Deploy NGINX Open Source for Intel Packaged by Bitnami using Azure 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 Microsoft Azure 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>
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</tbody>
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**Prerequisites**

This quick follow-along guide expects the following prerequisites:
Let’s deploy the NGINX for Intel from the Azure marketplace

1. Launch NGINX for Intel on Azure Compute Engine:
   Visit the NGINX for Intel Azure Marketplace page and click the Create button.

2. Configure NGINX for Intel Ice Lake VM deployment:
   Here is the step-by-step guide to configure NGINX for Intel on the Azure Ice Lake instances:
   a. Basics tab:
      Configuring all required parameters is needed to successfully validate configuration and create the VM. Next, in the Project details, set Subscription and a new or existing Resource Group for resource management and billing purpose.
Next, setting the correct **Instance details** is required to deploy NGINX on the Ice Lake machine. Type in the **Virtual Machine name** for the NGINX for Intel image. Specify the correct **Region** of Ice Lake availability and **VM Size**. The Ice Lake instances on Microsoft Azure are as follows:

- **Dv5 and Dsv5-series**
- **Ddv5 and Ddsv5-series**
- **Edv5 and Edsv5-series**
- **Ev5 and Esv5-series**

To verify the Region of availability for the Ice Lake instances, please go to [Azure instances availability by Region](https://docs.microsoft.com/en-us/azure/virtual-machines/details) for up-to-date regional availability. By default, the latest **Image** is selected, and it is recommended. However, the drop-down list contains all the available versions. Configure other Instance settings as required by your software needs.
Lastly, set the **Administrator account** settings **Username** and **Key pair name** required for the VMs instance configuration.
b. **Review configurations and Create a VM:**

Review the required settings for **Disks, Networking, Management, Advanced, and Tags.** Update all default configurations as needed. Once reviewed and configured, go to the **Review + Create tab.** Microsoft Azures verifies the configuration, and if it passes, a green check mark with the message **Validation passed** appears. Otherwise, Validation may fail and indicate all incorrect fields within each tab that needs correction. Once Validation passes, click **Create.**

Create initiates the deployment process and waits for it to complete. Once completed, a green checkmark and completion message appears along with Deployment details and Next steps. Next, click on **Go to resource.**
3. **NGINX VM resource management:**
   Clicking on **Go to resource** navigates to the resource management page, which displays VM instance details as configured along with the **IP address** and options to manage the instance such as connect, stop, delete options.

4. **Launch NGINX for Intel instance default webpage:**
   Copy the **Public IP 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](#).
Congratulations!

You are now running **Bitnami NGINX Open Source for Intel 0.4.7 in the Cloud.**

**Useful Links**
The following links will help you to understand better how to get started and configure the application you just launched.

Connect with us
Connect with Intel product experts to ask questions at [Intel Collective at Stack Overflow](#).

Visit the [Bitnami community](#) for queries regarding the NGINX Open Source for Intel package.

**Learn More**
[Ice Lake instances launch on Azure](#)

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