Barracuda WAF Control Center Deployment and Quick Start Guide for Amazon Web Services

https://campus.barracuda.com/doc/71861824/

The Barracuda WAF Control Center (WCC) AMI can be deployed on Amazon Web Services to manage multiple Barracuda Web Application Firewalls. Complete the steps in this guide to configure, launch, and license your Barracuda WAF Control Center instance. Then log into the Barracuda WAF Control Center to verify your configuration and change your password.

Requirements

Before you deploy the Barracuda WAF Control Center on Amazon Web Services, ensure that you have completed the following:

- Set up an Amazon Virtual Private Cloud (VPC) for the Barracuda WAF Control Center.
- If you want to use the Bring Your Own Licensing (BYOL) model, get the Barracuda WAF Control Center license. See Bring Your Own License (BYOL) .

Step 1 - Create a Security Group

Create a security group with rules specifying allowed protocols, ports and source IP ranges. Multiple security groups can be created with different rules, and assigned to each instance. For more information on security groups, refer to the AWS article Amazon EC2 Security Groups.

1. Log into the Amazon EC2 Management Console.
2. From the EC2 dashboard, select **Security Groups** under **NETWORK & SECURITY**.
3. Click **Create Security Group**.
4. In the **Create Security Group** window, do the following:
    1. Enter a name to identify the security group.
    2. Specify the description for the security group.
    3. Select a **VPC ID** from the list and click **Yes, Create**.

    The created group appears in the security group table.
5. Select the security group from the table, and specify the inbound and outbound traffic to be allowed for the instance.

By default, the Barracuda WAF Control Center web interface listens on port 8000 for HTTP and port 443 for HTTPS. Make sure these ports (8000 and 443) are added to the Inbound rule of the associated security group. Additionally, you need to open the following ports in inbound rules as shown in the image.

Port	Direction	TCP	UDP	Usage
22	Out	Yes	No	Technical Support connections
25	In/Out	Yes	No	Email alerts
53	Out	Yes	Yes	Domain Name Service (DNS)
80/8000	In/Out	Yes	No	Virus/attack/security definition and firmware updates
23557	In	Yes	No	Backup port if 80 and 8000 are not available
123	Out	No	Yes	Network Time Protocol (NTP)
443	Out	Yes	No	Initial VM Provisioning*
48320/48321	In/Out	Yes	No	The secure tunnel between the WCC and WAFs
2200	In/Out	Yes	No	File Transfer

Step 2 - Create a Network Interface

Create a network interface using the static IP address, for association with the Barracuda WAF Control Center later during deployment.

1. Log into the Amazon EC2 Management Console.
2. From the EC2 dashboard, select **Network Interfaces** under **NETWORK & SECURITY**.
3. Click **Create Network Interface**.
4. In the **Create Network Interface** window, provide the following information for the network interface:
    1. **Description** – Enter a name for the interface.
    2. **Subnet** – Select a subnet from the list. Make sure to select the subnet of the VPC where you want to create the instance.
    3. **Private IP** – Enter the static primary private IP address. It is recommended to use the Static IP address.
    4. **Security Groups** – Select one or more security groups. Make sure the security group has all the required ports open.

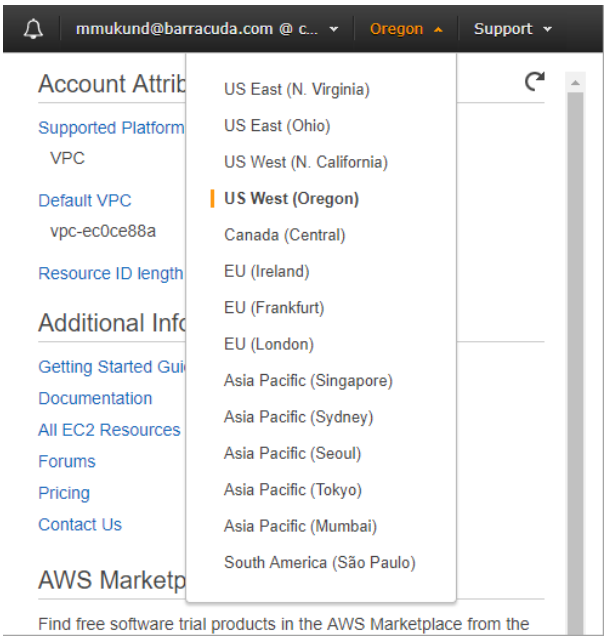
        By default, the Barracuda WAF Control Center web interface listens on port 8000 for HTTP and port 443 for HTTPS. Make sure these ports (8000 and 443) are added to the Inbound rule of the associated security group. Additionally, you need to open the following ports in inbound rules as shown in the image.
    5. Click **Yes** , **Create** .

Step 3 - Deploy the Barracuda WAF Control Center on Amazon Web Services

In the Amazon VPC that you have configured , launch an Amazon EC2 instance with the Barracuda WAF Control Center AMI image. The **Amazon Launch Instance** wizard guides you through the

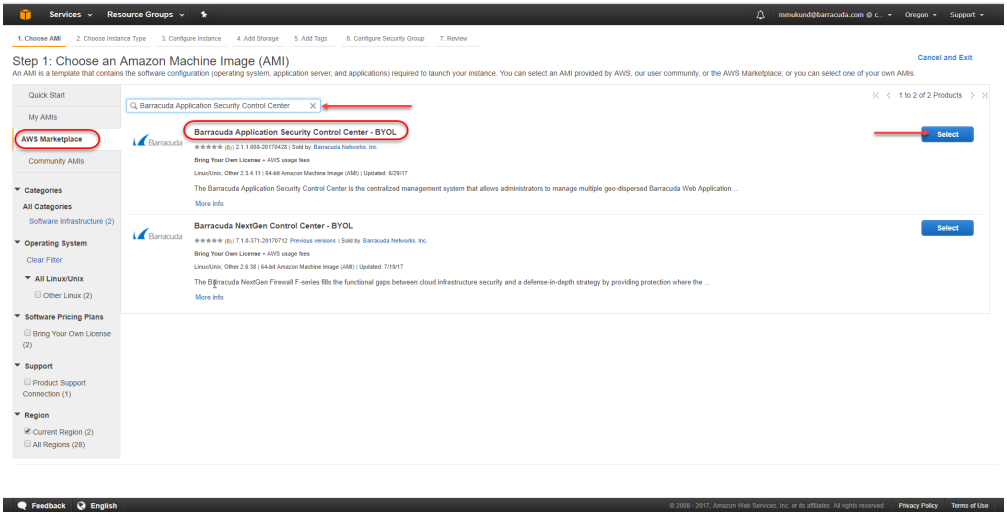
following steps:

1. Log into the AWS Management Console and open the EC2 Management Console.
2. From the top right corner of the page, select the region for the instance. This is important because some Amazon EC2 resources can be shared between regions.

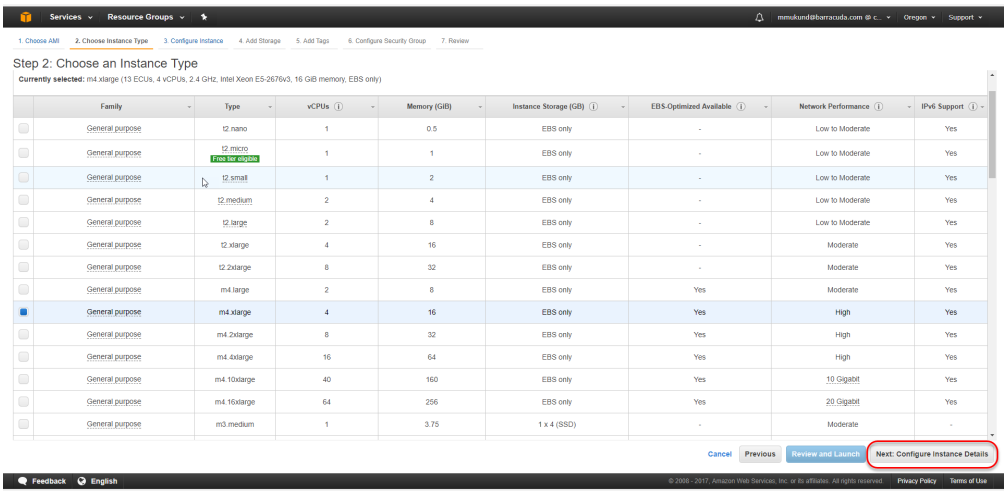


3. Click **Launch Instance**.

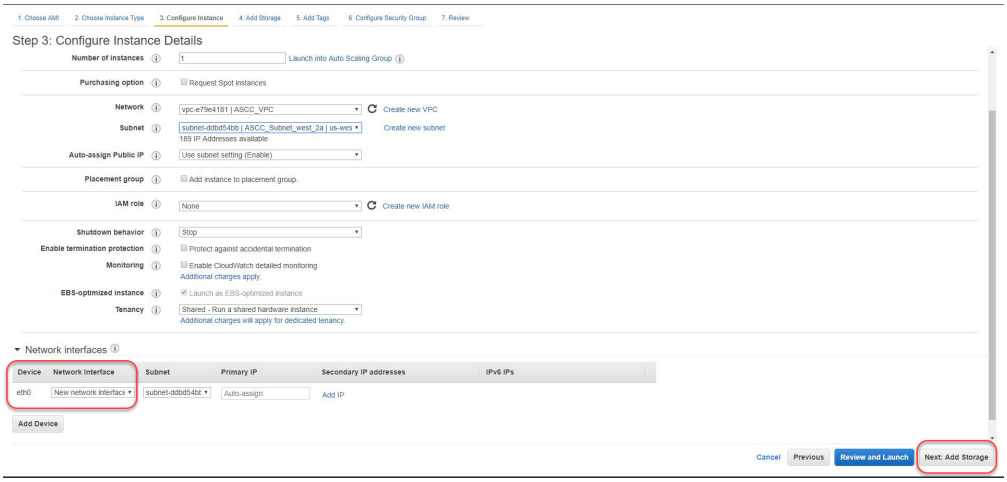
4. In **Step 1: Choose an Amazon Machine Image (AMI)** , select **AWS Marketplace** and search for the *Barracuda WAF Control Center* AMI. Click **Select** next to the Barracuda WAF Control Center AMI.



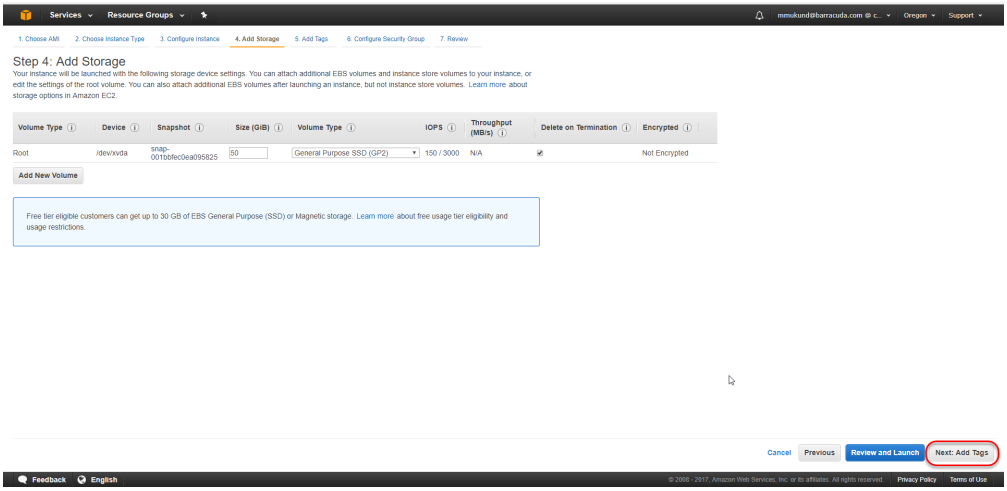
5. In **Step 2: Choose an Instance Type** , select an instance type from the **All Instance types** or **General purpose** table. Click **Next: Configure Instance Details** to continue.



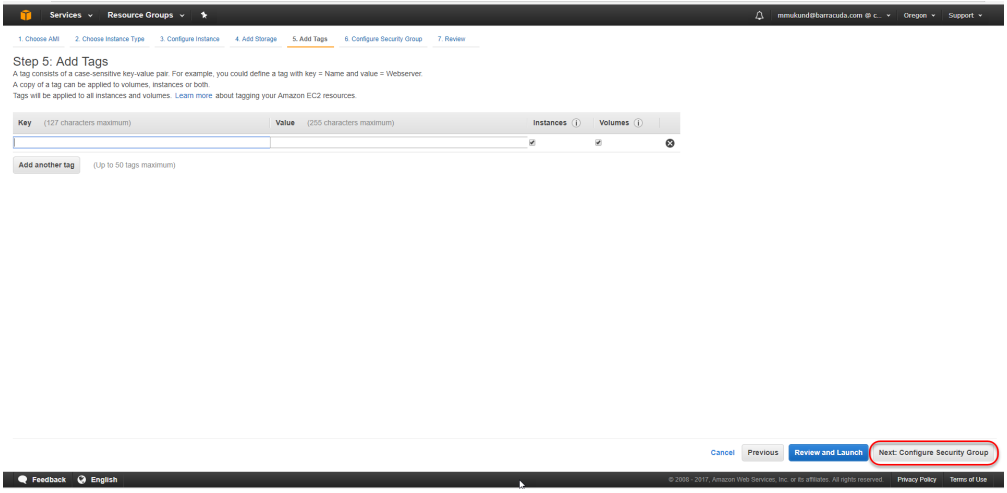
6. In **Step 3: Configure Instance Details** :
   1. Ensure that the **Number of Instances** is set to 1
   2. Select the appropriate **Network** from the list to deploy the instance.
   3. Select the appropriate **Subnet** from the list and select the network interface under **Network Interface** section that was created in Step 2 - Create a Network Interface.
   4. In the **Advanced Details** pane, keep the default setting for all parameters and click **Next: Add Storage** .



7. In **Step 4: Add Storage** , the table displays the storage device settings for the instance. Modify the values if required and click **Next: Tag Instance** .



8. In **Step 5: Add Tags** , add/remove the tags for the instance (if required) and click **Next: Configure Security Group** .



9. In **Step 6: Configure Security Group** , choose **Select an existing security group** to select and assign the security group(s) from the existing list, or choose **Create a new security group** to create a new group (see Step 1 - Create a Security Group or more information).

10. In **Step 7: Review Instance Launch** page, review your settings before launching the instance, and then click **Launch.**

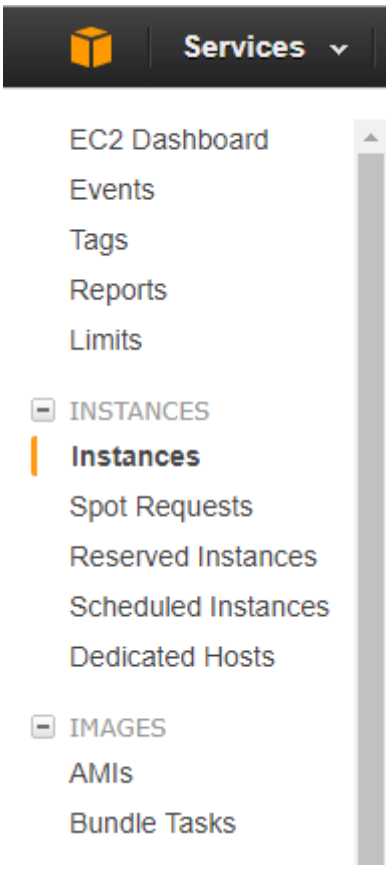
After you click **Launch**, Amazon Web Services begins provisioning the Barracuda WAF Control Center. Allow a few minutes for the Amazon Web Services Agent and the Barracuda WAF Control Center image to boot up.

DO NOT restart the Barracuda WAF Control Center while it is launching.

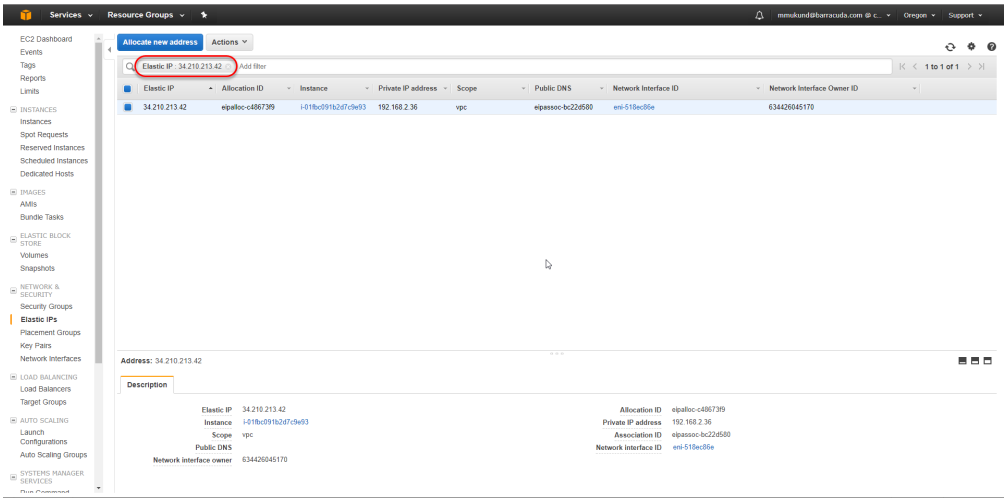
Step 4 - License the Barracuda WAF Control Center

The Barracuda WAF Control Center is available only as a BYOL instance. It needs to be provisioned and licensed.

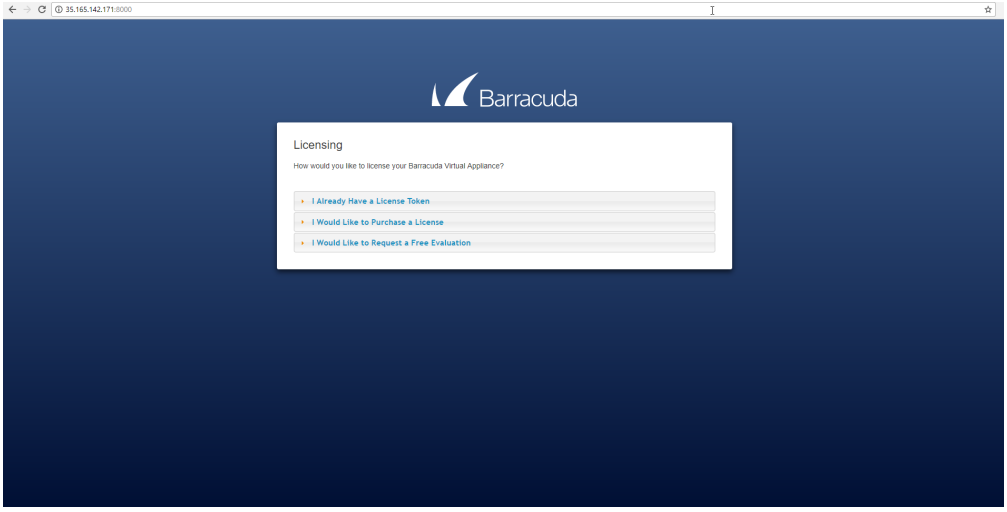
1. Log into the Amazon EC2 Management Console.
2. From the EC2 Dashboard, select **Instances** under **INSTANCES** .



3. In the **Instances** table, select the Barracuda WAF Control Center instance you created and note the **Elastic IP** address.



4. Open the browser and enter the copied Elastic IP address (from step **3**) with port 8000 for HTTP. No port is required for HTTPS. For example:
   For HTTP: http://<Public DNS>:8000 (Unsecured)
   For HTTPS: https://<Public DNS> (Secured)
   The Barracuda WAF Control Center is not accessible via HTTPS port while it is booting. Therefore, use ONLY HTTP port to access the unit when booting. This displays the status of the unit i.e., System Booting. Once the boot process is complete, you will be redirected to the login page.
5. After the boot process is complete, the Licensing page displays with the following options:



   1. **I Already Have a License Token** – Use this option to provision your Barracuda WAF Control Center with the license token you have already obtained from Barracuda Networks. Enter your Barracuda Networks **Token** and **Default Domain** to complete licensing, and then click **Provision**.
      The Barracuda WAF Control Center connects to the Barracuda Update Server to get the required information based on your license, and then reboots automatically. Allow a few

minutes for the reboot process. Once the instance is provisioned, you are redirected to the login page.

2. **I Would Like to Purchase a License** – Use this option to purchase the license token for the Barracuda WAF Control Center. Provide the required information in the form, accept the terms and conditions, and click **Purchase**.
   The Barracuda WAF Control Center connects to the Barracuda Update Server to get the required information based on your license, and then reboots automatically. Allow a few minutes for the reboot process. Once the instance is provisioned, you are redirected to the login page.

3. **I Would Like to Request a Free Evaluation** – Use this option to get 30 days free evaluation of the Barracuda WAF Control Center. Provide the required information in the form, accept the terms and conditions, and click **Evaluate**.
   The Barracuda WAF Control Center connects to the Barracuda Update Server to get the required information based on your license, and then reboots automatically. Allow a few minutes for the reboot process. Once the instance is provisioned, you are redirected to the login page.

Step 5 - Open Network Address Ranges on the Barracuda WAF Control Center

In the security group bound with your Barracuda WAF Control Center EC2 instance, open the following Barracuda network address ranges for the ports to ensure proper operation:

- 64.235.144.0/20
- 198.207.200.0/22
- 209.222.80.0/21

For more information on the usage of ports for the WCC, please check the Table below Step 1 - Create a Security Group.

Port	Direction	TCP	UDP	Usage
22	Out	Yes	No	Technical Support connections
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53	Out	Yes	Yes	Domain Name Service (DNS)
80/8000	Out	Yes	No	Virus/attack/security definition and firmware updates
123	Out	No	Yes	Network Time Protocol (NTP)
443	Out	Yes	No	Initial VM Provisioning *
48320/48321	In/Out	Yes	No	Secure Tunnel between the WCC and WAFs
2200	Out	Yes	No	File Transfer

* The initial provisioning port can be disabled once the initial provisioning process is complete.

Step 6 - Verify Configuration and Change the Password

1. Log into the Barracuda WAF Control Center web interface as the administrator using the URL, as described in step 4 of **Licensing of the Barracuda WAF Control Center after deploying on Amazon Web Services** above. Log in with:
    1. **Username*:*** *admin*
    2. **Password**: **Instance ID** of your Barracuda WAF Control Center in Amazon Web Services.
2. Navigate to the **BASIC > Administration** page and enter your old password, new password, and re-enter the new password. Click **Save Password**.

Step 7 - C reating the Barracuda WAF Control Center Account Admin

The Barracuda WAF Control Center Account Admin creates user accounts and associates the Barracuda Web Application Firewall instances to the corresponding accounts. Refer the link: Accounts and Roles for more details on accounts and roles.

To create the Barracuda WAF Control Center Account Admin, first log in to the web interface using the Barracuda WAF Control Center Administrator Account (admin/aws-instance-id), and the complete the listed steps:

> It is recommended to change the password from the default (aws-instance-id) to something else.

1. Go to the BASIC > Account Management page, and in the Account Creation section, enter the Account Name, Administrator Email Address, and select the Preferred Time Zone for the new account.
2. Click Create Account. The account displays in the Account View table at the top of the page.
3. A confirmation email containing the login credentials is sent to the administrator email address entered in step 1 above. Use these credentials to log in to the web interface to create users and assign permissions, connect devices, and view device status.

To connect one or more Barracuda Web Application Firewall devices to the Barracuda WAF Control Center, refer step 3 of this link Getting Started.

Figures

1. Image_Different regions drop down_2. of Step 5.png
2. Image_Launch Instance Button.png
3. Step 1_Choose an Amazon Machine Image (AMI)_AWS Marketplace selected_ASCC Image encircled.png
4. Step 2_Choose an Instance Type_Configure Instance Details encircled.png
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6. Step 4_Add Storage_Next_Add Tags button highlighted.png
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10. Barracuda Licensing New Screenshot.png