

Azure VMSS Deployment with Consolidated ARM Template

<https://campus.barracuda.com/doc/79468032/>

Before deploying the Barracuda Web Application Firewall VMSS template for PAYG/BYOL instance, do the following:

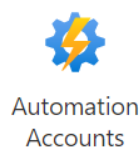
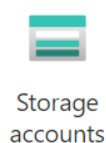
- [Step 1. Create a Resource Group](#) - Required for deploying the Barracuda Web Application Firewall VMSS template for PAYG/BYOL instance.
- [Step 2. Create a Storage Account](#) - Required for deploying the Barracuda Web Application Firewall VMSS template for PAYG/BYOL instance.
- [Step 3. Create and upload license file](#) - Required for deploying the Barracuda Web Application Firewall VMSS template for BYOL instance.

Step 1. Create a Resource Group

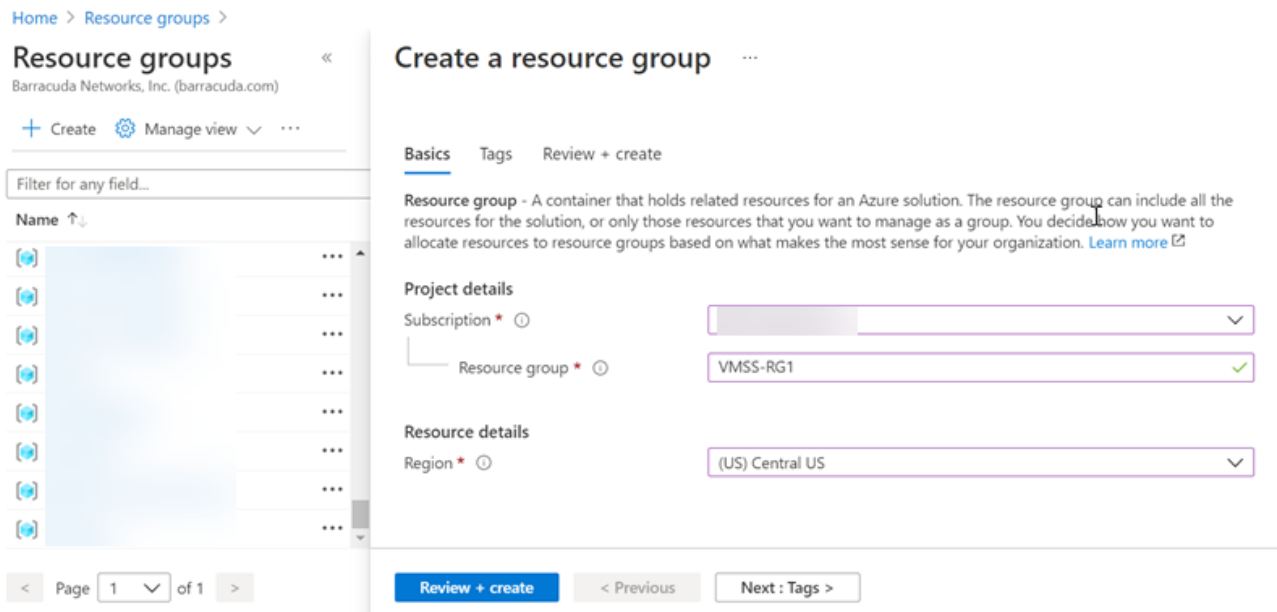
To create a resource group, perform the following steps:

1. Log into the [Microsoft Azure Portal](#).
2. Click **Resource groups** under **Azure services**.

Azure services



3. In the **Resource groups** page, click **Create** and specify values for the following:
 1. **Resource group name:** Enter a name for the resource group.
 2. **Subscription:** Select the subscription in which you want to create the resource group.
 3. **Resource group location:** Select a location for the resource group.
4. Click **Review + create**.
5. Review the resource group details and click **Create**.

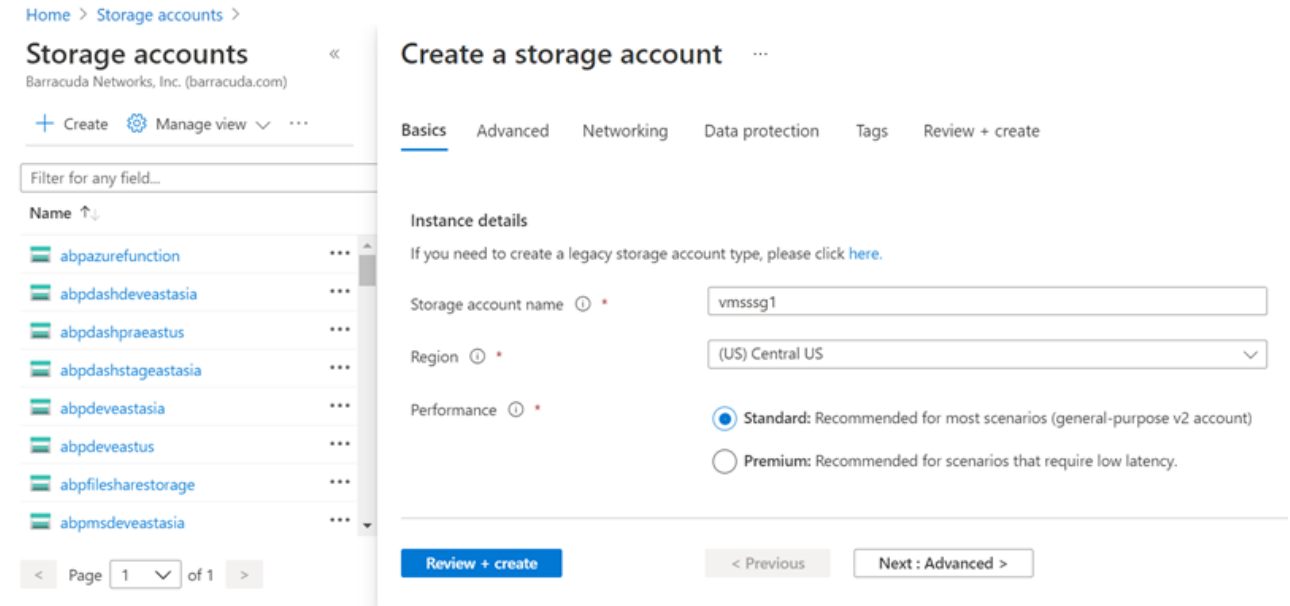


Step 2. Create a Storage Account

Perform the following steps to create a storage account:

1. Log into the [Microsoft Azure Portal](#).
2. Click **Storage accounts** under **Azure services**.
3. Click **Create**.
4. In the **Create storage account** page, specify values for the following:
 1. **Subscription**: Select the subscription in which you want to create the storage account.
Note: Ensure that the subscription for the storage account and the resource group are same.
 2. **Resource group**: Select the resource group created in "Step 1. Create a Resource Group".
 3. **Deployment model** : **Ensure the deployment model is set to Resource Manager.**
 4. **Storage account name**: Enter a name for the storage account.
 5. **Location** : Select the location for the storage account. Note: Ensure that the location for the storage account and the resource group are same.
 6. **Performance** : Select the performance tier as required.
 7. **Account kind**: Select the type of storage account that needs to be created. Default: General purpose
 8. **Replication**: Select the replication option for the storage account.
 9. **Secure transfer required**: Select **Enabled** if you want to transfer the data into or out of storage account. Default: Disabled.

6. Click **Review + create**.
7. Review the storage accounts details and click **Create**.



Home > Storage accounts >

Storage accounts

Barracuda Networks, Inc. (barracuda.com)

+ Create Manage view ...

Filter for any field...

Name ↑↓

- abpazurefunction
- abpdashdeveastasia
- abpdashpraeastus
- abpdashstageastasia
- abpdeveastasia
- abpdeveastus
- abpfilesharestorage
- abpmsdeveastasia

< Page 1 of 1 >

Create a storage account

Basics Advanced Networking Data protection Tags Review + create

Instance details

If you need to create a legacy storage account type, please click [here](#).

Storage account name ⓘ * vmssg1

Region ⓘ * (US) Central US

Performance ⓘ *

☒ **Standard:** Recommended for most scenarios (general-purpose v2 account)

☐ **Premium:** Recommended for scenarios that require low latency.

Review + create < Previous Next : Advanced >

Step 3. Create and Upload License File

Step 3 must be performed only when you are deploying the Barracuda Web Application Firewall VMSS template BYOL instance.

Perform the following steps to create and upload a license file:

Create a container

1. Click the storage account that you have created.
2. Under **Properties**, click **Blob service**.
3. Click + **Container**.
4. In the **New Container** window, specify values for the following:
 1. **Name:** Enter a name for the container. The container name must be lowercase and must start with a letter or a number. They must contain only letters, numbers, and the dash (-) character.
 2. **Public access level:** Set the level of public access to the container. The default level is **Private (no anonymous access)** and it is recommended to use the default level.
5. Click **Create** to create the container.

Create a License File

A license file contains licenses that can be used. This file should be created in the valid JSON format and should be saved in the name *"barracuda-byol-license-list.json"*.

1. Open Notepad or any text editor. Type the licenses in the format illustrated below.

```
{
  "licenses" :
  [
    "7UE3E-AB7NB-XXXX",
    "YTCHM-C63TB-XXXX",
    "AGY7C-LGHE5-XXXX"
  ]
}
```

It is recommended that you validate the JSON file using JSONLint or any other online validator before uploading the license file. The created WAF instances might fail during provisioning if the JSON file is not valid.

2. Save the license file. Note that you save the file with the name *"barracuda-byol-license-list.json"* as mentioned earlier.

Upload the License File

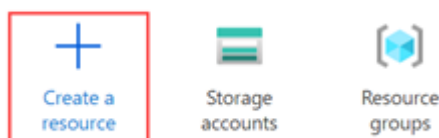
1. To upload a license file, select the container you created.
2. Click **Upload**.
3. In the right pane, click the browse button and select the license file you created.
4. Click **Upload** to upload the license file to the container.

Deploying the Barracuda Web Application Firewall for Azure Templates - BYOL

Perform the following steps to deploy the Barracuda Web Application Firewall instance:

1. Log into the [Microsoft Azure Portal](#).
2. On the Home page, click **Create a resource**.

Azure services



3. In the **Search services and marketplace** text box, type and search *Barracuda Web Application Firewall for Azure Template*.

4. On the Barracuda Web Application Firewall for Azure Templates page:
 1. Select **Barracuda Web Application Firewall VMSS Template (PAYG/BYOL)** from the **Select a plan** drop-down list.
 2. Read the product overview and click **Create**.

[Home](#) > [Create a resource](#) >

Barracuda CloudGen WAF for Azure Templates

Barracuda Networks, Inc.



Barracuda CloudGen WAF for Azure Templates

Barracuda Networks, Inc.
☆☆☆☆ 0.0 (0 ratings)

Preferred solution

Azure benefit eligible

Select a plan

Barracuda CloudGen WAF VMSS Tem... ▼

Create

[Overview](#)

[Plans](#)

[Usage Information + Support](#)

[Reviews](#)

The Barracuda CloudGen WAF for Azure inspects inbound web traffic and blocks many attacks targeted at your applications. It also prevents data loss by inspecting outgoing server responses. The integrated access control engine lets you easily create granular access control policies for Authentication, Authorization and Accounting (AAA), giving you strong authentication and user control. The built-in Barracuda Vulnerability Remediation Service automates vulnerability scanning and remediation, simplifies ongoing maintenance and accelerates development cycles making the Barracuda CloudGen WAF the ideal app security solution for Dev/Ops environments. Onboard L4/L7 load balancing capabilities let you quickly add back-end servers to scale deployments.

Application acceleration capabilities include SSL offloading, caching, compression, and connection pooling.

5. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Basics** tab:
 1. **Project details**
 1. **Subscription:** Select the subscription from the drop-down list.
 2. **Resource group:** Create a new resource group, or select a resource group that is empty from the existing **Resource group** list.
 2. **Instance details**
 1. **Region:** Select a region for the Barracuda Web Application Firewall for Azure Template.
 2. **Barracuda Web Application Firewall Virtual Machine Scale Set Name:** Enter a name for the Barracuda Web Application Firewall.
 3. **Password:** Enter a password for authentication. This will be your password to access the Barracuda Web Application Firewall web interface.
 4. **Confirm Password:** Re-enter the password for confirmation.
 5. **Billing Method:** Select **Bring your own License (BYOL)** from the drop-down list as your billing method.
 6. **Firmware Version:** From the drop-down list, select the firmware version on which your instance is deployed.
6. Click **Next Deployment Options**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics | Deployment Options | Azure Auto scaling Configuration Details | Azure API configuration | Barracuda CloudGen WAF Bootstrap Configuration | Azure Load Balancer Configuration | Review + create

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Resource group * ⓘ [Create new](#)

Instance details

Region * ⓘ

Barracuda CloudGen WAF Virtual Machine Scale Set Name * ⓘ

Password * ⓘ ✓

Confirm password * ⓘ ✓

Billing Method * ⓘ

Firmware Version * ⓘ

[Review + create](#) < Previous Next : Deployment Options >

7. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Deployment Options** tab:

1. **Barracuda Web Application Firewall Instance Size:** Select a size for the instance.
2. **Storage Account that will be used to store data for this deployment:** Create a new storage account, or select a storage account from the existing **Storage account** list.
 The storage account should be in the same region where the Barracuda Web Application Firewall VMSS instance needs to be deployed.
3. **Virtual network to be created for this deployment:** Create a new virtual network, or select a virtual network from the existing **Virtual network** list in which you want to deploy the Barracuda Web Application Firewall VMSS.
4. **Barracuda Web Application Firewall Subnet:** Review the subnet configuration and modify if required.
5. **New Public IP address name:** Enter a name for the public IP address associated with the Barracuda Web Application Firewall.
6. **Domain name for accessing the Barracuda Web Application Firewall:** Enter the domain for the Barracuda Web Application Firewall.
7. **Boot diagnostics:** When **Enabled**, the bootup debug logs get saved in the specified storage account.
8. **Specify storage account where license file is stored:** Enter the name of the storage account where your license file is stored.
 Ensure that the license file is created in the valid JSON format and named as "barracuda-byol-license-list.json". Refer to [Step 3. Create and upload license file](#) ;">to learn more about the license key and how to generate and upload it.
9. **License Storage Account Key:** Enter the account key for your storage account. The key is available in the path - "**Storage account**" > **Access keys** > **Key1, Key2**. You are provided with two access keys so that you can maintain connections using one key while regenerating the other.

10. **License Storage Blob Name:** Enter the path of the storage Blob where the license file is stored.

Ensure that the license file is created in the valid JSON format and named as *"barracuda-byol-license-list.json"*. Refer to [Step 3. Create and upload license file](#) to learn more about the license key and how to generate and upload it.

8. Click **Next : Azure Auto scaling Configuration Details**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics **Deployment Options** Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration Azure Load Balancer Configuration Review + create

Barracuda CloudGen WAF Instance Size * **1x Standard D2**
 2 vcpus, 7 GB memory
[Change size](#)

Storage Account that will be used to store data for this deployment *
[Create New](#)

Configure virtual networks

Virtual network to be created for this deployment *
[Create new](#)

Barracuda CloudGen WAF Subnet *
[Create new](#)

New Public IP address name *
[Create new](#)

Domain name for accessing the Barracuda CloudGen WAF *
☒ .centralus.cloudapp.azure.com

Boot diagnostics ☒ Enabled
☐ Disabled

Specify storage account where license file is stored. *
☒

[Review + create](#) [< Previous](#) [Next : Azure Auto scaling Configuration Details >](#)

9. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure Auto scaling Configuration Details** tab:

1. Instance Count

1. **Initial Instances:** Enter the number of instances to be deployed initially to serve the traffic. Default: 2
2. **Maximum Instances:** Enter the maximum number of instances to be scaled up to handle the traffic when required. Default: 5
3. **Minimum Instances:** Enter the minimum number of instances to be scaled down when the traffic is less. Default: 2

- Ensure that the **Minimum Instances** are fewer than or the same number as the **Initial Instances**.
- If the **Initial Instances** value is less than the **Minimum Instances** value, the deployment of instances will fail.

2. Scale Up Thresholds

1. **CPU%:** Enter the scale up threshold for CPU utilization. Default: 85%
2. **Network In:** Enter the scale up threshold for NetworkIn throughput. Default: 9175040
3. **Network Out:** Enter the scale up threshold for NetworkOut throughput. Default: 9175040

3. Scale Down Thresholds

1. **CPU%:** Enter the scale down threshold for SPU utilization. Default: 60%

2. **Network In:** Enter the scale down threshold for NetworkIn throughput. Default: 5242880
 3. **Network Out:** Enter the scale down threshold for NetworkOut throughput. Default: 5242880
 4. **Notification Email ID(s) in CSV Format:** Enter the email address to which the auto scaling event notification emails needs to be sent.
10. Click **Next : Azure API configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration Azure Load Balancer Configuration Review + create

Instance count

Initial instances * ⓘ

Maximum instances * ⓘ

Minimum instances * ⓘ

Scale UP threshold(s)

CPU % * ⓘ

Network In * ⓘ

Network Out * ⓘ

Scale Down threshold(s)

CPU % * ⓘ

Network In * ⓘ

Network Out * ⓘ

Notification Email ID(s) in csv format ⓘ

[Review + create](#) [< Previous](#) [Next : Azure API configuration >](#)

11. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure API Configuration** tab:
12. **Authentication Method:** Select the authentication method to authenticate to Azure Active Directory.
 1. **Azure AD Credentials**
 1. **Azure User ID:** Enter the user name to authenticate to the Azure Active Directory.
 2. **Client ID:** Enter the ID of the application in the Azure Active Directory.
 3. **Azure User Password:** Enter the password associated with user.
 4. **Confirm Password:** Re-enter the password to confirm.
 2. **Azure Service Principal**
 1. **Client ID:** Enter the ID of the application in Azure Active Directory.
 2. **Tenant ID:** Enter the ID of the Active Directory tenant.
 3. **Secret Key:** Enter the secret key generated.
 4. **Confirm Secret Key:** Re-enter the secret key to confirm.
13. Click **Next : Barracuda Web Application Firewall Bootstrap Configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics Deployment Options Azure Auto scaling Configuration Details **Azure API configuration** Barracuda CloudGen WAF Bootstrap Configuration Azure Load Balancer Configuration Review + create

Authentication Method ⓘ ☐ AD Credentials ☒ Service Principal

Azure Service Principal

Client ID * ⓘ ✓

Tenant ID * ⓘ ✓

Secret Key * ⓘ ✓

Confirm Secret Key * ⓘ ✓

[Review + create](#) < Previous Next : Barracuda CloudGen WAF Bootstrap Configuration >

14. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Barracuda Web Application Firewall Bootstrap Configuration** tab:
1. **Cluster Shared Secret:** Enter a password to be used by the Barracuda Web Application Firewall instances in the VMSS group.
 2. **Confirm Shared Secret:** Re-type the shared secret password.
 3. **Bootstrap Method:** Select the method (**NONE**, **BASIC** or **BACKUP**) for bootstrapping.
 4. **Basic Bootstrap Configuration**
 1. **Barracuda Web Application Firewall Service Name:** Enter a name for the service that needs to be created on the Barracuda Web Application Firewall instances.
 2. **Barracuda Web Application Firewall Service Port:** Enter the port number on which the service is listening to.
 3. **Backend Servers (IP:PORT):** Enter the IP address of the server followed by the port that needs to be protected by the Barracuda Web Application Firewall. Use comma (,) as a separator to specify multiple server IP addresses.
 5. **Backup Bootstrap Configuration**
 1. **Azure Storage Account Name:** Enter the name of the storage account.
 2. **Azure Storage Account Key:** Enter the key of the storage account.
 3. **Azure Storage Blob Name:** Enter the name of the blob configured in the storage account.
 4. **Type of Backup File:** Select the appropriate backup file from the drop-down list
 5. **Barracuda Web Application Firewall Backup File Name:** Enter the name of the backup file that you want to use for bootstrapping the instances.
 6. **OMS Workspace Details**
 1. **OMS Workspace ID:** Enter the workspace ID of the OMS server (if any).
 2. **OMS Workspace Primary Key:** Enter the primary key of the OMS server.
15. Click **Next : Azure Load Balancer Configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration **Barracuda CloudGen WAF Bootstrap Configuration** Azure Load Balancer Configuration Review + create

Cluster Shared Secret * ⓘ ✓

Confirm Shared Secret * ⓘ ✓

Bootstrap Method ⓘ ☐ NONE ☒ BASIC ☐ BACKUP

Basic Bootstrap Configuration

Barracuda CloudGen WAF Service Name ⓘ

Barracuda CloudGen WAF Service Port * ⓘ

Backend Servers(IP:PORT) * ⓘ ✓

OMS workspace Details

OMS workspace ID ⓘ

OMS Workspace Primary Key ⓘ

[Review + create](#) [< Previous](#) [Next : Azure Load Balancer Configuration >](#)

16. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure Load Balancer Configuration** tab:

1. **Health Probe Settings**

1. **Protocol:** Select **TCP** or **HTTP**. Recommended: **TCP**.
2. **Port:** Enter the port to be used when probing the instance.
3. **Interval:** Enter the interval time to probe the instance.
4. **Unhealthy threshold:** Enter how many attempts can fail before the backend instance is marked as unhealthy.

2. **Load Balancer Rule Settings**

1. **Port:** Enter the port on which the load balancer is listening.
2. **Backend Port:** Enter the port on which the Barracuda Web Application Firewall is listening.
3. **Session Persistence:** Select the persistence type.

3. **EULA Acceptance Details**

1. **User Name:** Enter the username of the user signing the EULA agreement.
2. **Email ID:** Enter the email ID of the user signing the EULA agreement.
3. **Company Name:** Enter the user's company name.
4. **Domain Name:** Enter the domain name for the Barracuda Web Application Firewall VMSS.

17. Click **Next : Review + create**.

Create Barracuda CloudGen WAF for Azure Templates

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration **Azure Load Balancer Configuration** Review + create

Health Probe Settings

Protocol ☒ TCP ☐ HTTP

Port *

Interval *

Unhealthy threshold *

Load Balancer Rule Settings

Port *

Backend Port *

Session Persistence *

EULA Acceptance Details

User Name * ✓

Email ID * ✓

Company Name * ✓

Domain Name * ✓

[Review + create](#) < Previous Next : Review + create >

18. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Review + create** tab, verify the values you entered and click **Create**.

Create Barracuda CloudGen WAF for Azure Templates

✓ Validation Passed

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration Azure Load Balancer Configuration **Review + create**

PRODUCT DETAILS

Barracuda CloudGen WAF for Azure
Templates
by Barracuda Networks, Inc.
[Terms of use](#) | [Privacy policy](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Basics

Subscription

Resource group

Region

Barracuda CloudGen WAF Virtual Machi...

Password

Billing Method

[Create](#) < Previous Next [Download a template for automation](#)

Deploying the Barracuda Web Application Firewall for Azure Templates - PAYG

Perform the following steps to deploy the Barracuda Web Application Firewall instance:

1. Log into the [Microsoft Azure Portal](#).
2. On the **Home** page, click **Create a resource**.
3. In the **Search services and marketplace** text box, type and search **Barracuda Web Application Firewall for Azure Templates**.
4. On the **Barracuda Web Application Firewall for Azure Templates** page:
 1. Select Barracuda Web Application Firewall VMSS Template (PAYG/BYOL) from the Select a plan drop-down list.
 2. Read the product overview and click **Create**.
5. In the **Barracuda Web Application Firewall for Azure Templates** page, **Basics** tab:
 1. **Project details**
 1. **Subscription** : Select the subscription from the drop-down list.
 2. **Resource group** : Create a new resource group, or select a resource group that is empty from the existing **Resource group** list.
 2. **Instance details**
 1. **Region**: Select a location for the Barracuda Web Application Firewall VMSS.
 2. **Barracuda Web Application Firewall Virtual Machine Scale Set Name**: Enter a name for the Barracuda Web Application Firewall VMSS.
 3. **Password**: Enter a password for authentication. This will be your password to access the Barracuda Web Application Firewall web interface.
 4. **Confirm Password** : Re-enter the password for confirmation.
 5. **Billing Method** : Select **Pay as You Go (Hourly Billing)** from the drop-down list as your billing method.
 6. **Firmware Version** : From the drop-down list, select the firmware version on which your instance is deployed.
6. Click **Next : Deployment Options** .

Create Barracuda CloudGen WAF for Azure Templates ...

Basics | Deployment Options | Azure Auto scaling Configuration Details | Azure API configuration | Barracuda CloudGen WAF Bootstrap Configuration | Azure Load Balancer Configuration | Review + create

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Resource group * ⓘ [Create new](#)

Instance details

Region * ⓘ

Barracuda CloudGen WAF Virtual Machine Scale Set Name * ⓘ

Password * ⓘ ✓

Confirm password * ⓘ ✓

Billing Method * ⓘ

Firmware Version * ⓘ

[Review + create](#) | < Previous | Next : Deployment Options >

7. In the **Create Barracuda Web Application Firewall for Azure Templates** page,

Deployment Options tab:

1. **Barracuda Web Application Firewall Instance Size** : Select a size for the instance.
2. **Storage Account that will be used to store data for this deployment** : Create a new storage account or select a storage account from the existing **Storage account** .
 The storage account should be in the same region where the Barracuda Web Application Firewall VMSS instance needs to be deployed.
3. **Configure virtual networks**
 1. **Virtual network to be created for this deployment** : Create a new virtual network, or select a virtual network from the existing **Virtual network** list in which you want to deploy the Barracuda Web Application Firewall VMSS.
 2. **Subnets** : Review the subnet configuration and modify if required.
 3. **New Public IP address name**: Enter a name for the public IP address associated with the Barracuda Web Application Firewall Firewall VMSS.
 4. **Domain name for accessing the Barracuda Web Application Firewall**: Enter the domain for the Barracuda Web Application Firewall VMSS.
 5. **Boot diagnostics**: When **Enabled**, the bootup debug logs get saved in the specified storage account.

8. Click **Next : Azure Auto scaling Configuration Details**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics **Deployment Options** Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration Azure Load Balancer Configuration Review + create

Barracuda CloudGen WAF Instance Size * ⓘ **1x Standard D2**
 2 vcpus, 7 GB memory
[Change size](#)

Storage Account that will be used to store data for this deployment * ⓘ
 (new) vmsssg3
[Create New](#)

Configure virtual networks

Virtual network to be created for this deployment * ⓘ
 (new) wafvnet
[Create new](#)

Barracuda CloudGen WAF Subnet * ⓘ
 (new) v

New Public IP address name * ⓘ
 (new) wafpip
[Create new](#)

Domain name for accessing the Barracuda CloudGen WAF * ⓘ
 vmsswaf02
 .centralus.cloudapp.azure.com

Boot diagnostics ⓘ
☐ Enabled
☒ Disabled

[Review + create](#) < Previous Next : Azure Auto scaling Configuration Details >

9. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure Auto Scaling Configuration** tab:1. **Instance Count**

1. **Initial Instances**: Enter the number of instances to be deployed initially to serve the traffic. Default: 2
2. **Maximum Instances**: Enter the maximum number of instances to be scaled up to handle the traffic when required. Default: 5

3. **Minimum Instances:** Enter the minimum number of instances to be scaled down when the traffic is less. Default: 2

- Ensure that the **Minimum Instances** are few than or the same number as the **Initial Instances**.
- If the **Initial Instances** value is less than the **Minimum Instances**, the deployment of instances will fail.

4. **Overprovisioning:** When set to **Enable**, the VMSS spins up a greater number of virtual machines than what is required to handle the traffic.

2. Scale Up Thresholds

1. **CPU%:** Enter the scale up threshold for CPU utilization. Default: 85%
2. **Network In:** Enter the scale up threshold for NetworkIn throughput. Default: 9175040
3. **Network Out:** Enter the scale up threshold for NetworkOut throughput. Default: 9175040

3. Scale Down Thresholds

1. **CPU%:** Enter the scale down threshold for SPU utilization. Default: 60%
2. **Network In:** Enter the scale down threshold for NetworkIn throughput. **Default:** 5242880
3. **Network Out:** Enter the scale down threshold for NetworkOut throughput. **Default:** 5242880

4. **Notification Email ID(s) in CSV Format:** Enter the email address to which the auto scaling event notification emails needs to be sent.

10. Click **Next : Azure API configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics
 Deployment Options
 Azure Auto scaling Configuration Details
 Azure API configuration
 Barracuda CloudGen WAF Bootstrap Configuration
 Azure Load Balancer Configuration
 Review + create

Instance count
 Initial instances * ⓘ
 Maximum instances * ⓘ
 Minimum instances * ⓘ

Scale UP threshold(s)
 CPU % * ⓘ
 Network In * ⓘ
 Network Out * ⓘ

Scale Down threshold(s)
 CPU % * ⓘ
 Network In * ⓘ
 Network Out * ⓘ

Notification Email ID(s) in csv format ⓘ

Review + create
 < Previous
 Next : Azure API configuration >

11. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure API Configuration** tab:

1. **Authentication Method:** Select the authentication method to authenticate to Azure

Active Directory.

It is recommended to use "Azure Service Principal" as the **Authentication Method**. The "Azure Active Directory" option may soon be deprecated by Microsoft.

2. Azure AD Credentials

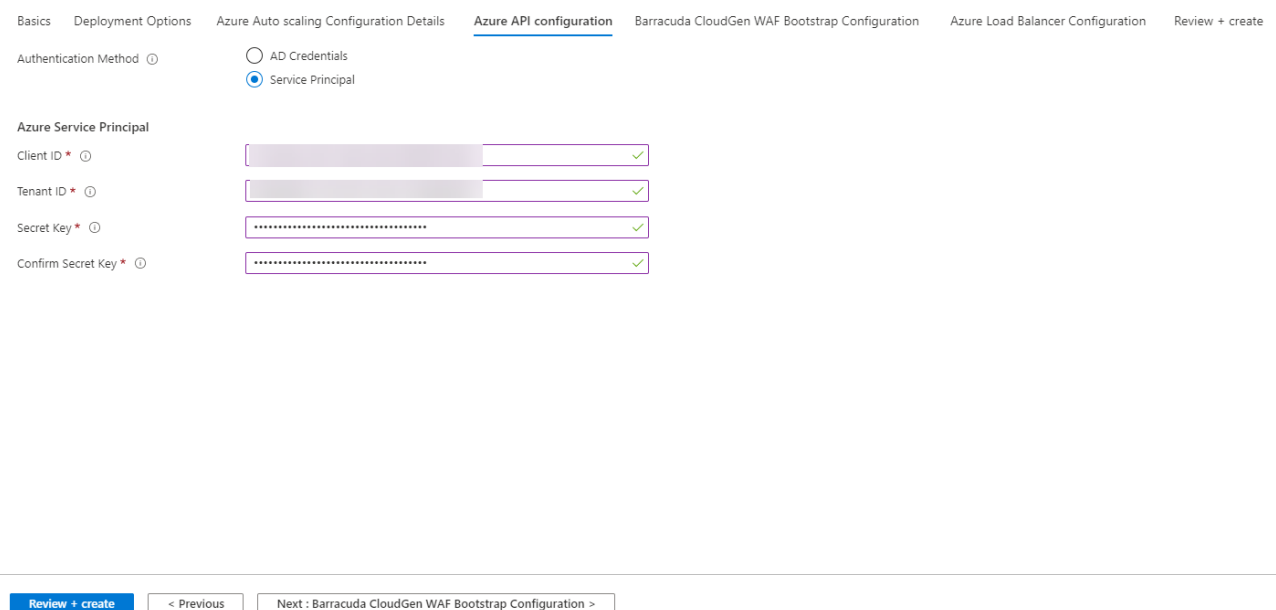
1. **Azure User ID:** Enter the user name to authenticate to the Azure Active Directory.
2. **Client ID:** Enter the ID of the application in the Azure Active Directory.
3. **Azure User Password:** Enter the password associated with user.
4. **Confirm Password:** Re-enter the password to confirm.

3. Azure Service Principal

1. **Client ID:** Enter the ID of the application in Azure Active Directory.
2. **Tenant ID:** Enter the ID of the Active Directory tenant.
3. **Azure Secret Key:** Enter the secret key generated.

12. Click **Next : Barracuda Web Application Firewall Bootstrap Configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...



The screenshot shows the 'Create Barracuda CloudGen WAF for Azure Templates' configuration page. The 'Azure API configuration' tab is selected. Under 'Authentication Method', 'Service Principal' is chosen. The 'Azure Service Principal' section contains four fields: 'Client ID', 'Tenant ID', 'Secret Key', and 'Confirm Secret Key', each with a green checkmark indicating successful input.

13. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Barracuda Web Application Firewall Bootstrap Configuration** tab:

1. **Cluster Shared Secret:** Enter a password to be used by the Barracuda Web Application Firewall instances in the VMSS group.
2. **Confirm Shared Secret:** Re-type the shared secret password.
3. **Bootstrap Method:** Select the method (**NONE**, **BASIC** or **BACKUP**) for bootstrapping.
4. **Basic Bootstrap Configuration**
 1. **Barracuda Web Application Firewall Service Name:** Enter a name for the service that needs to be created on the Barracuda Web Application Firewall instances.
 2. **Barracuda Web Application Firewall Service Port:** Enter the port number on which the service is listening to.
 3. **Backend Servers (IP:PORT):** Enter the IP address of the server followed by the port that needs to be protected by the Barracuda Web Application Firewall. Use

comma (,) as a separator to specify multiple server IP addresses.

5. Backup Bootstrap Configuration

1. **Azure Storage Account Name:** Enter the name of the storage account.
2. **Azure Storage Account Key:** Enter the key of the storage account.
3. **Azure Storage Blob Name:** Enter the name of the blob configured in the storage account.
4. **Type of Backup file:** Select the type of the backup file that you want to use for bootstrapping the instances.
1. **Barracuda Web Application Firewall Backup file Name:** Enter the name of the backup file.

6. OMS Workspace Details

1. **OMS Workspace Primary Key:** Enter the primary key of the OMS server.
2. **OMS Workspace Primary Key:** Enter the primary key of the OMS server.

14. Click **Next : Azure Load Balancer Configuration**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration **Barracuda CloudGen WAF Bootstrap Configuration** Azure Load Balancer Configuration Review + create

Cluster Shared Secret * ⓘ ✓

Confirm Shared Secret * ⓘ ✓

Bootstrap Method ⓘ

☐ NONE

☒ BASIC

☐ BACKUP

Basic Bootstrap Configuration

Barracuda CloudGen WAF Service Name

Barracuda CloudGen WAF Service Port * ⓘ

Backend Servers(IP:PORT) * ⓘ ✓

OMS workspace Details

OMS workspace ID ⓘ

OMS Workspace Primary Key ⓘ

[Review + create](#) [< Previous](#) [Next : Azure Load Balancer Configuration >](#)

15. In the **Create Barracuda Web Application Firewall for Azure Templates** page, **Azure Load Balancer Configuration** tab:

1. Health Probe Settings

1. **Protocol:** Select **TCP** or **HTTP**. Recommended: **TCP**.
2. **Port:** Enter the port to be used when probing the instance.
3. **Interval:** Enter the interval time to probe the instance.
4. **Unhealthy threshold:** Enter how many attempts can fail before the backend instance is marked as unhealthy.

2. Load Balancer Rule Settings

1. **Port:** Enter the port on which the load balancer is listening.
2. **Backend Port:** Enter the port on which the Barracuda Web Application Firewall is listening.
3. **Session Persistence:** Select the persistence type.

3. EULA Acceptance Details

1. **User Name:** Enter your user name.
2. **Email ID:** Enter your Email address.
3. **Company Name:** Enter your company name.
4. **Domain Name:** Enter the domain name.

16. Click **Next : Review + create**.

Create Barracuda CloudGen WAF for Azure Templates ...

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration **Azure Load Balancer Configuration** Review + create

Health Probe Settings

Protocol ☒ TCP ☐ HTTP

Port * 80

Interval * 10

Unhealthy threshold * 5

Load Balancer Rule Settings

Port * 80

Backend Port * 80

Session Persistence * Client IP and protocol

EULA Acceptance Details

User Name * ✓

Email ID * ✓

Company Name * abcd ✓

Domain Name * abcd.com ✓

Review + create < Previous Next : Review + create >

17. In the **Create Barracuda WAF for Azure Templates** page, **Review + create** tab verify the values you entered and click **Create**.

Create Barracuda CloudGen WAF for Azure Templates ...

✓ Validation Passed

Basics Deployment Options Azure Auto scaling Configuration Details Azure API configuration Barracuda CloudGen WAF Bootstrap Configuration **Azure Load Balancer Configuration** **Review + create**

PRODUCT DETAILS

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TERMS

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Basics

Subscription

Resource group vmssrg3

Region Central US

Barracuda CloudGen WAF Virtual Machi... bwafvmss

Password *****

Billing Method Pay as You Go (Monthly Billing)

Create < Previous Next Download a template for automation

Bootstrapping configuration cannot be updated for VMSS deployments after it is launched.

Figures

1. Azure_services.png
2. Create_RG.png
3. Create_storage_account.png
4. image2019-7-11 16:1:1.png
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6. CloudGen_WAF_for_Azure_Templates.png
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