

Launch AWS EC2 Instance with Intel® Distribution of OpenVINO™ toolkit

Enabling developers to optimize pre-trained models and accelerate the deployment of deep learning solutions with a write-once-deploy-anywhere approach across Intel® powered CPUs, integrated GPUs, Intel® Movidius™ VPUs, and FPGAs.

The Intel® Distribution of OpenVINO™ toolkit on Amazon Machine Image (AMI) enables developers to optimize pre-trained models and accelerate the deployment of deep learning solutions with a write-once-deploy-anywhere approach across Intel-powered CPUs, integrated GPUs, Intel® Movidius™ VPUs, and FPGAs.

AMI comes pre-equipped with the Intel® Distribution of OpenVINO™ toolkit development and deployment components, such as the Model Optimizer and the Inference Engine.

This document illustrates all the steps required to deploy AMI in your AWS account and access the Jupyter environment from your local machine. Please note that the AWS account you are using for deploying this AMI needs to have public IP assigned for Jupyter notebooks to be accessed from a local system.

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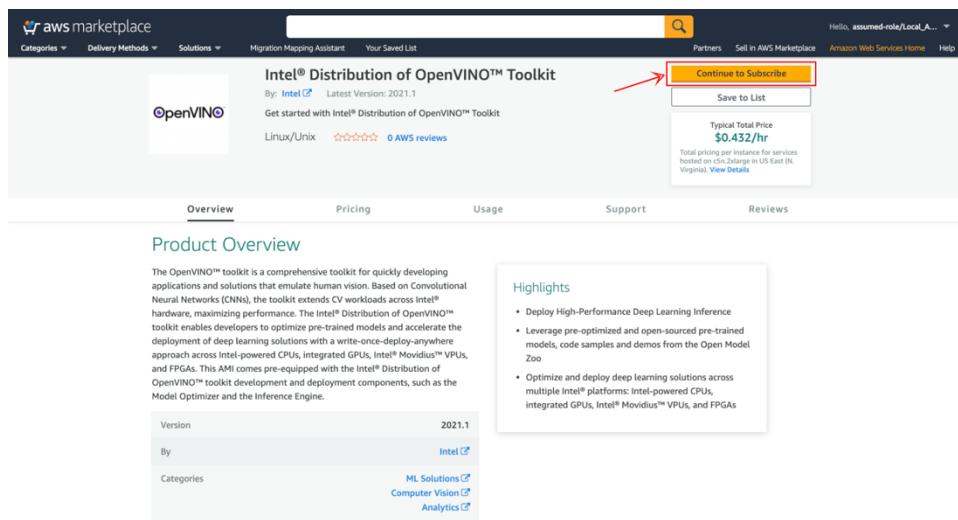
Search for AMI and Subscribe

There are two ways to subscribe to the OpenVINO™ marketplace offering:

- **Option 1:** Navigate to the AMI webpage directly by using this link.
<https://aws.amazon.com/marketplace/pp/B08LZJJZR3/>
- **Option 2:** Navigate to the AWS marketplace by using the link <https://aws.amazon.com/marketplace> and then search for “Intel® Distribution of OpenVINO™ Toolkit”. Select the “Intel® Distribution of OpenVINO™ Toolkit” AMI.

After selecting the AMI in the AWS marketplace:

1. Click on “Continue to Subscribe”



2. Click on “Continue to Configuration”

The screenshot shows the AWS Marketplace interface. At the top, there's a navigation bar with links like 'Categories', 'Delivery Methods', 'Solutions', 'Migration Mapping Assistant', 'Your Saved List', 'Partners', 'Sell in AWS Marketplace', 'Amazon Web Services Home', and 'Help'. Below the navigation, the product title 'Intel® Distribution of OpenVINO™ Toolkit' is displayed. To the right of the title is a yellow button labeled 'Continue to Configuration', which is highlighted with a red rectangular border and a red arrow pointing to it. Below the title, there's a section titled 'Subscribe to this software' with a note about being subscribed and terms and pricing details. Further down, there's a 'Terms and Conditions' section and an 'Intel Offer' section. At the bottom, there's a table showing product details: Product (Intel® Distribution of OpenVINO™ Toolkit), Effective date (10/22/2020), Expiration date (N/A), and Action (dropdown menu with 'Show Details').

3. Click on “Continue to Launch”

This screenshot shows the configuration step of the AWS Marketplace process. The top navigation bar is identical to the previous screenshot. The main content area has a heading 'Configure this software' and a note about selecting deployment options and entering configuration information. On the left, there are dropdown menus for 'Delivery Method' (set to '64-bit (x86) Amazon Machine Image (AMI)'), 'Software Version' (set to '2021.1 (Oct 13, 2020)'), and 'Region' (set to 'US East (N. Virginia)'). Below these is a note about local zones and wavelength infrastructure. On the right, there's a 'Pricing information' sidebar with a note about estimated costs, followed by 'Software Pricing' and 'Infrastructure Pricing' tables. The 'Software Pricing' table shows 'Intel® Distribution of OpenVINO™ Toolkit running on c5n.2xlarge' with a cost of '\$0/hr'. The 'Infrastructure Pricing' table shows 'EC2: 1 * c5n.2xlarge' and 'Monthly Estimate: \$311.00/month'. At the bottom, there are links for 'Ami Id', 'Product code', and 'Release notes'.

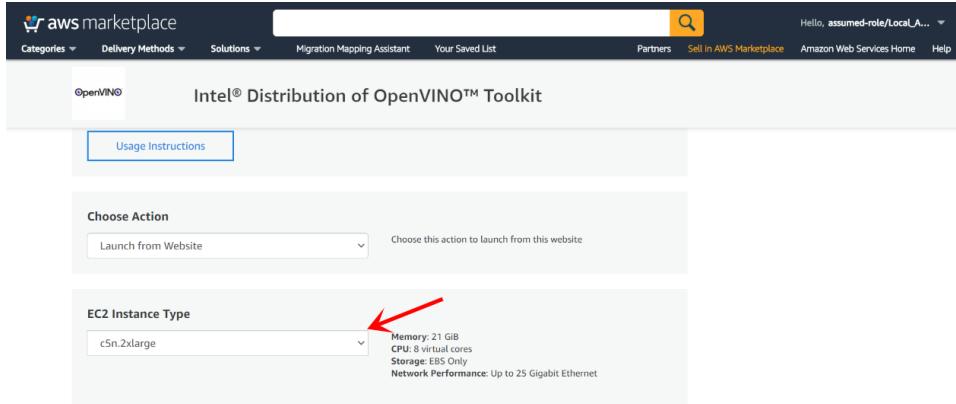
4. You have two options to launch the AMI under “Choose Action”,

- a. [Launch from Website](#)
- b. [Launch Through EC2](#)

The screenshot shows the AWS Marketplace interface for the Intel® Distribution of OpenVINO™ Toolkit. At the top, there's a navigation bar with links for Categories, Delivery Methods, Solutions, Migration Mapping Assistant, Your Saved List, Partners, Sell in AWS Marketplace, Amazon Web Services Home, and Help. Below the navigation, the product title "Intel® Distribution of OpenVINO™ Toolkit" is displayed. Underneath the title, there are buttons for Product Detail, Subscribe, Configure, and Launch. The "Launch" button is highlighted. The main content area is titled "Launch this software" and contains a section for "Configuration Details". This section includes fields for Fulfillment Option (set to "64-bit (x86) Amazon Machine Image (AMI) Intel® Distribution of OpenVINO™ Toolkit running on c5n.2xlarge"), Software Version (2021.1), and Region (US East (N. Virginia)). Below these details is a "Usage Instructions" button. Further down, there's a "Choose Action" dropdown menu with the option "Launch from Website" selected. A tooltip next to this option says "Choose this action to launch from this website". At the bottom, there's an "EC2 Instance Type" section showing "c5n.2xlarge" with "Memory: 21 GiB" and "CPU: 8 virtual cores".

AMI Launch Option 1: “Launch from Website”:

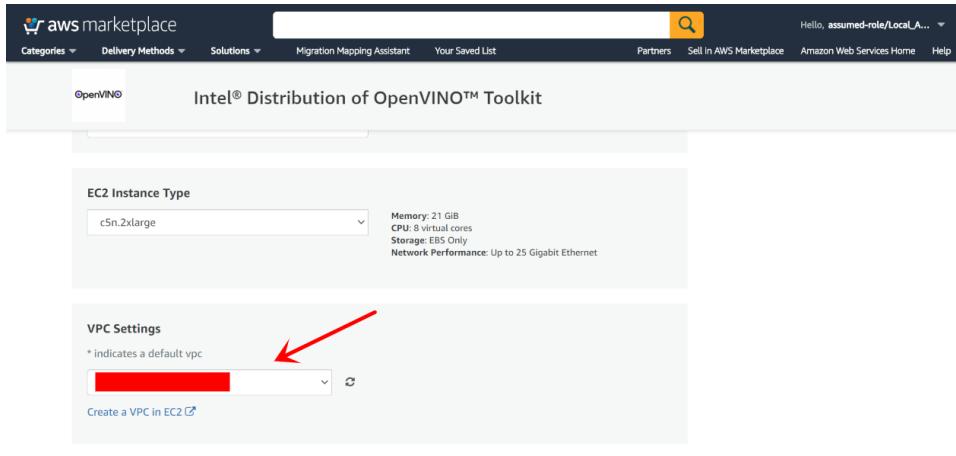
1. Select your desired EC2 Instance Type



2. Select your VPC Settings

Make sure your VPC and subnet has internet access.

Please refer to "[Create VPC with internet access](#)" on page 17 for detailed instructions.



3. Select your Subnet Settings

The screenshot shows the AWS Marketplace setup wizard for the Intel® Distribution of OpenVINO™ Toolkit. The current step is "Subnet Settings". A red arrow points to the dropdown menu where a subnet has been selected. Below the dropdown, it says "IPv4 CIDR block: 10.0.0.0/24". There is also a link to "Create a subnet in EC2" and a note: "(Ensure you are in the selected VPC above)".

4. Under Security Group Settings, click on “Create New Based on Seller Settings”.

- Enter “Name” and “Description” for the security group.
- For Source (IP or Group), we recommend “MY IP”, you could choose “anywhere” also.
- The security group needs two open ports, “22” for SSH login and “8888” for Jupyter access.

The screenshot shows the AWS Marketplace setup wizard for the Intel® Distribution of OpenVINO™ Toolkit. The current step is "Security Group Settings". A red arrow points to the "Select a security group" dropdown, which is currently empty. Below it, a blue button labeled "Create New Based On Seller Settings" is highlighted with a blue border and a red arrow pointing to it.

Create new based on seller settings

A new security group will be generated by AWS Marketplace. It is based on recommended settings for Intel® Distribution of OpenVINO™ Toolkit version 2021.1.

Name your security Group

Description

Connection Method	Protocol	Port Range	Source (IP or Group)
SSH	tcp	22	My Ip <input type="button" value="..."/> [REDACTED] /32
	tcp	8888	My Ip <input type="button" value="..."/> [REDACTED] /32

Rules with source of 0.0.0.0/0 allows all IP addresses to access your instance. We recommend limiting access to only known IP addresses.

Cancel Save

5. Select an existing Key Pair or create a new key pair

Create New Based On Seller Settings

Key Pair Settings

To ensure that no other person has access to your software, the software installs on an EC2 instance with an EC2 key pair that you created.

Select a key pair

Create a key pair in EC2

(Ensure you are in the region you wish to launch your software)

Launch

6. After selecting all the required fields above, click “Launch”

Create New Based On Seller Settings

Key Pair Settings

To ensure that no other person has access to your software, the software installs on an EC2 instance with an EC2 key pair that you created.

demo-key

Create a key pair in EC2

(Ensure you are in the region you wish to launch your software)

Launch

[AWS Marketplace on Twitter](#) [AWS Marketplace Blog](#) [RSS Feed](#)

Solutions Business Applications Data Products Sell in AWS Marketplace AWS Marketplace is hiring!

AMI Launch Option 2: “Launch through EC2”:

The screenshot shows the AWS Marketplace interface for the Intel® Distribution of OpenVINO™ Toolkit. At the top, there's a search bar and navigation links for categories, delivery methods, solutions, migration mapping assistant, your saved list, partners, sell in AWS Marketplace, Amazon Web Services Home, and help. Below the header, the product title 'Intel® Distribution of OpenVINO™ Toolkit' is displayed. Under 'Fulfillment Option', it says '64-bit (x86) Amazon Machine Image (AMI) Intel® Distribution of OpenVINO™ Toolkit running on c5n.xlarge'. Under 'Software Version', it shows '2021.1'. Under 'Region', it shows 'US East (N. Virginia)'. There's a 'Usage Instructions' button. In the center, there's a 'Choose Action' dropdown set to 'Launch through EC2' with a descriptive note below it: 'Choose this action to launch your configuration through the Amazon EC2 console.' A large red arrow points to this dropdown. To its right is a prominent yellow 'Launch' button, also highlighted by a red arrow.

1. Choose instance type

Choose an instance and then click “Configure Instance Details”.

Here we have picked a *c5.4xlarge (68 ECUs, 16 vCPUs, 32 GiB memory, EBS only)*.

The screenshot shows the AWS EC2 instance creation wizard, Step 2: Choose an Instance Type. The top navigation bar includes services, local administration, N. Virginia, and support. Below the navigation, a breadcrumb trail shows steps 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. The main content area is titled 'Step 2: Choose an Instance Type' with a sub-instruction: 'Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs.' A filter bar at the top allows filtering by family (c5), type (c5.large, c5.xlarge, c5.2xlarge, c5.4xlarge), and current generation. A table lists instance details: Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, Network Performance, and IPv6 Support. The 'c5.4xlarge' row is selected and highlighted with a blue border. Red arrows point to this row and to the 'Next: Configure Instance Details' button at the bottom right. Other buttons include 'Cancel', 'Previous', and 'Review and Launch'.

2. Configure Instance

The compute instance selected in the previous step is only available in a Virtual Private Cloud (VPC), so choose the default VPC and enable “Auto-assign Public IP”.

In case you don't have a default VPC with Public IP, follow the instructions [Create VPC with internet access](#) section to create one.

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances	<input type="text" value="1"/>	Launch into Auto Scaling Group
Purchasing option	<input type="checkbox"/> Request Spot instances	
Network	No default VPC found. Create a new default VPC	
Subnet	249 IP Addresses available Create new subnet	
Auto-assign Public IP	<input type="checkbox"/> Enable	
Placement group	<input type="checkbox"/> Add instance to placement group	
Capacity Reservation	<input type="checkbox"/> Open	

Cancel Previous Review and Launch Next: Add Storage

3. Add storage

Update the storage size based on your Requirement. We would recommend selecting a 30 GB minimum to start with as shown in the image below.

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-01b208bd4d49318b0	<input type="text" value="30"/>	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/> Not Encrypted

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

Cancel Previous Review and Launch Next: Add Tags

4. Add tags

Click on “Next: Configure Security Group”.

Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.

A copy of a tag can be applied to volumes, instances or both.

Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (128 characters maximum) Value (256 characters maximum)

This resource currently has no tags

Choose the Add tag button or [click to add a Name tag](#).
Make sure your [IAM policy](#) includes permissions to create tags.

Add Tag (Up to 50 tags maximum)

Cancel Previous Review and Launch Next: Configure Security Group

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5. Security Group

Choose the existing security group and click “Review and Launch”.

In case you don't have an existing security group then follow instructions in the [Create security group](#) section to create a new security group.

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below.

[Learn more](#) about Amazon EC2 security groups.

Assign a security group: Create a new security group Select an existing security group

Security Group ID	Name	Description
[REDACTED]	default	default VPC security group
[REDACTED]	Demo_SG	Allow SSH access to developers

Select a security group above to view its inbound rules.

Cancel Previous Review and Launch

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6. Launch your instance

Click “Launch”.

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

AMI Details

Intel® Distribution of OpenVINO™ Toolkit

OpenVINO Intel Distribution of OpenVINO-2021.1-AmazonLinux2

Root Device Type: ebs Virtualization type: hvm

Hourly Software Fees: \$0.00 per hour on c5.4xlarge instance. Additional taxes or fees may apply.
Software charges will begin once you launch this AMI and continue until you terminate the instance.

By launching this product, you will be subscribed to this software and agree that your use of this software is subject to the pricing terms and the seller's

Cancel Previous Launch

7. Choose or create a new private key file

Choose an existing private key file or create a new one by selecting “create a new key pair” and click “Download Key Pair” to save it. Then click “Launch Instance”.

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair
Select a key pair
demo-key

acknowledge that I have access to the selected private key file (demo-key.pem), and that without this file, I won't be able to log into my instance.

Cancel Launch Instances

Please note that it might take some time for the instance to be created.

Initiating Instance Launches

Please do not close your browser while this is loading

Initiating launches...

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8. Click on the “instance id” to see your instance status.

Also, copy this instance-id, as this will be your password to your Jupyter Notebook.

The screenshot shows the AWS Launch Status page. At the top, a green banner says "Your instances are now launching" with a red arrow pointing to the instance ID "i-0719207e3bde38334". Below the banner, there's a section about estimated charges and instructions on how to connect to instances. A blue bar at the bottom provides links for Intel Distribution of OpenVINO Toolkit and software subscription management. The footer includes standard AWS links like Feedback, English (US), Privacy Policy, and Terms of Use.

9. Click “Connect” to view instructions to SSH into the instance.

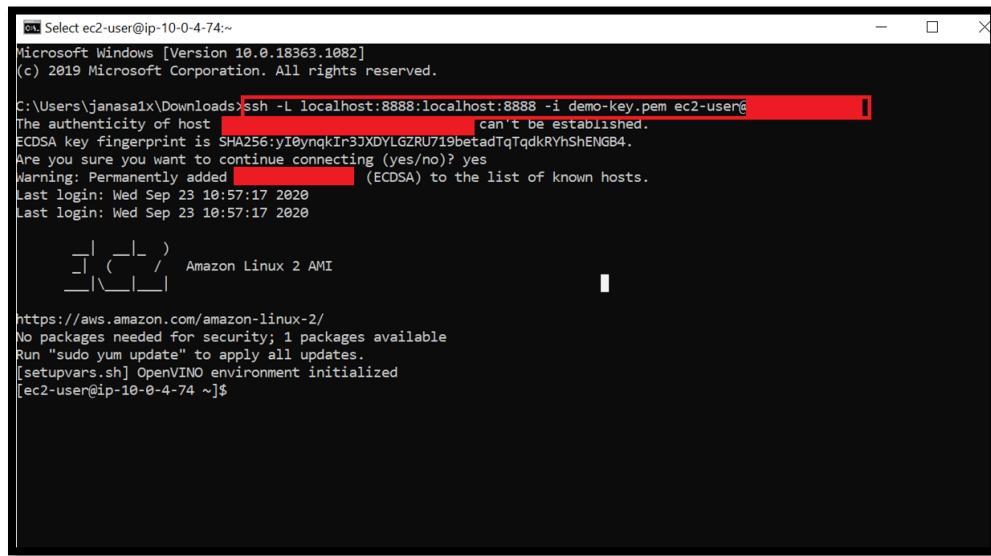
Click on the “Connect” button on top of the page to launch web CLI

The screenshot shows the AWS EC2 Instances page. On the left, a sidebar lists various EC2-related services like EC2 Dashboard, Events, Tags, Instances, and Images. The main area displays a table with one instance: Name (empty), Instance ID (i-0719207e3bde38334), Instance state (Running), Instance type (c5.4xlarge), Status check (2/2 checks ...), and Alarm Stat (No alarms). Above the table, a red arrow points to the "Connect" button. Below the table, a detailed view of the instance summary shows the Public IPv4 address (redacted) and Public IPv4 DNS (ip-10-0-4-169.ec2.internal), with a red arrow pointing to the "open address" link.

10. Connect to your instance via Terminal

Open a terminal then connect to your instance using SSH and Replace text below in red.

```
cd /Users/your_username/Downloads/  
chmod 0400 <your .pem file name>  
ssh -L localhost:8888:localhost:8888 -i <your .pem file name> ec2-  
user@<Your instance Public IP>  
  
#If you need to connect via proxy:  
ssh -o ProxyCommand='nc -x <your_proxy_address>:<your_proxy_port> <Your  
instance DNS> 22' -L localhost:8888:localhost:8888 -i <your .pem file  
name> ec2-user@<Your instance Public IP>
```



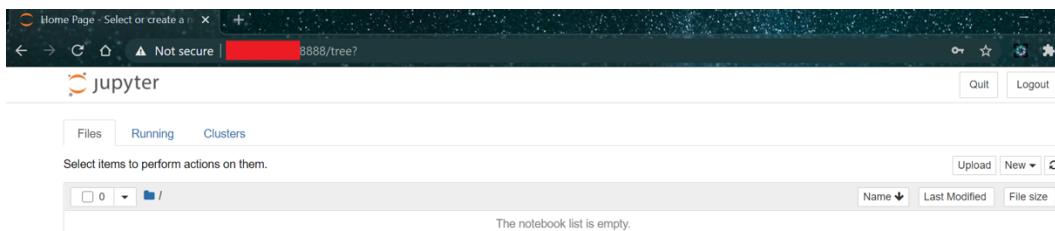
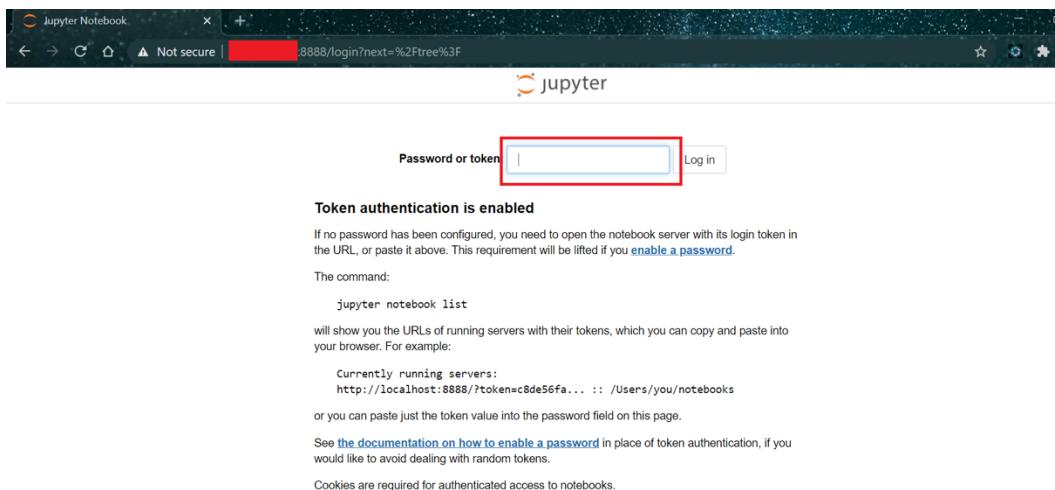
The screenshot shows a Windows terminal window titled "Select ec2-user@ip-10-0-4-74:~". The command entered is "ssh -L localhost:8888:localhost:8888 -i demo-key.pem ec2-user@<Your instance Public IP>". The terminal output shows:

```
Microsoft Windows [Version 10.0.18363.1082]  
(c) 2019 Microsoft Corporation. All rights reserved.  
  
C:\Users\janasa1x\Downloads>ssh -L localhost:8888:localhost:8888 -i demo-key.pem ec2-user@<Your instance Public IP>  
The authenticity of host [REDACTED] can't be established.  
ECDSA key fingerprint is SHA256:yI0ynqkIr3JXDYLGZRU719betadTqTqdkRYhShENG84.  
Are you sure you want to continue connecting (yes/no)? yes  
Warning: Permanently added [REDACTED] (ECDSA) to the list of known hosts.  
Last login: Wed Sep 23 10:57:17 2020  
Last login: Wed Sep 23 10:57:17 2020  
  
[REDACTED] _|_/_ ) Amazon Linux 2 AMI  
[REDACTED] _\|_|_/_|  
  
https://aws.amazon.com/amazon-linux-2/  
No packages needed for security; 1 packages available  
Run "sudo yum update" to apply all updates.  
[setupvars.sh] OpenVINO environment initialized  
[ec2-user@ip-10-0-4-74 ~]$
```

11. Connect to Jupyter Notebook.

Open a browser window and navigate to the URL given below and replace the text below in red.

```
http://<your instance Public IP>:8888  
Password or token: <your EC2 instance-id>
```



12. Change the Jupyter Notebook password.

Login to instance via SSH and replace the text below in red.

```
pkill jupyter  
  
Change password in `~/.start_jupyter.sh` and run `~/.start_jupyter.sh`  
  
OR  
  
jupyter notebook --no-browser --NotebookApp.allow_password_change=False  
--NotebookApp.token='<new password>' --ip 0.0.0.0 --port 8888 >  
/tmp/jupyter.out 2>&1 &
```

```
[ec2-user@ip-10-0-4-169 ~]$ pkill jupyter
[ec2-user@ip-10-0-4-169 ~]$ cat .start_jupyter.sh
TOKEN=`curl -X PUT "http://169.254.169.254/latest/api/token" -H "X-aws-ec2-metadata-token-ttl-seconds: 21600"`
INSTANCE_ID=`curl -H "X-aws-ec2-metadata-token: $TOKEN" http://169.254.169.254/latest/meta-data/instance-id`

cd /home/ec2-user
source /home/ec2-user/.bashrc
#source /opt/intel/openvino_2021/bin/setupvars.sh

export PATH=/opt/intel/openvino_2021/deployment_tools/model_optimizer:/opt/intel/openvino_2021/data_processing/gstreamer/bin:/opt/intel/openvino_2021/data_processing/gstreamer/bin/gstreamer-1.0:/usr/local/bin:/usr/bin:/usr/local/sbin:/usr/sbin:/home/ec2-user/.local/bin:/home/ec2-user/bin

export LD_LIBRARY_PATH=/opt/intel/openvino_2021/data_processing/dl_streamer/lib:/opt/intel/openvino_2021/data_processing/gstreamer/lib:/opt/intel/openvino_2021/openvnc/lib:/opt/intel/openvino_2021/deployment_tools/ngraph/lib:/opt/intel/openvino_2021/deployment_tools/inference_engine/external/hddl/unite/lib:/opt/intel/openvino_2021/deployment_tools/inference_engine/external/mkltiny_lnx/lib:/opt/intel/openvino_2021/deployment_tools/inference_engine/external/tbb/lib:/opt/intel/openvino_2021/deployment_tools/inference_engine/lib/intel64
export PYTHONPATH=/opt/intel/openvino_2021/python/python3.7:/opt/intel/openvino_2021/python/python3:/opt/intel/openvino_2021/deployment_tools/open_model_zoo/tools/accuracy_checker:/opt/intel/openvino_2021/deployment_tools/model_optimizer:/opt/intel/openvino_2021/data_processing/dl_streamer/python:/opt/intel/openvino_2021/data_processing/gstreamer/lib/python3.6/site-packages

/home/ec2-user/.local/bin/jupyter notebook --no-browser --NotebookApp.allow_password_change=False --NotebookApp.token="$INSTANCE_ID" --ip 0.0.0.0 --port 8888 > /tmp/jupyter.out 2>&1 &

[ec2-user@ip-10-0-4-169 ~]$ jupyter notebook --no-browser --NotebookApp.allow_password_change=False --NotebookApp.token='openvino@123' --ip 0.0.0.0 --port 8888 > /tmp/jupyter.out 2>&1 &
[1] 4695
```

Tips: Stop the instance when not in use to prevent additional charges.

Create VPC with internet access

1. Navigate to VPC then click on Create VPC

The screenshot shows the 'Create VPC' wizard. In the 'VPC settings' section, a 'Name tag - optional' field contains 'My_Demo'. The 'IPv4 CIDR block' field contains '10.0.0.0/16'. Under 'IPv6 CIDR block', the 'No IPv6 CIDR block' radio button is selected. In the 'Tenancy' section, 'Default' is chosen. The 'Tags' section contains one tag: 'Name' with value 'My_Demo'. A note says 'You can add 49 more tags.' At the bottom right are 'Cancel' and 'Create VPC' buttons.

Please fill in the following fields on the page and click “Create VPC”:

- **Name tag – optional** → Demo_VPC (Example Name)
- **IPv4 CIDR block** → 10.0.0.0/16
- **IPv6 CIDR block** → No IPv6 CIDR block
- **Tenancy** → Default

2. Create an internet gateway with the following details.

The screenshot shows the AWS VPC Internet Gateways creation interface. At the top, there's a navigation bar with 'Internet gateways (3) Info' and a search bar labeled 'Filter internet gateways'. Below the navigation is a breadcrumb trail: 'VPC > Internet gateways > Create internet gateway'. The main title is 'Create internet gateway' with an 'Info' link. A descriptive text explains that an internet gateway connects a VPC to the internet and asks to specify a name. The first section is 'Internet gateway settings' containing a 'Name tag' field with placeholder text 'Creates a tag with a key of 'Name' and a value that you specify.' and a text input box containing 'Demo_IGW'. The second section is 'Tags - optional', which includes a table for adding tags with columns 'Key' and 'Value - optional'. A single tag 'Name: Demo_IGW' is listed. Below the table is a note: 'You can add 49 more tags.' At the bottom right are 'Cancel' and 'Create Internet gateway' buttons.

Please fill the following field in the page and click “Create Internet gateway”

- **Name tag → Demo_IGW (Example Name)**

3. Attach the created VPC to the internet gateway.

The screenshot shows the 'Attach to VPC' dialog box. At the top, a green banner says 'The following internet gateway was created: [REDACTED]. You can now attach to a VPC to enable the VPC to communicate with the internet.' Below this, the path is 'VPC > Internet gateways > [REDACTED] / Demo_IGW'. A red box highlights the path and the gateway name. On the right, there's a 'Actions' dropdown. The main area has a title 'Attach to VPC ([REDACTED])' with an 'Info' link. A 'VPC' section asks to attach an internet gateway to a VPC to enable communication. It lists 'Available VPCs' with a search bar and an 'AWS Command Line Interface command' link. At the bottom are 'Cancel' and 'Attach internet gateway' buttons, with the latter being orange.

- Click “Attach to a VPC”.
- Choose the VPC (Demo_VPC) that we created and click “Attach Internet Gateway”.

4. Create Public Subnet.

The screenshot shows the 'Create subnet' dialog box. At the top, it says 'Subnets > Create subnet'. The main area is titled 'Create subnet' with a sub-instruction: 'Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.' It has fields for 'Name tag' (Public_Demo_Subnet), 'VPC*' (Demo_VPC), 'Availability Zone' (No preference), and 'IPv4 CIDR block*' (10.0.4.0/24). A table shows 'VPC CIDRs' with one entry: CIDR 10.0.0.0/16 and Status associated. At the bottom are 'Required' and 'Create' buttons.

Please fill the following field in the page & click “Create”:

- **Name tag** → Public_Demo_Subnet (Example Name)
- **VPC*** → Choose the VPC (Demo_VPC) that we created
- **Availability Zone** → us-east-1a (Choose your respective region)
- **IPv4 CIDR block*** → 10.0.4.0/24

5. Create “Route Table”.

Route Tables > Create route table

Create route table

A route table specifies how packets are forwarded between the subnets within your VPC, the Internet, and your VPN connection.

Name tag	Public_Demo_RT	<small>i</small>
VPC*	Demo_VPC	<small>C i</small>
Key	(128 characters maximum)	Value (256 characters maximum)

This resource currently has no tags

Add Tag 50 remaining (Up to 50 tags maximum)

* Required

Cancel Create

Please fill the following field in the page & click “Create”:

- **Name tag** → Public_Demo_RT (Example Name)
- **VPC*** → Choose the VPC (Demo_VPC) that we created

6. Attach the created internet gateway in the “route table”.

Route Table: rtb-0801cd61eaa0a8502

Summary	Routes	Subnet Associations	Edge Associations	Route Propagation	Tags
	Edit routes				
	View All routes				
Destination	Target	Status	Propagated		
10.0.0.0/16	local	active	No		

Click “Edit routes” and add a route with the following details & click “Save routes”

- **Destination** → 0.0.0.0/0 (Any)
- **Target** → Choose your Internet Gateway(Demo_IGW)

Route Tables > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	active	No
0.0.0.0/0	igw-0059fba23969ff2e9	active	No

Add route

* Required Cancel Save routes

7. Attach the created public subnet in the “route table”.

Click “Edit subnet associations” and choose the following details and click “Save”.

Route Table: rtb-0801cd61eaa0a8502

Summary	Routes	Subnet Associations	Edge Associations	Route Propagation	Tags
		Edit subnet associations			
Subnet ID	IPv4 CIDR	IPv6 CIDR			

You do not have any subnet associations.

Subnet ID → Choose the created Public Subnet(Public_Demo_Subnet)

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Route Tables > Edit subnet associations

Route table rtb-0801cd61eaa0a8502 (Public_Demo_RT)

Associated subnets [REDACTED]

Subnet ID	IPv4 CIDR	IPv6 CIDR	Current Route Table
[REDACTED]	10.0.4.0/24	-	Main

* Required Cancel Save

8. Create Network ACL.

Please fill the following field in the page and click “Create”

Network ACLs > Create network ACL

Create network ACL

A network ACL is an optional layer of security that acts as a firewall for controlling traffic in and out of a subnet.

Name tag Demo_NACL

VPC* [REDACTED]

* Required Cancel Create

- **Name tag** → Demo_NACL (Example Name)
- **VPC*** → Choose the VPC (Demo_VPC) that we created

9. Click Edit inbound rules and add the following rules.

Network ACL: acl-0484d27fee71d5c00

Details Inbound Rules Outbound Rules Subnet associations Tags

Edit inbound rules

View All rules

Rule #	Type	Protocol	Port Range	Source	Allow / Deny
*	ALL Traffic	ALL	ALL	0.0.0.0/0	DENY

Network ACLs > Edit inbound rules

Edit inbound rules

Network ACL: acl-0484d27fee71d5c00

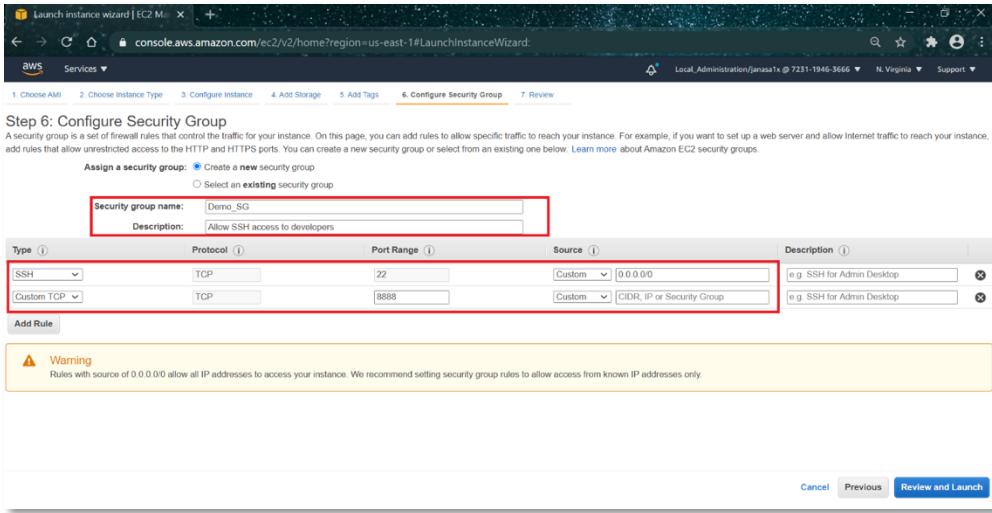
Rule #	Type	Protocol	Port Range	Source	Allow / Deny
1	SSH (22)	TCP (6)	22	10.10.10.0/32	ALLOW
2	Custom TCP Rule	TCP (6)	8888	10.10.10.0/32	ALLOW

Add Rule * Required Cancel Save

Inbound rules

Type	Port	Source	Allow/Deny
SSH	22	Your System IP	Allow
Custom TCP Rule	8888	Your System IP	Allow

Create a Security Group



Please fill the following fields on the page & click “Review and Launch”

- **Security group name** → Demo_SG (Example Name)
- **Description** → Allow SSH access to developers (Example Description)
- **Inbound rules**

Type	Port	Source
SSH	22	Custom (Your System IP)
Custom TCP	8888	Custom (Your System IP)

Summary:

This document walks you through in detail how to create an EC2 instance using Intel® Distribution of OpenVINO™ toolkit AMI in this tutorial. Please note that AWS charges you for the hours the server is running, so stop it when it's unused to save on your costs.



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