

Security Group 확인

단계1: Instance의 Security Group 확인

The screenshot displays the AWS Management Console interface for the EC2 service. The top navigation bar includes the AWS logo, a search bar, and various service icons. The left sidebar shows the navigation menu with 'Instances' highlighted. The main content area shows the 'Instances (1/1)' page with a table of instances. The instance 'hello-ec2' is selected, and the 'Security' tab is active. The 'Security details' section shows the instance's IAM Role, Owner ID, and Security groups. The 'Security groups' section shows the instance is associated with 'sg-081d260c11e5a414f (hello-ec2-sg)'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
hello-ec2	i-0e0a30e99c1f7e3a4	Running	t2.micro	2/2 checks passed	View alarms	ap-northeast-1

i-0e0a30e99c1f7e3a4 (hello-ec2)

Security

Security details

- IAM Role: -
- Owner ID: 426653742146
- Launch time: Tue Jul 23 2024 19:45:54 GMT+0900 (한국 표준시)
- Security groups: sg-081d260c11e5a414f (hello-ec2-sg)

단계2: Inbound rules 확인

- 외부에서 내부(ec2)에 접속할 수 있는 Rule 정의

The screenshot displays the AWS Management Console interface for a security group. On the left, the navigation pane shows the 'Network & Security' section with 'Security Groups' highlighted. The main content area shows the details for the security group 'sg-081d260c11e5a414f - hello-ec2-sg'. The 'Inbound rules' tab is selected, showing a single rule with ID 'sgr-0d2ddfa53a55a9540' for SSH access on port 22 from 0.0.0.0/0.

Navigation Pane:

- EC2 Dashboard
- EC2 Global View
- Events
- Instances
- Images
- Elastic Block Store
- Network & Security**
 - Security Groups**
 - Elastic IPs
 - Placement Groups
 - Key Pairs
 - Network Interfaces
- Load Balancing
- Auto Scaling
 - Auto Scaling Groups
- Settings

Breadcrumbs: EC2 > Security Groups > sg-081d260c11e5a414f - hello-ec2-sg

Security Group Details:

sg-081d260c11e5a414f - hello-ec2-sg			
Security group name	hello-ec2-sg	Security group ID	sg-081d260c11e5a414f
Description	hello-ec2-sg created 2024-07-23T10:12:51.456Z		
VPC ID	vpc-0e092393ffbd671b9		
Owner	426653742146	Inbound rules count	1 Permission entry
		Outbound rules count	1 Permission entry

Inbound rules (1)

Name	Security group rule...	IP versi...	Type	Protocol	Port ra...	Source
-	sgr-0d2ddfa53a55a9540	IPv4	SSH	TCP	22	0.0.0.0/0

단계3: Outbound rules 확인

- 내부(ec2)에서 외부로 접속할 수 있는 Rule 정의

EC2 Dashboard X

EC2 Global View

Events

► Instances

► Images

► Elastic Block Store

▼ Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

► Load Balancing

▼ Auto Scaling

Auto Scaling Groups

Settings

EC2 > Security Groups > sg-081d260c11e5a414f - hello-ec2-sg

sg-081d260c11e5a414f - hello-ec2-sg

Actions ▼

Details

Security group name hello-ec2-sg	Security group ID sg-081d260c11e5a414f	Description hello-ec2-sg created 2024-07-23T10:12:51.456Z	VPC ID vpc-0e092393ffbd671b9
Owner 426653742146	Inbound rules count 1 Permission entry	Outbound rules count 1 Permission entry	

Inbound rules | **Outbound rules** | Tags

Outbound rules (1)

Manage tags Edit outbound rules

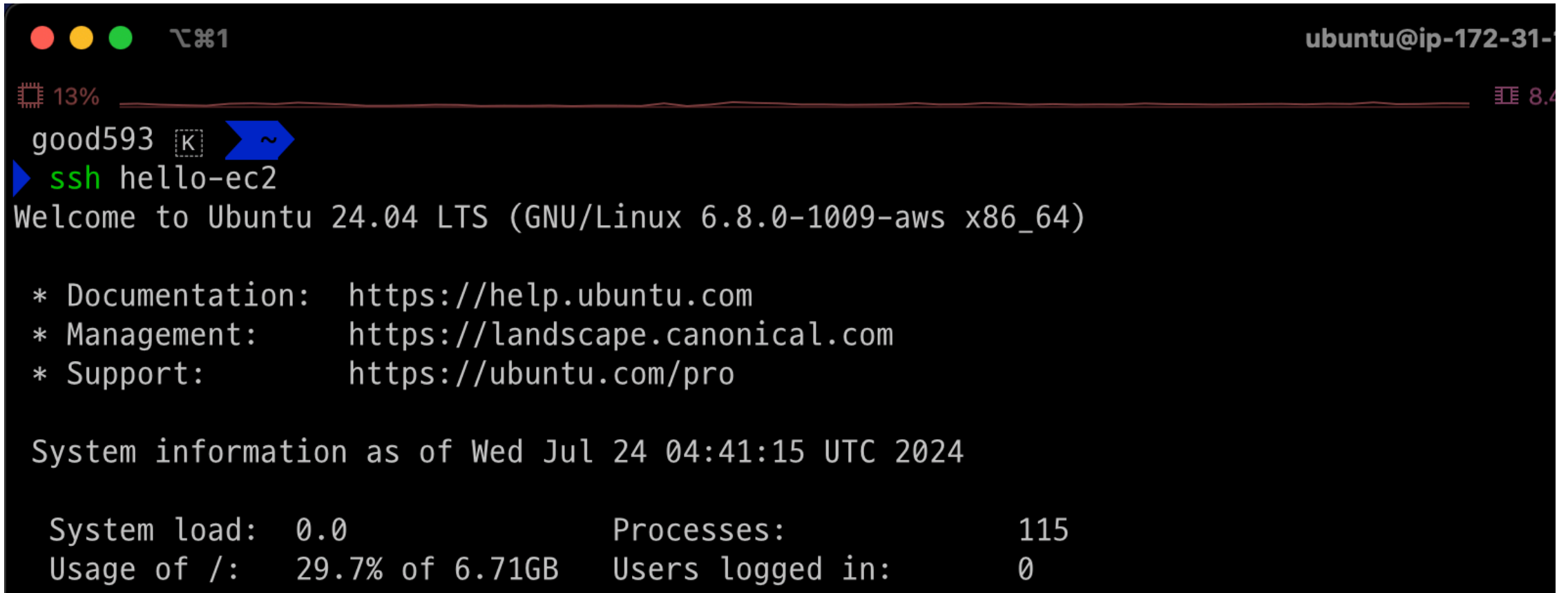
Search

	Name	Security group rule...	IP versi...	Type	Protocol	Port ra...	Destination
<input type="checkbox"/>	-	sgr-037e2943f45c29a60	IPv4	All traffic	All	All	0.0.0.0/0

Nginx 접속 테스트

단계1: ec2 접속

```
ssh hello-ec2
```



A terminal window with a dark background. The title bar shows three colored circles (red, yellow, green) and the text "ㄴ%1". The top right corner displays "ubuntu@ip-172-31-". Below the title bar, a red progress bar indicates 13% completion. The terminal content shows a user "good593" at a prompt, followed by the command "ssh hello-ec2". The output is the Ubuntu 24.04 LTS login banner, including system information and resource usage.

```
good593 [K] ~
ssh hello-ec2
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1009-aws x86_64)

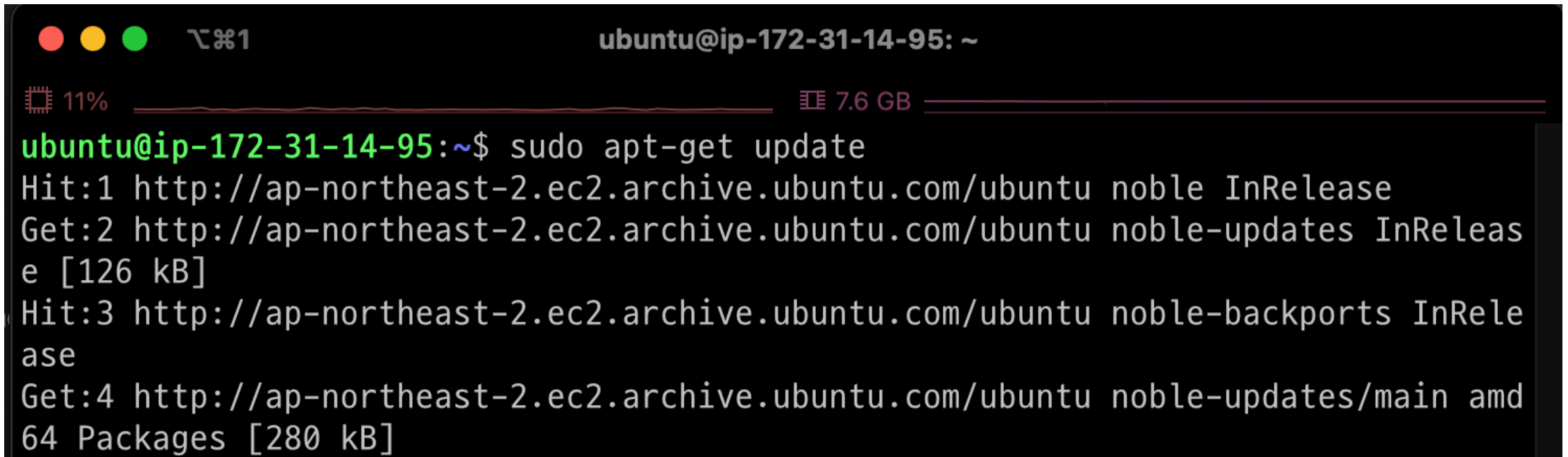
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/pro

System information as of Wed Jul 24 04:41:15 UTC 2024

System load:  0.0                Processes:            115
Usage of /:   29.7% of 6.71GB    Users logged in:     0
```

단계2: update

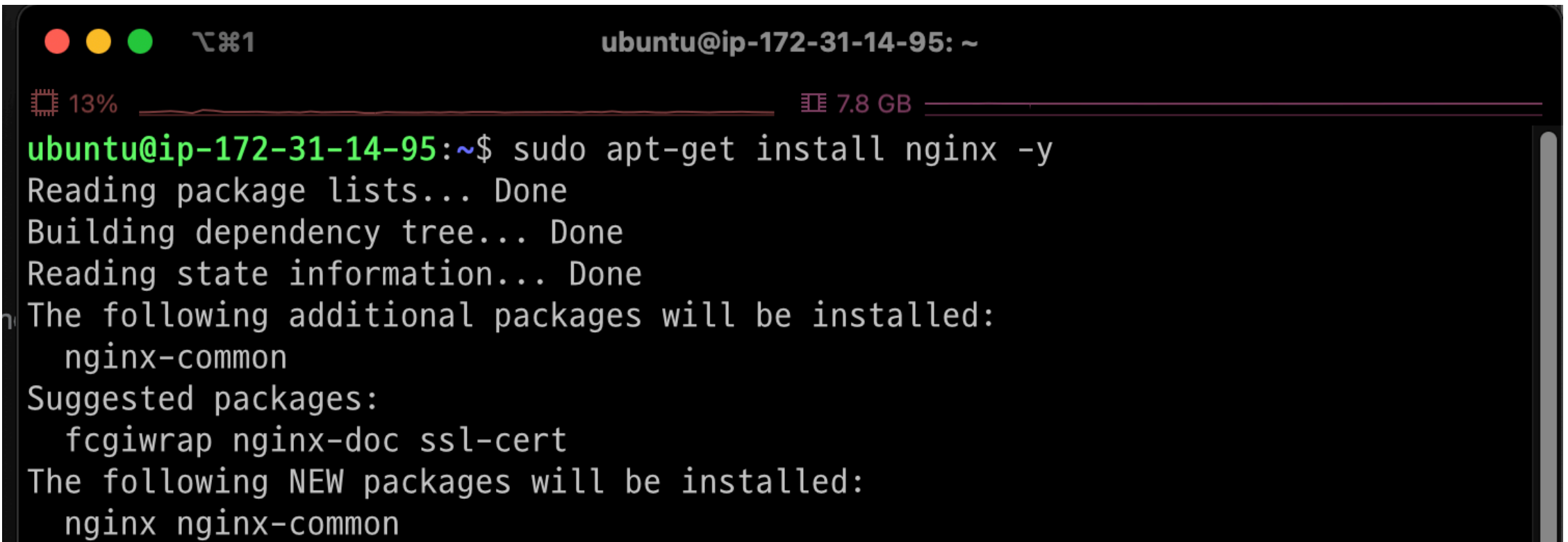
```
sudo apt-get update
```



```
ubuntu@ip-172-31-14-95: ~$ sudo apt-get update
Hit:1 http://ap-northeast-2.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://ap-northeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:3 http://ap-northeast-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:4 http://ap-northeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [280 kB]
```

단계3: install nginx

```
sudo apt-get install nginx -y
```

A terminal window with a dark background and light text. The title bar shows three colored circles (red, yellow, green) and the text 'ubuntu@ip-172-31-14-95: ~'. The terminal content shows the command 'sudo apt-get install nginx -y' being executed. The output indicates that package lists are read, the dependency tree is built, and state information is read. It then lists additional packages to be installed (nginx-common) and suggested packages (fcgiwrap, nginx-doc, ssl-cert). Finally, it lists the new packages to be installed (nginx, nginx-common).

```
ubuntu@ip-172-31-14-95: ~  
13% 7.8 GB  
ubuntu@ip-172-31-14-95:~$ sudo apt-get install nginx -y  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  nginx-common  
Suggested packages:  
  fcgiwrap nginx-doc ssl-cert  
The following NEW packages will be installed:  
  nginx nginx-common
```


단계4: nginx server 실행 확인

```
systemctl status nginx
```

```
ubuntu@ip-172-31-14-95: ~  
13% 8.1 GB  
ubuntu@ip-172-31-14-95:~$ systemctl status nginx  
● nginx.service - A high performance web server and a reverse proxy server  
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)  
   Active: active (running) since Wed 2024-07-24 03:49:11 UTC; 3min 15s ago  
     Docs: man:nginx(8)  
  Process: 4436 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, status=0/SUCCESS)  
  Process: 4437 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUCCESS)  
 Main PID: 4439 (nginx)  
    Tasks: 2 (limit: 1130)  
  Memory: 2.1M (peak: 2.3M)  
     CPU: 16ms  
   CGroup: /system.slice/nginx.service  
           └─4439 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"  
             └─4440 "nginx: worker process"  
  
Jul 24 03:49:11 ip-172-31-14-95 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...  
Jul 24 03:49:11 ip-172-31-14-95 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.  
ubuntu@ip-172-31-14-95:~$
```

단계5: Public IP 확인

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

► Images

► Elastic Block Store

Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

All states ▼

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<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input checked="" type="checkbox"/>	hello-ec2	i-0e0a30e99c1f7e3a4	Running	t2.micro	2/2 checks passed	View alarms +	ap-northeast-1

i-0e0a30e99c1f7e3a4 (hello-ec2)

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

▼ Instance summary Info

Instance ID

i-0e0a30e99c1f7e3a4 (hello-ec2)

Public IPv4 address

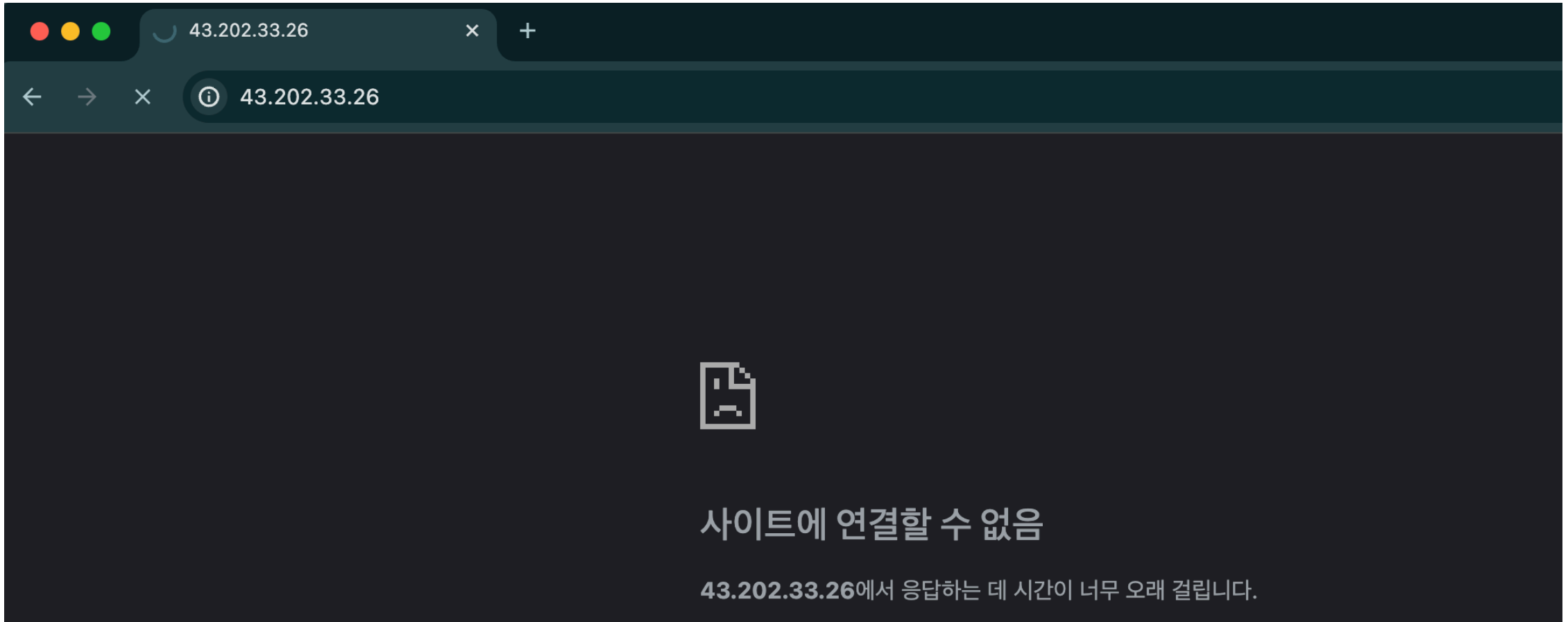
43.202.33.26 | open address

Private IPv4 addresses

172.31.14.95

단계6: nginx 접속 실패

- Public IP로 접속 시도



단계7: Inbound rules 변경

EC2 Global View

Events

- Instances
- Images
- Elastic Block Store
- ▼ Network & Security
 - Security Groups**
 - Elastic IPs
 - Placement Groups
 - Key Pairs
 - Network Interfaces
- Load Balancing
- ▼ Auto Scaling
 - Auto Scaling Groups

sg-081d260c11e5a414f - hello-ec2-sg Actions ▼

Details

Security group name hello-ec2-sg	Security group ID sg-081d260c11e5a414f	Description hello-ec2-sg created 2024-07-23T10:12:51.456Z	VPC ID vpc-0e092393ffbd671b9
Owner 426653742146	Inbound rules count 1 Permission entry	Outbound rules count 1 Permission entry	

Inbound rules Outbound rules Tags

Inbound rules (1) Manage tags Edit inbound rules

Search

< 1 > ⚙

- 예제: http 프로토콜 & Apache Tomcat Server 추가
- Nginx Server Port: 80

sgr-0d2ddfa53a55a9540

SSH	TCP	22	Custom	0.0.0.0/0		Delete	
-	Custom TCP	TCP	8080	Anyw...	0.0.0.0/0	Apache Tomcat Server	Delete
-	HTTP	TCP	80	Anyw...	0.0.0.0/0	http Protocol	Delete

Add rule

Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Preview changes Save rules

- 변경 내용 확인

Inbound rules

Outbound rules

Tags

Inbound rules (3)

Q Search

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☐

Name ▾

☐

Security group rule... ▾

☐

IP versi... ▾

☐

Type ▾

☐

Protocol ▾

☐

Port ra... ▾

☐

Source

<input type="checkbox"/>	-	sgr-0d2ddfa53a55a9540	IPv4	SSH	TCP	22	0.0.0.0/0
<input type="checkbox"/>	-	sgr-01d8a86eba0526c...	IPv4	Custom TCP	TCP	8080	0.0.0.0/0
<input type="checkbox"/>	-	sgr-088121a8bd705d...	IPv4	HTTP	TCP	80	0.0.0.0/0

단계8: nginx 접속 성공

- Public IP로 접속 시도

