Azure Marketplace
Getting Started Tutorial
Community Edition
**Introduction**

NooBaa software provides a distributed storage solution for unstructured data such as analytics data, multi-media, backup, and archive. NooBaa is unique in creating a flexible and secure capacity fabric across public-cloud and on-premises capacity resources, which can be adjusted non-disruptively to add capacity, expand globally, switch cloud providers, or adopt new technologies. Users of Amazon AWS and Microsoft Azure will find that NooBaa keeps data placement and security under enterprise control, while also eliminating many forms of vendor and IAAS lock-in.

This document will guide you through NooBaa system setup, and assumes that the user has an existing understanding of NooBaa architecture and functionality. For more information on NooBaa's technology, please visit [http://www.noobaa.com](http://www.noobaa.com).

A setup includes the following high level steps:

1. **Register your NooBaa community edition** – Simply register your system online and NooBaa will provide you with an activation code.

2. **NooBaa Core deployment** – Start your own instance of NooBaa Core directly from the Azure market place. NooBaa's virtual machine includes the NooBaa Core server with a management console. This virtual machine also includes a default S3 REST gateway.

3. **Daemon installation and distribution** - Daemon software is required for every storage node that takes part in the storage network. This software is downloaded from the virtual machine, including configuration and
authentication information. A minimum of 3 storage hosts is required for reliable operation.

4. **S3 storage client** - In order to use NooBaa Object Storage, application hosts and clients must support the S3 API interface. The S3 client connects to the S3 REST gateway, which by default resides on the virtual machine and allows storing and retrieving of objects.
Getting started with NooBaa

Get your community activation code


2. You will receive a confirmation email followed by an emailed activation code.

Virtual Machine deployment

2. Fill in all details. SSH is not required by NooBaa, so you can set any value for Authentication type and Password and just ignore it.

3. Choose the Virtual Machine size and accept default settings.

4. The deployment process should take a few minutes and the NooBaa Core virtual machine should be online.

5. **Important Step:** DNS name or Static IP must be assigned in order to keep the connectivity between NooBaa Daemons and the NooBaa Core machine.
Select the virtual machine, click on Overview -> Public IP address -> Configuration and set DNS name label or change the Assignment to be Static.
6. Connect to your system via http://<DNSName>:8080

By default, you will be required to create a new system

Activation Code - Use the activation code received by email from the NooBaa team.
Email address - Used as the management username
**System Name** – Used to uniquely identify this system instance
Server DNS name setup

Click on Management -> configuration and set System DNS

System Address - Select Use DNS name

DNS Name - Fully Qualified Domain Name (FQDN), copy it from the Azure virtual machine properties -> DNS NAME. **This is a required setting as the public IP may change after VM restart.**
Agent installation and distribution

1. If you have three machines deployed on Azure, you can skip forward to configuration of Pools. If not, please deploy three clean machines on Azure with the same resource group. These can be any Linux or Windows machines except Ubuntu 16 and CentOS 7 (support will be provided by Nov-2016). We recommend using Debian 8. A minimum of 10GB of file-system capacity must be available in each host.

2. **Firewall Setting is required: please open TCP ports 60100-60600**

3. Click on “Install Node” to add a compute node to your system. The next steps will allow you to retrieve an installation string directly from the NaoBaa Core VM.
2. Follow the “Install Node” wizard

**Network Installation** is used when you are able to download and execute remotely. This process involves either PowerShell commands (windows) or Bash (Linux).

Open Bash or Powershell on each of the 3 clean machines and execute the appropriate command, based on the selected OS.
That's it! The nodes are now assigned to the default pool.

Please note that a minimum of 3 nodes is required before you can use the system.

Click on Resources -> default_pool link to navigate directly to the pool.

All the nodes we had just added will appear as “Online”.

If the nodes do not show up within a few minutes, it is most likely a firewall on the node or between the server and node is preventing communication.

You may have see more than one node for each virtual machine.

NooBaa treats each mount-point or drive as a separate ‘node’.
S3 storage client

1. At this time the NooBaa system is operational and ready to accept storage operations. To connect your application, navigate to the overview page and click on **Connect Application** button.
2. Use the following details for your S3 application.

Each NooBaa account has a unique **access key** and **secret key** which are used to limit bucket exposure to specific accounts.

During installation, a default bucket is created named “Files”. The initial account user is already configured with access permissions to this bucket. Access control may be mapped arbitrarily between incremental users and data buckets.

Any S3-compatible client or AWS S3 SDK can be used to access the system. For this guide, we will use S3Browser (http://s3browser.com) application to access the Files bucket.
3. Configure noobaa REST details in S3 Browser

[S3 browser example:]
4. Upload a test file via S3 Browser Upload
5. The uploaded file is also visible in NooBaa under "Files" bucket

Congratulations on completing this NooBaa tutorial!
You are now able to start exploring and experimenting

For any questions or assistance, please contact support@noobaa.com