions on the Azure Marketplace from third-party vendors that simplify the deployment process, but these may have additional costs for supplementary services.

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## Step-by-Step Installation on Ubuntu Server

These instructions are a general guide. For the most up-to-date and specific instructions, always refer to the official BookStack documentation. This guide assumes you have a clean Ubuntu server with `sudo` privileges.

### Prerequisites

- A fresh Ubuntu Server installation (e.g., Ubuntu 22.04 LTS).
- A non-root user with `sudo` privileges.
- A fully qualified domain name (FQDN) or server IP address.

### Step 1: Update the Server

Start by updating your server's package list and upgrading existing packages.

Bash

```
sudo apt update && sudo apt upgrade -y
```

## Step 2: Install Apache, PHP, and MySQL

Install the necessary components for the BookStack application.

Bash

```
sudo apt install apache2 mysql-server -y
sudo apt install php libapache2-mod-php php-mysql php-mbstring php-tokenizer php-xml php-json php-gd php-curl
php-zip php-ldap php-bcmath -y
```

## Step 3: Secure MySQL Installation

Run the MySQL security script to configure the database server.

Bash

```
sudo mysql_secure_installation
```

Follow the prompts. It's recommended to set a root password, remove anonymous users, disallow remote root login, and remove the test database.

## Step 4: Create a Database and User for BookStack

Log in to the MySQL command line and create a new database and a dedicated user for BookStack.

Bash

```
sudo mysql
```

SQL

```
CREATE DATABASE bookstack;
CREATE USER 'bookstackuser'@'localhost' IDENTIFIED BY 'your_password_here';
GRANT ALL PRIVILEGES ON bookstack.* TO 'bookstackuser'@'localhost';
FLUSH PRIVILEGES;
EXIT;
```

**Note:** Replace `your_password_here` with a strong, secure password.

## Step 5: Download and Install BookStack

Download the latest version of BookStack from its GitHub repository and install its dependencies using Composer.

Bash

```
sudo apt install git composer unzip -y
cd /var/www/
sudo git clone https://github.com/BookStackApp/BookStack.git --branch release --single-branch
cd BookStack
sudo composer install --no-dev
```

## Step 6: Configure BookStack

Copy the example environment file and edit it to include your database and application details.

Bash

```
sudo cp .env.example .env
sudo nano .env
```

In the `.env` file, modify the following lines:

- `APP_URL` : Set this to your domain name or IP address (e.g., `http://your_domain.com` ).
- `DB_DATABASE` : Set to `bookstack` .
- `DB_USERNAME` : Set to `bookstackuser` .
- `DB_PASSWORD` : Set to the password you created in Step 4.

Save and close the file ( `Ctrl+X` , then `Y` , then `Enter` ).

Next, generate an application key and set directory permissions.

Bash

```
sudo php artisan key:generate
sudo chown -R www-data:www-data /var/www/BookStack/
```

## Step 7: Configure Apache Virtual Host

Create a new Apache configuration file for BookStack.

Bash

```
sudo nano /etc/apache2/sites-available/bookstack.conf
```

Add the following content to the file:

## Apache

```
<VirtualHost *:80>
  ServerName your_domain.com
  DocumentRoot /var/www/BookStack/public
  <Directory /var/www/BookStack/public>
    AllowOverride All
    Require all granted
  </Directory>
  ErrorLog ${APACHE_LOG_DIR}/bookstack_error.log
  CustomLog ${APACHE_LOG_DIR}/bookstack_access.log combined
</VirtualHost>
```

**Note:** Replace `your_domain.com` with your actual domain or server IP address.

Enable the new virtual host and the `mod_rewrite` module, then disable the default Apache site and restart the service.

### Bash

```
sudo a2ensite bookstack.conf
sudo a2enmod rewrite
sudo a2dissite 000-default.conf
sudo systemctl restart apache2
```

## Step 8: Finalize Installation

Run the final BookStack installation command to set up the database.

### Bash

```
cd /var/www/BookStack/
sudo php artisan migrate
```

## Step 9: Access BookStack

Open your web browser and navigate to the URL you configured (your domain name or server IP address). You should see the BookStack login page. The default login credentials are **admin@admin.com** with the password **password**. Be sure to change these immediately after logging in.