```
         Account     Usage | Account Limit Available (hours)
---------------- ---------- + ------------- ----------
MRC-BSU-SL2-CPU 45,827,935 |    45,827,732          -203
MRC-BSU-SL2-GPU     63,487 |        76,610     13,123
MRC-BSU-SL3-CPU 1,107,330 |     1,307,330    200,000
MRC-BSU-SL3-GPU      2,232 |         5,232      3,000
MRC-BSU2-SL2-CPU         0 |     2,000,000 2,000,000
```


aws

Get started with Amazon EC2 with AWS Free Tier →

Amazon EC2

Secure and resizable compute capacity for virtually any workload

Get started with Amazon EC2 | Connect with an Amazon EC2 specialist

Why Amazon EC2?

Amazon Elastic Compute Cloud (Amazon EC2) offers the broadest and deepest compute platform, with over 1000 instances and choice of the latest processor, storage, networking, operating system, and purchase model to help you best match the needs of your workload. We are the first major cloud provider that supports Intel, AMD, and Arm processors, the only cloud with on-demand EC2 Mac instances, and the only cloud with 400 Gbps Ethernet networking. We offer the best price performance for machine learning training, as well as the lowest cost per inference instances in the cloud. More SAP, high performance computing (HPC), ML, and Windows workloads run on AWS than any other cloud.

Select a location type and region

Location Type: AWS Region

Region: Europe (London)

Select an operating system, instance type, and vCPU to view rates

Operating system: Linux

Instance type: All

vCPU: 64

Viewing 73 available instances

1 2 3 4

Instance name	On-Demand hourly rate	vCPU	Memory	Storage	Network performance
c6g.metal	$2.5856	64	128 GiB	EBS Only	25 Gigabit
c6g.16xlarge	$2.5856	64	128 GiB	EBS Only	25 Gigabit
c7g.16xlarge	$2.7475	64	128 GiB	EBS Only	30 Gigabit
c7g.metal	$2.7475	64	128 GiB	EBS Only	30 Gigabit
m6g.metal	$2.8416	64	256 GiB	EBS Only	25 Gigabit
m6g.16xlarge	$2.8416	64	256 GiB	EBS Only	25 Gigabit

Get advice on instance type selection

EC2 instance type finder recommends instance families: C8g, C8gn, C7gd

View recommended instance family details

Additional information

1. The recommended instances are suitable for Scientific Simulations/Numerical Computing workloads with a focus on price-performance optimization.
2. C7gd, C8g, and C8gn are compute-optimized instances powered by AWS Graviton processors, ideal for compute-intensive workloads like scientific simulations.
3. Hpc7g instances are specifically designed for high-performance computing (HPC) workloads, making them highly suitable for scientific simulations and numerical computing tasks.
4. X8g instances, powered by AWS Graviton4 processors, offer the lowest cost per GiB of memory among Graviton4-based EC2 instances, which can be beneficial for memory-intensive scientific computations.
5. G5g instances, featuring NVIDIA T4G Tensor Core GPUs, can provide acceleration for certain types of scientific simulations that can leverage GPU computing.
6. C8g and C8gn instances, powered by the latest AWS Graviton4 processors, offer up to 30% better performance compared to their Graviton3-based predecessors, providing excellent price-performance for compute-intensive workloads.
7. C7gd instances include local NVMe-based SSDs, offering up to 45% better real-time NVMe storage performance than comparable Graviton2-based instances, which can be advantageous for I/O-intensive scientific simulations.
8. C8gn instances feature up to 600 Gbps network bandwidth, the highest among network-optimized EC2 instances, which can be beneficial for distributed scientific computing tasks.
9. For users requiring high network bandwidth, C7gn and C8gn instances are available, offering up to 200 Gbps and 600 Gbps of network bandwidth respectively.
10. C7gd instances are available for users needing additional local storage, providing fast, low-latency access to data for I/O-intensive scientific workloads.

EC2 instance type finder recommends instance families: C8gn, C7gd

View recommended instance family details

Additional information

1. The recommended instances (C7gd, C8gn, G5g, and Hpc7g) are suitable for Data Science & Analytics use cases, specifically for Scientific Simulations/Numerical Computing workloads, with a focus on price-performance.
2. C7gd instances are compute-optimized, powered by AWS Graviton3 processors, and include local NVMe-based SSDs. They offer up to 45% better real-time NVMe storage performance compared to Graviton2-based instances, which can be beneficial for data-intensive scientific simulations.
3. C8gn instances, powered by AWS Graviton4 processors, provide the highest network bandwidth (up to 600 Gbps) among the recommended instances. They offer up to 30% higher compute performance compared to Graviton3-based instances, making them suitable for network-intensive simulations and computations.
4. G5g instances, powered by AWS Graviton2 processors and NVIDIA T4G Tensor Core GPUs, offer the best price-performance for graphics workloads. While primarily designed for graphics applications, they can also be used for cost-effective machine learning inference in data science workflows.
5. Hpc7g instances are specifically designed for compute-intensive high-performance computing (HPC) workloads, making them ideal for complex scientific simulations and numerical computing tasks.
6. The C7gd instances provide local storage options, which can be advantageous for workloads requiring fast, low-latency access to temporary data during computations.
7. C7gn and C8gn instances offer high network bandwidth (up to 200 Gbps and 600 Gbps, respectively), which can be crucial for distributed computing or large-scale data processing in scientific simulations.
8. All recommended instances are based on ARM architecture (AWS Graviton processors), which can offer a good balance of performance and cost-efficiency for many scientific computing workloads.
9. The variety of instance types allows for flexibility in choosing the most appropriate resources based on the specific requirements of different scientific simulations or numerical computing tasks within the Data Science & Analytics domain.

Instance types (9)

Instance type finder

Find instance type by attribute

C7gd | Clear filters

Instance type	Free ...	vCPUs	Architecture	Memory (GiB)	Storage (GB)	Storage type	Network performance	On-Demand Windo...	On-Demand Linux pricing
c7gd.16xlarge	false	64	arm64	128	3800	ssd	30 Gigabit	-	3.145 USD per Hour
c7gd.metal	false	64	arm64	128	3800	ssd	30 Gigabit	-	3.145 USD per Hour
c7gd.12xlarge	false	48	arm64	96	2850	ssd	22.5 Gigabit	-	2.3587 USD per Hour
c7gd.8xlarge	false	32	arm64	64	1900	ssd	15 Gigabit	-	1.5725 USD per Hour
c7gd.4xlarge	false	16	arm64	32	950	ssd	Up to 15 Gigabit	-	0.7862 USD per Hour
c7gd.2xlarge	false	8	arm64	16	474	ssd	Up to 15 Gigabit	-	0.3931 USD per Hour
c7gd.xlarge	false	4	arm64	8	237	ssd	Up to 12.5 Gigabit	-	0.1966 USD per Hour
c7gd.large	false	2	arm64	4	118	ssd	Up to 12.5 Gigabit	-	0.0983 USD per Hour
c7gd.medium	false	1	arm64	2	59	ssd	Up to 12.5 Gigabit	-	0.0491 USD per Hour

Instance types (10)

Instance type finder

Find instance type by attribute

C8gn | Clear filters

Instance type	Free ...	vCPUs	Architecture	Memory (GiB)	Storage (GB)	Storage type	Network performance	On-Demand Windo...	On-Demand Linux pricing
c8gn.48xlarge	false	192	arm64	384	-	-	600 Gigabit	-	12.2189 USD per Hour
c8gn.24xlarge	false	96	arm64	192	-	-	300 Gigabit	-	6.1094 USD per Hour
c8gn.16xlarge	false	64	arm64	128	-	-	200 Gigabit	-	4.073 USD per Hour
c8gn.12xlarge	false	48	arm64	96	-	-	150 Gigabit	-	3.0547 USD per Hour
c8gn.8xlarge	false	32	arm64	64	-	-	100 Gigabit	-	2.0365 USD per Hour
c8gn.4xlarge	false	16	arm64	32	-	-	50 Gigabit	-	1.0182 USD per Hour
c8gn.2xlarge	false	8	arm64	16	-	-	Up to 50 Gigabit	-	0.5091 USD per Hour
c8gn.xlarge	false	4	arm64	8	-	-	Up to 40 Gigabit	-	0.2546 USD per Hour
c8gn.large	false	2	arm64	4	-	-	Up to 30 Gigabit	-	0.1273 USD per Hour
c8gn.medium	false	1	arm64	2	-	-	Up to 25 Gigabit	-	0.0636 USD per Hour

New customers get up to $200 in credits

New AWS customers can get started at no cost with the AWS Free Tier. Gain $100 USD credits at sign-up and up to $100 USD more to earn as you explore key AWS services. Test drive AWS services with the Free Plan for up to 6 months. You won't be charged unless you choose the Paid Plan, which allows you to scale your operations and gain access to over 150 AWS services.

Free Plan

Experience AWS for up to 6 months without cost or commitment

- ✓ Receive up to $200 USD in credits
- ✓ Includes free usage of select services
- ✓ No charges incurred unless you switch to the Paid Plan
- ✗ Workloads scale beyond credit thresholds
- ✗ Access to all AWS services and features

Paid Plan

Develop production-ready workloads with access to over 150 AWS services

- ✓ Receive up to $200 USD in credits
- ✓ Includes free usage of select services
- ✓ Pay beyond credit thresholds
- ✓ Workloads scale beyond credit thresholds
- ✓ Access to all AWS services and features

Launch instance from template

Launching from a template allows you to launch from an instance configuration that you would have saved in the past. These saved configurations can be reused and shared with other users to standardize launches across an organisation.

Choose a launch template

Source template

baseR-template
ID: lt-0d00cb2812f281f32

1 (Default)
A basic R 4.2.2

Instance details

Your instance details are listed below. Any fields that are not specified as part of the configuration below will use the template or default values for those fields. Ensure that you have permissions to override these parameters or your instance launch will fail.

Application and OS Images (Amazon Machine Image) Info

An AMI contains the operating system, application server, and applications for your instance. If you don't see a suitable AMI below, use the search field or choose **Browse more AMIs**.

Search our full catalog including 1000s of application and OS images

AMI from catalog | Recents | My AMIs | Quick Start

Name
debian-12-amd64-20250316-2053

Verified provider

Description
Debian 12 (20250316-2053)

Browse more AMIs
Including AMIs from AWS, Marketplace and

Instance type Info | Get advice

Instance type

t3.micro — Free tier eligible
Family: t3 2 vCPU 1 GiB Memory Current generation: true On-Demand Ubuntu Pro base pricing: 0.0143 USD per Hour
On-Demand RHEL base pricing: 0.0396 USD per Hour On-Demand SUSE base pricing: 0.0108 USD per Hour
On-Demand Linux base pricing: 0.0108 USD per Hour On-Demand Windows base pricing: 0.02 USD per Hour

All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

Summary

Number of instances Info

1

Software Image (AMI)
Debian 12 (20250316-2053)
ami-0548d28d4f7ec72c5

Virtual server type (instance type)
t3.micro

Firewall (security group)
launch-wizard-1

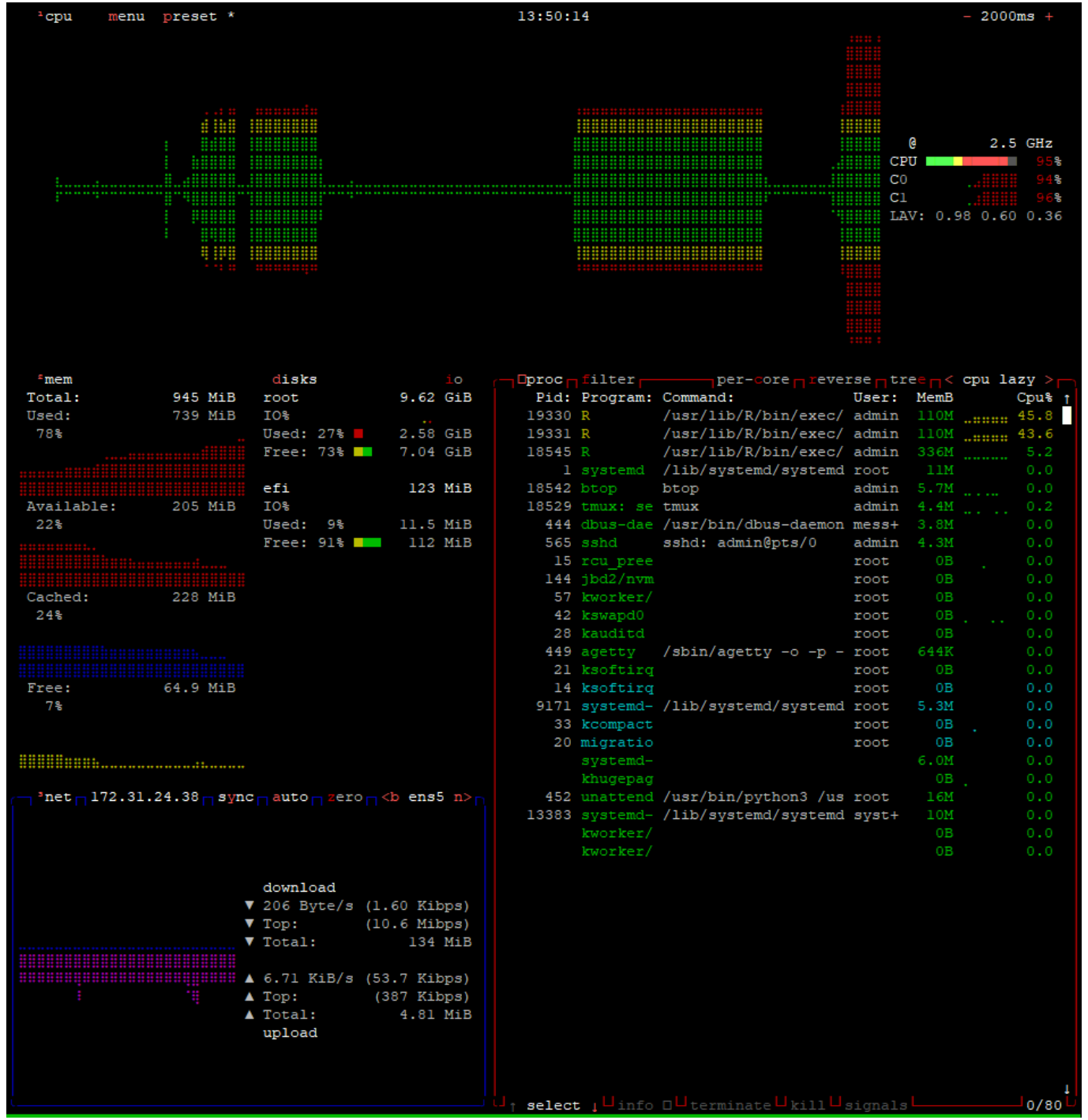
Storage (volumes)
1 volume(s) - 10 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet. Data transfer charges are not included as part of the free tier allowance.

Cancel

Launch instance

Preview code


¹cpu menu preset * 13:50:14 - 2000ms +
@ 2.5 GHz
CPU 95%
C0 94%
C1 96%
LAV: 0.98 0.60 0.36
²mem
Total: 945 MiB
Used: 739 MiB
78%
Available: 205 MiB
22%
Cached: 228 MiB
24%
Free: 64.9 MiB
7%
disks io
root 9.62 GiB
IO%
Used: 27% 2.58 GiB
Free: 73% 7.04 GiB
efi 123 MiB
IO%
Used: 9% 11.5 MiB
Free: 91% 112 MiB
³net 172.31.24.38 sync auto zero <b ens5 n>
download
▼ 206 Byte/s (1.60 Kibps)
▼ Top: (10.6 Mibps)
▼ Total: 134 MiB
▲ 6.71 KiB/s (53.7 Kibps)
▲ Top: (387 Kibps)
▲ Total: 4.81 MiB
upload
⁴proc filter per-core reverse tree < cpu lazy >
Pid: Program: Command: User: MemB Cpu%
19330 R /usr/lib/R/bin/exec/ admin 110M 45.8
19331 R /usr/lib/R/bin/exec/ admin 110M 43.6
18545 R /usr/lib/R/bin/exec/ admin 336M 5.2
1 systemd /lib/systemd/systemd root 11M 0.0
18542 btop btop admin 5.7M 0.0
18529 tmux: se tmux admin 4.4M 0.2
444 dbus-dae /usr/bin/dbus-daemon mess+ 3.8M 0.0
565 sshd sshd: admin@pts/0 admin 4.3M 0.0
15 rcu_pree root 0B 0.0
144 jbd2/nvm root 0B 0.0
57 kworker/ root 0B 0.0
42 kswapd0 root 0B 0.0
28 kauditd root 0B 0.0
449 agetty /sbin/agetty -o -p - root 644K 0.0
21 ksoftirq root 0B 0.0
14 ksoftirq root 0B 0.0
9171 systemd- /lib/systemd/systemd root 5.3M 0.0
33 kcompact root 0B 0.0
20 migratio root 0B 0.0
systemd- 6.0M 0.0
khugepag 0B 0.0
452 unattend /usr/bin/python3 /us root 16M 0.0
13383 systemd- /lib/systemd/systemd syst+ 10M 0.0
kworker/ 0B 0.0
kworker/ 0B 0.0
↑ select ↓ info terminate kill signals 0/80

Instances (1/2) Info

Connect | Instance state | Actions | Launch instances

Find Instance by attribute or tag (case-sensitive) | All states | 1

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP	IPv6 IPs	Mo
SimpleServer	i-0849cccdce64f3ceb	Running	t3.micro	Initializing	View alarms +	eu-north-1b	ec2-13-61-100-175.eu-...	13.61.100.175	–	–	disa
My base server	i-096bfa23fd1a95d2e	Terminated	t3.micro	–	View alarms +	eu-north-1b	–	–	–	–	disa

i-0849cccdce64f3ceb (SimpleServer)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

Instance summary Info

Instance ID
i-0849cccdce64f3ceb

IPv6 address
–

Public IPv4 address
13.61.100.175 | open address

Instance state
Running

Private IPv4 addresses
172.31.45.178

Public DNS
ec2-13-61-100-175.eu-north-1.compute.amazonaws.com | open address

```
admin@ip-172-31-45-178: ~
login as: admin
Authenticating with public key "test2.tmicro"
Linux ip-172-31-45-178 6.1.0-37-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.14
0-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu May 29 10:43:12 2025 from 131.111.5.201
admin@ip-172-31-45-178:~$ R

R version 4.2.2 Patched (2022-11-10 r83330) -- "Innocent and Trusting"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

se> sessionInfo()
R version 4.2.2 Patched (2022-11-10 r83330)
Platform: x86_64-pc-linux-gnu (64-bit)
Running under: Debian GNU/Linux 12 (bookworm)

Matrix products: default
BLAS:   /usr/lib/x86_64-linux-gnu/blas/libblas.so.3.11.0
LAPACK: /usr/lib/x86_64-linux-gnu/lapack/liblapack.so.3.11.0

locale:
 [1] LC_CTYPE=C.UTF-8       LC_NUMERIC=C           LC_TIME=C.UTF-8
 [4] LC_COLLATE=C.UTF-8     LC_MONETARY=C.UTF-8    LC_MESSAGES=C.UTF-8
 [7] LC_PAPER=C.UTF-8       LC_NAME=C              LC_ADDRESS=C
[10] LC_TELEPHONE=C         LC_MEASUREMENT=C.UTF-8 LC_IDENTIFICATION=C

attached base packages:
[1] stats     graphics  grDevices utils     datasets  methods   base

loaded via a namespace (and not attached):
[1] compiler_4.2.2
>
```

Create image Info

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

Image details

Instance ID

i-0849cccdce64f3ceb (SimpleServer)

Image name

Enter image name

Maximum 127 characters. Can't be modified after creation.

Image description - *optional*

Image description

Maximum 255 characters

Reboot instance

When selected, Amazon EC2 reboots the instance so that data is at rest when snapshots of the attached volumes are taken. This ensures data consistency.

Instance volumes

Storage type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination	Encrypted
EBS	/dev/xv...	Create new snapshot from v...	10	Magnetic - standard	2000		Enable	Enable

Amazon Machine Images (AMIs) (1/2) Info

Recycle Bin | EC2 Image Builder | Actions | Launch instance from AMI

Owned by me | Find AMI by attribute or tag

1

Name	AMI name	AMI ID	Source	Owner	Visibility	Status	Creation date	Platform
	BaseR_4.5.2	ami-058cdc4d36693109d	280434961641/BaseR_4.5.2	280434961641	Private	Available	2025/11/26 21:28 GMT+0	Linux/UNIX
	BaseR	ami-0b22876f45004bfbc	280434961641/BaseR	280434961641	Private	Available	2025/05/29 11:57 GMT+1	Linux/UNIX

AMI ID: ami-058cdc4d36693109d

Details | Permissions | Storage | My AMI usage | AMI ancestry - *new* | Tags

AMI ID
ami-058cdc4d36693109d

AMI name
BaseR_4.5.2

Root device name
/dev/xvda

Boot mode
–

Description
R 4.5.2. installed

Image type
machine

Owner account ID
280434961641

Status
Available

State reason
–

Product codes
–

Platform details
Linux/UNIX

Architecture
x86_64

Source
280434961641/BaseR_4.5.2

Creation date
2025-11-26T21:28:12.000Z

RAM disk ID
–

Root device type
EBS

Usage operation
RunInstances

Virtualization type
hvm

Kernel ID
–

Deprecation time
–

```
admin@ip-172-31-45-178: ~
login as: admin
Authenticating with public key "test2.tmicro"
Linux ip-172-31-45-178 6.1.0-37-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.14
0-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Nov 26 21:14:16 2025 from 86.166.173.196
admin@ip-172-31-45-178:~$ R

R version 4.5.2 (2025-10-31) -- "[Not] Part in a Rumble"
Copyright (C) 2025 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> sessionInfo()
R version 4.5.2 (2025-10-31)
Platform: x86_64-pc-linux-gnu
Running under: Debian GNU/Linux 12 (bookworm)

Matrix products: default
BLAS:   /usr/lib/x86_64-linux-gnu/blas/libblas.so.3.11.0
LAPACK: /usr/lib/x86_64-linux-gnu/lapack/liblapack.so.3.11.0  LAPACK version 3.11.0

locale:
 [1] LC_CTYPE=C.UTF-8       LC_NUMERIC=C           LC_TIME=C.UTF-8
 [4] LC_COLLATE=C.UTF-8     LC_MONETARY=C.UTF-8    LC_MESSAGES=C.UTF-8
 [7] LC_PAPER=C.UTF-8       LC_NAME=C              LC_ADDRESS=C
[10] LC_TELEPHONE=C         LC_MEASUREMENT=C.UTF-8 LC_IDENTIFICATION=C

time zone: Etc/UTC
tzcode source: system (glibc)

attached base packages:
[1] stats     graphics  grDevices utils     datasets  methods   base

loaded via a namespace (and not attached):
[1] compiler_4.5.2
```