

3. Deploy Application On Cloud

Output:

The screenshot displays the AWS Management Console for the 'us-east-1' region. The 'Instances' page shows a list of three EC2 instances: 'firstec2', 'awsdeploy', and 'springboot AWS'. The 'springboot AWS' instance is selected, and its details are shown in the right-hand pane. The instance is in a 'Running' state, using the 't2.micro' instance type. The public IPv4 address is 107.21.69.163, and the public IPv4 DNS is ec2-107-21-69-163.compute-1.amazonaws.com. The instance summary shows the instance ID as i-0a57066384647dce5, the instance type as t2.micro, and the instance state as Running. The instance is located in the us-east-1b availability zone. The instance is associated with the springboot AWS security group and the default VPC. The instance is associated with the default IAM role for EC2 instances.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
firstec2	i-0958d9ed6a5149f00	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	ec2-3-89-121-16
awsdeploy	i-0168dad201bf94d5	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	ec2-3-80-53-208
springboot AWS	i-0a57066384647dce5	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	ec2-107-21-69-1

Instance: i-0a57066384647dce5 (springboot AWS)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary | Info

Instance ID: i-0a57066384647dce5 (springboot AWS)

Public IPv4 address: 107.21.69.163 | [open address](#)

Private IPv4 addresses: 172.31.30.210

IPv6 address: -

Instance state: **Running**

Public IPv4 DNS: ec2-107-21-69-163.compute-1.amazonaws.com | [open address](#)

Hostname type: IP name: ip-172-31-30-210.ec2.internal

Private IP DNS name (IPv4 only): ip-172-31-30-210.ec2.internal

Answer private resource DNS name: IPv4 (A)

The screenshot displays the AWS Management Console for the 'us-east-1' region, showing the 'awsspringbootdeploy' S3 bucket. The bucket is publicly accessible. The 'Objects' tab is selected, showing a list of objects. There is one object named 'SpringBoot-AWS-exe.jar' with a size of 16.3 MB, last modified on March 9, 2022, at 23:11:18 (UTC+05:30). The object is stored in the Standard storage class.

Amazon S3 > awsspringbootdeploy

awsspringbootdeploy | info

Publicly accessible

Objects | Properties | Permissions | Metrics | Management | Access Points

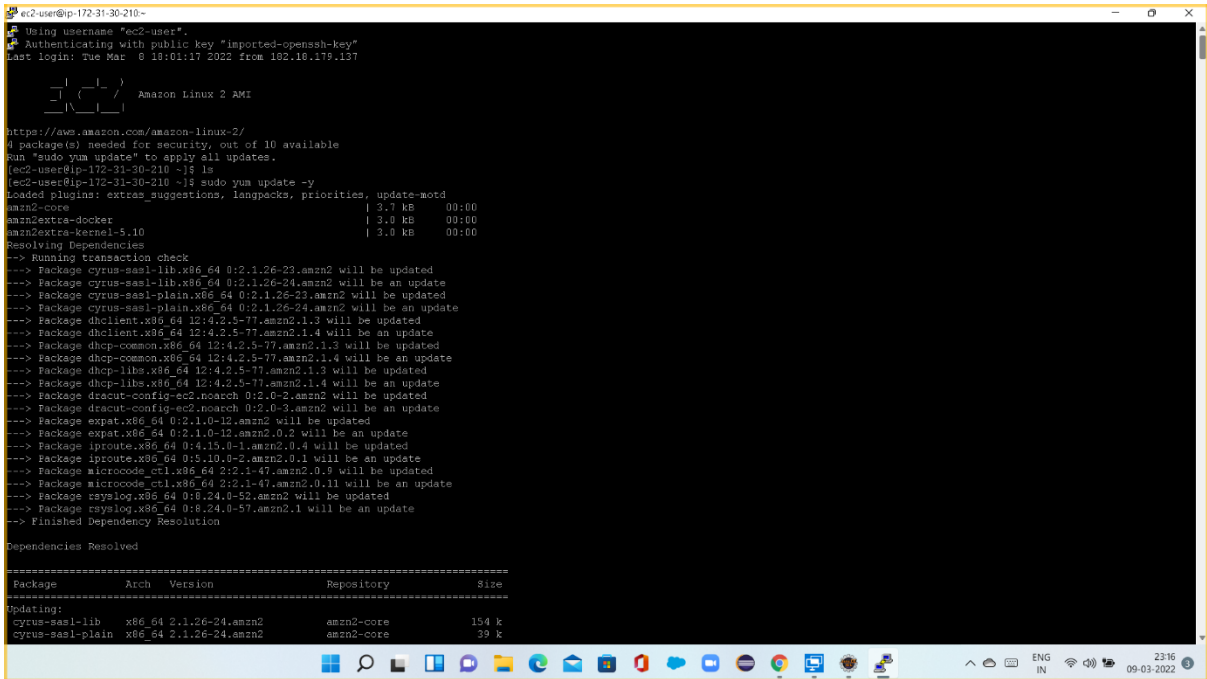
Objects (1)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

[Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

[Find objects by prefix](#)

Name	Type	Last modified	Size	Storage class
SpringBoot-AWS-exe.jar	jar	March 9, 2022, 23:11:18 (UTC+05:30)	16.3 MB	Standard



```
ec2-user@ip-172-31-30-210-
=====
Package      Arch  Version      Repository      Size
=====
Updating:
cyrus-sasl-lib  x86_64 2.1.26-24.amzn2  amzn2-core      154 k
cyrus-sasl-plain x86_64 2.1.26-24.amzn2  amzn2-core       39 k
dhclient        x86_64 12:4.2.5-77.amzn2.1.4  amzn2-core      286 k
dhcp-common     x86_64 12:4.2.5-77.amzn2.1.4  amzn2-core      176 k
dhcp-libe       x86_64 12:4.2.5-77.amzn2.1.4  amzn2-core      132 k
dracut-config-ec2 noarch 2.0-3.amzn2      amzn2-core       5.0 k
expat           x86_64 2.1.1.0-12.amzn2.0.2  amzn2-core       86 k
iproute         x86_64 5.10.0-2.amzn2.0.1  amzn2Extra-kernel-5.10 649 k
microcode_ctl  x86_64 2:2.1-47.amzn2.0.11  amzn2-core       296 k
rsyslog         x86_64 8.24.0-57.amzn2.1  amzn2-core       618 k
Transaction Summary
=====
Upgrade 10 Packages

Total download size: 2.4 M
Downloading packages:
Delta RPMs disabled because /usr/bin/applydelta not installed.
(1/10): cyrus-sasl-plain-2.1.26-24.amzn2.x86_64.rpm | 39 kB 00:00
(2/10): cyrus-sasl-lib-2.1.26-24.amzn2.x86_64.rpm | 154 kB 00:00
(3/10): dhclient-4.2.5-77.amzn2.1.4.x86_64.rpm | 286 kB 00:00
(4/10): dhcp-common-4.2.5-77.amzn2.1.4.x86_64.rpm | 176 kB 00:00
(5/10): dracut-config-ec2-2.0-3.amzn2.noarch.rpm | 5.0 kB 00:00
(6/10): dhcp-libe-4.2.5-77.amzn2.1.4.x86_64.rpm | 132 kB 00:00
(7/10): expat-2.1.1.0-12.amzn2.0.2.x86_64.rpm | 86 kB 00:00
(8/10): microcode_ctl-2.1-47.amzn2.0.11.x86_64.rpm | 296 kB 00:00
(9/10): rsyslog-8.24.0-57.amzn2.1.x86_64.rpm | 618 kB 00:00
(10/10): iproute-5.10.0-2.amzn2.0.1.x86_64.rpm | 649 kB 00:00
-----
Total                                          8.0 MB/s | 2.4 MB 00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating : 12:dhcp-libe-4.2.5-77.amzn2.1.4.x86_64 1/20
  Updating : 12:dhcp-common-4.2.5-77.amzn2.1.4.x86_64 2/20
  Updating : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 3/20
  Updating : iproute-5.10.0-2.amzn2.0.1.x86_64 4/20
  Updating : 12:dhclient-4.2.5-77.amzn2.1.4.x86_64 5/20
  Updating : cyrus-sasl-plain-2.1.26-24.amzn2.x86_64 6/20
  Updating : dracut-config-ec2-2.0-3.amzn2.noarch 7/20
  Updating : expat-2.1.1.0-12.amzn2.0.2.x86_64 8/20
  Updating : rsyslog-8.24.0-57.amzn2.1.x86_64 9/20
  Updating : 2:microcode_ctl-2.1-47.amzn2.0.11.x86_64 10/20
Updated:
cyrus-sasl-lib.x86_64 0:2.1.26-24.amzn2
cyrus-sasl-plain.x86_64 0:2.1.26-24.amzn2
dhclient.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-common.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-libe.x86_64 12:4.2.5-77.amzn2.1.4
dracut-config-ec2.noarch 0:2.0-3.amzn2
expat.x86_64 0:2.1.1.0-12.amzn2.0.2
iproute.x86_64 0:5.10.0-2.amzn2.0.1
```

```
ec2-user@ip-172-31-30-210-
Updating : 12:dhcp-common-4.2.5-77.amzn2.1.4.x86_64 2/20
Updating : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 3/20
Updating : iproute-5.10.0-2.amzn2.0.1.x86_64 4/20
Updating : 12:dhclient-4.2.5-77.amzn2.1.4.x86_64 5/20
Updating : cyrus-sasl-plain-2.1.26-24.amzn2.x86_64 6/20
Updating : dracut-config-ec2-2.0-3.amzn2.noarch 7/20
Updating : expat-2.1.1.0-12.amzn2.0.2.x86_64 8/20
Updating : rsyslog-8.24.0-57.amzn2.1.x86_64 9/20
Updating : 2:microcode_ctl-2.1-47.amzn2.0.11.x86_64 10/20
Cleanup : 12:dhclient-4.2.5-77.amzn2.1.4.x86_64 11/20
Cleanup : 12:dhcp-common-4.2.5-77.amzn2.1.4.x86_64 12/20
Cleanup : 12:dhcp-libe-4.2.5-77.amzn2.1.4.x86_64 13/20
Cleanup : dracut-config-ec2-2.0-3.amzn2.noarch 14/20
Cleanup : cyrus-sasl-plain-2.1.26-24.amzn2.x86_64 15/20
Cleanup : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 16/20
Cleanup : iproute-4.15.0-1.amzn2.0.4.x86_64 17/20
Cleanup : expat-2.1.1.0-12.amzn2.0.2.x86_64 18/20
Cleanup : rsyslog-8.24.0-52.amzn2.x86_64 19/20
Cleanup : 2:microcode_ctl-2.1-47.amzn2.0.9.x86_64 20/20
Verifying : iproute-5.10.0-2.amzn2.0.1.x86_64 1/20
Verifying : 12:dhcp-libe-4.2.5-77.amzn2.1.4.x86_64 2/20
Verifying : 12:dhcp-common-4.2.5-77.amzn2.1.4.x86_64 3/20
Verifying : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 4/20
Verifying : 2:microcode_ctl-2.1-47.amzn2.0.11.x86_64 5/20
Verifying : 12:dhclient-4.2.5-77.amzn2.1.4.x86_64 6/20
Verifying : rsyslog-8.24.0-57.amzn2.1.x86_64 7/20
Verifying : expat-2.1.1.0-12.amzn2.0.2.x86_64 8/20
Verifying : dracut-config-ec2-2.0-3.amzn2.noarch 9/20
Verifying : cyrus-sasl-plain-2.1.26-24.amzn2.x86_64 10/20
Verifying : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 11/20
Verifying : iproute-4.15.0-1.amzn2.0.4.x86_64 12/20
Verifying : dracut-config-ec2-2.0-3.amzn2.noarch 13/20
Verifying : 2:microcode_ctl-2.1-47.amzn2.0.9.x86_64 14/20
Verifying : 12:dhcp-libe-4.2.5-77.amzn2.1.4.x86_64 15/20
Verifying : cyrus-sasl-lib-2.1.26-24.amzn2.x86_64 16/20
Verifying : rsyslog-8.24.0-52.amzn2.x86_64 17/20
Verifying : 12:dhclient-4.2.5-77.amzn2.1.4.x86_64 18/20
Verifying : expat-2.1.1.0-12.amzn2.0.2.x86_64 19/20
Verifying : 12:dhcp-common-4.2.5-77.amzn2.1.4.x86_64 20/20
Updated:
cyrus-sasl-lib.x86_64 0:2.1.26-24.amzn2
cyrus-sasl-plain.x86_64 0:2.1.26-24.amzn2
dhclient.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-common.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-libe.x86_64 12:4.2.5-77.amzn2.1.4
dracut-config-ec2.noarch 0:2.0-3.amzn2
expat.x86_64 0:2.1.1.0-12.amzn2.0.2
iproute.x86_64 0:5.10.0-2.amzn2.0.1
```

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ec2-user@ip-172-31-30-210-
dhclient.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-common.x86_64 12:4.2.5-77.amzn2.1.4
dhcp-libs.x86_64 12:4.2.5-77.amzn2.1.4
dracut-config-rescue.noarch 0:2.0-3.amzn2
expat.x86_64 0:2.1.0-12.amzn2.0.2
iproute.x86_64 0:5.10.0-2.amzn2.0.1
microcode_ctl.x86_64 2:2.1-47.amzn2.0.11
rsyslog.x86_64 0:8.24.0-57.amzn2.1

Complete!
[ec2-user@ip-172-31-30-210 ~]$ sudo yum install -y httpd
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.52-1.amzn2 will be installed
--> Processing Dependency: httpd-tools = 2.4.52-1.amzn2 for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: httpdfilesystem = 2.4.52-1.amzn2 for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: system-logs-httpd for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: mod_http2 for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: httpdfilesystem for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: libaprutil1.so.0()(64bit) for package: httpd-2.4.52-1.amzn2.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.52-1.amzn2.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.7.0-9.amzn2 will be installed
--> Package apr-util.x86_64 0:1.6.1-5.amzn2.0.2 will be installed
--> Processing Dependency: apr-util-bdb.x86_64 = 1.6.1-5.amzn2.0.2 for package: apr-util-1.6.1-5.amzn2.0.2.x86_64
--> Package generic-logos-httpd.noarch 0:18.0.0-4.amzn2 will be installed
--> Package httpdfilesystem.noarch 0:2.4.52-1.amzn2 will be installed
--> Package httpd-tools.x86_64 0:2.4.52-1.amzn2 will be installed
--> Package mailcap.noarch 0:2.1.41-2.amzn2 will be installed
--> Package mod_http2.x86_64 0:1.15.19-1.amzn2.0.1 will be installed
--> Running transaction check
--> Package apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                                Arch                                Version                                Repository                                Size
=====
Installing:
httpd                                  x86_64                              2.4.52-1.amzn2                          amzn2-core                                1.3 M
Installing for dependencies:
apr                                    x86_64                              1.7.0-9.amzn2                           amzn2-core                                122 k
apr-util                              x86_64                              1.6.1-5.amzn2.0.2                       amzn2-core                                99 k
apr-util-bdb                          x86_64                              1.6.1-5.amzn2.0.2                       amzn2-core                                19 k
generic-logos-httpd                   noarch                               18.0.0-4.amzn2                          amzn2-core                                19 k
httpdfilesystem                       noarch                               2.4.52-1.amzn2                          amzn2-core                                24 k
=====
```

```
ec2-user@ip-172-31-30-210-
generic-logos-httpd                   noarch                               18.0.0-4.amzn2                          amzn2-core                                19 k
httpdfilesystem                       noarch                               2.4.52-1.amzn2                          amzn2-core                                24 k
httpd-tools                           x86_64                              2.4.52-1.amzn2                          amzn2-core                                88 k
mailcap                               noarch                               2.1.41-2.amzn2                          amzn2-core                                31 k
mod_http2                             x86_64                              1.15.19-1.amzn2.0.1                     amzn2-core                                149 k

Transaction Summary
-----
Install 1 Package (+6 Dependent packages)

Total download size: 1.9 M
Installed size: 5.2 M
Downloading packages:
(1/9): apr-1.7.0-9.amzn2.x86_64.rpm | 122 kB 00:00:00
(2/9): apr-util-1.6.1-5.amzn2.0.2.x86_64.rpm | 99 kB 00:00:00
(3/9): apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64.rpm | 19 kB 00:00:00
(4/9): generic-logos-httpd-18.0.0-4.amzn2.noarch.rpm | 19 kB 00:00:00
(5/9): httpdfilesystem-2.4.52-1.amzn2.noarch.rpm | 24 kB 00:00:00
(6/9): httpd-tools-2.4.52-1.amzn2.x86_64.rpm | 88 kB 00:00:00
(7/9): httpd-2.4.52-1.amzn2.x86_64.rpm | 1.2 MB 00:00:00
(8/9): mailcap-2.1.41-2.amzn2.noarch.rpm | 31 kB 00:00:00
(9/9): mod_http2-1.15.19-1.amzn2.0.1.x86_64.rpm | 149 kB 00:00:00
-----
Total                                                                    0.5 MB/s | 1.9 MB 00:00:00

Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : apr-1.7.0-9.amzn2.x86_64                                1/9
  Installing : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64                 2/9
  Installing : apr-util-1.6.1-5.amzn2.0.2.x86_64                    3/9
  Installing : httpd-tools-2.4.52-1.amzn2.x86_64                     4/9
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch              5/9
  Installing : mailcap-2.1.41-2.amzn2.noarch                         6/9
  Installing : httpdfilesystem-2.4.52-1.amzn2.noarch                  7/9
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64                 8/9
  Installing : httpd-2.4.52-1.amzn2.x86_64                           9/9
  Verifying  : apr-util-1.6.1-5.amzn2.0.2.x86_64                    1/9
  Verifying  : httpd-tools-2.4.52-1.amzn2.x86_64                    2/9
  Verifying  : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64                 3/9
  Verifying  : httpdfilesystem-2.4.52-1.amzn2.noarch                  4/9
  Verifying  : httpd-2.4.52-1.amzn2.x86_64                           5/9
  Verifying  : mailcap-2.1.41-2.amzn2.noarch                         6/9
  Verifying  : generic-logos-httpd-18.0.0-4.amzn2.noarch              7/9
  Verifying  : mod_http2-1.15.19-1.amzn2.0.1.x86_64                 8/9
  Verifying  : apr-1.7.0-9.amzn2.x86_64                              9/9

Installed:
httpd.x86_64 0:2.4.52-1.amzn2
```

```
ec2-user@ip-172-31-30-210-
Dependency Installed:
apr.x86_64 0:1.7.0-9.amzn2          apr-util.x86_64 0:1.6.1-5.amzn2.0.2    apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2    generic-logos-httpd.noarch 0:18.0.0-4.amzn2
httpdfilesystem.noarch 0:2.4.52-1.amzn2    httpd-tools.x86_64 0:2.4.52-1.amzn2    mailcap.noarch 0:2.1.41-2.amzn2    mod_httpd.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[ec2-user@ip-172-31-30-210 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-31-30-210 ~]$ sudo systemctl enable httpd
Created symlink from /etc/systemd/system/wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-31-30-210 ~]$ sudo yum install wget -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Package wget-1.14-18.amzn2.1.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-172-31-30-210 ~]$ java -version
-bash: java: command not found
[ec2-user@ip-172-31-30-210 ~]$ sudo yum install java -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package java-17-amazon-corretto.x86_64 1:17.0.2+8-1.amzn2.1 will be installed
--> Processing Dependency: java-17-amazon-corretto-headless.x86_64 = 1:17.0.2+8-1.amzn2.1 for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: dejavu-sans-mono-fonts for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: dejavu-serif-fonts for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: dejavu-sans-fonts for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: alsa-lib for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXtst for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXrandr for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXrender for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXt for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXinerama for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: libXi for package: 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64
--> Running transaction check
--> Package alsa-lib.x86_64 0:1.1.4.1-2.amzn2 will be installed
--> Package dejavu-sans-fonts.noarch 0:2.33-6.amzn2 will be installed
--> Processing Dependency: dejavu-fonts-common = 2.33-6.amzn2 for package: dejavu-sans-fonts-2.33-6.amzn2.noarch
--> Package dejavu-sans-mono-fonts.noarch 0:2.33-6.amzn2 will be installed
--> Package dejavu-serif-fonts.noarch 0:2.33-6.amzn2 will be installed
--> Package java-17-amazon-corretto-headless.x86_64 1:17.0.2+8-1.amzn2.1 will be installed
--> Processing Dependency: fontconfig for package: 1:java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64
--> Processing Dependency: jpackage-utils for package: 1:java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64
--> Package libXi.x86_64 0:1.6.7-3.amzn2.0.2 will be installed
--> Processing Dependency: libXi-common >= 1:6.7-3.amzn2.0.2 for package: libXi-1.6.7-3.amzn2.0.2.x86_64
--> Processing Dependency: libxcb.so.1(64bit) for package: libXi-1.6.7-3.amzn2.0.2.x86_64
--> Package libXt.x86_64 0:1.1.7-9-1.amzn2.0.2 will be installed
--> Processing Dependency: libXtst.so.6(64bit) for package: libXi-1.7.9-1.amzn2.0.2.x86_64
--> Package libXinerama.x86_64 0:1.1.3-2.1.amzn2.0.2 will be installed
--> Running transaction check
--> Package libXrandr.x86_64 0:1.5.1-2.amzn2.0.3 will be installed
--> Package libXt.x86_64 0:1.1.5-3.amzn2.0.2 will be installed
--> Processing Dependency: libSM.so.6(64bit) for package: libXt-1.1.5-3.amzn2.0.2.x86_64
--> Processing Dependency: libICE.so.6(64bit) for package: libXt-1.1.5-3.amzn2.0.2.x86_64
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Running transaction check
--> Package dejavu-fonts-common.noarch 0:2.33-6.amzn2 will be installed
--> Processing Dependency: fontpackages-filesystem for package: dejavu-fonts-common-2.33-6.amzn2.noarch
--> Package fontconfig.x86_64 0:12.1.0-4.3.amzn2 will be installed
--> Package jpackage-tools.noarch 0:3.4.1-11.amzn2 will be installed
--> Processing Dependency: python-javapackages = 3.4.1-11.amzn2 for package: jpackage-tools-3.4.1-11.amzn2.noarch
--> Processing Dependency: libxslt for package: jpackage-tools-3.4.1-11.amzn2.noarch
--> Package libICE.x86_64 0:1.0.9-9.amzn2.0.2 will be installed
--> Package libSM.x86_64 0:1.2.2-2.amzn2.0.2 will be installed
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Package libXcb.x86_64 0:1.12-1.amzn2.0.2 will be installed
--> Processing Dependency: libXau.so.6(64bit) for package: libXcb-1.12-1.amzn2.0.2.x86_64
--> Package libXau.x86_64 0:1.0.8-2.1.amzn2.0.2 will be installed
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Package python-javapackages.noarch 0:3.4.1-11.amzn2 will be installed
--> Processing Dependency: python-lxml for package: python-javapackages-3.4.1-11.amzn2.noarch
--> Running transaction check
--> Package python-lxml.x86_64 0:3.2.1-4.amzn2.0.3 will be installed
--> Finished Dependency Resolution
Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
java-17-amazon-corretto x86_64 1:17.0.2+8-1.amzn2.1 amzn2-core 178 k
Installing for dependencies:
alsa-lib x86_64 1.1.4.1-2.amzn2 amzn2-core 425 k
dejavu-fonts-common noarch 2.33-6.amzn2 amzn2-core 64 k
dejavu-sans-fonts noarch 2.33-6.amzn2 amzn2-core 1.4 M
dejavu-sans-mono-fonts noarch 2.33-6.amzn2 amzn2-core 433 k
dejavu-serif-fonts noarch 2.33-6.amzn2 amzn2-core 777 k
fontconfig x86_64 2.13.0-4.3.amzn2 amzn2-core 253 k
fontpackages-filesystem noarch 1.44-8.amzn2 amzn2-core 10 k
java-17-amazon-corretto-headless x86_64 1:17.0.2+8-1.amzn2.1 amzn2-core 94 M
jpackage-tools x86_64 3.4.1-11.amzn2 amzn2-core 73 k
libSM x86_64 1.0.9-9.amzn2.0.2 amzn2-core 67 k
libXi x86_64 1.2.2-2.amzn2.0.2 amzn2-core 39 k
```

```
ec2-user@ip-172-31-30-210-
--> Package libXrandr.x86_64 0:1.5.1-2.amzn2.0.3 will be installed
--> Package libXt.x86_64 0:1.1.5-3.amzn2.0.2 will be installed
--> Processing Dependency: libSM.so.6(64bit) for package: libXt-1.1.5-3.amzn2.0.2.x86_64
--> Processing Dependency: libICE.so.6(64bit) for package: libXt-1.1.5-3.amzn2.0.2.x86_64
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Running transaction check
--> Package dejavu-fonts-common.noarch 0:2.33-6.amzn2 will be installed
--> Processing Dependency: fontpackages-filesystem for package: dejavu-fonts-common-2.33-6.amzn2.noarch
--> Package fontconfig.x86_64 0:12.1.0-4.3.amzn2 will be installed
--> Package jpackage-tools.noarch 0:3.4.1-11.amzn2 will be installed
--> Processing Dependency: python-javapackages = 3.4.1-11.amzn2 for package: jpackage-tools-3.4.1-11.amzn2.noarch
--> Processing Dependency: libxslt for package: jpackage-tools-3.4.1-11.amzn2.noarch
--> Package libICE.x86_64 0:1.0.9-9.amzn2.0.2 will be installed
--> Package libSM.x86_64 0:1.2.2-2.amzn2.0.2 will be installed
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Package libXcb.x86_64 0:1.12-1.amzn2.0.2 will be installed
--> Processing Dependency: libXau.so.6(64bit) for package: libXcb-1.12-1.amzn2.0.2.x86_64
--> Package libXau.x86_64 0:1.0.8-2.1.amzn2.0.2 will be installed
--> Package libXtst.x86_64 0:1.2.3-1.amzn2.0.2 will be installed
--> Package python-javapackages.noarch 0:3.4.1-11.amzn2 will be installed
--> Processing Dependency: python-lxml for package: python-javapackages-3.4.1-11.amzn2.noarch
--> Running transaction check
--> Package python-lxml.x86_64 0:3.2.1-4.amzn2.0.3 will be installed
--> Finished Dependency Resolution
Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
java-17-amazon-corretto x86_64 1:17.0.2+8-1.amzn2.1 amzn2-core 178 k
Installing for dependencies:
alsa-lib x86_64 1.1.4.1-2.amzn2 amzn2-core 425 k
dejavu-fonts-common noarch 2.33-6.amzn2 amzn2-core 64 k
dejavu-sans-fonts noarch 2.33-6.amzn2 amzn2-core 1.4 M
dejavu-sans-mono-fonts noarch 2.33-6.amzn2 amzn2-core 433 k
dejavu-serif-fonts noarch 2.33-6.amzn2 amzn2-core 777 k
fontconfig x86_64 2.13.0-4.3.amzn2 amzn2-core 253 k
fontpackages-filesystem noarch 1.44-8.amzn2 amzn2-core 10 k
java-17-amazon-corretto-headless x86_64 1:17.0.2+8-1.amzn2.1 amzn2-core 94 M
jpackage-tools x86_64 3.4.1-11.amzn2 amzn2-core 73 k
libSM x86_64 1.0.9-9.amzn2.0.2 amzn2-core 67 k
libXi x86_64 1.2.2-2.amzn2.0.2 amzn2-core 39 k
```

```
ec2-user@ip-172-31-30-210-
libX11 x86_64 1.7.9-1.amzn2.0.2 amzn2-core 41 k
libXinerama x86_64 1.1.3-2.1.amzn2.0.2 amzn2-core 14 k
libXrandr x86_64 1.5.1-2.amzn2.0.3 amzn2-core 27 k
libXrender x86_64 0.9.10-1.amzn2.0.2 amzn2-core 26 k
libXt x86_64 1.1.5-3.amzn2.0.2 amzn2-core 177 k
libXtst x86_64 1.2.3-1.amzn2.0.2 amzn2-core 20 k
libxcb x86_64 1.12-1.amzn2.0.2 amzn2-core 216 k
libxslt x86_64 1.1.28-6.amzn2 noarch 240 k
log4j-cve-2021-44228-hotpatch noarch 1.1-13.amzn2 144 k
python-javapackages noarch 3.4.1-11.amzn2 amzn2-core 31 k
python-lxml x86_64 3.2.1-4.amzn2.0.3 amzn2-core 1.0 M

Transaction Summary
-----
Install 1 Package (+26 Dependent packages)
Total download size: 100 M
Installed size: 256 M
Downloading packages:
(1/27): dejavu-fonts-common-2.33-6.amzn2.noarch.rpm | 64 kB 00:00:00
(2/27): alsa-lib-1.1.4-1.2.amzn2.x86_64.rpm | 425 kB 00:00:00
(3/27): dejavu-sans-mono-fonts-2.33-6.amzn2.noarch.rpm | 433 kB 00:00:00
(4/27): dejavu-sans-fonts-2.33-6.amzn2.noarch.rpm | 1.4 MB 00:00:00
(5/27): fontconfig-2.13.0-4.3.amzn2.x86_64.rpm | 253 kB 00:00:00
(6/27): dejavu-serif-fonts-2.33-6.amzn2.noarch.rpm | 777 kB 00:00:00
(7/27): fontpackages-filesystem-1.44-8.amzn2.noarch.rpm | 10 kB 00:00:00
(8/27): java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64.rpm | 178 kB 00:00:00
(9/27): javapackages-tools-3.4.1-11.amzn2.noarch.rpm | 73 kB 00:00:00
(10/27): libICE-1.0.9-9.amzn2.0.2.x86_64.rpm | 67 kB 00:00:00
(11/27): libSM-1.2.2-2.amzn2.0.2.x86_64.rpm | 39 kB 00:00:00
(12/27): libX11-1.6.7-3.amzn2.0.2.x86_64.rpm | 606 kB 00:00:00
(13/27): libX11-common-1.6.7-3.amzn2.0.2.noarch.rpm | 165 kB 00:00:00
(14/27): libXau-1.0.6-2.1.amzn2.0.2.x86_64.rpm | 29 kB 00:00:00
(15/27): libXext-1.3.3-3.amzn2.0.2.x86_64.rpm | 39 kB 00:00:00
(16/27): libXt-1.7.9-1.amzn2.0.2.x86_64.rpm | 41 kB 00:00:00
(17/27): libXinerama-1.1.3-2.1.amzn2.0.2.x86_64.rpm | 14 kB 00:00:00
(18/27): libXrandr-1.5.1-2.amzn2.0.3.x86_64.rpm | 27 kB 00:00:00
(19/27): libXrender-0.9.10-1.amzn2.0.2.x86_64.rpm | 26 kB 00:00:00
(20/27): libXt-1.1.5-3.amzn2.0.2.x86_64.rpm | 177 kB 00:00:00
(21/27): libXtst-1.2.3-1.amzn2.0.2.x86_64.rpm | 20 kB 00:00:00
(22/27): libxcb-1.12-1.amzn2.0.2.x86_64.rpm | 216 kB 00:00:00
(23/27): libxslt-1.1.28-6.amzn2.x86_64.rpm | 240 kB 00:00:00
(24/27): log4j-cve-2021-44228-hotpatch-1.1-13.amzn2.noarch.rpm | 144 kB 00:00:00
(25/27): python-javapackages-3.4.1-11.amzn2.noarch.rpm | 31 kB 00:00:00
(26/27): python-lxml-3.2.1-4.amzn2.0.3.x86_64.rpm | 1.0 MB 00:00:00
(27/27): java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64.rpm | 54 MB 00:00:01
Total 49 MB/s | 100 MB 00:00:02
Running transaction check
```

```
ec2-user@ip-172-31-30-210-
(27/27): java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64.rpm | 94 MB 00:00:01
Total 49 MB/s | 100 MB 00:00:02
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : libICE-1.0.9-9.amzn2.0.2.x86_64 1/27
Installing : libXt-1.1.5-3.amzn2.0.2.x86_64 2/27
Installing : fontpackages-filesystem-1.44-8.amzn2.noarch 3/27
Installing : dejavu-fonts-common-2.33-6.amzn2.noarch 4/27
Installing : dejavu-sans-fonts-2.33-6.amzn2.noarch 5/27
Installing : fontconfig-2.13.0-4.3.amzn2.x86_64 6/27
Installing : dejavu-serif-fonts-2.33-6.amzn2.noarch 7/27
Installing : dejavu-sans-mono-fonts-2.33-6.amzn2.noarch 8/27
Installing : python-lxml-3.2.1-4.amzn2.0.3.x86_64 9/27
Installing : python-javapackages-3.4.1-11.amzn2.noarch 10/27
Installing : javapackages-tools-3.4.1-11.amzn2.noarch 11/27
Installing : libSM-1.2.2-2.amzn2.0.2.x86_64 12/27
Installing : alsa-lib-1.1.4-1.2.amzn2.x86_64 13/27
Installing : log4j-cve-2021-44228-hotpatch-1.1-13.amzn2.noarch 14/27
Created symlink /etc/systemd/system/multi-user.target.wants/log4j-cve-2021-44228-hotpatch.service to /usr/lib/systemd/system/log4j-cve-2021-44228-hotpatch.service.
Installing : 1:java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64 15/27
Installing : libXau-1.0.6-2.1.amzn2.0.2.x86_64 16/27
Installing : libxcb-1.12-1.amzn2.0.2.x86_64 17/27
Installing : libX11-common-1.6.7-3.amzn2.0.2.noarch 18/27
Installing : libX11-1.6.7-3.amzn2.0.2.x86_64 19/27
Installing : libXext-1.3.3-3.amzn2.0.2.x86_64 20/27
Installing : libXt-1.7.9-1.amzn2.0.2.x86_64 21/27
Installing : libXrender-0.9.10-1.amzn2.0.2.x86_64 22/27
Installing : libXrandr-1.5.1-2.amzn2.0.3.x86_64 23/27
Installing : libXtst-1.2.3-1.amzn2.0.2.x86_64 24/27
Installing : libXinerama-1.1.3-2.1.amzn2.0.2.x86_64 25/27
Installing : libXt-1.1.5-3.amzn2.0.2.x86_64 26/27
Installing : 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64 27/27
Verifying : dejavu-serif-fonts-2.33-6.amzn2.noarch 1/27
Verifying : python-lxml-3.2.1-4.amzn2.0.3.x86_64 2/27
Verifying : fontpackages-filesystem-1.44-8.amzn2.noarch 3/27
Verifying : 1:java-17-amazon-corretto-17.0.2+8-1.amzn2.1.x86_64 4/27
Verifying : libxcb-1.12-1.amzn2.0.2.x86_64 5/27
Verifying : libXrandr-1.5.1-2.amzn2.0.3.x86_64 6/27
Verifying : libXext-1.3.3-3.amzn2.0.2.x86_64 7/27
Verifying : dejavu-sans-mono-fonts-2.33-6.amzn2.noarch 8/27
Verifying : 1:java-17-amazon-corretto-headless-17.0.2+8-1.amzn2.1.x86_64 9/27
Verifying : libX11-common-1.6.7-3.amzn2.0.2.noarch 10/27
Verifying : dejavu-fonts-common-2.33-6.amzn2.noarch 11/27
Verifying : libXau-1.0.6-2.1.amzn2.0.2.x86_64 12/27
Verifying : libxslt-1.1.28-6.amzn2.x86_64 13/27
Verifying : libXt-1.1.5-3.amzn2.0.2.x86_64 14/27
```



```
ec2-user@ip-172-31-30-210-
60 mock2 available [ =stable ]
61 dnsmasq2.85 available [ =stable ]
(ec2-user@ip-172-31-30-210 ~) sudo amazon-linux-extras install epel -y
Installing epel-release
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Cleaning repos: amzn2-core amzn2extra-docker amzn2extra-epel amzn2extra-kernel-5.10 epel jenkins
30 metadata files removed
12 sqlite files removed
0 metadata files removed
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core 1 3.7 kB 00:00:00
amzn2extra-docker 1 3.0 kB 00:00:00
amzn2extra-epel 1 3.0 kB 00:00:00
amzn2extra-kernel-5.10 1 3.0 kB 00:00:00
epel/x86_64/metalink 1 11 kB 00:00:00
epel 1 4.7 kB 00:00:00
jenkins 1 2.9 kB 00:00:00
(1/13): amzn2-core/2/x86_64/group.gz 2.5 kB 00:00:00
(2/13): amzn2-core/2/x86_64/updateinfo 452 kB 00:00:00
(3/13): amzn2extra-epel/2/x86_64/primary.db 1.8 kB 00:00:00
(4/13): amzn2extra-kernel-5.10/2/x86_64/updateinfo 12 kB 00:00:00
(5/13): amzn2extra-docker/2/x86_64/updateinfo 5.9 kB 00:00:00
(6/13): amzn2extra-epel/2/x86_64/updateinfo 76 kB 00:00:00
(7/13): amzn2extra-docker/2/x86_64/primary.db 86 kB 00:00:00
(8/13): amzn2extra-kernel-5.10/2/x86_64/primary.db 7.4 MB 00:00:00
(9/13): epel/x86_64/group.gz 96 kB 00:00:00
(10/13): epel/x86_64/updateinfo 1.0 MB 00:00:00
(11/13): epel/x86_64/primary.db 7.0 MB 00:00:00
(12/13): jenkins/primary.db 40 kB 00:00:00
(13/13): amzn2-core/2/x86_64/primary.db 60 MB 00:00:02
209 packages excluded due to repository priority protections
Package epel-release-7-11.noarch already installed and latest version
Nothing to do
0 ansible2 available \
[ =2.4.2 =2.4.6 =2.8 =stable ]
2 httpd_modules available [ =1.0 =stable ]
3 memcached1.5 available \
[ =1.5.1 =1.5.16 =1.5.17 ]
5 postgresql9.6 available \
[ =9.6.6 =9.6.8 =stable ]
6 postgresql10 available [ =10 =stable ]
9 R3.4 available [ =3.4.3 =stable ]
10 rust1 available \
[ =1.22.1 =1.26.0 =1.26.1 =1.27.2 =1.31.0 =1.38.0 =stable ]
11 vim available [ =8.0 =stable ]
18 libreoffice available \
[ =5.0.6.2_15 =5.3.6.1 =stable ]
19 gimp available [ =2.8.22 ]
```

```
ec2-user@ip-172-31-30-210-
19 libreoffice available \
[ =5.0.6.2_15 =5.3.6.1 =stable ]
19 gimp available [ =2.8.22 ]
20 docker-latest enabled \
[ =17.12.1 =18.03.1 =18.06.1 =18.09.9 =stable ]
21 mate-desktop1.x available \
[ =1.12.0 =1.20.0 =stable ]
22 GraphicsMagick1.3 available \
[ =1.3.29 =1.3.32 =1.3.34 =stable ]
23 tomcat8.5 available \
[ =8.5.31 =8.5.32 =8.5.38 =8.5.40 =8.5.42 =8.5.50 =stable ]
24 epel-latest enabled [ =7.11 =stable ]
25 testing available [ =1.0 =stable ]
26 ecs available [ =stable ]
27 corretto9 available \
[ =1.8.0_192 =1.8.0_202 =1.8.0_212 =1.8.0_222 =1.8.0_232 =1.8.0_242 =stable ]
29 firecracker available [ =0.11 =stable ]
29 golang1.11 available \
[ =1.11.3 =1.11.11 =1.11.13 =stable ]
30 squid4 available [ =4 =stable ]
32 lustre2.10 available \
[ =2.10.5 =2.10.8 =stable ]
33 java-openjdk11 available [ =11 =stable ]
34 lynx available [ =stable ]
35 kernel-ng available [ =stable ]
36 BCC available [ =0.x =stable ]
37 mono available [ =3.x =stable ]
38 nghttp available [ =stable ]
39 ruby2.6 available [ =2.6 =stable ]
40 mock available [ =stable ]
41 postgresql11 available [ =11 =stable ]
42 php7.4 available [ =stable ]
43 livepatch available [ =stable ]
44 python3.8 available [ =stable ]
45 haproxy2 available [ =stable ]
46 collectd available [ =stable ]
47 aws-nitro-enclaves-cli available [ =stable ]
48 R4 available [ =stable ]
kernel-5.4 available [ =stable ]
50 selinux-ng available [ =stable ]
51 php8.0 available [ =stable ]
52 tomcat9 available [ =stable ]
53 unbound1.13 available [ =stable ]
54 mariadb10.5 available [ =stable ]
55 kernel-5.10-latest enabled [ =stable ]
56 redis6 available [ =stable ]
57 ruby3.0 available [ =stable ]
```