Deploy NGINX Open Source for Intel Packaged by Bitnami using AWS Cloud Marketplace

NGINX Open Source for Intel is a ready-to-run solution with enhanced security and performance. The NGINX for Intel virtual machine (VM) image is packaged with an optimized software stack to utilize the Intel® Advanced Encryption Standard New Instructions set (AES-NI) offered on the 3rd Gen Intel® Xeon® Scalable Processor known as Ice Lake. In addition, the encryption instructions pair with algorithmic and software innovations to deliver breakthrough performance for the industry’s most widely deployed cryptographic ciphers.

This Quick Start document is a step-by-step guide to deploy NGINX for Intel packaged by Bitnami on the AWS M6i Ice Lake instances that enables the Intel Optimized Cloud Stack for NGINX.

What does the NGINX for Intel package include?
NGINX for Intel includes the following pre-compiled binaries:

<table>
<thead>
<tr>
<th>Intel Optimized Library</th>
<th>Minimum Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Async Nginx</td>
<td>0.4.5</td>
</tr>
<tr>
<td>QAT Engine</td>
<td>0.6.5</td>
</tr>
<tr>
<td>IPP Crypto</td>
<td>2021.2</td>
</tr>
<tr>
<td>IPSec Crypto</td>
<td>1.0.0</td>
</tr>
</tbody>
</table>

Prerequisites
This quick follow-along guide expects the following prerequisites:

- An AWS account with EC2. Visit Get Started with AWS EC2 for more information.
• NGINX for Intel package requires an Ice Lake instance.

Let’s deploy the NGINX for Intel from the AWS marketplace

1. Choose and configure NGINX for Intel image:
   Visit the NGINX for Intel AWS Marketplace page and click the Continue to Subscribe button.
   
   a. Subscribe to NGINX for Intel on AWS EC2:
      Subscription may require accepting Terms and Conditions for Bitnami to subscribe successfully.
      Once the subscription is successful, Click Continue to Configuration.
b. Configure software:
Select the Fulfilment option as 64-bit (x86) Amazon Machine Image. Next, choose the Software version; it is recommended to select the latest up-to-date version. Finally, you must select the Region where Ice Lake is available.

AWS M6i instances are Ice Lake. The current regions of availability are:
- US East (Ohio), US East (N. Virginia)
- US West (N. California), US West (Oregon)
- Asia Pacific (Mumbai), Asia Pacific (Seoul), Asia Pacific (Singapore), Asia Pacific (Sydney), Asia Pacific (Tokyo)
- Europe (Frankfurt), Europe (Ireland), Europe (Paris), and South America (São Paulo)

For up-to-date information, visit [Amazon EC2 M6i Instances](#)

Once all configurations are selected, click Continue to Launch.
c. Launch NGINX Open Source for Intel software:
   Review all the configurations. Then, choose Launch Action through Launch through EC2 console and click Launch.
2. Choose and configure instance:
   a. Choose instance type:
      Next, choose the **Instance Type**. Filter the Instance Type list by **m6i** family to view all the instance size options.
b. **Configure instance:**
Select the rest of the configurations (Network, Storage, Tags, and Security) according to your NGINX software needs. We must either create a new Network VPC and Subnet or choose an existing one.

c. **Review and launch instance:**
The last step of the deployment is to review all configurations. Finally, click **Launch**.
Clicking on Launch opens a pop-up window to select or create a key pair. Next, acknowledge the selection/creation of a key pair and click **Launch Instances**.

![Select an existing key pair or create a new key pair](image)

- Choose an existing key pair
- Select a key pair
- I acknowledge that I have access to the corresponding private key file, and that without this file, I won’t be able to log into my instance.

**Launch Instances** initiates the deployment process and waits for it to complete. Once completed, a green checkmark and instance link with id is displayed. Click the instance id link.

d. Verify launch status:

**Launch Instances** initiates the deployment process and waits for it to complete. Once completed, a green checkmark and instance link with id is displayed. Click the instance id link.
e. **Instance details and management:**

The link navigates to a page with instance details, state, and management options. For example, we can verify the instance’s **running state**, edit the **Instance Name**, and view the **IPv4 address** of the instance.
3. **Launch NGINX for Intel instance default webpage:**
   Copy the public IPv4 address and paste it into the web browser, and the default webpage should launch in the web browser. For further NGINX configuration and functionality guide, visit [NGINX Docs](https://nginx.org/).

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**Connect with us**
Connect with Intel product experts to ask questions at [Intel Collective at Stack Overflow](https://stackoverflow.com/questions/tagged/intel).

Visit the [Bitnami community](https://bitnami.org) for queries regarding the NGINX for Intel package.

**Learn More**
- [Amazon EC2 M6i Instances](https://aws.amazon.com/ec2/)

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