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## How to Deploy a CloudGen in AWS via CloudFormation Template

<https://campus.barracuda.com/doc/79463332/>

CloudFormation templates allow you to automate your deployments in AWS and make them more consistent. You can replicate the deployment multiple times for testing and production, or you can spin up additional environments in other regions. Including user data scripts in the template automatically disables the web interface. You can re-enable it via the cloud-enable-webui command. For more information, see [Public Cloud Provisioning Command Line Tools](#).

### CloudFormation Templates

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CloudFormation templates are available for all our AWS reference architectures in the Barracuda Networks GitHub account: <https://github.com/barracudanetworks/ngf-aws-templates>.

### Before You Begin

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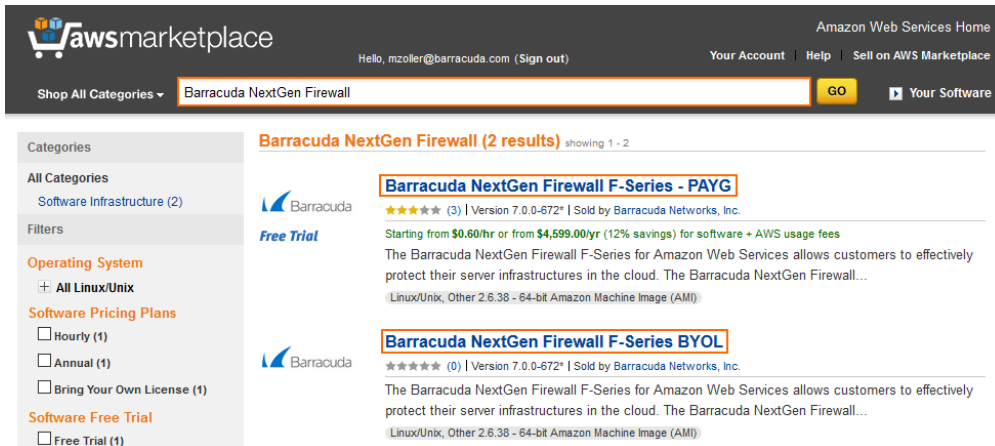
Verify that the AMI image IDs used in the CloudFormation template match the IDs for the CloudGen Firewall image listed in the AWS Marketplace. The AMI disk images change for every released version. Each region has a separate AMI ID.

### Step 1. Subscribe to CloudGen Firewall in AWS Marketplace

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To be able to deploy a CloudGen Firewall image via the CloudFormation template, you must agree to the **Terms of Service** and subscribe to the image in the AWS Marketplace. You need to do this only once per account, but it must be done separately for PAYG and BYOL images.

1. Go to the AWS Marketplace: <https://aws.amazon.com/marketplace/>
2. Search for Barracuda CloudGen Firewall.
3. Click the **Barracuda CloudGen Firewall F-Series PAYG** or **Barracuda CloudGen Firewall F-Series BYOL** image.



The screenshot shows the AWS Marketplace interface. At the top, there's a search bar with "Barracuda NextGen Firewall" entered. Below the search bar, there are two search results. The first result is "Barracuda NextGen Firewall F-Series - PAYG" with a 3-star rating and a "Free Trial" badge. The second result is "Barracuda NextGen Firewall F-Series BYOL" with a 0-star rating. On the left side, there are filters for "Operating System" (All Linux/Unix) and "Software Pricing Plans" (Hourly, Annual, Bring Your Own License, Software Free Trial).

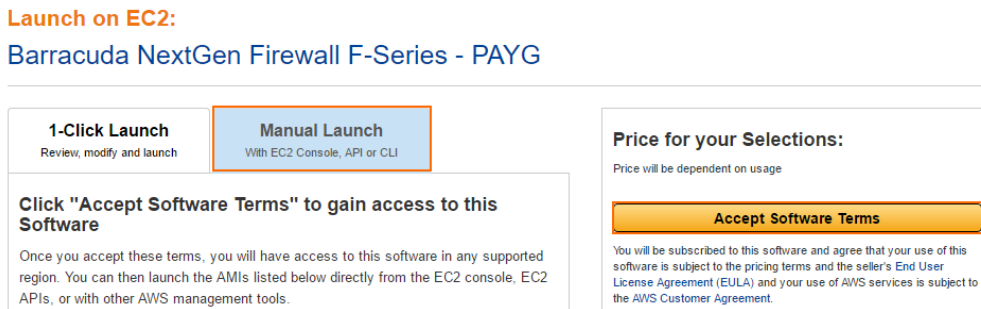
4. Click **Continue**.



The product page for "Barracuda NextGen Firewall F-Series - PAYG" is shown. It includes the Barracuda logo, the product name, and the text "Sold by: Barracuda Networks, Inc.". A prominent "30 Day Free Trial Available" message is displayed. Below this, there's a "Customer Rating" section showing 3 stars and "(3 Customer Reviews)". A "Continue" button is visible on the right side of the page.

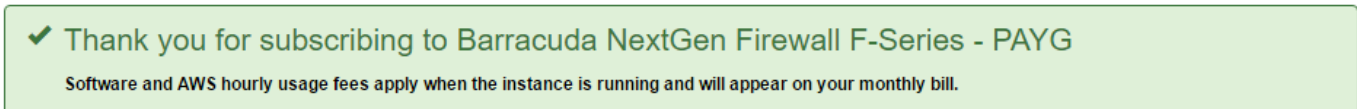
5. Click the **Manual Launch** tab.

6. Click **Accept Software Terms**.



This section shows the "Launch on EC2" options for the product. There are two tabs: "1-Click Launch" and "Manual Launch". The "Manual Launch" tab is selected. Below the tabs, there's a "Click 'Accept Software Terms' to gain access to this Software" section. To the right, there's a "Price for your Selections:" section with an "Accept Software Terms" button.

You will now receive an email from Amazon confirming your subscription. You can now use the provided AMI in your CloudFormation templates.



A green confirmation message box with a checkmark icon. The text reads: "Thank you for subscribing to Barracuda NextGen Firewall F-Series - PAYG. Software and AWS hourly usage fees apply when the instance is running and will appear on your monthly bill."

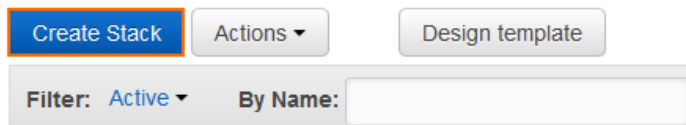
## Step 2. (BYOL only) Create Stack Policy to Protect the Firewall Instance from Stack Updates

To protect your firewall instances from being replaced during stack updates, use a stack policy when deploying the CloudFormation template. Replacing the instance automatically invalidates your license. If your license is invalidated, contact Barracuda Technical Support during the 15-day grace period to transfer your license to the instance.

### Step 3. Deploy the CloudFormation Template

CloudFormation templates can be deployed via the AWS web console, CLI, REST, or PowerShell.

1. Log into the AWS console.
2. Click **Services** and select **CloudFormation**.
3. Click **Create Stack**



4. Select **Upload a template to Amazon S3**.
5. Click **Browse** and select the template file.

**Choose a template** A template is a JSON-formatted text file that describes your stack's resources and their properties. [Learn more](#).

Select a sample template

Upload a template to Amazon S3

Specify an Amazon S3 template URL

6. Click **Next**.
7. Enter the **Stack name**.
8. (optional) If the template includes parameters, fill in the values in the **Parameters** section.

#### Specify Details

Specify a stack name and parameter values. You can use or change the default parameter values, which are defined in the AWS CloudFormation template. [Learn more](#).

**Stack name**

#### Parameters

**KeyName**

Name of an existing EC2 KeyPair to enable SSH access to the instances

9. Click **Next**.

10. (optional) Enter **Tags** for your stack.
11. In the **Advanced** section, set additional options for your stack:
  - **Notification options**
  - **Timeout** - Set the timeout in minutes.
  - **Rollback on failure** - When set to **yes**, the deployment will be rolled back if any errors are encountered.
  - **Stack policy** - For BYOL images, it is highly recommended to protect the firewall instance from stack updates.

Stack updates that require redeploying the firewall instance will invalidate the license for BYOL firewalls.
12. Click **Next**.
13. Review the settings and click **Create**.

The resources defined in the template are now deployed. This may take a couple of minutes. When the **Status** column shows **CREATE\_COMPLETE**, the template has been deployed successfully. If the firewall fetches a PAR file from a Control Center, it may take a couple of minutes for the firewall to be available.

Create Stack   Actions ▾   Design template

Filter: Complete ▾   By Name:

	Stack Name	Created Time	Status	Description
<input checked="" type="checkbox"/>	DOCSingleNGF	2016-10-05 13:49:42 UTC+0200	CREATE_COMPLETE	AWS Single NGF Template

## Figures

1. aws\_cloudformation\_01.png
2. aws\_cloudformation\_02.png
3. aws\_cloudformation\_03.png
4. aws\_cloudformation\_04.png
5. aws\_cloudformation\_05.png
6. aws\_cloudformation\_06.png
7. aws\_cloudformation\_07.png
8. aws\_cloudformation\_08.png

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