

1 Go to the URL <https://aws.amazon.com/marketplace/pp/B0862DRQGT>

Click the subscribe button (highlighted with red rectangle).

The screenshot shows the AWS Marketplace page for the Symbiotic EDA Suite. The browser address bar displays the URL <https://aws.amazon.com/marketplace/pp/B0862DRQGT>. The page header includes the AWS Marketplace logo and navigation links. The main content area features the Symbiotic EDA Suite logo, a description, and a 'Continue to Subscribe' button highlighted with a red rectangle. Below the button is a 'Save to List' button and a pricing box showing a typical total price of \$19.08/hr. The page also includes tabs for Overview, Pricing, Usage, Support, and Reviews. The 'Product Overview' section describes the suite's capabilities and provides a table of specifications. The 'Pricing Information' section includes a tool for estimating costs based on region and fulfillment options.

Symbiotic EDA Suite
By: [Symbiotic GmbH](#) Latest Version: Symbiotic EDA suite 20200324A
Symbiotic EDA Suite - Cloud Edition
Linux/Unix ☆☆☆☆ 0 AWS reviews

Continue to Subscribe
Save to List

Typical Total Price
\$19.08/hr
Total pricing per instance for services hosted on c3.24xlarge in US East (N. Virginia). [View Details](#)

Product Overview
Verify your digital designs with this AMI with pre-installed complete Symbiotic EDA Suite. Formally check safety-, cover- and liveness-properties in your Verilog, SystemVerilog, or VHDL designs. Use the included Verification IP to verify common bus interfaces, and use the formal-enhanced mutation cover tool MCY to formally verify your traditional simulation test-benches.

Version	Symbiotic EDA suite 20200324A
By	Symbiotic GmbH
Categories	Education & Research
Operating System	Linux/Unix, Ubuntu 18.04
Delivery Methods	Amazon Machine Image

Highlights

- Formal Hardware Verification
- Safety-, Cover-, and Liveness-Properties
- Verilog, SystemVerilog, and VHDL Support

Pricing Information
Use this tool to estimate the software and infrastructure costs based on your configuration choices. Your usage and costs might be different from this estimate. They will be reflected on your monthly AWS billing reports.

Estimating your costs
Choose your region and fulfillment option to see the pricing details. Then, modify the estimated price by choosing different instance types.

Region
US East (N. Virginia)

Fulfillment Option

The table shows current software and infrastructure pricing for services hosted in US East

2 Continue to configuration

The screenshot shows the AWS Marketplace page for the Symbiotic EDA Suite. The browser address bar shows the URL: <https://aws.amazon.com/marketplace/server/procurement?productId=bbe0ae63-4bf2-425f-8517-343fba8fdbbe>. The page header includes the AWS Marketplace logo and navigation links. The main content area features the Symbiotic EDA Suite logo and a prominent yellow button labeled "Continue to Configuration" which is highlighted with a red rectangular box. Below this, there is a section titled "Subscribe to this software" with a brief explanation of the subscription process. A "Terms and Conditions" section follows, detailing the Symbiotic GmbH Offer and the user's agreement to the terms. A table provides details about the subscription, including the product name, effective date, expiration date, and an action link to show details.

Product	Effective date	Expiration date	Action
Symbiotic EDA Suite	4/3/2020	N/A	Show Details

3 Choose your region

The screenshot shows the AWS Marketplace configuration page for the Symbiotic EDA Suite. The browser address bar shows the URL: https://aws.amazon.com/marketplace/server/configuration?productid=bbe0ae63-4bf2-425f-8517-343fba8fdbbe&ref=_psb_cfg_continue. The page header includes the AWS Marketplace logo and navigation links. The main content area is titled 'Symbiotic EDA Suite' and features a 'Continue to Launch' button. Below this, there are three tabs: 'Product Detail', 'Subscribe', and 'Configure'. The 'Configure' tab is active, showing a 'Configure this software' section. This section includes a 'Fulfillment Option' dropdown set to '64-bit (x86) Amazon Machine Image (AMI)', a 'Software Version' dropdown set to 'Symbiotic EDA suite 20200324A', and a 'Region' dropdown set to 'US East (N. Virginia)'. The 'Region' dropdown is highlighted with a red box. To the right of the 'Region' dropdown, the 'AMI Id' is displayed as 'ami-072042db8d80552d3'. A 'Pricing information' sidebar on the right provides details on software and infrastructure costs. The footer contains various links for solutions, business applications, data products, and AWS Marketplace resources.

Configure this software

Choose a fulfillment option below to select how you wish to deploy the software, then enter the information required to configure the deployment.

Fulfillment Option

64-bit (x86) Amazon Machine Image (AMI)

Software Version

Symbiotic EDA suite 20200324A

Region

US East (N. Virginia)

AMI Id: ami-072042db8d80552d3

Pricing information

This is an estimate of typical software and infrastructure costs based on your configuration. Your actual charges for each statement period may differ from this estimate.

Software Pricing

Symbiotic EDA Suite
running on
c5.24xlarge
\$15.00/hr

Infrastructure Pricing

EC2: 1 * c5.24xlarge
Monthly Estimate: \$2,938.00/month

Footer Links:

- Solutions: Data & Analytics, DevOps, Internet of Things, Infrastructure Software, Machine Learning, Migration, Security, Financial Services, Public Sector, Healthcare & Life Sciences, Telecommunications
- Business Applications: Blockchain, Collaboration & Productivity, Contact Center, Content Management, CRM, eCommerce, Human Resources, IT Business Management, Project Management, Machine Learning, Human Review Services, ML Solutions, Data Labeling Services, Computer Vision, Natural Language
- Data Products: Financial Services Data, Healthcare & Life Sciences Data, Media & Entertainment Data, Telecommunications Data, Gaming Data, Automotive Data, Manufacturing Data, Resources Data, Retail, Location & Marketing Data, Public Sector Data, IoT, Analytics, Applications
- Sell in AWS Marketplace: Management Portal, Sign up as a Seller, Seller Guide, Partner Application, Partner Success Stories
- About AWS Marketplace: What is AWS Marketplace?, Customer Success Stories, AWS Blog, Press Releases, Events, Help & FAQ, Careers
- Featured Categories: SaaS Subscriptions
- AWS Marketplace is hiring! Amazon Web Services (AWS) is a dynamic, growing business unit within Amazon.com. We are currently hiring Software Development Engineers, Product Managers, Account Managers, Solutions Architects, Support Engineers, System Engineers, Designers and more. Visit our Careers page or our Developer-specific Careers page to learn more.
- Amazon Web Services is an Equal Opportunity Employer.
- An amazon.com company

4 Continue to Launch

The screenshot shows the AWS Marketplace configuration page for the Symbiotic EDA Suite. The page is titled "Configure this software" and includes a "Continue to Launch" button highlighted with a red box. The configuration options are as follows:

Option	Value
Fulfillment Option	64-bit (x86) Amazon Machine Image (AMI)
Software Version	Symbiotic EDA suite 20200324A
Region	EU (Paris)

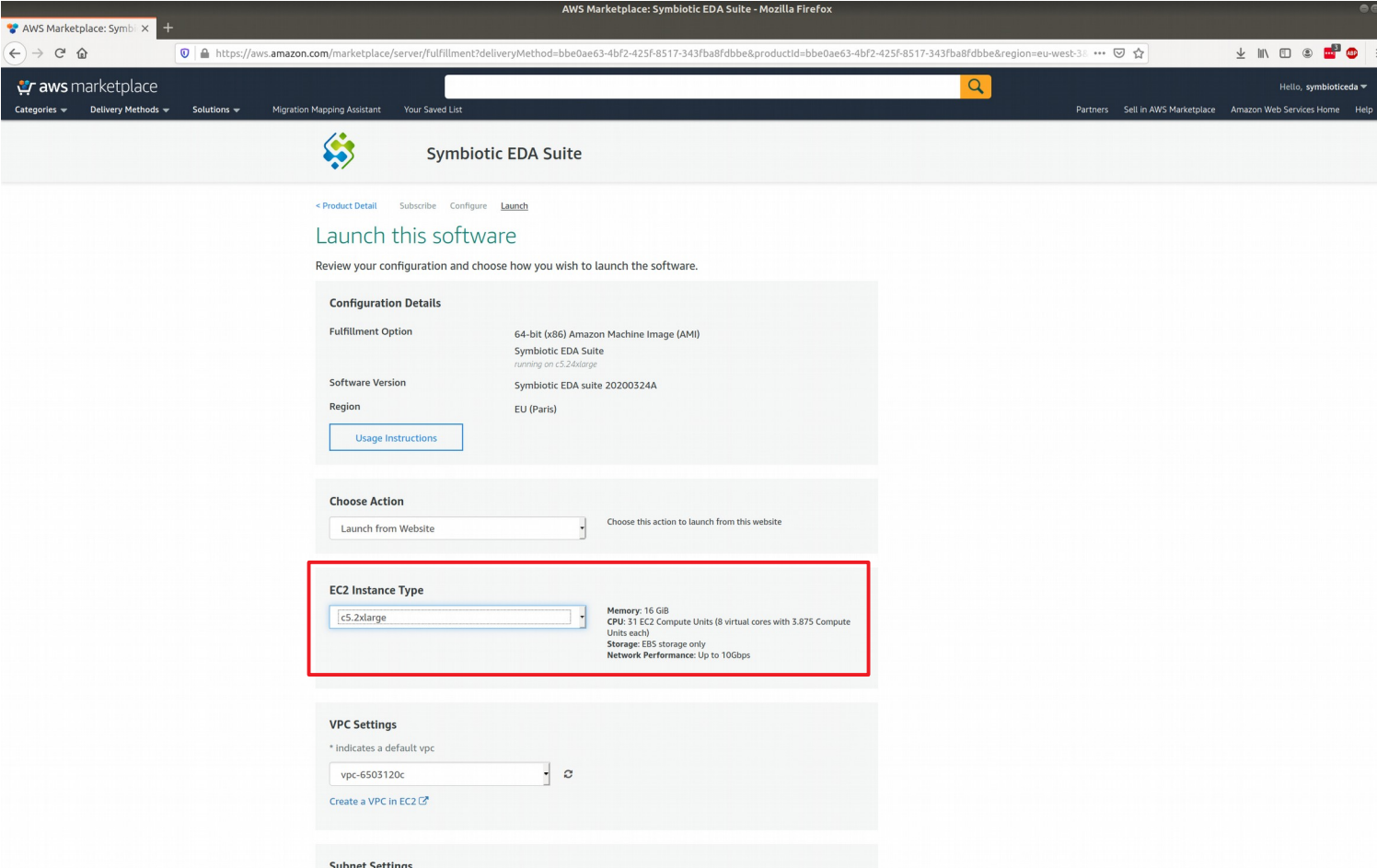
The pricing information is as follows:

Category	Item	Price
Software Pricing	Symbiotic EDA Suite	\$15.00/hr
	running on c5.24xlarge	
Infrastructure Pricing	EC2:	1 * c5.24xlarge
	Monthly Estimate:	\$3,491.00/month

The footer of the page includes links to AWS Marketplace on Twitter, AWS Marketplace Blog, and RSS Feed, as well as a list of solutions and products.

5 Change instance type

Change the EC2 instance type. If you have a new account, you will be limited to the smallest machine: c5.2xlarge.



AWS Marketplace: Symbiotic EDA Suite - Mozilla Firefox

https://aws.amazon.com/marketplace/server/fulfillment?deliveryMethod=bbe0ae63-4bf2-425f-8517-343fba8fdbbe&productId=bbe0ae63-4bf2-425f-8517-343fba8fdbbe®ion=eu-west-3

aws marketplace

Symbiotic EDA Suite

< Product Detail Subscribe Configure **Launch**

Launch this software

Review your configuration and choose how you wish to launch the software.

Configuration Details

Fulfillment Option	64-bit (x86) Amazon Machine Image (AMI) Symbiotic EDA Suite <i>running on c5.2xlarge</i>
Software Version	Symbiotic EDA suite 20200324A
Region	EU (Paris)

[Usage Instructions](#)

Choose Action

Launch from Website Choose this action to launch from this website

EC2 Instance Type

c5.2xlarge

Memory: 16 GiB
CPU: 31 EC2 Compute Units (8 virtual cores with 3.875 Compute Units each)
Storage: EBS storage only
Network Performance: Up to 10Gbps

VPC Settings

* indicates a default vpc

vpc-6503120c

[Create a VPC in EC2](#)

Subnet Settings

6 Choose default security group

Select default as the security group.

The screenshot shows the AWS Marketplace configuration page for the Symbiotic EDA Suite. The page is titled "Symbiotic EDA Suite" and includes a navigation bar with "Categories", "Delivery Methods", "Solutions", "Migration Mapping Assistant", and "Your Saved List". The main content area is divided into four sections: VPC Settings, Subnet Settings, Security Group Settings, and Key Pair Settings. Each section has a dropdown menu for selection and a "Create a ... in EC2" link. The "Security Group Settings" section is highlighted with a red box, showing the "default" security group selected. The "Launch" button is located at the bottom right of the configuration area.

VPC Settings
* indicates a default vpc
vpc-6503120c
[Create a VPC in EC2](#)

Subnet Settings
subnet-28b3e453 (eu-west-3b)
IPv4 CIDR block: 172.31.16.0/20
[Create a subnet in EC2](#)
(Ensure you are in the selected VPC above)

Security Group Settings
A security group acts as a firewall that controls the traffic allowed to reach one or more instances. You can create a new security group based on seller-recommended settings or choose one of your existing groups. [Learn more](#)
default
[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](#)

7 Choose or setup a key pair

If you already have a key pair choose it and skip to page [Launch the new instance](#).

Otherwise click the link. This will open a new tab where you can create a key pair.

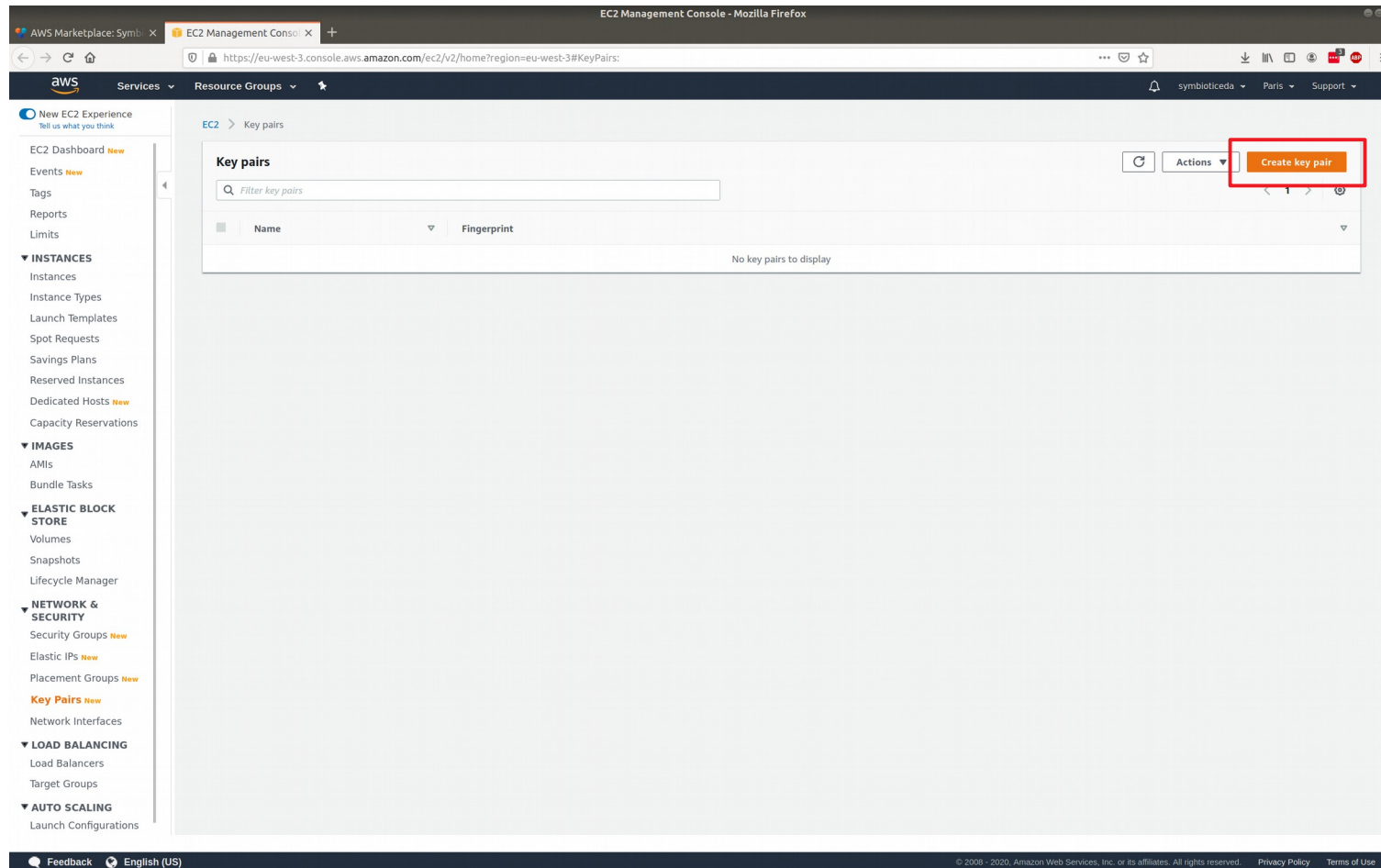
The screenshot shows the AWS Marketplace configuration page for the Symbiotic EDA Suite. The page is titled "Symbiotic EDA Suite" and includes a navigation bar with "Categories", "Delivery Methods", "Solutions", "Migration Mapping Assistant", and "Your Saved List". The main content area is divided into four sections: "VPC Settings", "Subnet Settings", "Security Group Settings", and "Key Pair Settings".

- VPC Settings:** A dropdown menu shows "vpc-6503120c" with a refresh icon. Below it is a link "Create a VPC in EC2".
- Subnet Settings:** A dropdown menu shows "subnet-28b3e453 (eu-west-3b)" with a refresh icon. To the right, it says "IPv4 CIDR block: 172.31.16.0/20". Below it is a link "Create a subnet in EC2" with a note "(Ensure you are in the selected VPC above)".
- Security Group Settings:** A dropdown menu shows "default" with a refresh icon. Below it is a button "Create New Based On Seller Settings".
- Key Pair Settings:** A dropdown menu shows "Select a key pair" with a refresh icon. Below it is a link "Create a key pair in EC2" with a note "(Ensure you are in the region you wish to launch your software)". This link is highlighted with a red box.

At the bottom right of the configuration area is a "Launch" button. The footer includes links to "AWS Marketplace on Twitter", "AWS Marketplace Blog", and "RSS Feed", along with a navigation bar for "Solutions", "Business Applications", "Data Products", "Sell in AWS Marketplace", and "AWS Marketplace is hiring".

8 Create the new key pair

Click the button shown.



9 Name and download the pem key pair

Then click the create button.

The screenshot shows the AWS Management Console interface for creating a key pair. The browser address bar indicates the URL: <https://eu-west-3.console.aws.amazon.com/ec2/v2/home?region=eu-west-3#CreateKeyPair>. The page title is "Create key pair | EC2 Management Console - Mozilla Firefox".

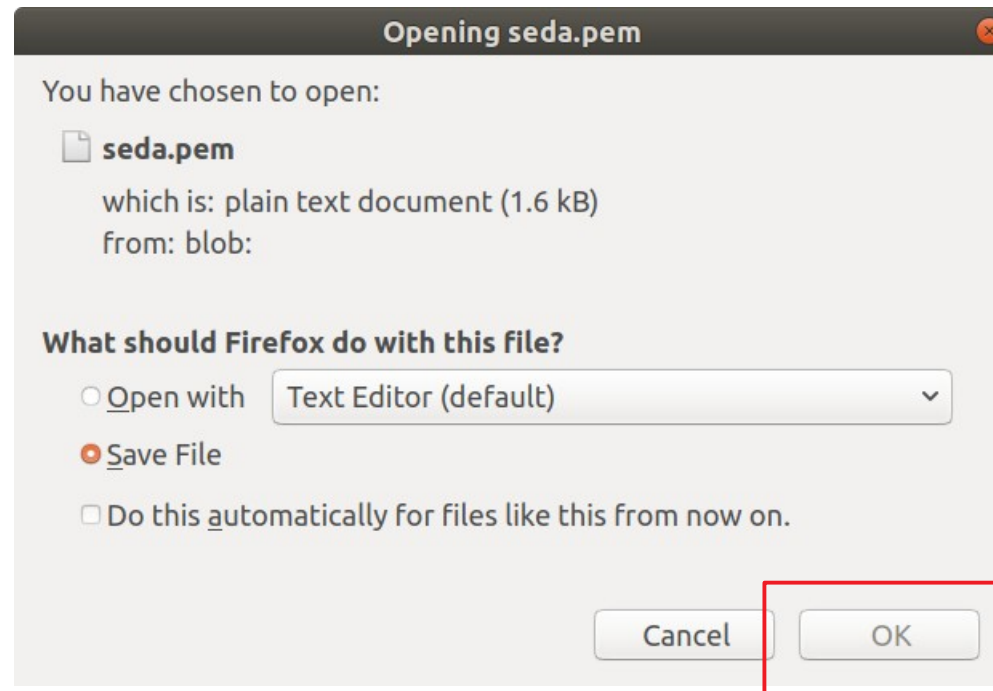
The main content area is titled "Create key pair" and includes a description: "A key pair, consisting of a private key and a public key, is a set of security credentials that you use to prove your identity when connecting to an instance."

The form contains the following fields and options:

- Name:** A text input field containing the value "seda". A red box highlights this field.
- File format:** A section with two radio button options:
 - pem:** Selected option, labeled "For use with OpenSSH". A red box highlights this option.
 - ppk:** Unselected option, labeled "For use with PuTTY".
- Buttons:** At the bottom right, there are two buttons: "Cancel" and "Create key pair". The "Create key pair" button is highlighted with a red box.

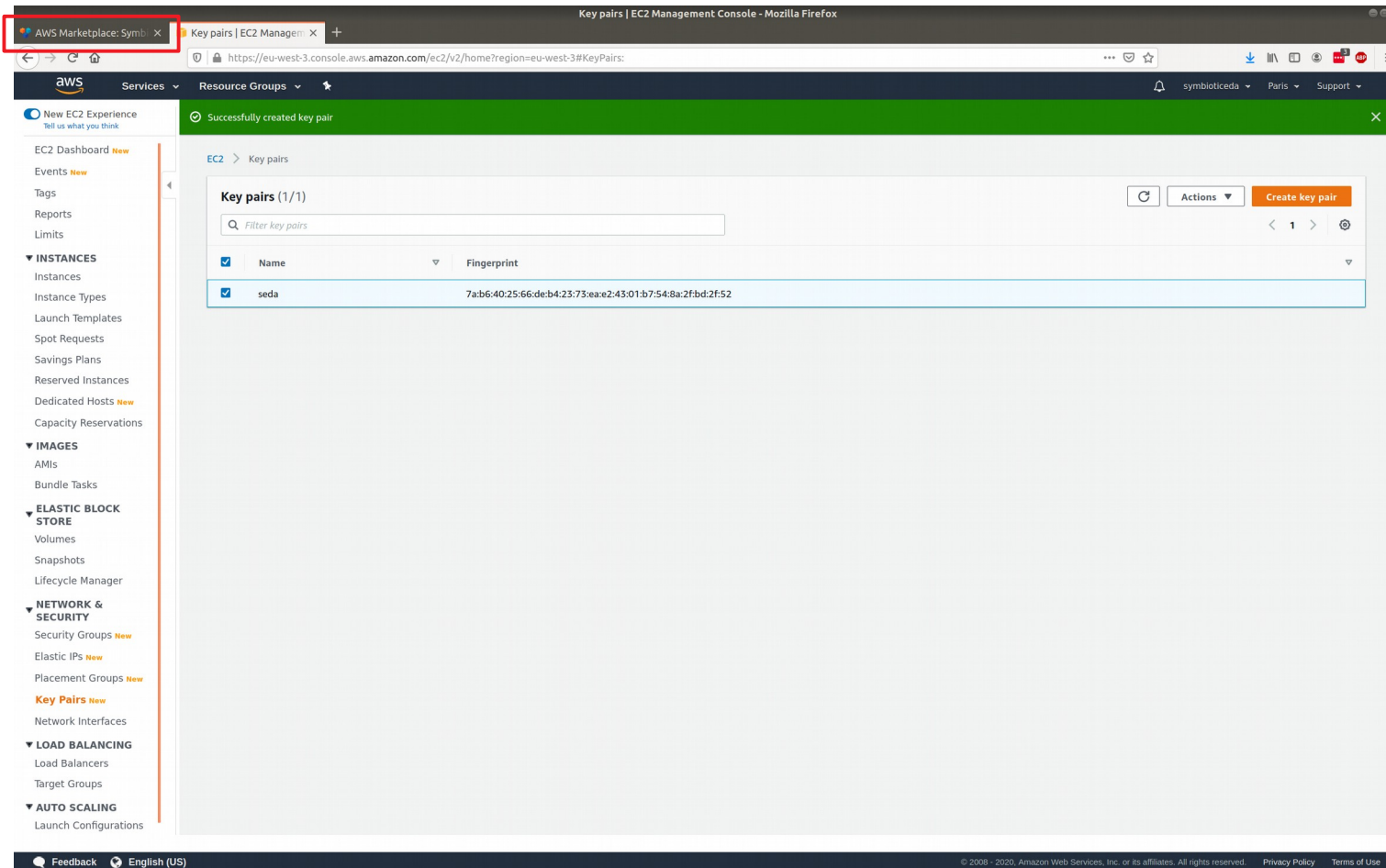
The footer of the page includes a "Feedback" link, "English (US)" language selection, and copyright information: "© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use".

10 Save the key pair



11 Your new keypair will be shown in the list

Click the previous tab to continue configuration.



12 Refresh the key pairs

Click the refresh button to load your new key.

The screenshot shows the AWS Marketplace interface for the Symbiotic EDA Suite. The page is titled "Symbiotic EDA Suite" and includes a navigation bar with "Categories", "Delivery Methods", "Solutions", "Migration Mapping Assistant", and "Your Saved List". The main content area is divided into four sections: "VPC Settings", "Subnet Settings", "Security Group Settings", and "Key Pair Settings". Each section has a dropdown menu and a refresh button (a circular arrow icon). The "Key Pair Settings" section is highlighted with a red box around the refresh button. Below the "Key Pair Settings" section is a "Launch" button. The footer includes links to "AWS Marketplace on Twitter", "AWS Marketplace Blog", and "RSS Feed".

VPC Settings
* indicates a default vpc
vpc-6503120c
[Create a VPC in EC2](#)

Subnet Settings
subnet-28b3e453 (eu-west-3b)
IPv4 CIDR block: 172.31.16.0/20
[Create a subnet in EC2](#)
(Ensure you are in the selected VPC above)

Security Group Settings
A security group acts as a firewall that controls the traffic allowed to reach one or more instances. You can create a new security group based on seller-recommended settings or choose one of your existing groups. [Learn more](#)
default
[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](#)

13 Choose the new key

The screenshot shows the AWS Marketplace interface for the Symbiotic EDA Suite. The page is titled "Symbiotic EDA Suite" and contains several configuration sections:

- VPC Settings:** A dropdown menu shows "vpc-6503120c" as the selected VPC. A link "Create a VPC in EC2" is provided.
- Subnet Settings:** A dropdown menu shows "subnet-28b3e453 (eu-west-3b)" as the selected subnet. The IPv4 CIDR block is "172.31.16.0/20". A link "Create a subnet in EC2" is provided.
- Security Group Settings:** A dropdown menu shows "default" as the selected security group. A link "Create New Based On Seller Settings" is provided.
- Key Pair Settings:** A dropdown menu shows "seda" as the selected key pair. A link "Create a key pair in EC2" is provided.

A red box highlights the "seda" key pair selection in the Key Pair Settings section. At the bottom right of the configuration area, there is a yellow "Launch" button.

14 Launch the new instance

The screenshot shows the AWS Marketplace configuration page for the Symbiotic EDA Suite. The page is titled "Symbiotic EDA Suite" and contains several configuration sections:

- VPC Settings:** A dropdown menu shows "vpc-6503120c" as the selected VPC. Below it is a link "Create a VPC in EC2".
- Subnet Settings:** A dropdown menu shows "subnet-28b3e453 (eu-west-3b)" as the selected subnet. To the right, it displays "IPv4 CIDR block: 172.31.16.0/20". Below it is a link "Create a subnet in EC2" with a note "(Ensure you are in the selected VPC above)".
- Security Group Settings:** A dropdown menu shows "default" as the selected security group. Below it is a link "Create New Based On Seller Settings".
- Key Pair Settings:** A dropdown menu shows "seda" as the selected key pair. Below it is a link "Create a key pair in EC2" with a note "(Ensure you are in the region you wish to launch your software)".

At the bottom right of the configuration area, there is a yellow "Launch" button, which is highlighted with a red rectangular box.

15 Go to the EC2 console

Click the link shown.

The screenshot shows the AWS Marketplace page for the Symbiotic EDA Suite. A green notification box at the top states: "Congratulations! An instance of this software is successfully deployed on EC2!". Below this, it provides the AMI ID: `ami-0e91618ca94733206` and a link to "View Launch Configuration Details". The text continues: "You can view this instance on EC2 Console. You can also view all instances on Your Software. Software and AWS hourly usage fees apply when the instance is running and will appear on your monthly bill." Below the notification, it says: "You can launch this configuration again below or go to the configuration page to start a new one." The "Configuration Details" section lists: Fulfillment Option: 64-bit (x86) Amazon Machine Image (AMI) Symbiotic EDA Suite running on c5.24xlarge; Software Version: Symbiotic EDA suite 20200324A; Region: EU (Paris). There is a "Usage Instructions" button. The "Choose Action" section has a dropdown menu labeled "Select a launch action" and a "Launch" button. The footer contains links to AWS Marketplace on Twitter, AWS Marketplace Blog, and RSS Feed, along with a list of solutions and a "Sell in AWS Marketplace" section.

16 Go to the default security group configuration

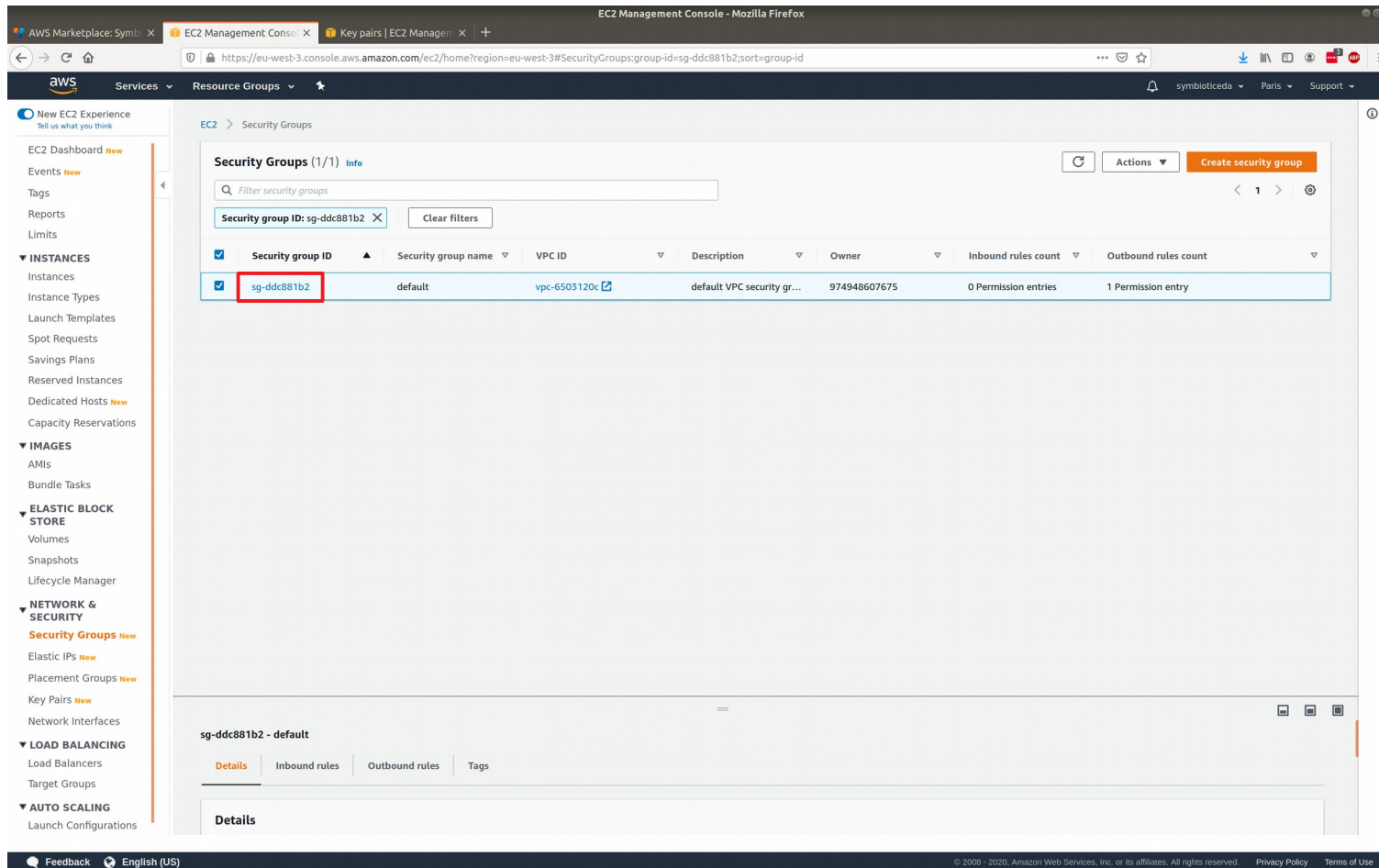
Click the link.

The screenshot displays the AWS Management Console for an EC2 instance. The instance is named 'i-0ce3848783cd552bc' and is in the 'running' state. The 'Security groups' field is highlighted with a red box, showing the default security group 'sg-0a6634bf2-425f-8517-343ba8f8dbbe-ami-0be9c82de4c7e85a.4'. The console also shows the instance's public DNS, IP addresses, and other configuration details.

Description	Status Checks	Monitoring	Tags	Usage Instructions
Instance ID	i-0ce3848783cd552bc			
Instance state	running			
Instance type	c5.2xlarge			
Finding	Opt-in to AWS Compute Optimizer for recommendations. Learn more			
Private DNS	ip-172-31-25-244.eu-west-3.compute.internal			
Private IPs	172.31.25.244			
Secondary private IPs				
VPC ID	vpc-6503120c			
Subnet ID	subnet-28b3e453			
Network interfaces	eth0			
IAM role	-			
Key pair name	seda			
Owner	974948607675			
Launch time	April 28, 2020 at 4:32:05 PM UTC+2 (less than one hour)			
Termination protection	False			
Lifecycle	normal			
Monitoring	basic			
Alarm status	None			
Kernel ID	-			
RAM disk ID	-			
Placement group	-			
Partition number	-			
Virtualization	hvm			
Reservation	r-0365d07012dd1898			
AMI launch index	0			
Tenancy	default			
Public DNS (IPv4)	ec2-52-47-100-148.eu-west-3.compute.amazonaws.com			
IPv4 Public IP	52.47.100.148			
IPv6 IPs	-			
Elastic IPs	-			
Availability zone	eu-west-3b			
Security groups	default. view inbound rules . view outbound rules			
Scheduled events	No scheduled events			
AMI ID	symbiotic-ubuntu1804-x86_64-20200324A-1585772981-bbe0ae63-4bf2-425f-8517-343ba8f8dbbe-ami-0be9c82de4c7e85a.4 (ami-0e91618ca9e47178a)			
Platform details	Linux/UNIX			
Usage operation	RunInstances			
Source/dest. check	True			
T2/T3 Unlimited	-			
EBS-optimized	False			
Root device type	ebs			
Root device	/dev/sda1			
Block devices	/dev/sda1			
Capacity Reservation	-			
Capacity Reservation Settings	Open			
Outpost Arm	-			

17 Choose the default group

Click the link.



The screenshot shows the AWS Management Console for the EC2 instance. The left sidebar contains navigation links for various services. The main content area displays the 'Security Groups' page. A table lists the security groups, with the 'sg-ddc881b2' group highlighted. The table has columns for Security group ID, Security group name, VPC ID, Description, Owner, Inbound rules count, and Outbound rules count. The 'sg-ddc881b2' group is the default group for the VPC 'vpc-6503120c'.

Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules count	Outbound rules count
sg-ddc881b2	default	vpc-6503120c	default VPC security gr...	974948607675	0 Permission entries	1 Permission entry

18 Add a new inbound rule

Click the button to edit inbound rules.

The screenshot shows the AWS Management Console interface for the 'sg-ddc881b2 - default' security group. The left sidebar contains navigation links for various AWS services. The main content area displays the details of the security group, including its name, ID, description, VPC ID, owner, and rule counts. The 'Inbound rules' tab is active, showing a table with no rules found. The 'Edit inbound rules' button is highlighted with a red box.

Details

Security group name default	Security group ID sg-ddc881b2	Description default VPC security group	VPC ID vpc-6503120c
Owner 974948607675	Inbound rules count 0 Permission entries	Outbound rules count 1 Permission entry	

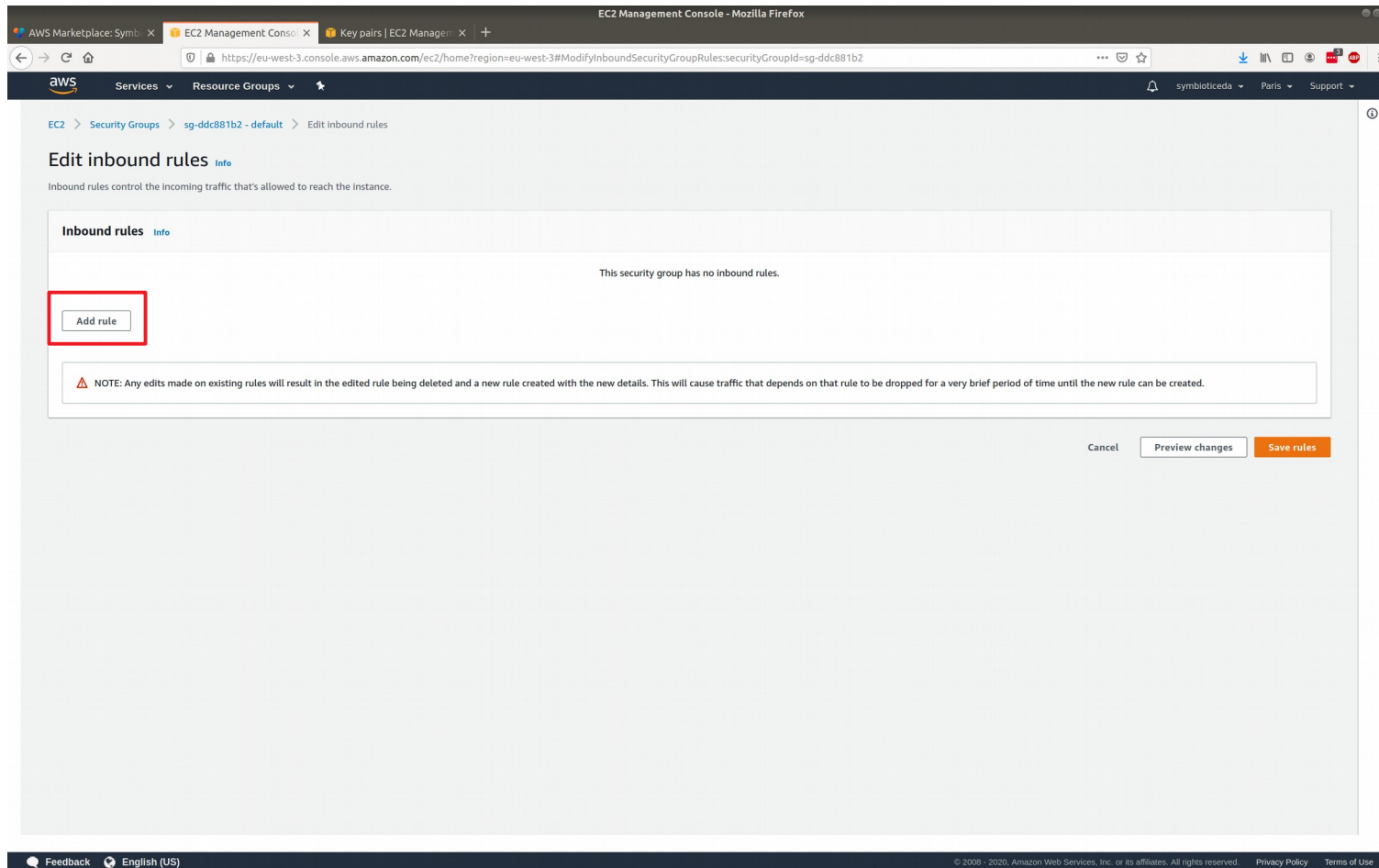
Inbound rules

Type	Protocol	Port range	Source	Description - optional
No rules found This security group has no inbound rules.				

Edit inbound rules

19 Add a new rule

Click the button.



20 Change inbound type to SSH

Click the dropdown and choose SSH.

EC2 Management Console - Mozilla Firefox

https://eu-west-3.console.aws.amazon.com/ec2/home?region=eu-west-3#ModifyInboundSecurityGroupRules:securityGroupId=sg-ddc881b2

EC2 > Security Groups > sg-ddc881b2 - default > Edit inbound rules

Edit inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules [Info](#)

Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info	
Custom TCP	TCP	0	Custom		Delete

[Add rule](#)

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

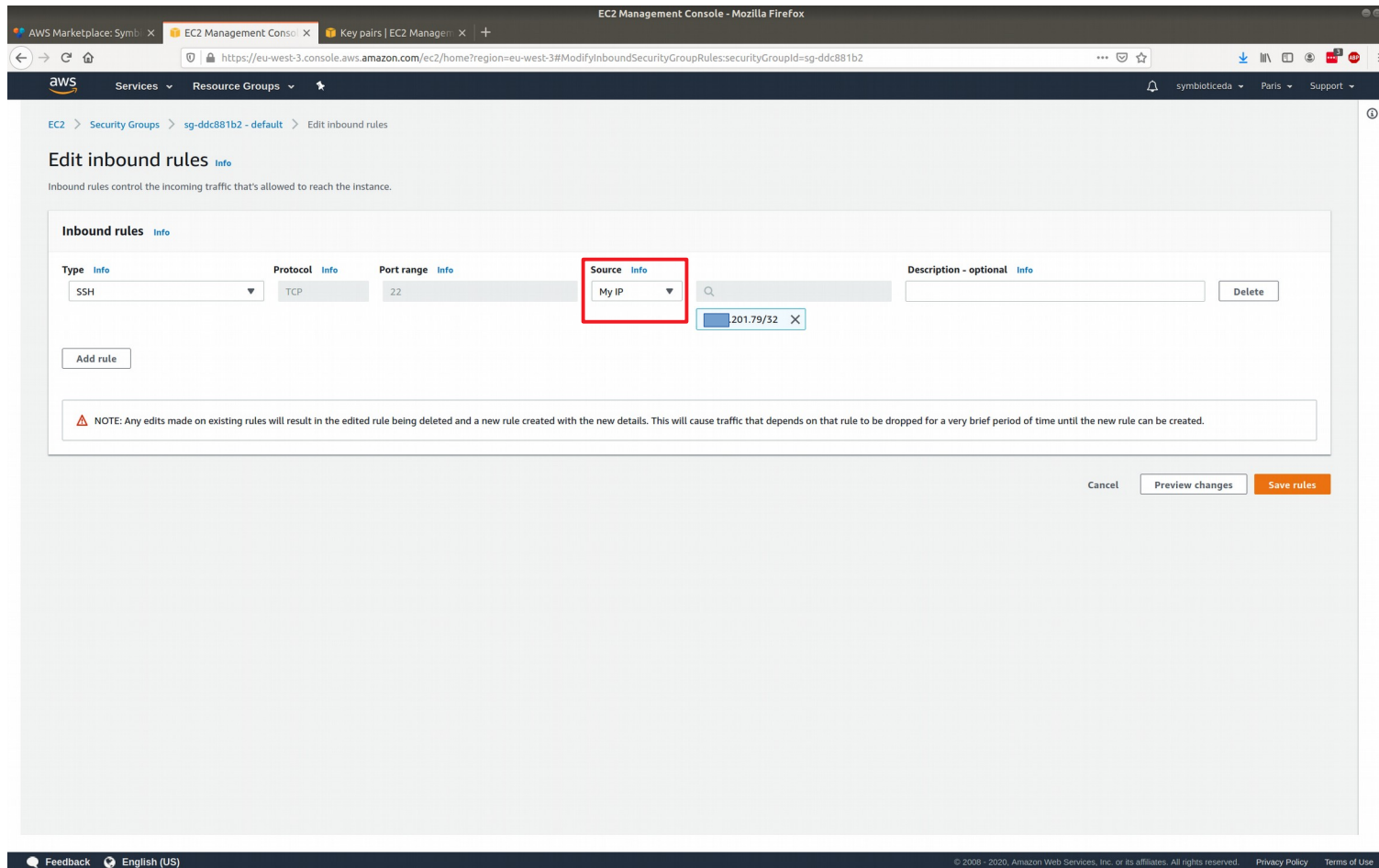
[Cancel](#) [Preview changes](#) [Save rules](#)

[Feedback](#) [English \(US\)](#)

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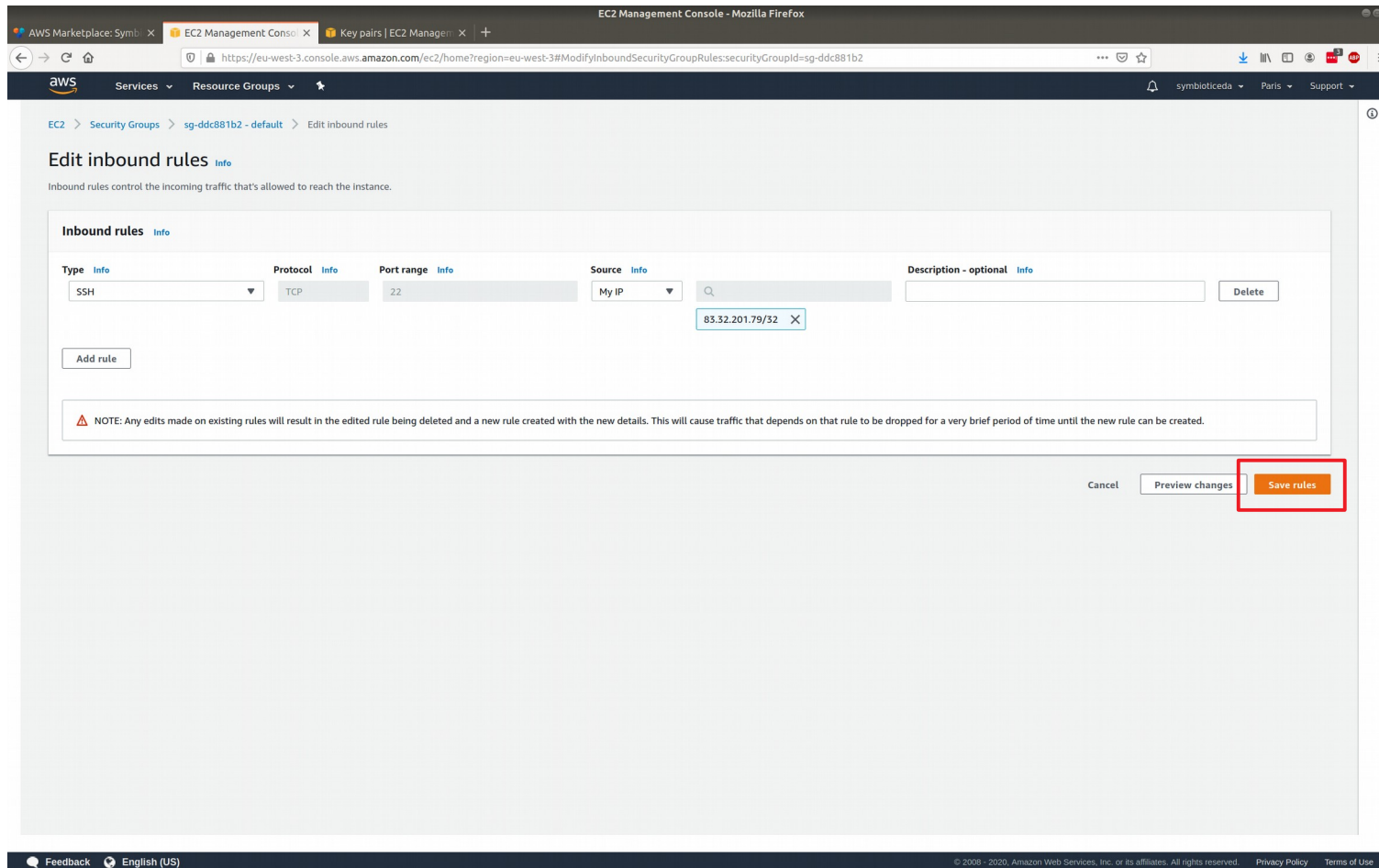
21 Setup source IP

In the source dropdown, choose 'My IP'.



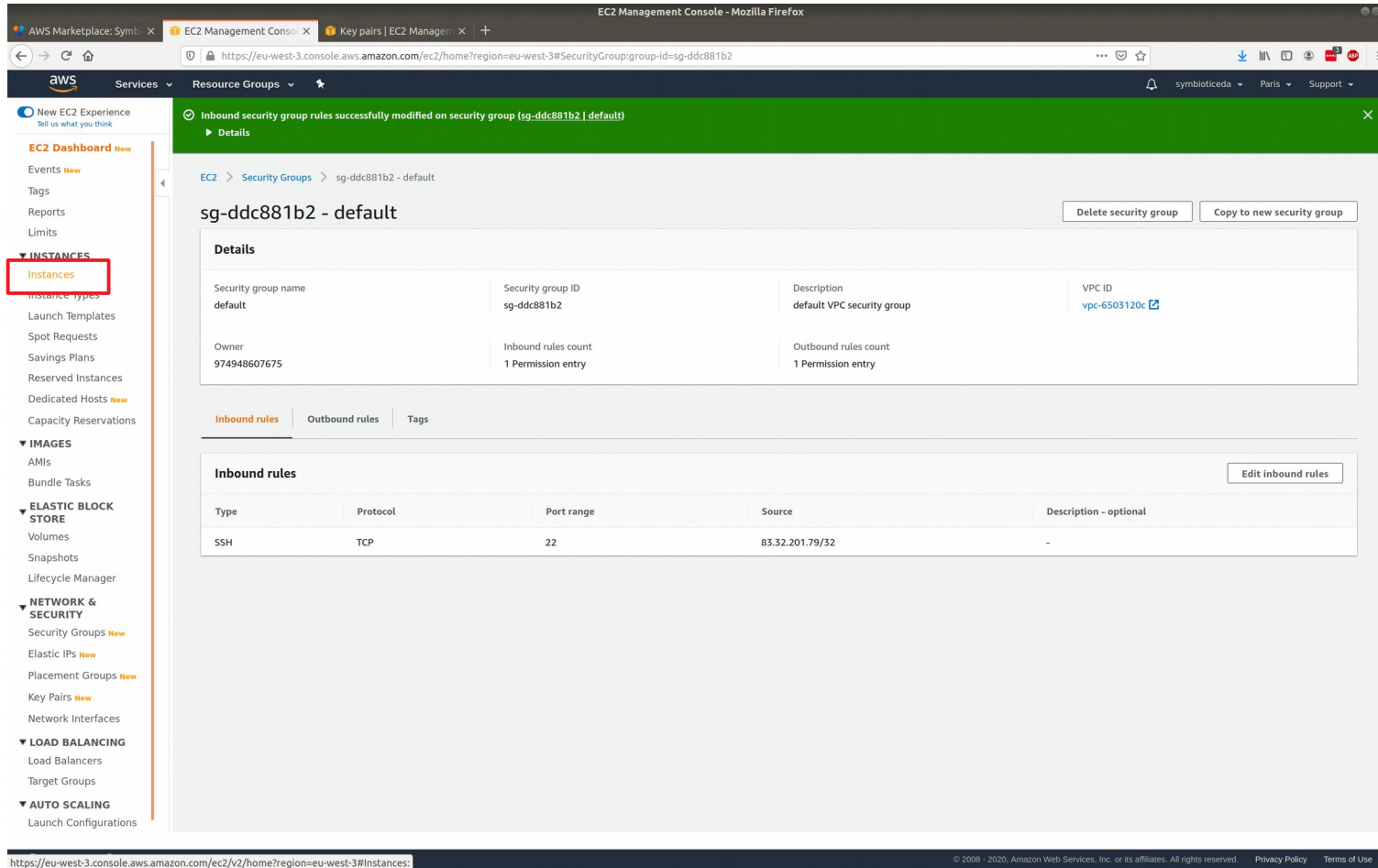
22 Save the new rule

Click the button.



23 View the instances

Click the instances link.



The screenshot displays the AWS Management Console for the EC2 Management Console. The left sidebar contains a navigation menu with categories like EC2 Dashboard, INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, and LOAD BALANCING. The 'INSTANCES' category is expanded, and the 'Instances' link is highlighted with a red box. The main content area shows the details for the 'sg-ddc881b2 - default' security group. A green banner at the top indicates that the inbound security group rules were successfully modified. The details section shows the security group name, ID, description, VPC ID, owner, and inbound rules count. The inbound rules section shows a single rule for SSH access from 83.32.201.79/32.

sg-ddc881b2 - default

Details

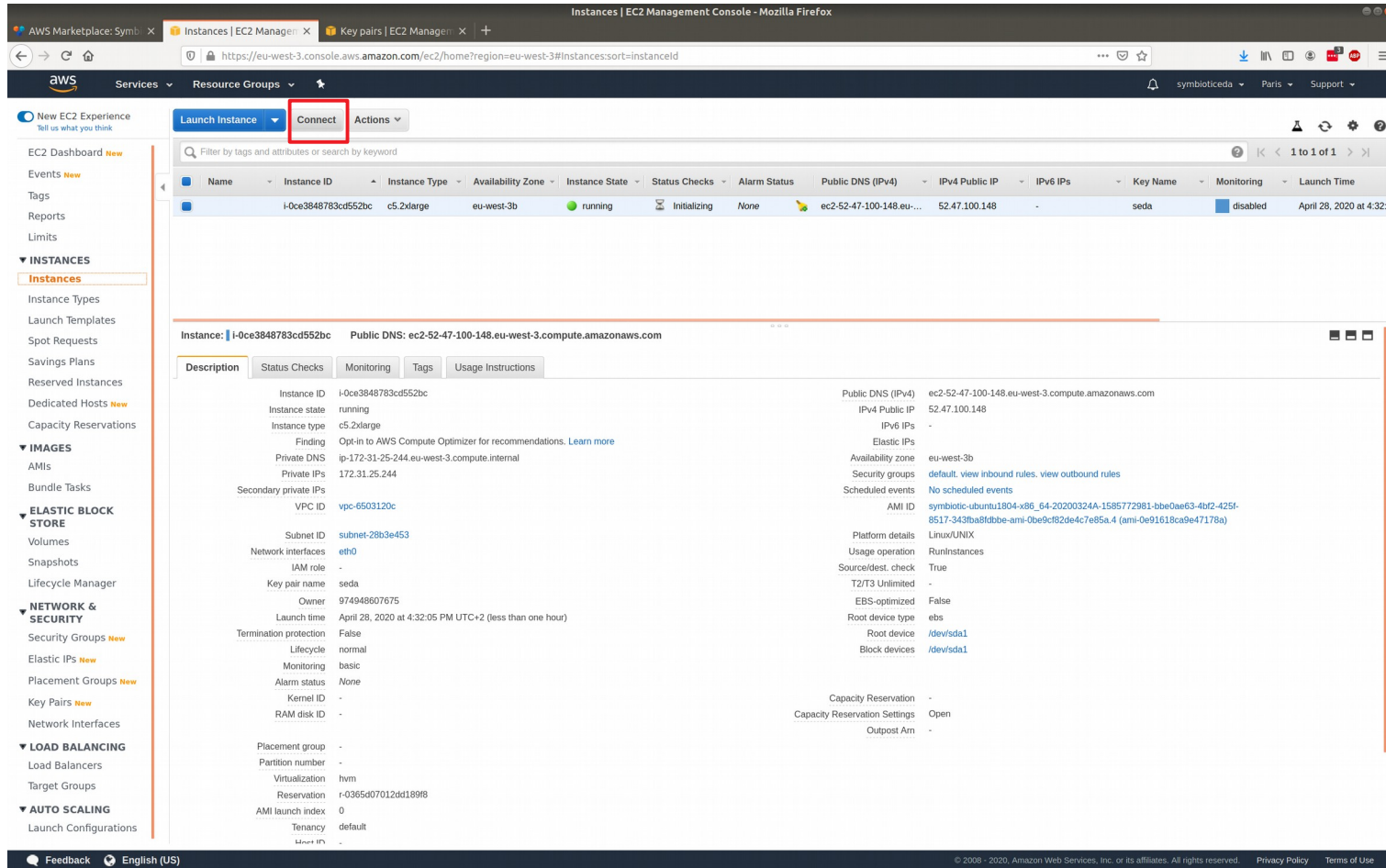
Security group name	Security group ID	Description	VPC ID
default	sg-ddc881b2	default VPC security group	vpc-6503120c
Owner	Inbound rules count	Outbound rules count	
974948607675	1 Permission entry	1 Permission entry	

Inbound rules

Type	Protocol	Port range	Source	Description - optional
SSH	TCP	22	83.32.201.79/32	-

24 Connect to the instances

Click the button.

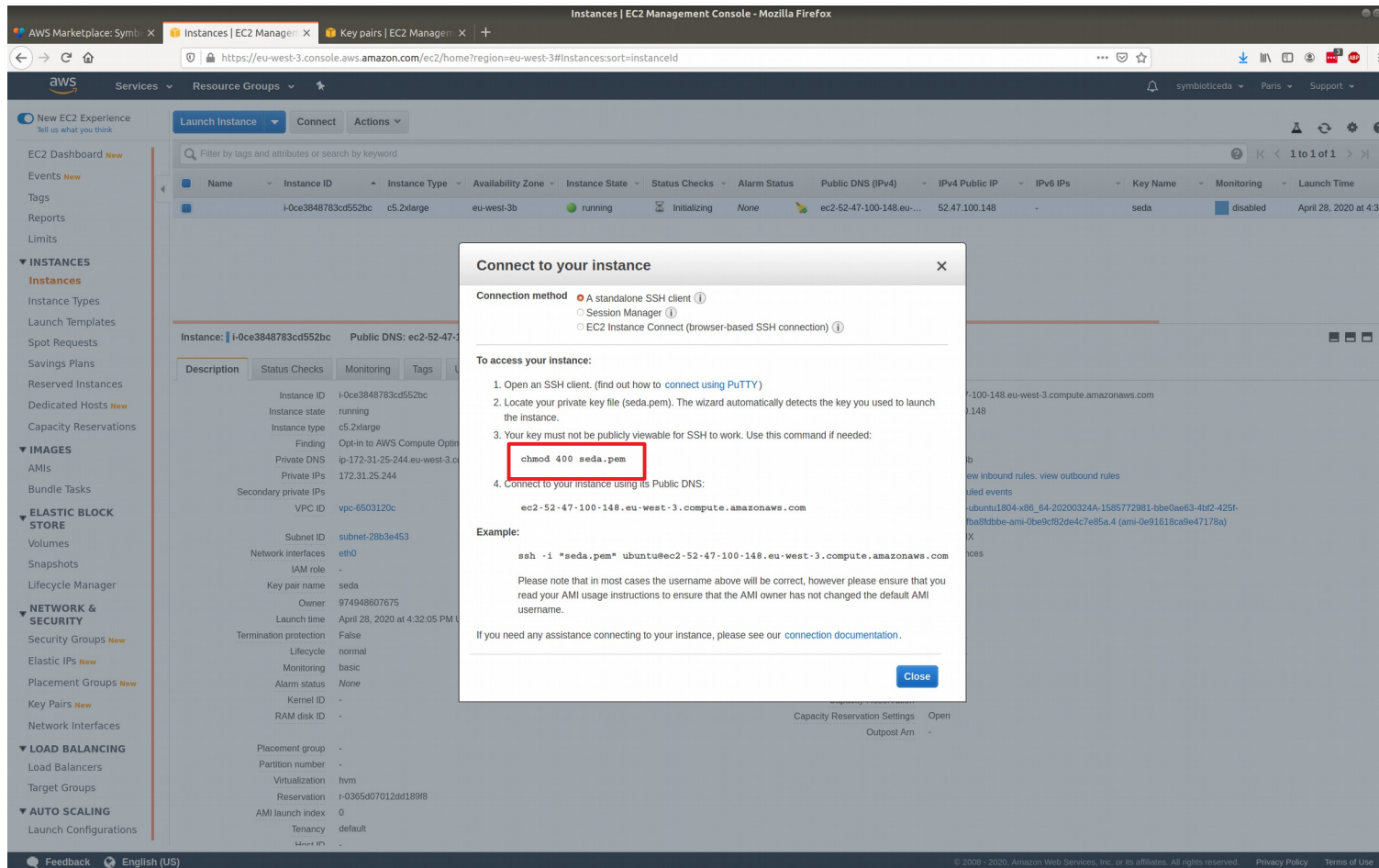


The screenshot shows the AWS Management Console for EC2 Instances. The 'Connect' button is highlighted with a red box. Below the instance list, the details for instance `i-0ce3848783cd552bc` are shown. The instance is in the `running` state, located in `eu-west-3b` Availability Zone. The public DNS is `ec2-52-47-100-148.eu-west-3.compute.amazonaws.com`.

Section	Property	Value
Description	Instance ID	<code>i-0ce3848783cd552bc</code>
	Instance state	<code>running</code>
	Instance type	<code>c5.2xlarge</code>
	Finding	Opt-in to AWS Compute Optimizer for recommendations. Learn more
	Private DNS	<code>ip-172-31-25-244.eu-west-3.compute.internal</code>
	Private IPs	<code>172.31.25.244</code>
	Secondary private IPs	-
	VPC ID	<code>vpc-6503120c</code>
	Subnet ID	<code>subnet-28b3e453</code>
	Network interfaces	<code>eth0</code>
Status Checks	IAM role	-
	Key pair name	<code>seda</code>
	Owner	<code>974948607675</code>
	Launch time	April 28, 2020 at 4:32:05 PM UTC+2 (less than one hour)
	Termination protection	False
	Lifecycle	normal
	Monitoring	basic
	Alarm status	None
	Kernel ID	-
	RAM disk ID	-
Monitoring	Placement group	-
	Partition number	-
	Virtualization	<code>hvm</code>
	Reservation	<code>r-0365d07012dd1898</code>
	AMI launch index	<code>0</code>
	Tenancy	<code>default</code>
	Subnet ID	-
	Public DNS (IPv4)	<code>ec2-52-47-100-148.eu-west-3.compute.amazonaws.com</code>
	IPv4 Public IP	<code>52.47.100.148</code>
	IPv6 IPs	-
Tags	Elastic IPs	-
	Availability zone	<code>eu-west-3b</code>
	Security groups	default , view inbound rules , view outbound rules
	Scheduled events	No scheduled events
	AMI ID	<code>symbolic-ubuntu1804-x86_64-20200324A-1585772981-bbe0ae63-4bf2-425f-8517-343ba8f8dbbe-ami-0be9c8f2de4c7e85a.4 (ami-0e91618ca9e47178a)</code>
	Platform details	Linux/UNIX
	Usage operation	RunInstances
	Source/dest. check	True
	T2/T3 Unlimited	-
	EBS-optimized	False
Usage Instructions	Root device type	<code>ebs</code>
	Root device	<code>/dev/sda1</code>
	Block devices	<code>/dev/sda1</code>
	Capacity Reservation	-
	Capacity Reservation Settings	Open
	Outpost Arm	-
	Capacity Reservation	-
	Capacity Reservation Settings	Open
	Outpost Arm	-
	Capacity Reservation	-

25 Copy the chmod text

Select and copy the text shown.



The screenshot shows the AWS Management Console interface. A modal dialog titled "Connect to your instance" is open. It provides instructions for connecting to an EC2 instance. The "Connection method" section shows "A standalone SSH client" selected. The "To access your instance:" section lists four steps, with the third step highlighting the command `chmod 400 seda.pem` in a red box. The "Example:" section shows the command `ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com`. The background shows the EC2 instance details for instance `i-0ce3848783cd552bc`.

Connect to your instance

Connection method ☒ A standalone SSH client ⓘ
☐ Session Manager ⓘ
☐ EC2 Instance Connect (browser-based SSH connection) ⓘ

To access your instance:

1. Open an SSH client. (find out how to [connect using PuTTY](#))
2. Locate your private key file (`seda.pem`). The wizard automatically detects the key you used to launch the instance.
3. Your key must not be publicly viewable for SSH to work. Use this command if needed:
`chmod 400 seda.pem`
4. Connect to your instance using its Public DNS:
`ec2-52-47-100-148.eu-west-3.compute.amazonaws.com`

Example:

```
ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com
```

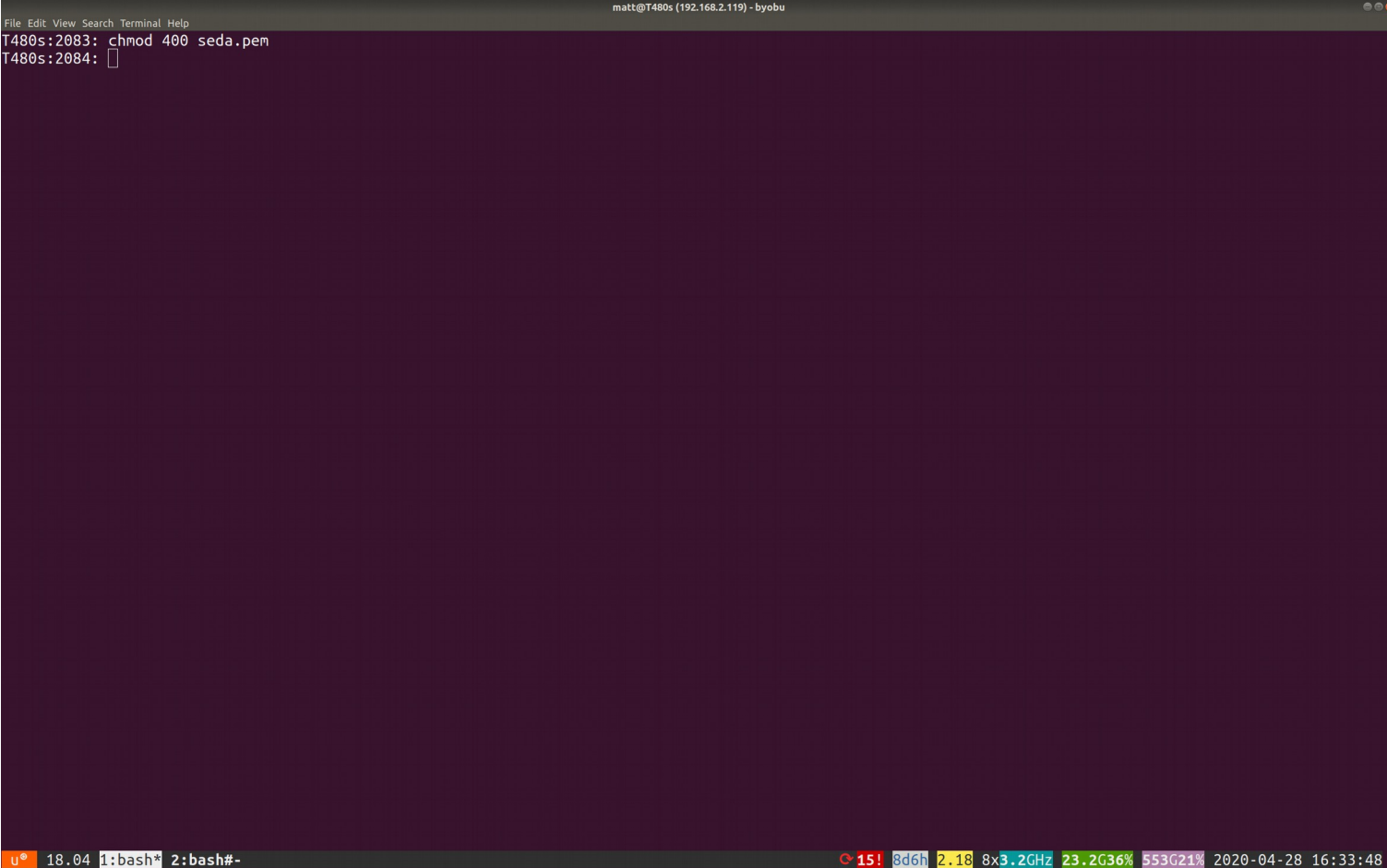
Please note that in most cases the username above will be correct, however please ensure that you read your AMI usage instructions to ensure that the AMI owner has not changed the default AMI username.

If you need any assistance connecting to your instance, please see our [connection documentation](#).

Close

26 Run the command on your downloaded key

In a terminal, go to where you downloaded the key from step [Save the key pair](#). Then paste in the copied text from step [Copy the chmod text](#).



A terminal window titled "matt@T480s (192.168.2.119) - byobu" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command `chmod 400 seda.pem` being executed. The prompt changes from `T480s:2083:` to `T480s:2084:` after the command. The terminal has a dark purple background. At the bottom, a status bar shows system information: `u* 18.04 1: bash* 2: bash#` on the left, and `15! 8d6h 2.18 8x3.2GHz 23.2G36% 553G21% 2020-04-28 16:33:48` on the right.

```
matt@T480s (192.168.2.119) - byobu
T480s:2083: chmod 400 seda.pem
T480s:2084: 
```

27 Copy the ssh text

Select and copy the text shown.

The screenshot shows the AWS Management Console interface. A modal dialog titled "Connect to your instance" is open, providing instructions for connecting to an EC2 instance. The dialog lists three connection methods: "A standalone SSH client" (selected), "Session Manager", and "EC2 Instance Connect (browser-based SSH connection)". It includes a list of steps to access the instance, such as opening an SSH client, locating the private key file, and connecting to the instance using its Public DNS. An example command is provided and highlighted with a red box: `ssh -i "/code>

Example:

```
ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com
```

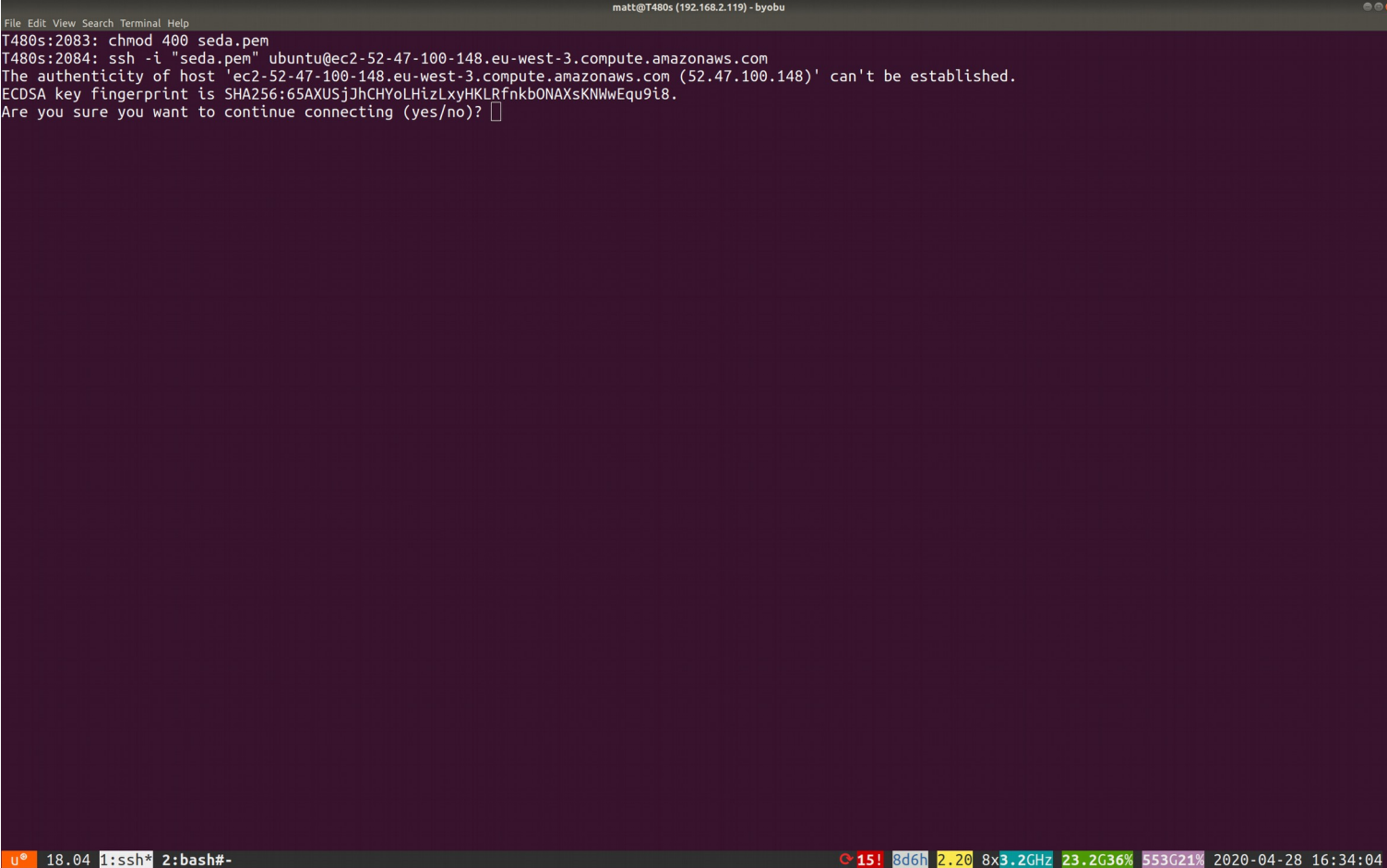
Please note that in most cases the username above will be correct, however please ensure that you read your AMI usage instructions to ensure that the AMI owner has not changed the default AMI username.

If you need any assistance connecting to your instance, please see our connection documentation.

Close`

28 Run the ssh command

Paste the command copied from step [Copy the ssh text](#).



```
matt@T480s (192.168.2.119) - byobu
File Edit View Search Terminal Help
T480s:2083: chmod 400 seda.pem
T480s:2084: ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com
The authenticity of host 'ec2-52-47-100-148.eu-west-3.compute.amazonaws.com (52.47.100.148)' can't be established.
ECDSA key fingerprint is SHA256:65AXUSjJhCHYoLHizLxyHKLRfnkb0NAXsKNWwEqu9i8.
Are you sure you want to continue connecting (yes/no)?
```

The terminal window shows a user named 'matt' on a machine 'T480s' with IP '192.168.2.119' running a terminal session. The user has set permissions on 'seda.pem' and then attempts to run 'ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com'. The terminal displays a warning about the host's authenticity and asks for confirmation to continue. The bottom status bar shows system metrics like CPU usage (15%), memory (8d6h), and network activity, along with the date and time (2020-04-28 16:34:04).

29 Confirm connection

Type yes and then enter to connect.

```
matt@T480s (192.168.2.119) - byobu
T480s:2083: chmod 400 seda.pem
T480s:2084: ssh -i "seda.pem" ubuntu@ec2-52-47-100-148.eu-west-3.compute.amazonaws.com
The authenticity of host 'ec2-52-47-100-148.eu-west-3.compute.amazonaws.com (52.47.100.148)' can't be established.
ECDSA key fingerprint is SHA256:65AXUSjJhCHYoLHizLxyHKLRfnkbONAXsKNWwEqu9i8.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'ec2-52-47-100-148.eu-west-3.compute.amazonaws.com,52.47.100.148' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-1057-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Tue Apr 28 14:34:09 UTC 2020

System load:  1.49           Processes:           195
Usage of /:   35.1% of 7.69GB Users logged in:          0
Memory usage: 3%           IP address for ens5: 172.31.25.244
Swap usage:   0%

 * Ubuntu 20.04 LTS is out, raising the bar on performance, security,
   and optimisation for Intel, AMD, Nvidia, ARM64 and Z15 as well as
   AWS, Azure and Google Cloud.

   https://ubuntu.com/blog/ubuntu-20-04-lts-arrives

7 packages can be updated.
0 updates are security updates.

*** System restart required ***
Welcome to the SymbioticEDA AMI Image!
Tools are available in /opt/symbiotic/bin, and are also present in the system PATH.

To get started, run:
  yosys --help

For support, please contact support@symbioticeda.com and cite the AMI ID of your image.
ubuntu@ip-172-31-25-244:~$
```

30 Start yosys to test the tools

Type yosys and press enter. You will see the license verified. Type exit to quit.

```
File Edit View Search Terminal Help
matt@T480s (192.168.2.119) - byobu
System information as of Tue Apr 28 14:34:09 UTC 2020

System load:  1.49      Processes:    195
Usage of /:   35.1% of 7.69GB  Users logged in:  0
Memory usage: 3%        IP address for ens5: 172.31.25.244
Swap usage:   0%

* Ubuntu 20.04 LTS is out, raising the bar on performance, security,
  and optimisation for Intel, AMD, Nvidia, ARM64 and Z15 as well as
  AWS, Azure and Google Cloud.

  https://ubuntu.com/blog/ubuntu-20-04-lts-arrives

7 packages can be updated.
0 updates are security updates.

*** System restart required ***
Welcome to the SymbioticEDA AMI Image!
Tools are available in /opt/symbiotic/bin, and are also present in the system PATH.

To get started, run:
  yosys --help

For support, please contact support@symbioticeda.com and cite the AMI ID of your image.
ubuntu@ip-172-31-25-244:~$ yosys

/-----\
| yosys -- Yosys Open SYnthesis Suite -- Symbiotic EDA Edition [20200324A] |
| Copyright (C) 2012 - 2020 Symbiotic GmbH                               |
| Licensed to: SymbioticEDA                                              |
| Licensee contact: SymbioticEDA                                         |
|-----|

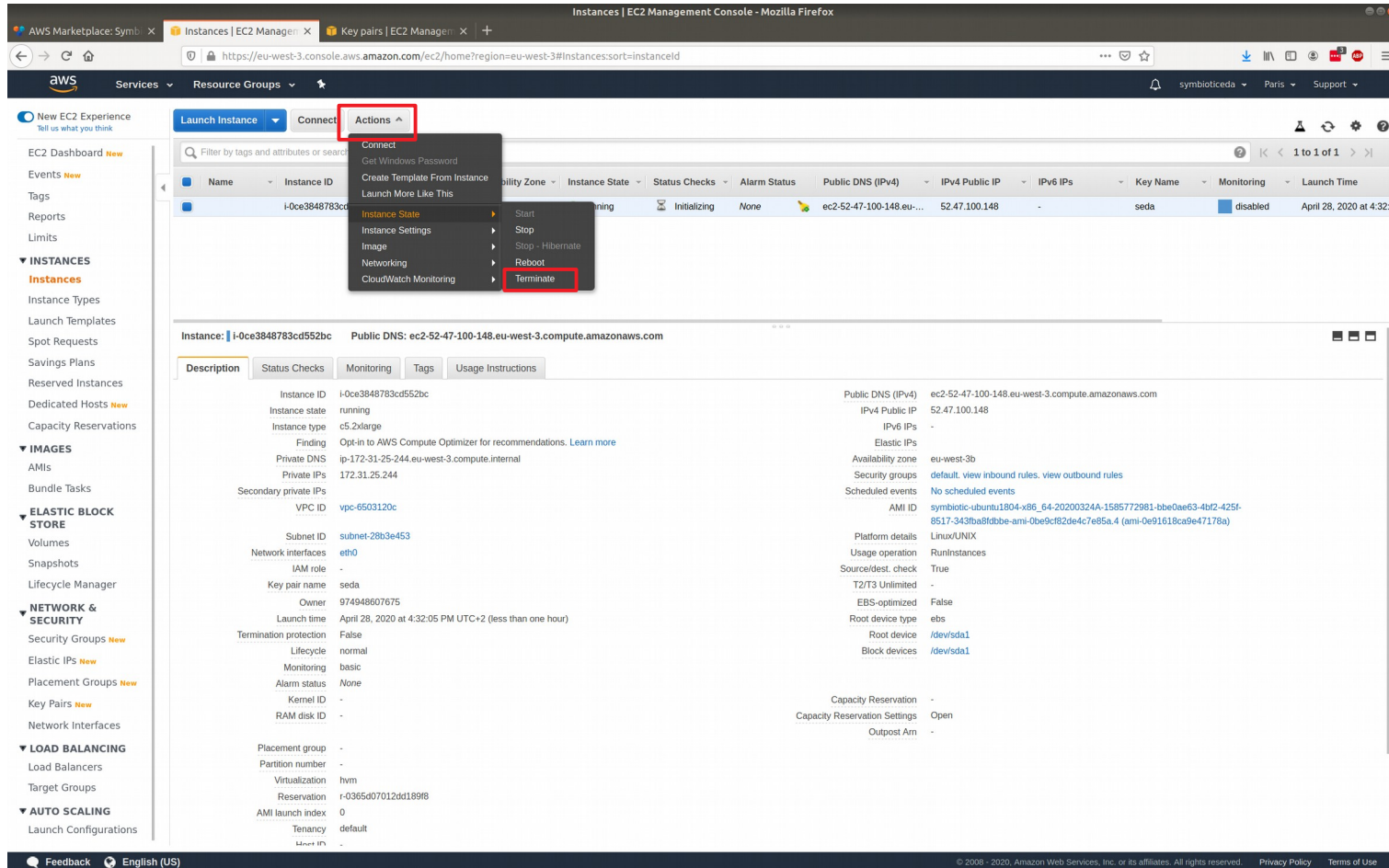
Yosys 0.9+1706 (git sha1 d46259b, clang 3.8.0-2ubuntu4 -fPIC -Os)

[license] Signature verified.
[license] License is valid for AWS product code b4f5xe67pib7ty3orsmpi4f5q.

yosys> 
```


31 Terminate instance when finished

Click the actions button, then choose instance state and terminate.



The screenshot shows the AWS Management Console for the EC2 service. The 'Actions' menu is open, and the 'Instance State' sub-menu is selected, with 'Terminate' highlighted. The instance details for 'i-0ce3848783cd552bc' are visible below the menu.

Description	Status Checks	Monitoring	Tags	Usage Instructions
Instance ID	i-0ce3848783cd552bc			Public DNS (IPv4)
Instance state	running			ec2-52-47-100-148.eu-west-3.compute.amazonaws.com
Instance type	c5.2xlarge			IPv4 Public IP
Finding	Opt-in to AWS Compute Optimizer for recommendations. Learn more			52.47.100.148
Private DNS	ip-172-31-25-244.eu-west-3.compute.internal			IPv6 IPs
Private IPs	172.31.25.244			-
Secondary private IPs				Elastic IPs
VPC ID	vpc-6503120c			-
Subnet ID	subnet-28b3e453			Availability zone
Network interfaces	eth0			eu-west-3b
IAM role	-			Security groups
Key pair name	seda			default, view inbound rules, view outbound rules
Owner	974948607675			Scheduled events
Launch time	April 28, 2020 at 4:32:05 PM UTC+2 (less than one hour)			No scheduled events
Termination protection	False			AMI ID
Lifecycle	normal			sybionic-ubuntu1804-x86_64-20200324A-1585772981-bbe0ae63-4bf2-425f-8517-343ba8f8dbbe-ami-0be9c8f2de4c7e85a.4 (ami-0e91618ca9e47178a)
Monitoring	basic			Platform details
Alarm status	None			Linux/UNIX
Kernel ID	-			Usage operation
RAM disk ID	-			RunInstances
Placement group	-			Source/dest, check
Partition number	-			True
Virtualization	hvm			T2/T3 Unlimited
Reservation	r-0365d07012dd1898			-
AMI launch index	0			EBS-optimized
Tenancy	default			False
Network ID	-			Root device type
				ebs
				Root device
				/dev/sda1
				Block devices
				/dev/sda1
				Capacity Reservation
				-
				Capacity Reservation Settings
				Open
				Outpost Arm
				-

32 Confirm termination

Click the button to confirm termination of the instance.

