



STEP-BY-STEP GUIDE: Deploying Bitnami Stacks on Microsoft Azure

In this guide we walk you through the process of setting up a Bitnami cloud image stack on Microsoft Azure and look at the advantages over other deployment methods.



Introduction

Bitnami packages popular open source software, such as web applications and development stacks, as installers, virtual machines and cloud images. You could, for example, download, install and deploy the Bitnami WordPress installer, which would include all servers (for databases and web), other dependent packages, and preconfigured configuration files, and install everything in one fell swoop. This avoids both long and cumbersome installation processes and error-prone configurations.

Microsoft Azure is a secure, flexible and high-performance cloud platform integrating multiple tools and managed services. It provides a complete set of tools to build, deploy and manage enterprise, mobile and Web applications in the cloud. If you're new to the cloud, the easiest way to get started with Microsoft Azure is with **Bitnami**. Bitnami provides pre-packaged application images for Microsoft Azure cloud servers, so that you can get productive with your new server immediately. You can access and launch these images through the free **Bitnami Launchpad for Microsoft Azure**, which gives you an intuitive Web-based dashboard to create and manage your Microsoft Azure cloud servers.

In this tutorial, I'll walk you, step by step, through the process of using the Bitnami Launchpad for Microsoft Azure to create and provision a new Microsoft Azure cloud server using the WordPress blog as an example. And since Microsoft offers a **FREE Azure Account with \$200 credit** for 30 days, you'll have plenty of time to experiment with your server and Bitnami stacks without worrying about being billed for usage.

Overview

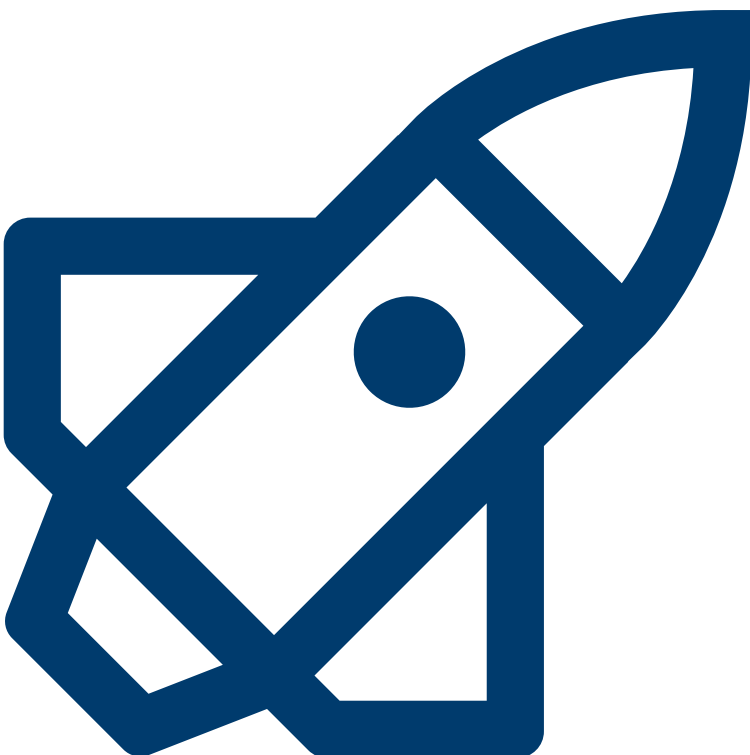
If you're interested in creating a personal or small business blog, chances are that you're going to use [WordPress](#). WordPress is one of the most popular blogging platforms in the world, in use on over 60 million websites (according to [Wikipedia](#)). It's not hard to see why: WordPress is incredibly easy to use, comes with thousands of extensions and themes, and is completely free and open source.

In this tutorial, I'll launch a cloud server with the [Bitnami WordPress Stack](#), which gives you a pre-configured WordPress blog that you can start using right way. But WordPress is just an example: there are hundreds of other Bitnami applications to choose from, and they're all equally easy to set up.

Here are the steps you'll follow in this tutorial:

- **Register with Microsoft Azure**
- **Register with Bitnami**
- **Connect your Microsoft Azure and Bitnami accounts**
- **Deploy the Bitnami WordPress Stack on a Microsoft Azure cloud server**
- **Log in and start using WordPress**

The next sections will walk you through these steps in detail.



Step 1: Register with Microsoft Azure

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At the end of this step, you will have signed up for the Microsoft Azure free trial. If you already have a Microsoft Azure account, you may skip this step. Begin by creating an Azure account, by browsing to the [Microsoft Azure website](#) and choosing the «Free Trial» option for a one month free trial. You will need an existing Microsoft account to log in and sign up for the free trial; if you don't have one, you can [create one here](#). Remember to keep track of your account username and password, because you'll need them in the next step.

your mobile phone number. Azure will send a verification code to your mobile number, which you'll need to enter into the registration form. Once that's done, proceed to the next stage by entering your credit card information.

If you're wondering why you need to provide credit card information for a free trial, or if you're worried about being billed for services, relax. By default, Azure trial accounts are configured with a spending limit of \$0, which means that your card will never be billed unless you remove or modify the spending limit. Azure needs your credit card information for security purposes, to avoid service misuse and to confirm your identity.

Once you've signed in, sign up for the Azure free trial by providing some basic personal information and

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A screenshot of the Microsoft Azure registration form. The form is titled 'Sign up' and 'Free Trial'. It is divided into four sections: 1. 'About you' with fields for first name, last name, country/region (set to 'United States'), contact email (widvfxcr@guerrillamail.info), company/school, and work phone. 2. 'Verification by phone' with a radio button for 'Send text message' (selected) and 'Call me', a dropdown for country (set to 'United States (+1)'), and a phone number field (1(202) 555-0100). 3. 'Verification by card' with a note: 'This information is collected only to verify your identity. You will not be charged unless you explicitly upgrade to a paid offer.' 4. 'Agreement' with a checkbox for 'I agree to the subscription agreement, offer details, and privacy statement.' and a note: 'Microsoft may use my email and phone to provide special Microsoft Azure offers.' A 'Sign up' button is at the bottom.

IMPORTANT: When your spending limit is set to \$0, Azure will automatically deactivate your cloud servers so that you don't incur any charges if your usage exceeds your free quota. [Read about the Azure spending limit.](#) Once your payment information is entered, review Azure's terms of service, free trial details and privacy statement, and indicate your agreement by ticking the box. Then, hit the big green «Sign up» button. The Azure account registration machine will churn away for a minute or so, and you will then be redirected to your Azure account management page, which allows you to manage your subscriptions, edit your profile and get support. You should see that your free trial is now active in the subscription list.

Step 2: Register with Bitnami

At the end of this step, you will have created a Bitnami account.

The next step is to create a Bitnami account, so that you can launch a cloud server with the Bitnami WordPress Stack. If you have a Google, Facebook, Yahoo! or Github account, you can use your credentials from those services with OpenID to create your Bitnami account.

If you don't have accounts with those services (or you don't want to use them), you can use your email address and password to create a Bitnami

account, as described below:

- Head to the [Bitnami sign-up page](#).
- Enter your name and email address.
- Choose a password.
- Review the Bitnami terms of service.

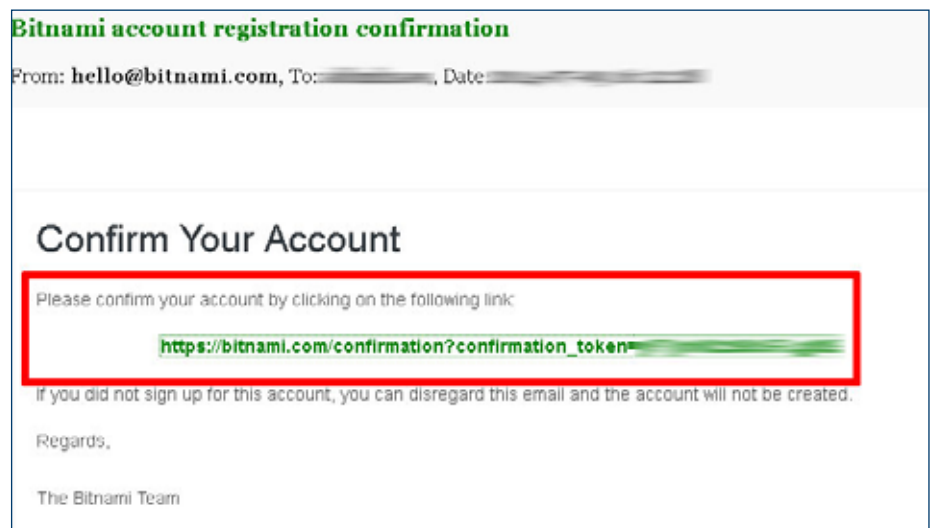
Then, use the «Sign up» button to create your account.

Bitnami will send you an email with a verification link which you'll need to click or browse to, to activate your account. This will also sign you in to your Bitnami account.

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Step 3: Connect your Microsoft Azure and Bitnami accounts

At the end of this step, your Bitnami Launchpad for Microsoft Azure will be configured and you will be ready to provision a cloud server.

The easiest way to set up your Microsoft Azure cloud server with Bitnami's WordPress Stack is via the [Bitnami Launchpad for Microsoft Azure](#), which gives you a simple control panel to provision, start, stop, connect to and check status of your cloud servers. However, to use it, you must first connect your Microsoft Azure and Bitnami accounts.

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To do this:

- Log in to your Bitnami account if you're not already logged in.
- Browse to the [Bitnami Launchpad for Microsoft Azure](#).
- Select the «Sign in with Bitnami» link in the top right corner.

The Launchpad will recognize your Bitnami credentials and automatically sign you in. You may also be prompted to set up your Bitnami password vault by entering an administrative password. Enter a hard-to-guess password.

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The Bitnami Vault password offers an additional level of protection against misuse: you'll need to enter it when performing certain operations, such as creating new cloud servers. Again, make sure you note it down for future reference.

- Click the «Add Subscription» button.
- You'll be transferred to an authorization page, where you can confirm that the Bitnami Launchpad is authorized to connect to your Microsoft Azure account. Select the «Create a Management Certificate for Microsoft Azure» button.

IMPORTANT: Your Bitnami Vault password is different from your Microsoft Azure account password.


Proceed as follows:

- Select the «Account -> Subscriptions» link in the Launchpad menu.

So long as you're still logged in to Azure, this will generate a *.publishsettings* file which you'll be prompted to download through your browser.

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Microsoft Azure



Your subscription file is being generated, and the download will begin shortly.

This file contains secure credentials and additional information about subscriptions that you can use in your development environment. Click [here](#) if the download does not start automatically.

- 1 Sign up for Windows Azure preview features

Sign up for [Windows Azure preview features](#) that you are interested in.
- 2 Save a local copy of the publishSettings file

Warning This file contains an encoded management certificate. It serves as your credentials to administer your subscriptions and related services. Store this file in a secure location or delete it after you use it.
- 3 Import the publishSettings file

Run the following command

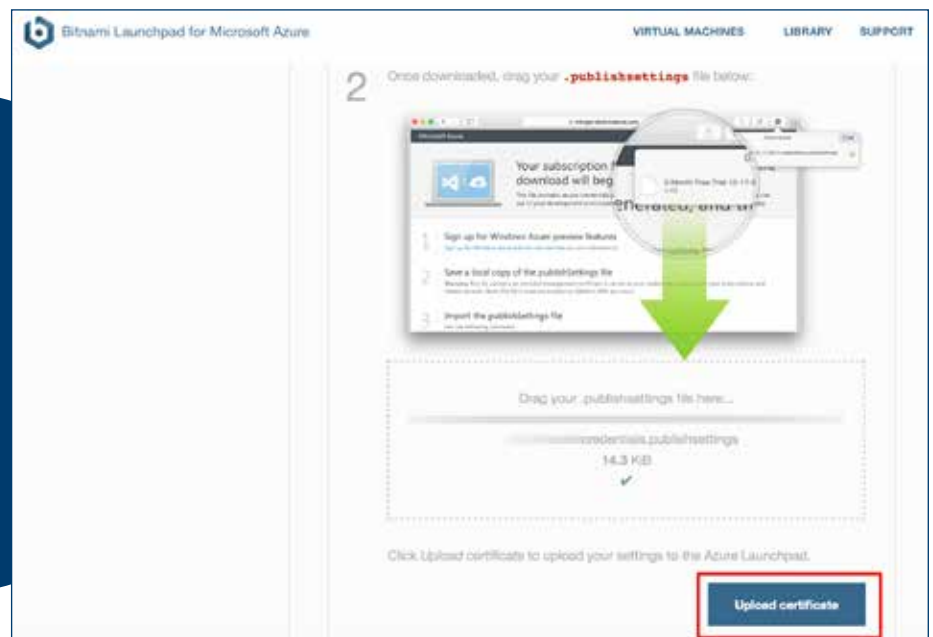
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azure account import
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• Once the file is downloaded, drag it from your desktop to the Bitnami Launchpad page and then click the «Upload certificate» button to upload the management certificate to the Launchpad.

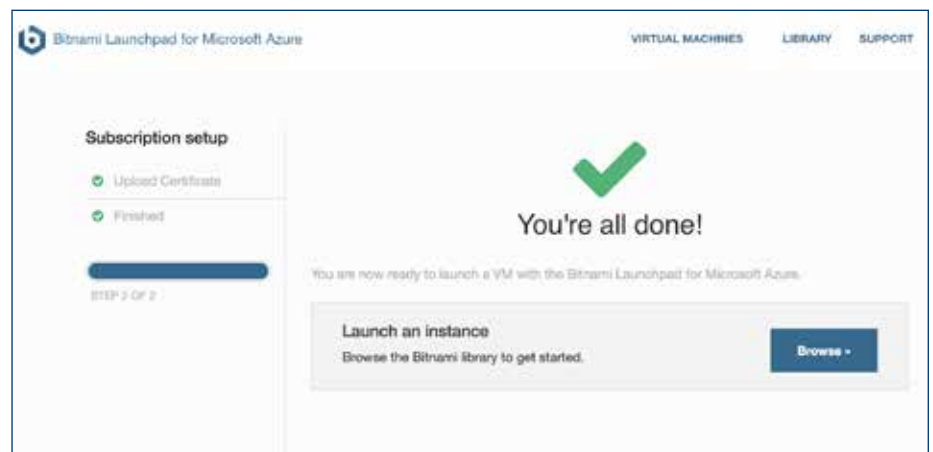
Your Microsoft Azure and Bitnami accounts will now be connected.

You will now be able to launch new cloud servers with Bitnami application stacks.

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TIP: An «A0» server will work just fine for a low-traffic WordPress blog or for WordPress development.

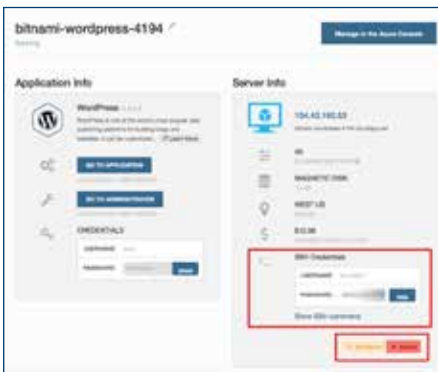
- Confirm your selection by hitting the «Create» button at the end of the page.

The Bitnami Launchpad will now begin spinning up the new server. The process usually takes a few minutes: a status indicator on the page provides a progress update.

address directly into your browser's address bar. You should now see your WordPress blog's home page with a sample post, as shown below.

The Launchpad page also includes controls to shut down or delete the server. You can also obtain the SSH password for the server if you'd like to connect to it directly with an SSH client (like PuTTY on Windows).

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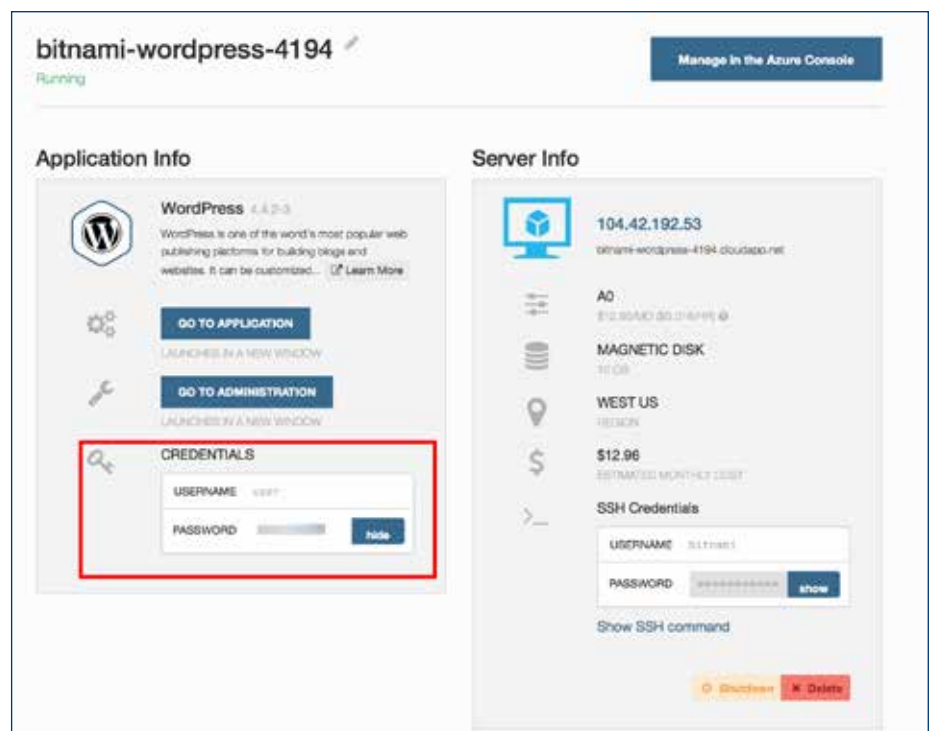


Once the cloud server has been provisioned, the status indicator will show that it's «running», and the Bitnami Launchpad page will display the server details, including its IP address.

At this point, you should be able to browse to the cloud server, either by clicking the link in the Bitnami Launchpad (a new browser tab will open) or entering the cloud server IP

By default, the Bitnami Launchpad creates an application user account named user and an auto-generated password when a new server is provisioned. You will need this password in order to use WordPress. To do this, go back to the Launchpad page containing the server information screen, look in the «Credentials» section, and make a note of the password.

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Step 5: Log in and start using WordPress

At the end of this step, you will have logged in to WordPress and created a new blog post.

To log in to the WordPress dashboard, follow these steps:

- Browse to the WordPress dashboard, usually at the URL `http://SERVER-IP/wp-admin`.
- Log in with the administrator credentials from the previous step.

You should now arrive at the WordPress dashboard, which allows

you to manage posts, pages and comments; customize your blog with themes and plugins; import and export content; manage navigation menus; add or delete new user accounts; and much more.

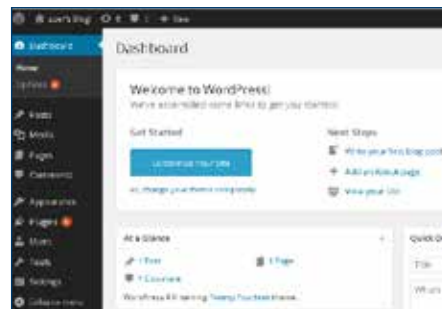
You can now add a new post using the following steps:

- Select the «Posts -> Add New» menu option to create a new post.
- Enter a title and content for the post. You can use the formatting tools at

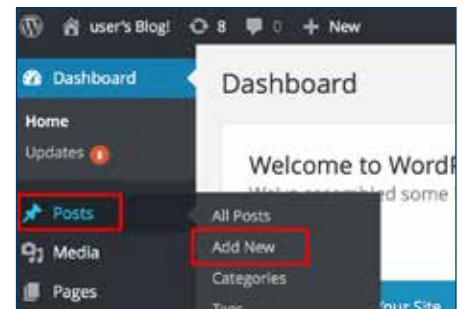
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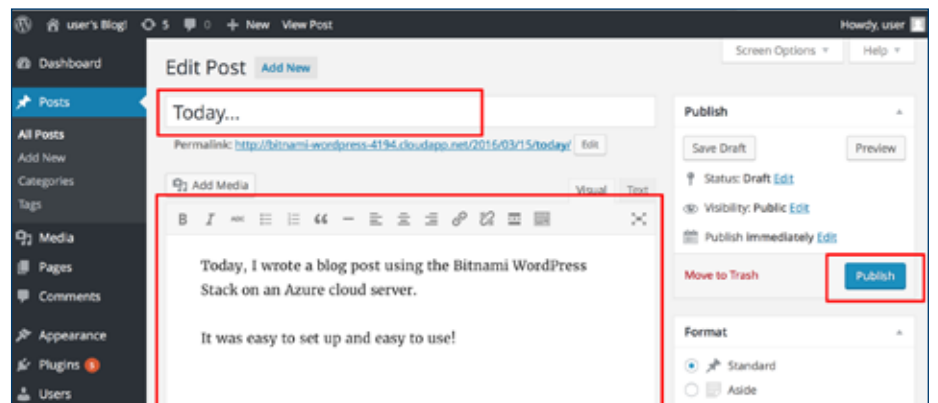
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the top of the content area to format your post and add hyperlinks or images.

- Optionally, choose the format and category for your post.
- Publish it immediately using the «Publish» button.

And now, when you visit your blog's front page, you should see your new post.

Congratulations! You now have a working, fully-functional WordPress blog in the cloud.

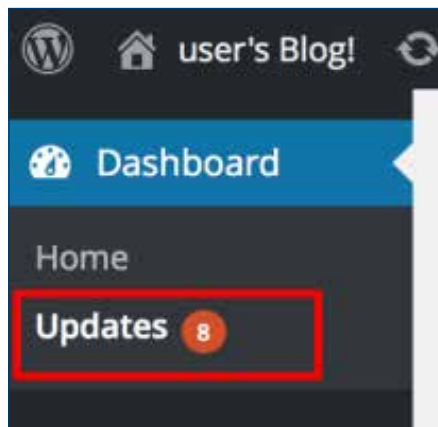
You can keep your WordPress installation up-to-date with the WordPress automatic update feature.

To access this:

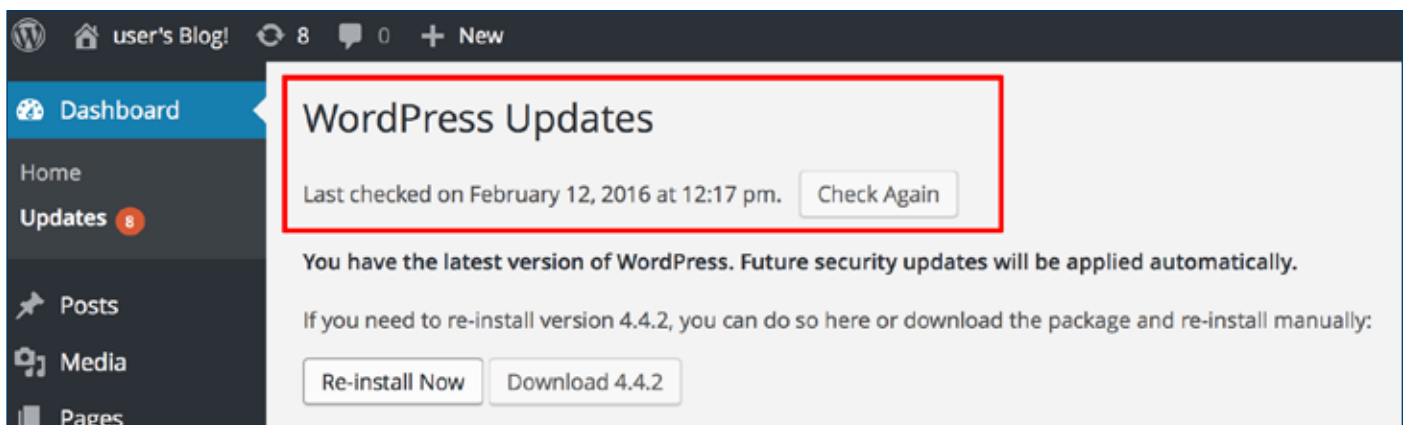
- Log in to WordPress using the administrator account.
- Select the «Dashboard -> Updates» menu item.

- Review the resulting page to see if WordPress needs an update. If an update is available, you can install it by clicking the «Update Now» button. You can also re-install WordPress if needed with the «Re-install Now» button.

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Useful links

To learn more about the topics discussed in this tutorial, use the links below:

- [Bitnami](#)
- [Bitnami Launchpad for Microsoft Azure](#)
- [Microsoft Azure](#)
- [Bitnami WordPress Stack](#)
- [WordPress User Manual](#)
- [Frequently Asked Questions for Bitnami + Microsoft Azure](#)
- [Bitnami How-To Guides for Microsoft Azure](#)
- [Bitnami Documentation for Microsoft Azure](#)

Azure



