

대학생을 위한 AWS 강의(27)

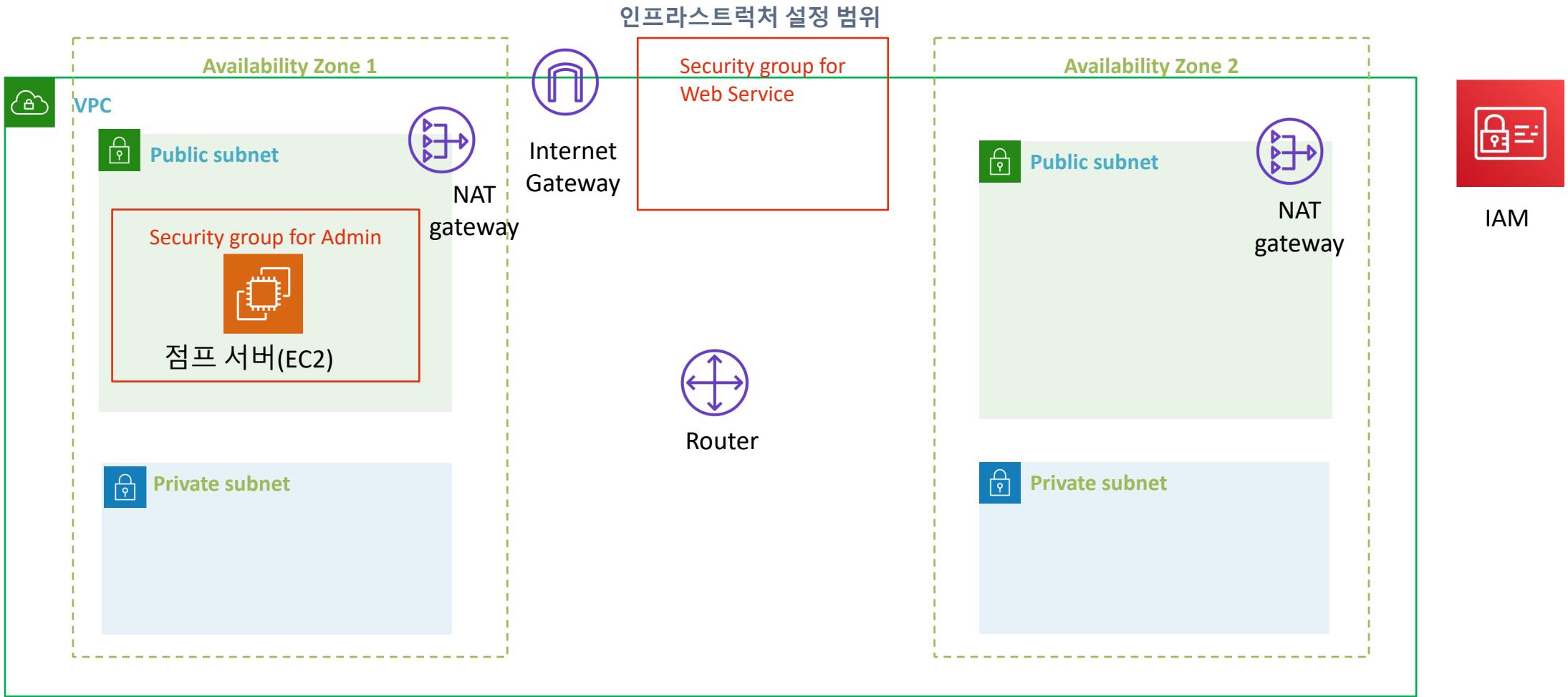
네번째 VPC 실습

서진호

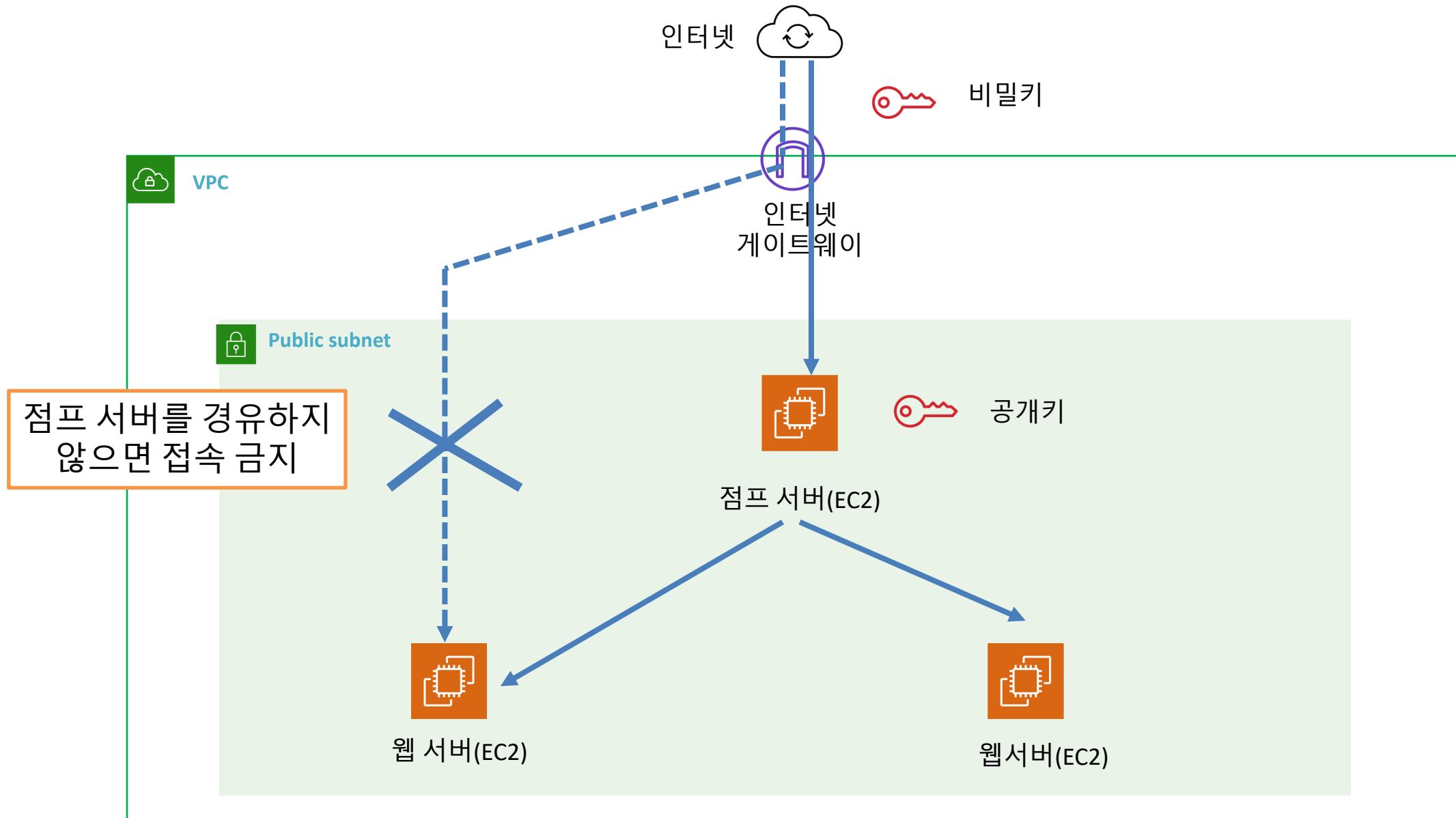
제 27 강 목표

- 점프 서버(베스천 호스트) 설정
- 웹서버 설정

1. 전체 구성도 - 점프 서버



2. 점프 서버 용도



3. 젠프 서버 설정 항목

항목	값	설명
AMI	Amazon Linux 2 AMI(HVM) – Kernel 5.10, SSD Volume Type	EC2 인스턴스에 도입할 운영체제
인스턴스 유형	t2.micro	EC2 인스턴스의 스펙
네트워크	Tutorial-vpc	EC2 인스턴스를 생성할 VPC
서브넷	Tutorial-Subnet-Public01	EC2 인스턴스를 생성할 서브넷
퍼블릭 IP 자동 할당	활성화	EC2 인스턴스에 대한 퍼블릭 IP 할당
태그	Name : Tutorial-EC2-Bastion	EC2 인스턴스 이름
보안그룹	default	EC2 인스턴스에 적용할 보안 그룹
	Tutorial-SG-Bastion	

실습 – VPC 에서 점프 서버 설정



4-1. 실습 - 점프 서버(EC2) 시작

The screenshot shows the AWS EC2 Management Console interface. On the left, there's a sidebar with navigation links for EC2 (New Experience), Instances, AMIs, and Elastic Block Store. The main content area displays resource statistics and an 'Instances Starting' section. A callout box highlights the 'Instances Starting' button. To the right, there's a 'Configure Wizard' panel and a 'Additional Information' panel.

리소스

아시아 태평양 (서울) 리전에서 다음 Amazon EC2 리소스를 사용하고 있음:

인스턴스(실행 중)	0	로드 밸런서	0
배치 그룹	0	보안 그룹	20
볼륨	0	스냅샷	0
인스턴스	1	전용 호스트	0
키 페어	5	탄력적 IP	2

AWS Launch Wizard for SQL Server를 사용하여 AWS에서 Microsoft SQL Server Always On 가용성 그룹을 손쉽게 크기 조정, 구성 및 배포할 수 있습니다. 자세히 알아보기

인스턴스 시작

시작하려면 클라우드의 가상 서버인 Amazon EC2 인스턴스를 시작하십시오.

서비스 상태

리전
아시아 태평양 (서울)

상태

인스턴스 시작 ▾

서비스 마이그레이션 ▾

추가 정보

시작 안내서

설명서

모든 EC2 리소스

포럼

요금

문의처

인스턴스 시작

인스턴스 시작

4-2. 실습 - 인스턴스 시작

The screenshot shows the AWS EC2 Management console at the 'Launch Instances' step. The browser address bar displays `ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#LaunchInstances:`. The navigation bar includes links for S3, IAM, EC2, VPC, and RDS. A message at the top left says, "새로운 시작 경험으로 옵트인했습니다. 이 경험에 대해 자세히 알아보거나 피드백을 보내주세요. 옵트아웃을 통해 이전 버전으로 돌아갈 수 있습니다." A blue button 'Opt out to the old experience' is visible.

Instance Information

Name and Tags: The name is set to "Tutorial-EC2-Bastion".

Application and OS Image (Amazon Machine Image): The image selected is "Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type".

Instance Type: The type is "t2.micro".

Networking: The interface type is "Amazon VPC".

Storage: The volume type is "Amazon EBS".

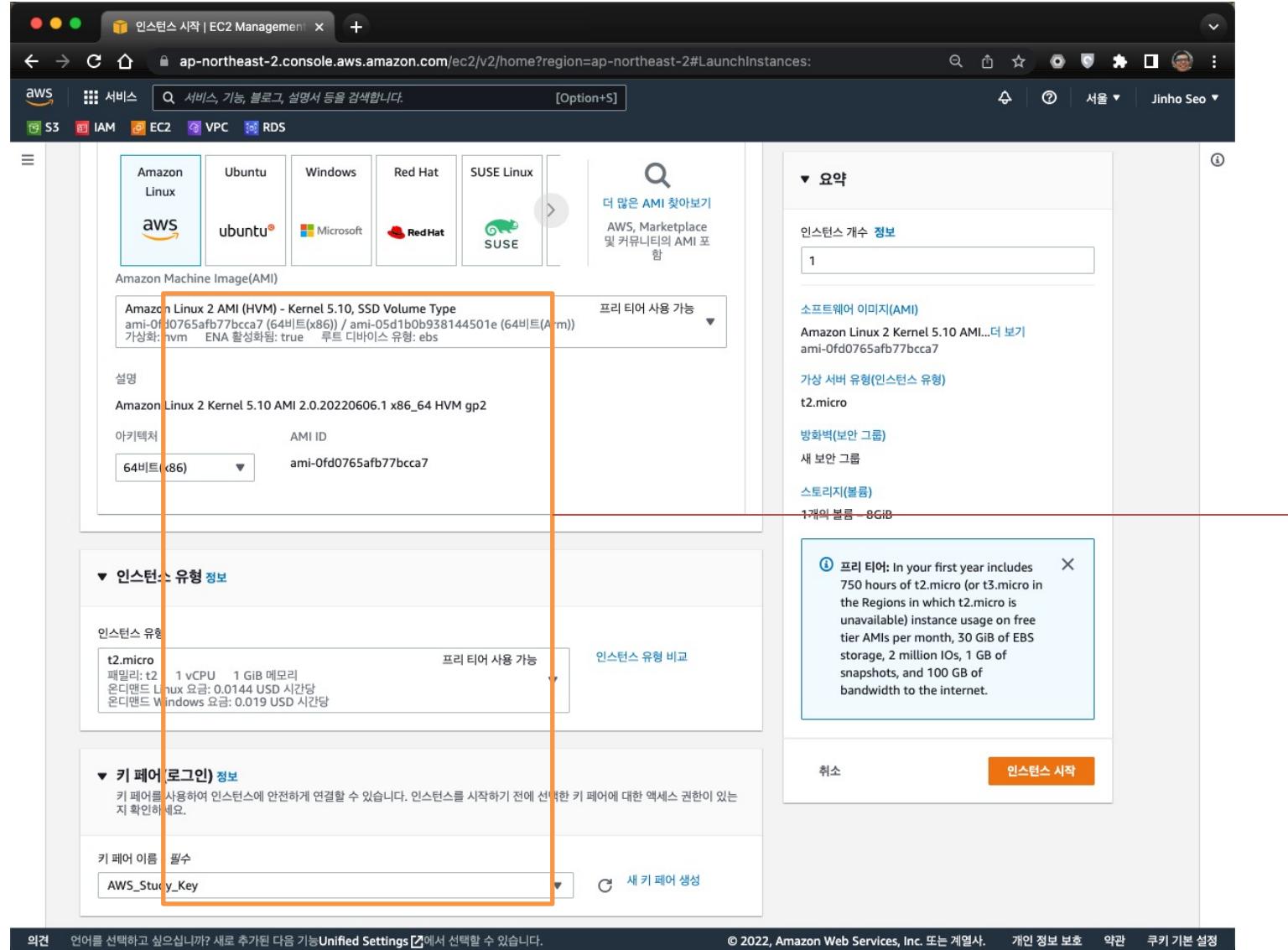
Block Device Mapping: The volume is labeled "Volume 1".

Advanced Options: The "Enable API" checkbox is checked.

Review Step: The summary shows: Instance Type: t2.micro, AMI: Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type, Volume Type: Amazon EBS, and Block Device Mapping: /dev/sda1 (Volume 1). The "Launch Instances" button is highlighted in orange.

- 이름 태그: Tutorial-EC2-Bastion
- 애플리케이션 및 이미지 : 아마존 리눅스 이미지

4-3. 실습 - 인스턴스 유형 및 키 페어 설정



- AMI: Amazon Linux 2 AMI(HVM) – Kernel 5.10, SSD Volume Type
- 아키텍처: x86
- 인스턴스 유형: t2.micro
- 키 페어 로그인: AWS_PC_Key

4-4. 실습 - 네트워크 설정

▼ 네트워크 설정

VPC - 필수 정보
vpc-0670db751a44b55c6 (Tutorial-vpc)
10.0.0.0/16

서브넷 정보
subnet-0d6d606140fc5705a Tutorial-Subnet-Public01
VPC: vpc-0670db751a44b55c6 소유자: 534520364753
가용 영역: ap-northeast-2a IP 주소 사용 가능: 4090

퍼블릭 IP 자동 할당 정보
활성화

방화벽(보안 그룹) 정보
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

보안 그룹 생성 기존 보안 그룹 선택

일반 보안 그룹 정보
보안 그룹 선택

Tutorial-SG-Bastion sg-07057e028d8f4a31c X
VPC: vpc-0670db751a44b55c6

default sg-0cb7bda9438b0d1eb X
VPC: vpc-0670db751a44b55c6

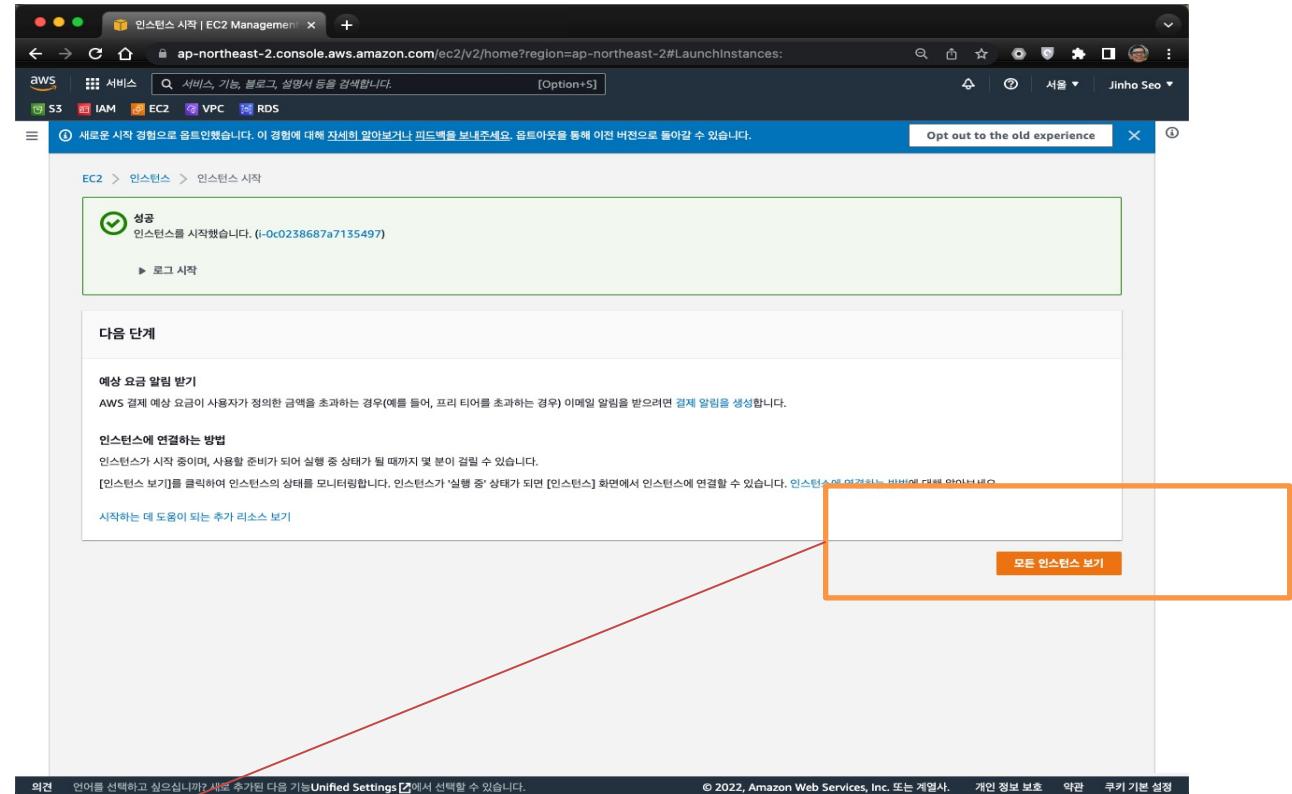
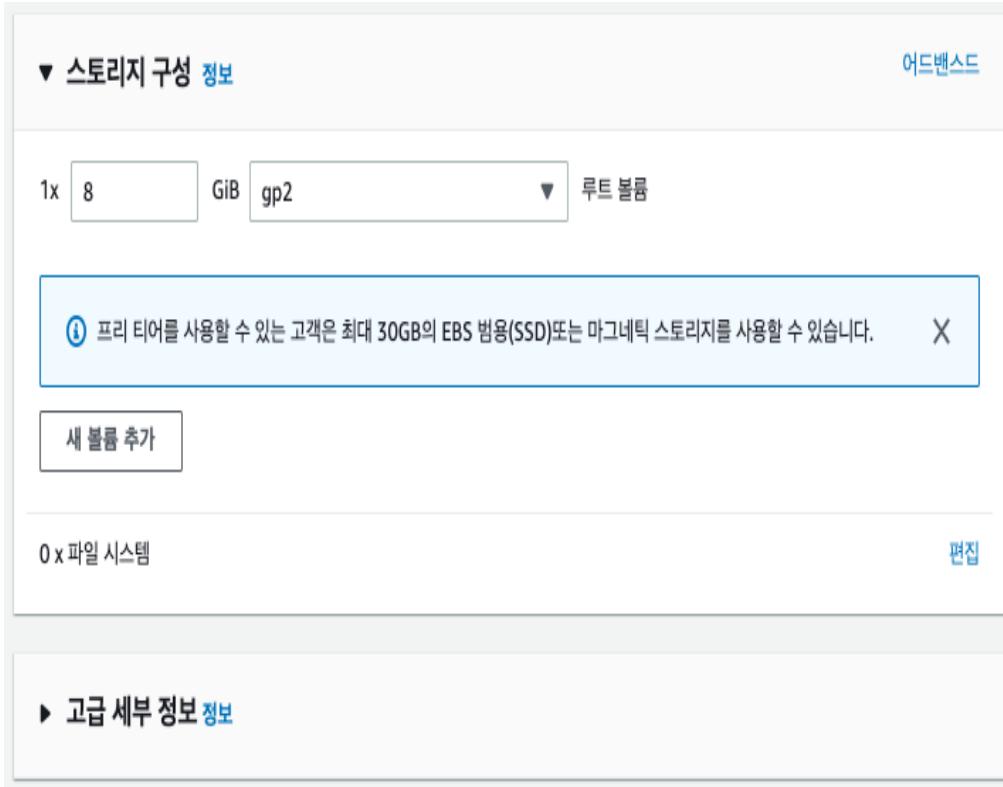
모든 선택 항목 습기기

여기에서 추가 또는 제거하는 보안 그룹은 모든 네트워크 인터페이스에 추가 또는 제거됩니다.

▶ 어드밴스드 네트워크 구성

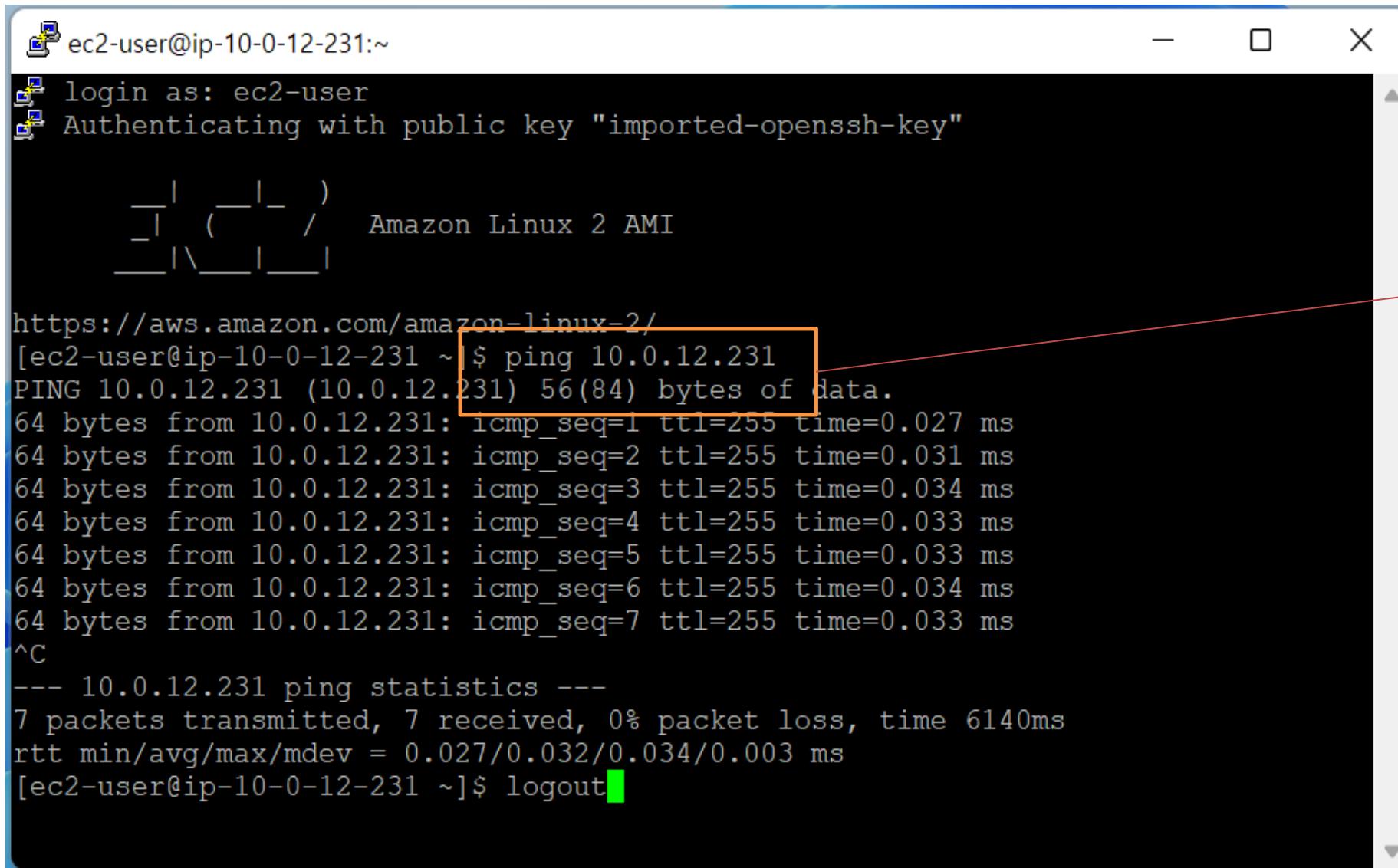
- VPC: Tutorial-vpc
- 서브넷: Tutorial-Subnet-Public01
- 퍼블릭IP 자동 할당: 활성화
- 방화벽(보안 그룹): 기존 보안 그룹 선택
- 일반 보안 그룹: Tutorial-SG-Bastion, default

4-5. 실습 - 스토리지 구성 및 EC2 생성



스토리지 구성은 그대로, EC2 생성 후 확인

4-6. 실습 - Putty 로 점프 서버 연결



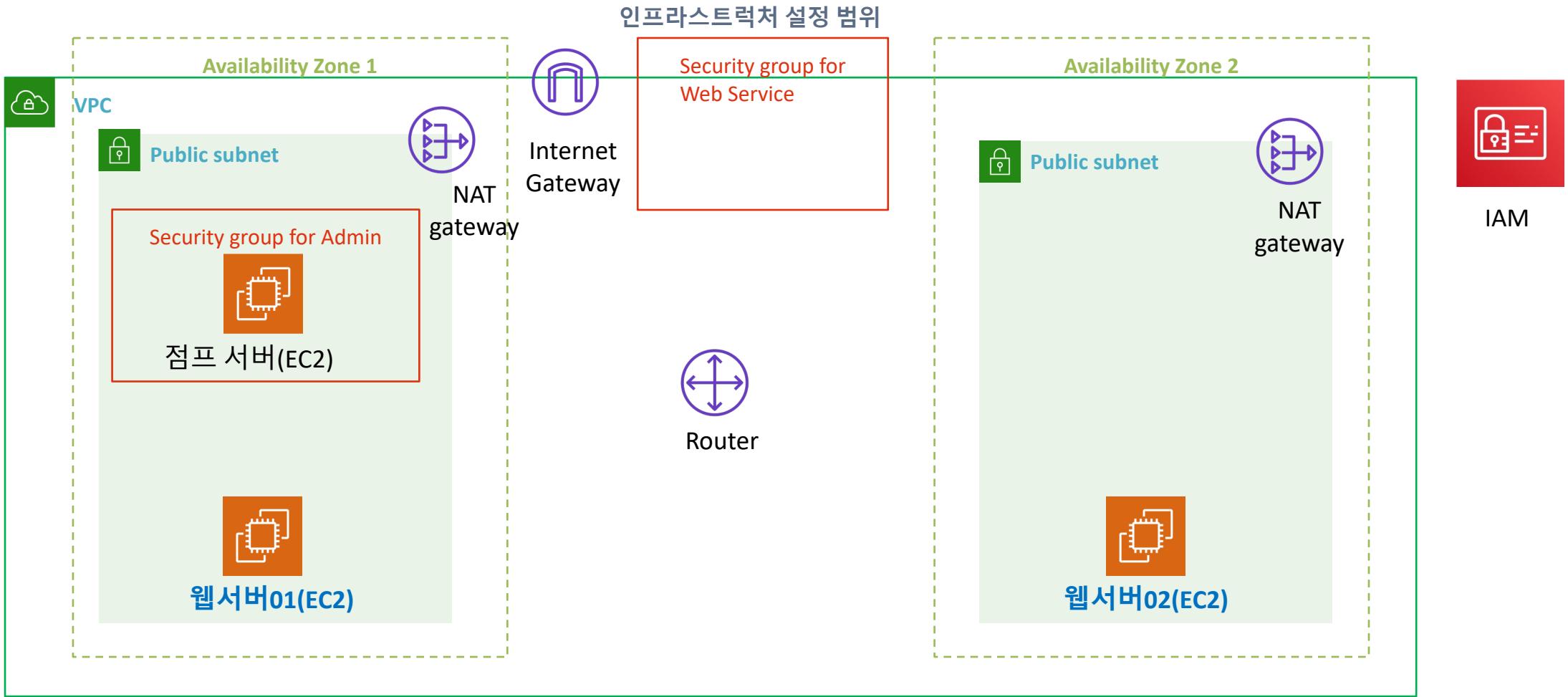
```
ec2-user@ip-10-0-12-231:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
  
Amazon Linux 2 AMI  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-10-0-12-231 ~]$ ping 10.0.12.231  
PING 10.0.12.231 (10.0.12.231) 56(84) bytes of data.  
64 bytes from 10.0.12.231: icmp_seq=1 ttl=255 time=0.027 ms  
64 bytes from 10.0.12.231: icmp_seq=2 ttl=255 time=0.031 ms  
64 bytes from 10.0.12.231: icmp_seq=3 ttl=255 time=0.034 ms  
64 bytes from 10.0.12.231: icmp_seq=4 ttl=255 time=0.033 ms  
64 bytes from 10.0.12.231: icmp_seq=5 ttl=255 time=0.033 ms  
64 bytes from 10.0.12.231: icmp_seq=6 ttl=255 time=0.034 ms  
64 bytes from 10.0.12.231: icmp_seq=7 ttl=255 time=0.033 ms  
^C  
--- 10.0.12.231 ping statistics ---  
7 packets transmitted, 7 received, 0% packet loss, time 6140ms  
rtt min/avg/max/mdev = 0.027/0.032/0.034/0.003 ms  
[ec2-user@ip-10-0-12-231 ~]$ logout
```

Putty로 점프 서버
연결하여 ping 내부IP
로 접속되는지 확인하고
logout

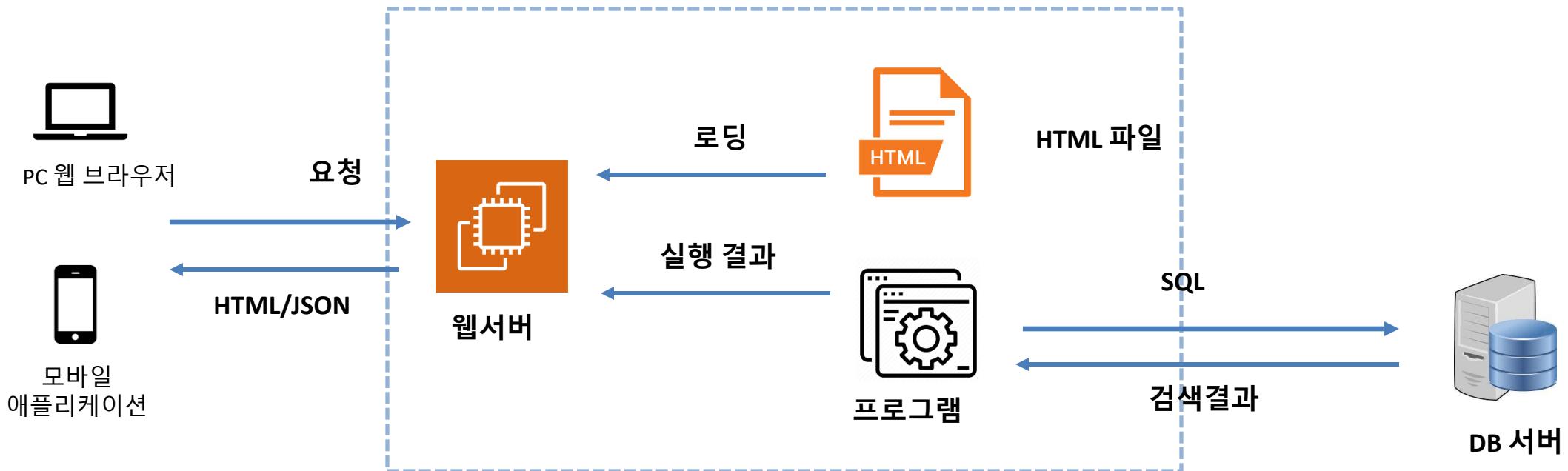
실습B – 웹 서버 생성하기



1. 전체 구성도 - 웹 서버



2. 웹서버 역할



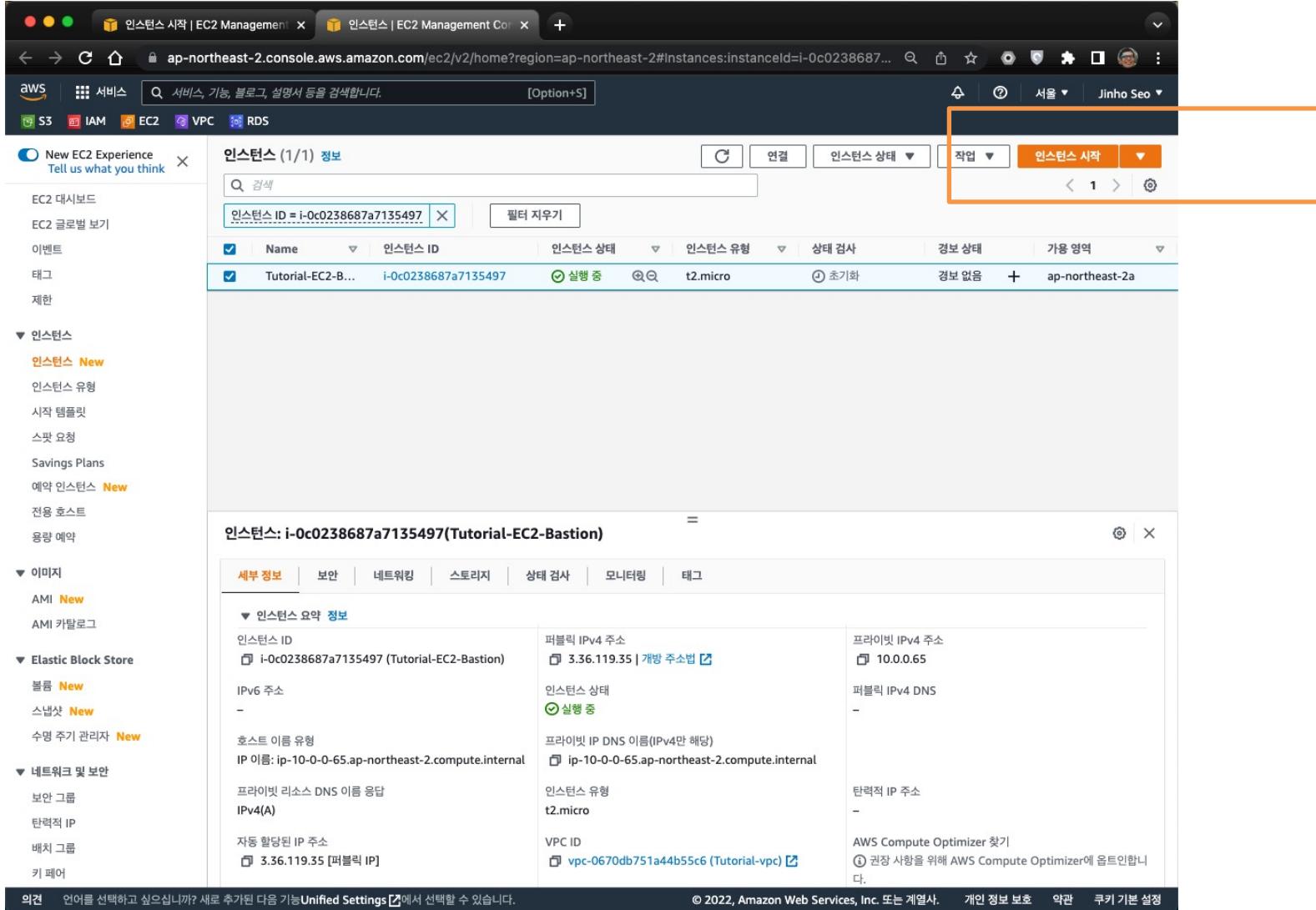
3. 웹서버(EC2) 설정 항목

항목	값	설명
AMI	Amazon Linux 2 AMI(HVM) – Kernel 5.10, SSD Volume Type	EC2 인스턴스에 도입할 운영체제
인스턴스 유형	t2.micro	EC2 인스턴스의 스펙
네트워크	Tutorial-vpc	EC2 인스턴스를 생성할 VPC
서브넷	웹서버01: Tutorial-Subnet-Public01 웹서버02: Tutorial-Subnet-Public02	EC2 인스턴스를 생성할 서브넷01 EC2 인스턴스를 생성할 서브넷02
퍼블릭 IP 자동 할당	활성화	EC2 인스턴스에 대한 퍼블릭 IP 할당하지 않음
태그	Default	EC2 인스턴스에 적용할 보안 그룹
보안그룹	이름: Tutorial-EC2-Web01 이름: Tutorial-EC2-Web01	EC2 인스턴스 이름

4. 젠프 서버와 웹서버(EC2) 비교

항목	젠프 서버	웹 서버
인스턴스 유형	최소 성능 (현업에서는 이용자 수 맞게)	이용자 수에 맞게 적절한 성능
서브넷	퍼블릭 서브넷	프라이빗 서브넷
퍼블릭 IP 자동 할당	활성화 필요	비 활성화
보안 그룹	기본 + SSH 접속	기본(Default)

5-1. 실습 - 웹 서버 EC2 인스턴스 시작



The screenshot shows the AWS EC2 Management Console interface. At the top, there's a navigation bar with tabs like 'AWS', '서비스', 'EC2', etc. Below it is a search bar and a sidebar with various service links. The main area displays a table of instances. A specific row for 'Tutorial-EC2-B...' is selected, and its details are shown in a modal window below. The modal window has tabs for '세부 정보', '보안', '네트워킹', etc. The '세부 정보' tab is active, showing detailed information about the instance, including its public IP (3.36.119.35), private IP (10.0.0.65), and instance type (t2.micro). The status of the instance is listed as '실행 중' (Running).

인스턴스 시작

5-2. 실습 - 인스턴스 설정 (Web01)

The screenshot shows the AWS EC2 Management console at the 'Launch Instances' step. The left sidebar has 'EC2' selected. The main area is titled '인스턴스 시작' (Instance Launch) with a '정보' (Information) link. It shows the following configuration:

- 이름 및 태그 정보**: The name is set to 'Tutorial-EC2-Web01'. A red box highlights this input field.
- 애플리케이션 및 OS 이미지(Amazon Machine Image) 정보**: The AMI is set to 'Amazon Linux 2 Kernel 5.10 AMI...'. A red box highlights this section.
- 최근 사용**: Shows recent AMI selections: Amazon Linux, Ubuntu, Windows, Red Hat, SUSE Linux, and a 'Quick Start' section.
- 설명**: Shows detailed information about the selected AMI: 'Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type'.
- 요약**: Summary of the instance configuration:
 - 인스턴스 개수: 1
 - 소프트웨어 이미지(AMI): Amazon Linux 2 Kernel 5.10 AMI... (ami-0fd0765afb77bccca7)
 - 가상 서버 유형(인스턴스 유형): t2.micro
 - 방화벽(보안 그룹): 새 보안 그룹
 - 스토리지(볼륨): 1개의 볼륨 – 8GiB
- A callout box points from the 'Quick Start' section to the summary table, containing the text: '프리 티어: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOPS, 1 GB of snapshots, and 100 GiB of bandwidth to the internet.'
- 인스턴스 시작** button at the bottom right.

At the bottom, there are links for '언어를 선택하고 싶으십니까? 새로 추가된 다음 기능Unified Settings' and footer links for '© 2022, Amazon Web Services, Inc. 또는 계열사.' and '개인 정보 보호'.

- 이름 태그: Tutorial-EC2-Web01
- 애플리케이션 및 이미지 : 아마존 리눅스 이미지
- AMI: Amazon Linux 2 AMI(HVM) – Kernel 5.10, SSD Volume Type
- 아키텍처: x86
- 인스턴스 유형: t2.micro
- 키 페어 로그인: AWS_PC_Key

5-3. 실습 - 네트워크 설정

▼ 네트워크 설정

VPC - 필수 정보
vpc-0ecccd7c29c2641d3 (Tutorial-vpc)
10.0.0.0/16

서브넷 정보
subnet-04bb94280a939a388 Tutorial-subnet-public01
VPC: vpc-0ecccd7c29c2641d3 소유자: 534520364753
가용 영역: ap-northeast-2a IP 주소 사용 가능: 4088

새 서브넷 생성

퍼블릭 IP 자동 할당 정보
활성화

방화벽(보안 그룹) 정보
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

보안 그룹 생성 기존 보안 그룹 선택

보안 그룹 규칙 비교

일반 보안 그룹 정보
보안 그룹 선택

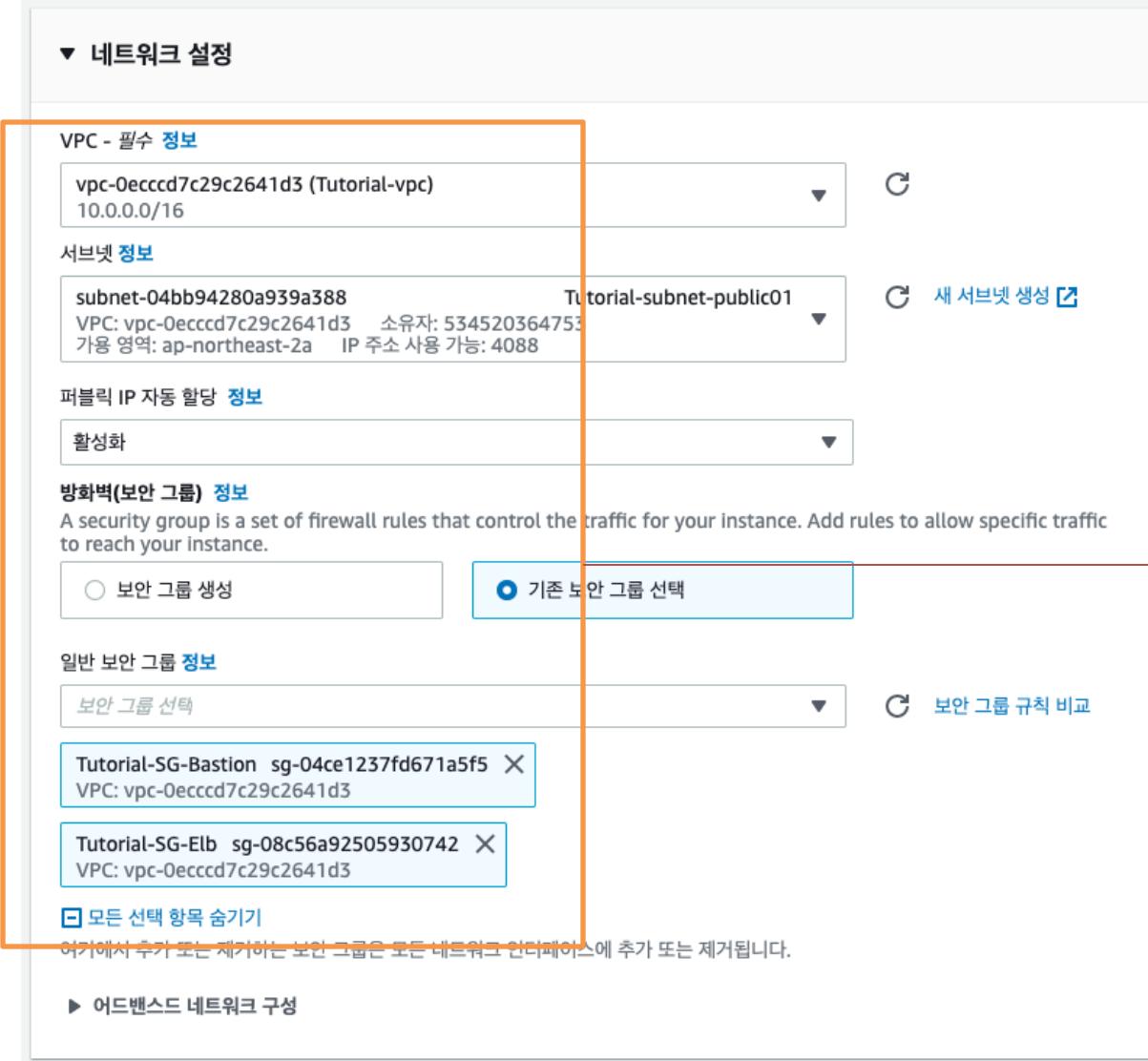
Tutorial-SG-Bastion sg-04ce1237fd671a5f5 X
VPC: vpc-0ecccd7c29c2641d3

Tutorial-SG-Elb sg-08c56a92505930742 X
VPC: vpc-0ecccd7c29c2641d3

모든 선택 항목 숨기기

여기에서 추가 또는 제거하는 보안 그룹은 모든 네트워크 인터페이스에 추가 또는 제거됩니다.

▶ 어드밴스드 네트워크 구성



- VPC: Tutorial-vpc
- 서브넷: Tutorial-Subnet-Public01
- 퍼블릭IP 자동 할당: 활성화
- 방화벽(보안 그룹): 기존 보안 그룹 선택
- 일반 보안 그룹: Tutorial-SG-Bastion, Tutorial-SG-Elb

5-4. 실습 - 인스턴스 시작

The screenshot shows the AWS EC2 Management Console interface for launching a new instance. The top navigation bar includes the EC2 Management Console logo, browser controls, and the URL ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#LaunchInstances. The left sidebar has links for AWS, Services, EC2 (selected), VPC, and RDS. The main content area is titled "방화벽(보안 그룹) 정보" (Security Group Information). It shows two security groups selected: "Tutorial-SG-Bastion" and "Tutorial-SG-Elb". A button "기존 보안 그룹 선택" (Select Existing Security Group) is highlighted with a blue border. Below this is a section for "일반 보안 그룹 정보" (General Security Group Information) with a dropdown menu showing "보안 그룹 선택". The "보안 그룹 선택" dropdown also has a blue border. A "모든 선택 항목 숨기기" (Hide All Selected Items) checkbox is checked. At the bottom of this section is a link "▶ 어드밴스드 네트워크 구성" (Advanced Network Configuration). The next section, "스토리지 구성 정보" (Storage Configuration Information), shows a root volume of 8 GiB gp2 type. A tooltip "프리 티어를 사용할 수 있는 고객은 최대 30GB의 EBS 범용(SSD) 또는 마그네티к 스토리지를 사용할 수 있습니다." (Customers who qualify for Free Tier can use up to 30GB of General Purpose (SSD) or Magnetic storage) is displayed over the volume settings. A "새 볼륨 추가" (Add New Volume) button is visible. The final section, "인스턴스 시작" (Launch Instance), contains a large orange "인스턴스 시작" (Launch Instance) button. A red arrow points from this button to the text "• 인스턴스 시작" on the right.

방화벽(보안 그룹) 정보
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.
보안 그룹 생성 기존 보안 그룹 선택
일반 보안 그룹 정보
보안 그룹 선택 보안 그룹 규칙 비교
Tutorial-SG-Bastion sg-04ce1237fd671a5f5 X
VPC: vpc-0ecccd7c29c2641d3
Tutorial-SG-Elb sg-08c56a92505930742 X
VPC: vpc-0ecccd7c29c2641d3
모든 선택 항목 숨기기
여기에서 추가 또는 제거하는 보안 그룹은 모든 네트워크 인터페이스에 추가 또는 제거됩니다.
▶ 어드밴스드 네트워크 구성

스토리지 구성 정보
어드밴스드
1x 8 GiB gp2 루트 볼륨
프리 티어를 사용할 수 있는 고객은 최대 30GB의 EBS 범용(SSD) 또는 마그네티ك 스토리지를 사용할 수 있습니다.
새 볼륨 추가
0 x 파일 시스템
▶ 고급 세부 정보 정보

인스턴스 시작

- 인스턴스 시작

5-5. 실습 - 웹 서버 설정 확인

The screenshot shows the AWS EC2 Management Console. The main pane displays a list of instances with columns for Name, Instance ID, Instance State, Instance Type, Status Checks, Health Status, and Region. Three instances are listed: MySGTest (Stopped), Tutorial-EC2-Bastion (Running), and Tutorial-EC2-Web01 (Running). The Tutorial-EC2-Web01 instance is selected and highlighted with a red box. A secondary window titled '인스턴스: i-0b973cebd3cbe732e(Tutorial-EC2-Web01)' is open, showing the Network tab. It displays network details such as Public IPv4 Address (10.0.72.147), Public DNS Name (ip-10-0-72-147.ap-northeast-2.compute.internal), VPC ID (vpc-0670db751a44b55c6), and Subnet ID (subnet-0354077a3bb09aa22 (Tutorial-Subnet-Private01)).

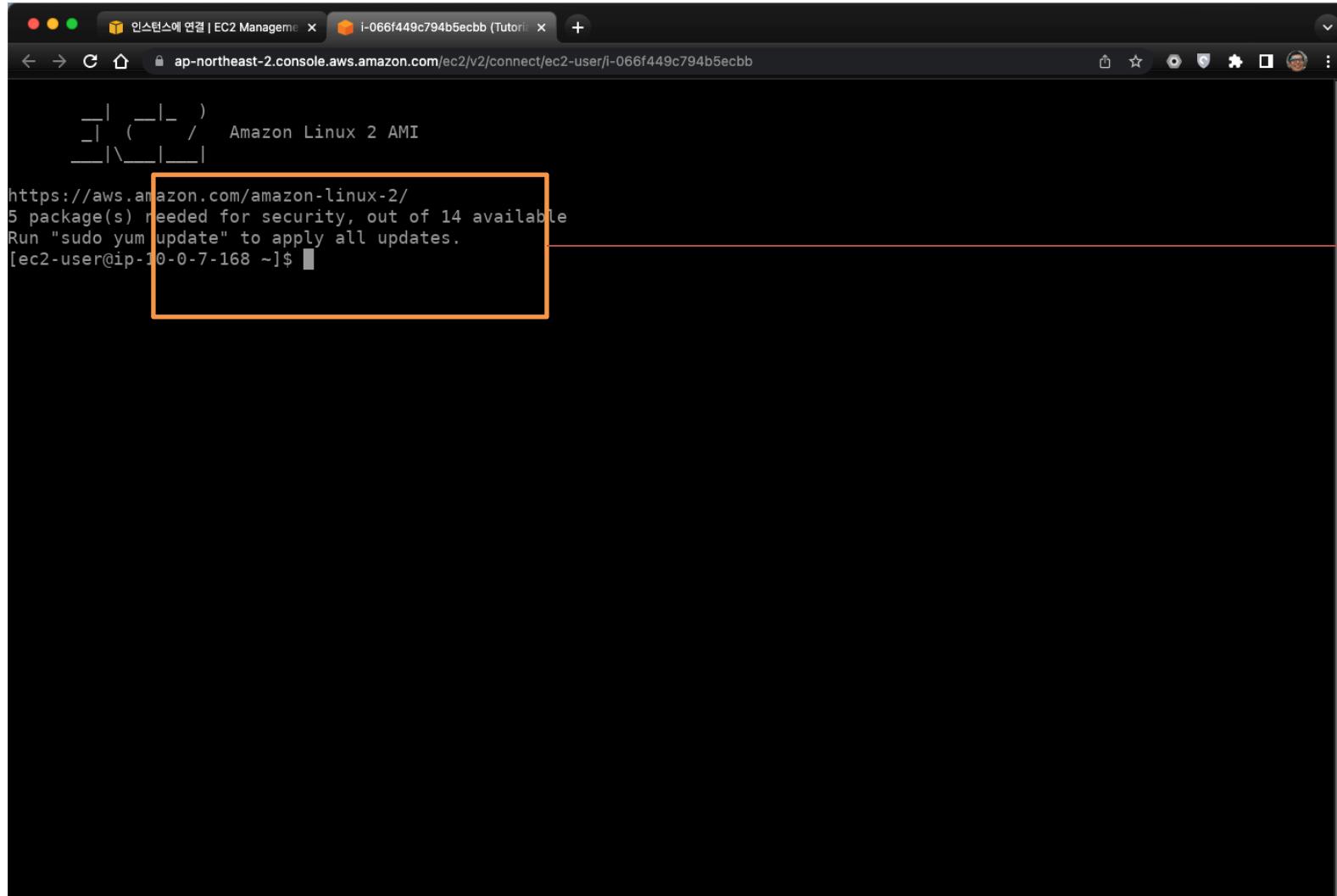
- Tutorial-EC2-Web01 확인

5-6. 실습 - 웹 서버 연결

The screenshot shows the AWS EC2 Management console with the URL ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#ConnectToInstance:instanceId=i-066f449c794b5ecbb. The page displays information for an EC2 instance with ID **i-066f449c794b5ecbb** (Tutorial-EC2-Web01). It includes fields for Public IP (54.180.156.211) and User Name (ec2-user). A note at the bottom states: "① 참고: 대부분의 경우 추정된 사용자 이름은 정확합니다. 하지만 AMI 사용 지침을 읽고 AMI 소유자가 기본 AMI 사용자 이름을 변경했는지 확인하십시오." (Note: In most cases, the inferred user name is correct. However, please check the AMI usage guide to see if the AMI owner has changed the default AMI user name.) An orange box highlights the "연결" (Connect) button, which is highlighted in red in the diagram below.

• 연결

5-7. 실습 - 웹 서버 연결 완료



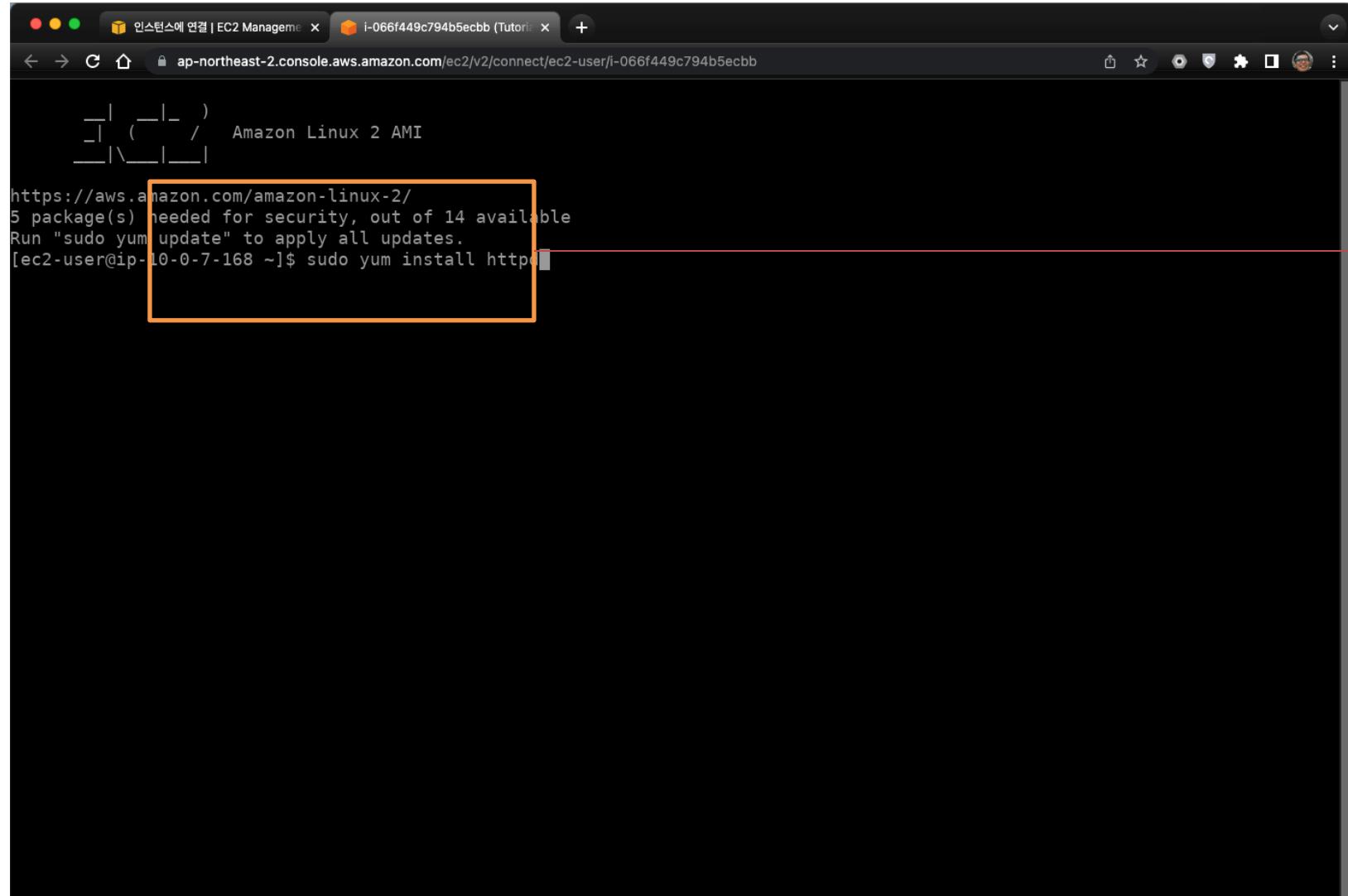
A screenshot of a web browser window titled "인스턴스에 연결 | EC2 Management" and "i-066f449c794b5ecbb (Tutorial-EC2-Web01)". The address bar shows "ap-northeast-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-066f449c794b5ecbb". The main content is a terminal session on an Amazon Linux 2 AMI instance. The terminal output is as follows:

```
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/
5 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-0-7-168 ~]$
```

The first three lines of the terminal output are highlighted with an orange rectangle.

- 연결 확인

5-8. 실습 - 웹 서버 데몬 설치

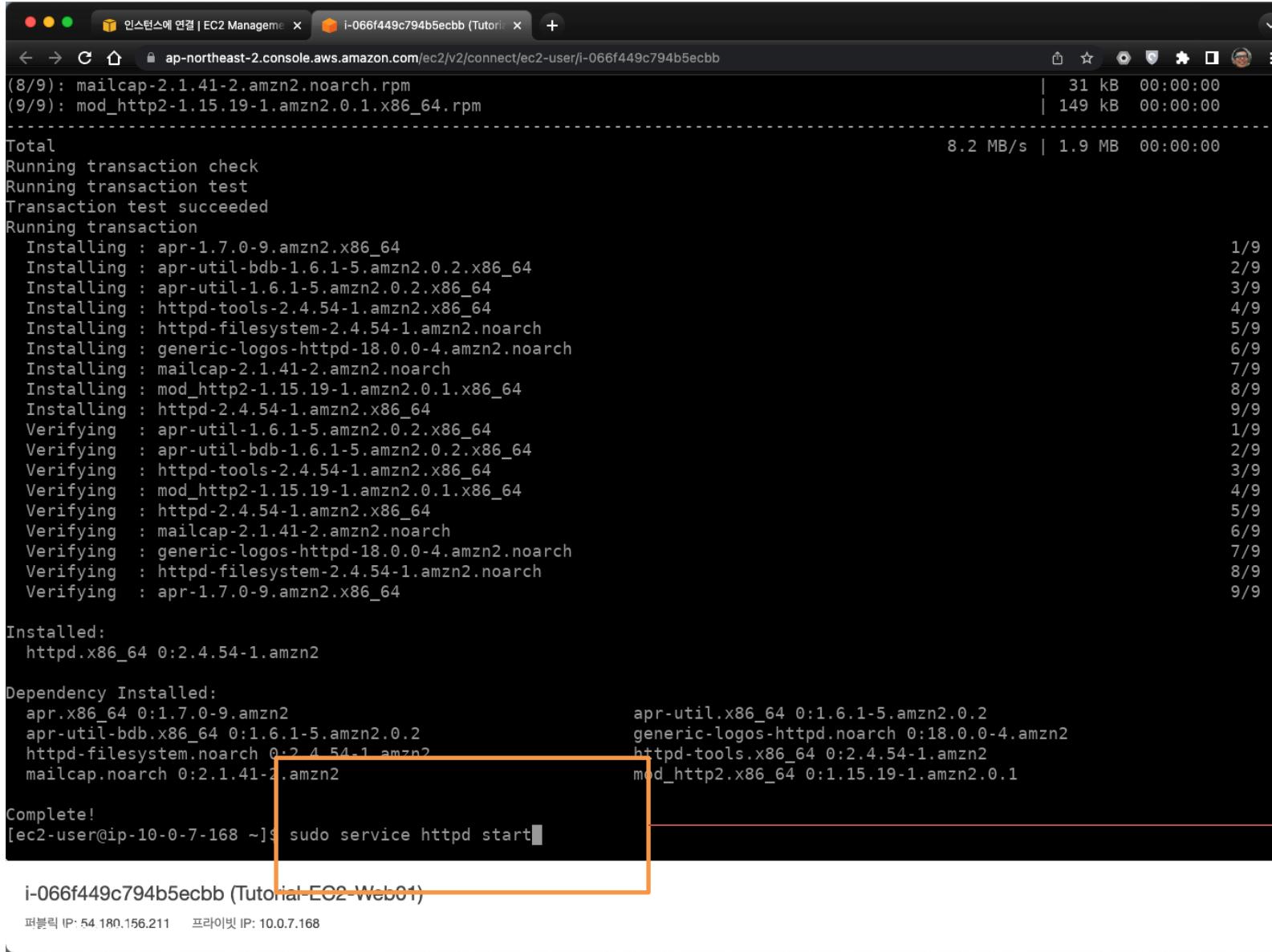


A screenshot of a terminal window titled "i-066f449c794b5ecbb (Tutorial-EC2-Web01)". The window shows a shell session on an Amazon Linux 2 AMI. The user has run the command "sudo yum install httpd". A red arrow points from the right side of the terminal window to the command itself, which is highlighted with an orange box.

```
https://aws.amazon.com/amazon-linux-2/
5 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-0-7-168 ~]$ sudo yum install httpd
```

sudo yum install
httpd

5-9. 실습 - 웹 서버 데몬 시작



ap-northeast-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-066f449c794b5ecbb

```
(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 8.2 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-2.4.54-1.amzn2.x86_64 4/9
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch 5/9
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/9
  Installing : mailcap-2.1.41-2.amzn2.noarch 7/9
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64 8/9
  Installing : httpd-2.4.54-1.amzn2.x86_64 9/9
  Verifying : apr-util-1.6.1-5.amzn2.0.2.x86_64 1/9
  Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 2/9
  Verifying : httpd-tools-2.4.54-1.amzn2.x86_64 3/9
  Verifying : mod_http2-1.15.19-1.amzn2.0.1.x86_64 4/9
  Verifying : httpd-2.4.54-1.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 : httpd-filesystem-2.4.54-1.amzn2.noarch 8/9
  Verifying : apr-1.7.0-9.amzn2.x86_64 9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2
  apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2
  apr-util.x86_64 0:1.6.1-5.amzn2.0.2
  generic-logos-httpd.noarch 0:18.0.0-4.amzn2
  httpd-tools.x86_64 0:2.4.54-1.amzn2
  mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[ec2-user@ip-10-0-7-168 ~]$ sudo service httpd start
```

i-066f449c794b5ecbb (Tutorial-EC2-Web01)

퍼블릭 IP: 54.180.156.211 프라이빗 IP: 10.0.7.168

sudo service
httpd start

5-10. 실습 - 웹 서버 데몬 시작

The screenshot shows a terminal window on an Amazon EC2 instance. The user is installing several Apache-related packages using yum. After the installation, the user runs the command `sudo service httpd start`. A red arrow points from the terminal output to the command itself.

```
(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 8.2 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-2.4.54-1.amzn2.x86_64 4/9
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch 5/9
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/9
  Installing : mailcap-2.1.41-2.amzn2.noarch 7/9
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64 8/9
  Installing : httpd-2.4.54-1.amzn2.x86_64 9/9
  Verifying : apr-util-1.6.1-5.amzn2.0.2.x86_64 1/9
  Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 2/9
  Verifying : httpd-tools-2.4.54-1.amzn2.x86_64 3/9
  Verifying : mod_http2-1.15.19-1.amzn2.0.1.x86_64 4/9
  Verifying : httpd-2.4.54-1.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 : httpd-filesystem-2.4.54-1.amzn2.noarch 8/9
  Verifying : apr-1.7.0-9.amzn2.x86_64 9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2
  apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2

apr-util.x86_64 0:1.6.1-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2
httpd-tools.x86_64 0:2.4.54-1.amzn2
mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

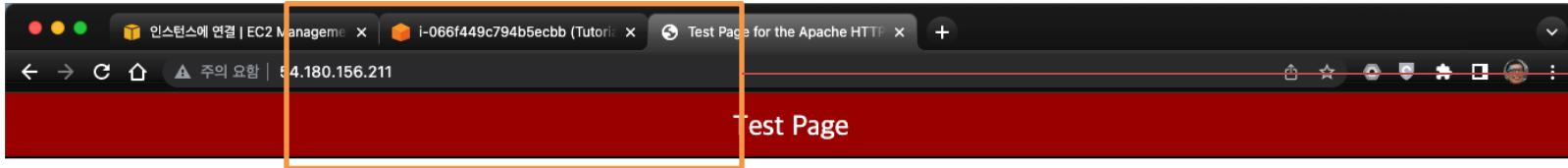
Complete!
[ec2-user@ip-10-0-7-168 ~]$ sudo service httpd start
```

i-066f449c794b5ecbb (Tutorial-EC2-Web01)

퍼블릭 IP: 54.180.156.211 프라이빗 IP: 10.0.7.168

sudo service
httpd start

5-11. 실습 - 웹 서버 데몬 확인



웹 브라우저
실행시켜 퍼블릭
IP로 접속한 다음
Test Page 가
나오는지 확인

If you are a member of the general public:

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

If you are the website administrator:

You may now add content to the directory /var/www/html/. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file /etc/httpd/conf.d/welcome.conf.

You are free to use the image below on web sites powered by the Apache HTTP Server:



5-12. 실습 - 웹 서버 자동 활성화

The screenshot shows a terminal window with the following output:

```
Total                                         8.2 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-2.4.54-1.amzn2.x86_64      4/9
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch 5/9
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/9
  Installing : mailcap-2.1.41-2.amzn2.noarch        7/9
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64    8/9
  Installing : httpd-2.4.54-1.amzn2.x86_64          9/9
  Verifying   : apr-util-1.6.1-5.amzn2.0.2.x86_64      1/9
  Verifying   : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 2/9
  Verifying   : httpd-tools-2.4.54-1.amzn2.x86_64      3/9
  Verifying   : mod_http2-1.15.19-1.amzn2.0.1.x86_64    4/9
  Verifying   : httpd-2.4.54-1.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   : httpd-filesystem-2.4.54-1.amzn2.noarch 8/9
  Verifying   : apr-1.7.0-9.amzn2.x86_64          9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2
  apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2

Complete!
[ec2-user@ip-10-0-7-168 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-7-168 ~]$ sudo chkconfig httpd on
```

A red box highlights the command `sudo service httpd start`. Below the terminal window, the status bar shows the instance ID `i-066f449c794b5ecbb` and the IP addresses `퍼블릭 IP: 54.180.156.211` and `프라이빗 IP: 10.0.7.168`.

`sudo chkconfig httpd on`
(서버 부팅시 웹 서버가
자동으로 시작될 수 있도록
설정)

5-13. 실습 - 웹 서버 기본 루트 권한 변경

The screenshot shows a terminal window with the following content:

```
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-2.4.54-1.amzn2.x86_64 4/9
Installing : httpd-filesystem-2.4.54-1.amzn2.noarch 5/9
Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/9
Installing : mailcap-2.1.41-2.amzn2.noarch 7/9
Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64 8/9
Installing : httpd-2.4.54-1.amzn2.x86_64 9/9
Verifying : apr-util-1.6.1-5.amzn2.0.2.x86_64 1/9
Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 2/9
Verifying : httpd-tools-2.4.54-1.amzn2.x86_64 3/9
Verifying : mod_http2-1.15.19-1.amzn2.0.1.x86_64 4/9
Verifying : httpd-2.4.54-1.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 : httpd-filesystem-2.4.54-1.amzn2.noarch 8/9
Verifying : apr-1.7.0-9.amzn2.x86_64 9/9

Installed:
httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
apr.x86_64 0:1.7.0-9.amzn2
apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
httpd-filesystem.noarch 0:2.4.54-1.amzn2
mailcap.noarch 0:2.1.41-2.amzn2

april-util.x86_64 0:1.6.1-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2
httpd-tools.x86_64 0:2.4.54-1.amzn2
mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[ec2-user@ip-10-0-7-168 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-7-168 ~]$ sudo chkconfig httpd on
Note: Forwarding request to 'systemctl enable httpd.service'.
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-10-0-7-168 ~]$ sudo groupadd www
[ec2-user@ip-10-0-7-168 ~]$ sudo usermod -a -G www ec2-user
[ec2-user@ip-10-0-7-168 ~]$ exit
```

A red box highlights the command `sudo groupadd www`.

sudo groupadd www
Sudo usermod -a -G www ec2-user
exit

5-14. 실습 - 웹 서버 재연결

The screenshot shows the AWS EC2 Instances connection page for an instance with ID i-066f449c794b5ecbb. The 'EC2 인스턴스 연결' tab is selected. The page displays the instance ID, public IP address (54.180.156.211), and the user name (ec2-user). A note indicates that the user name is correct unless it has been changed. A callout box highlights the '연결' (Connect) button, which is enclosed in an orange rectangle. An orange arrow points from this button towards the word '연결' (Connection) located on the right side of the page.

인스턴스에 연결 정보

다음 옵션 중 하나를 사용하여 인스턴스 i-066f449c794b5ecbb (Tutorial-EC2-Web01)에 연결

EC2 인스턴스 연결 Session Manager SSH 클라이언트 EC2 직렬 콘솔

인스턴스 ID
i-066f449c794b5ecbb (Tutorial-EC2-Web01)

퍼블릭 IP 주소
54.180.156.211

사용자 이름
ec2-user

사용자 지정 사용자 이름을 사용하여 연결하거나 인스턴스 시작에 사용한 AMI의 기본 사용자 이름 ec2-user(를) 사용합니다.

① 참고: 대부분의 경우 추정된 사용자 이름은 정확합니다. 하지만 AMI 사용 지침을 읽고 AMI 소유자가 기본 AMI 사용자 이름을 변경했는지 확인하십시오.

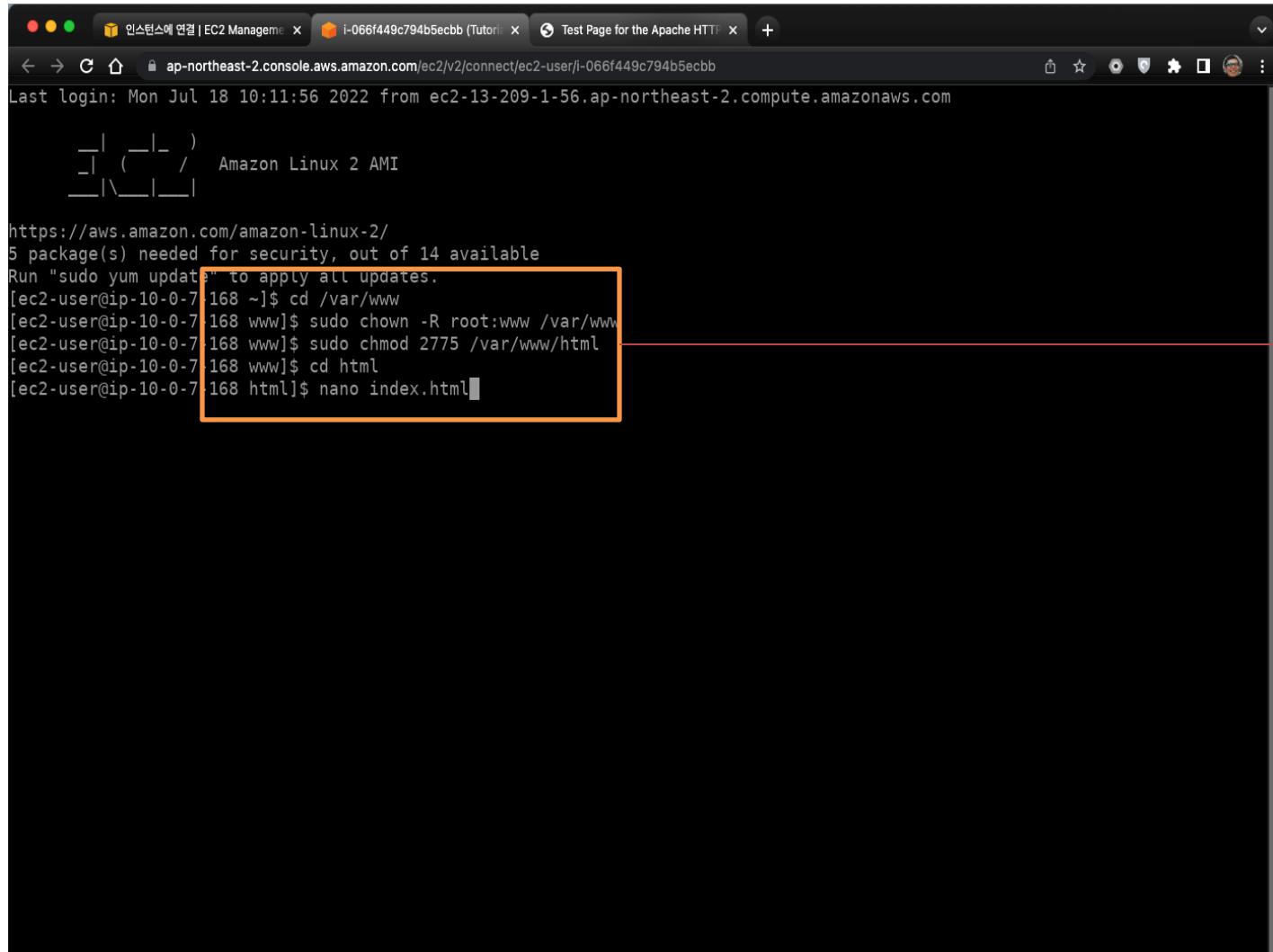
취소 연결

연결

의견 언어를 선택하고 싶으십니까? 새로 추가된 다음 기능Unified Settings에서 선택할 수 있습니다.

© 2022, Amazon Web Services, Inc. 또는 계열사. 개인 정보 보호 약관 쿠키 기본 설정

5-15. 실습 - html 루트 권한 설정



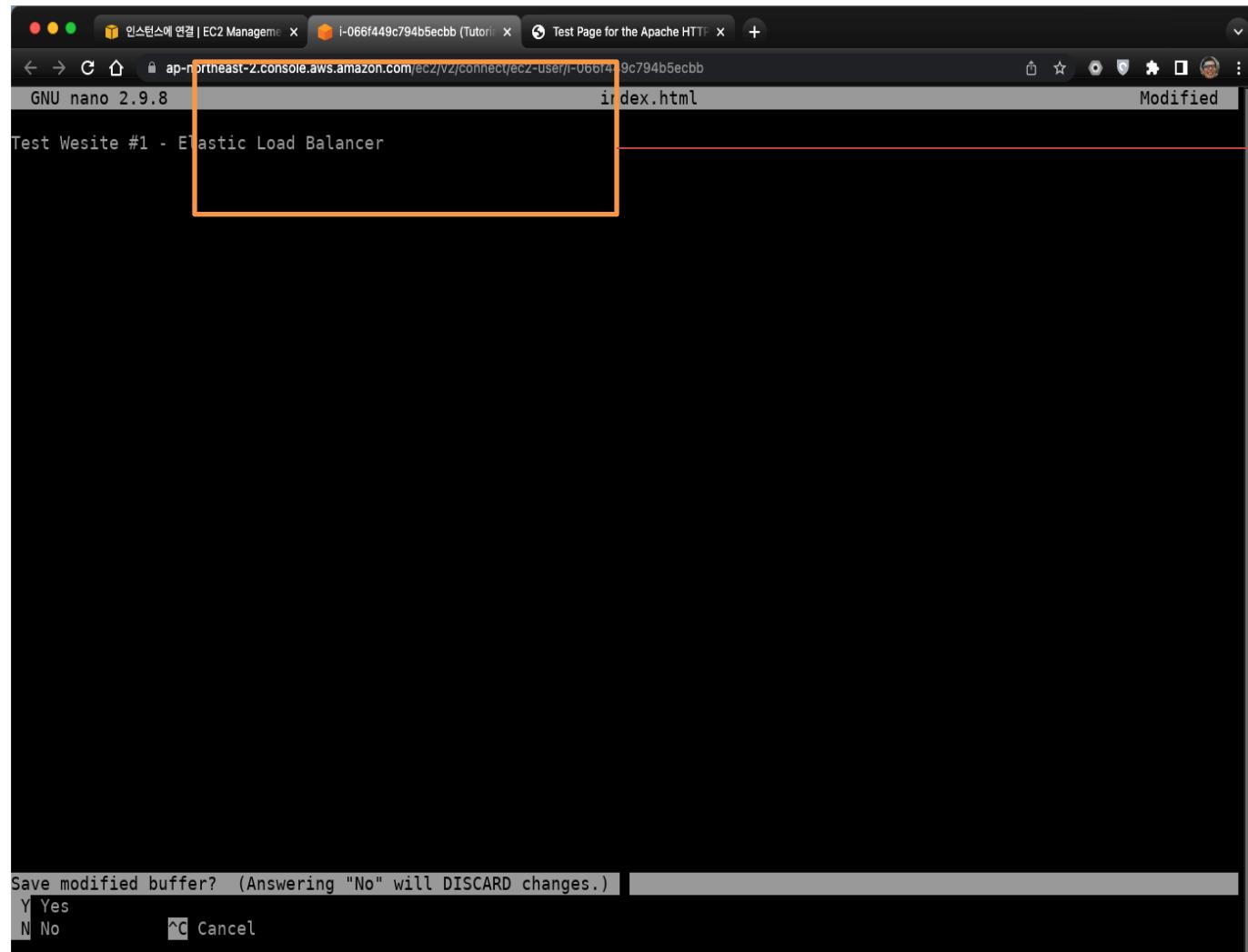
A screenshot of a terminal window on an Amazon Linux 2 AMI. The window title is "Test Page for the Apache HTTP". The terminal shows a user's session with the following commands:

```
Last login: Mon Jul 18 10:11:56 2022 from ec2-13-209-1-56.ap-northeast-2.compute.amazonaws.com
[ec2-user@ip-10-0-7:~]$ cd /var/www
[ec2-user@ip-10-0-7:~/www]$ sudo chown -R root:www /var/www
[ec2-user@ip-10-0-7:~/www]$ sudo chmod 2775 /var/www/html
[ec2-user@ip-10-0-7:~/www]$ cd html
[ec2-user@ip-10-0-7:~/www/html]$ nano index.html
```

The command sequence from `cd /var/www` to `nano index.html` is highlighted with an orange rectangle.

cd /var/www
sudo chown –R root:www /var/www
sudo chmod 2775 /var/www/html
cd html
nano index.html

5-16. 실습 - 나노에디터 index.html 편집

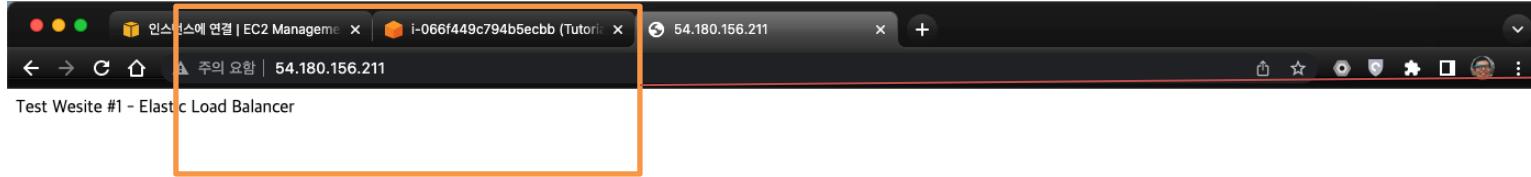


```
GNU nano 2.9.8           index.html          Modified
Test Wesite #1 - Elastic Load Balancer

Save modified buffer? (Answering "No" will DISCARD changes.)
Y Yes
N No      ^C Cancel
```

Test Website #1 – Elastic Load
Balancer 입력후 CTRL+X 키 누른 후
Y 누르고 엔터키 누르면 저장됨

5-17. 실습 - 최종 웹 서비스 실행



퍼블릭 IP를 웹브라우저에 복사하여
"Test Website #1 – Elastic Load
Balancer" 나오는지 최종 확인

실습C – 두번째 웹 서버 생성하기



6-1. 실습 - 인스턴스 설정 (Web02)

The screenshot shows the AWS EC2 Management Console with the URL ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#LaunchInstances. The page is titled "인스턴스 시작" (Instance Start) under the "인스턴스" (Instances) section. A blue box highlights the "이름 및 태그 정보" (Name and Tag Information) section where the instance name is set to "tutorial-EC2-Web02". Another blue box highlights the "애플리케이션 및 OS 이미지(Amazon Machine Image)" (Application and OS Image) section, which lists "Amazon Linux 2 Kernel 5.10 AMI...". A red arrow points from this section to a callout box containing the following text:

프리 티어: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Below the main form, there is a note: "언어를 선택하고 싶으신가? 새로 추가된 다음 기능 Unified Settings에서 선택할 수 있습니다." (Would you like to choose a language? You can select it from the new feature Unified Settings.)

- 이름 태그: Tutorial-EC2-Web02
- 애플리케이션 및 이미지 : 아마존 리눅스 이미지
- AMI: Amazon Linux 2 AMI(HVM) – Kernel 5.10, SSD Volume Type
- 아키텍처: x86
- 인스턴스 유형: t2.micro
- 키 페어 로그인: AWS_PC_Key

6-2. 실습 - 네트워크 설정

The screenshot shows the AWS EC2 Management Console interface for launching a new instance. The '네트워크 설정' (Network Settings) section is highlighted with a red box. Inside this box, the 'VPC - 필수' dropdown is set to 'vpc-0ecccd7c29c2641d3 (Tutorial-vpc)' with IP range '10.0.0.0/16'. Below it, the '서브넷 정보' dropdown is set to 'subnet-053343c2da73bfbb0 Tutorial-subnet-public02'. Under '퍼블릭 IP 자동 할당' (Public IP Assignment), '활성화' (Enabled) is selected. In the '방화벽(보안 그룹)' (Security Group) section, the '기존 보안 그룹 선택' (Select Existing Security Group) radio button is selected, with 'Tutorial-SG-Bastion' chosen. A tooltip for this selection provides information about free tier usage for t2.micro instances.

- VPC: Tutorial-vpc
- 서브넷: Tutorial-Subnet-Public02
- 퍼블릭IP 자동 할당: 활성화
- 방화벽(보안 그룹): 기존 보안 그룹 선택
- 일반 보안 그룹: Tutorial-SG-Bastion, Tutorial-SG-Elb

6-3. 실습 - 웹 서버 생성 확인

The screenshot shows the AWS EC2 Management Console with the URL ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#LaunchInstances. The browser tabs include 'EC2 Management Console', 'i-066f449c794b5ecbb [Tutorial]', and '54.180.156.211'. The main content area displays a success message: '성공' (Success) and '인스턴스를 시작했습니다. (i-0dbbd3b3e625fed54)'. Below this, there is a link '▶ 로그 시작' (Start Log). A green box highlights this message. To the right, a red arrow points to a button labeled '모든 인스턴스 보기' (View All Instances), which is also highlighted with an orange box. The '모든 인스턴스 보기' button is located at the bottom of a sidebar section titled '다음 단계' (Next Step) containing sections for '예상 요금 알림 받기' (Receive estimated bill notifications) and '인스턴스에 연결하는 방법' (How to connect to the instance). The bottom of the page includes a footer with links like '의견' (Feedback), '언어를 선택하고 싶으십니까? 새로 추가된 다음 기능Unified Settings' (Would you like to select a language? New feature: Unified Settings), '© 2022, Amazon Web Services, Inc. 또는 계열사.', and '개인 정보 보호' (Privacy Protection).

모든 인스턴스 보기

6-4. 실습 - Web02 웹 서버 연결

The screenshot shows the AWS EC2 Instance Connect interface. At the top, the browser title bar displays "인스턴스에 연결 | EC2 Management Console" and "i-066f449c794b5ecbb (Tutorial-EC2-Web02)" with the IP "54.180.156.211". The main content area is titled "인스턴스에 연결 정보" and shows the instance ID "i-0dbbd3b3e625fed54 (Tutorial-EC2-Web02)" and public IP "13.209.41.12". It also shows the user name "ec2-user". A note at the bottom left says: "참고: 대부분의 경우 추정된 사용자 이름은 정확합니다. 하지만 AMI 사용 지침을 알고 AMI 소유자가 기본 AMI 사용자 이름을 변경했는지 확인하십시오." (Note: In most cases, the estimated user name is accurate. However, if you know the AMI usage guidelines, check if the AMI owner has changed the default AMI user name.) An orange box highlights this note. A red arrow points from this note to the text "• 연결" (Connect) at the bottom right.

인스턴스에 연결 정보

다음 옵션 중 하나를 사용하여 인스턴스 i-0dbbd3b3e625fed54 (Tutorial-EC2-Web02)에 연결

EC2 인스턴스 연결 Session Manager SSH 클라이언트 EC2 직렬 콘솔

인스턴스 ID

i-0dbbd3b3e625fed54 (Tutorial-EC2-Web02)

퍼블릭 IP 주소

13.209.41.12

사용자 이름

ec2-user

사용자 지정 사용자 이름을 사용하여 연결하거나 인스턴스 시작에 사용한 AMI의 기본 사용자 이름 ec2-user(을) 사용합니다.

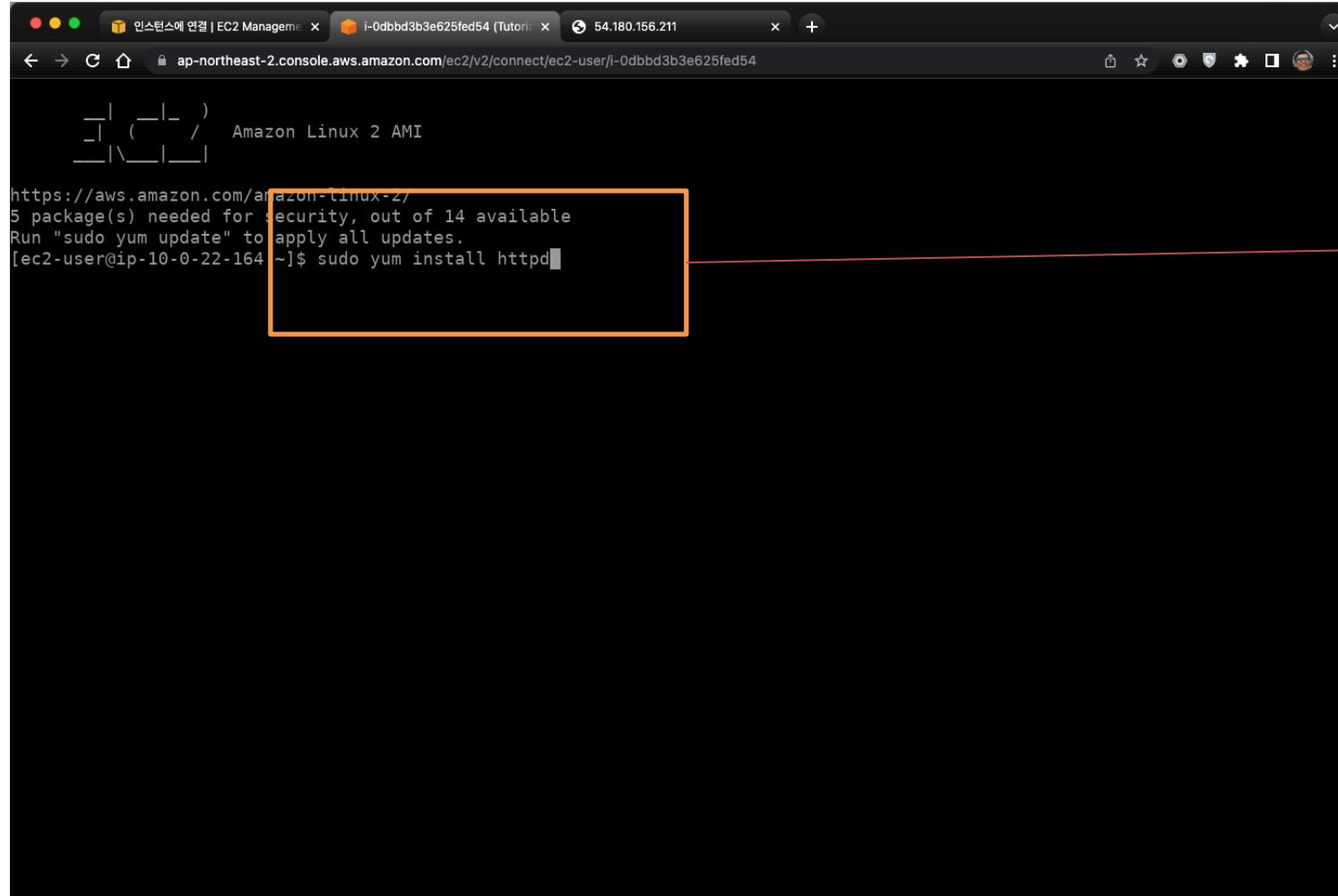
참고: 대부분의 경우 추정된 사용자 이름은 정확합니다. 하지만 AMI 사용 지침을 알고 AMI 소유자가 기본 AMI 사용자 이름을 변경했는지 확인하십시오.

취소 연결

• 연결

의견 언어를 선택하고 싶으십니까? 새로 추가된 다음 기능Unified Settings에서 선택할 수 있습니다. © 2022, Amazon Web Services, Inc. 또는 계열사. 개인 정보 보호 약관 쿠키 기본 설정

6-5. 실습 - Web02 웹 서버 설치



A screenshot of a terminal window on an Amazon Linux 2 AMI. The window title is '54.180.156.211'. The URL in the address bar is 'ap-northeast-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0dbbd3b3e625fed54'. The terminal output shows:

```
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/
5 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-0-22-164 ~]$ sudo yum install httpd
```

The command 'sudo yum install httpd' is highlighted with an orange rectangle.

→ sudo yum install httpd

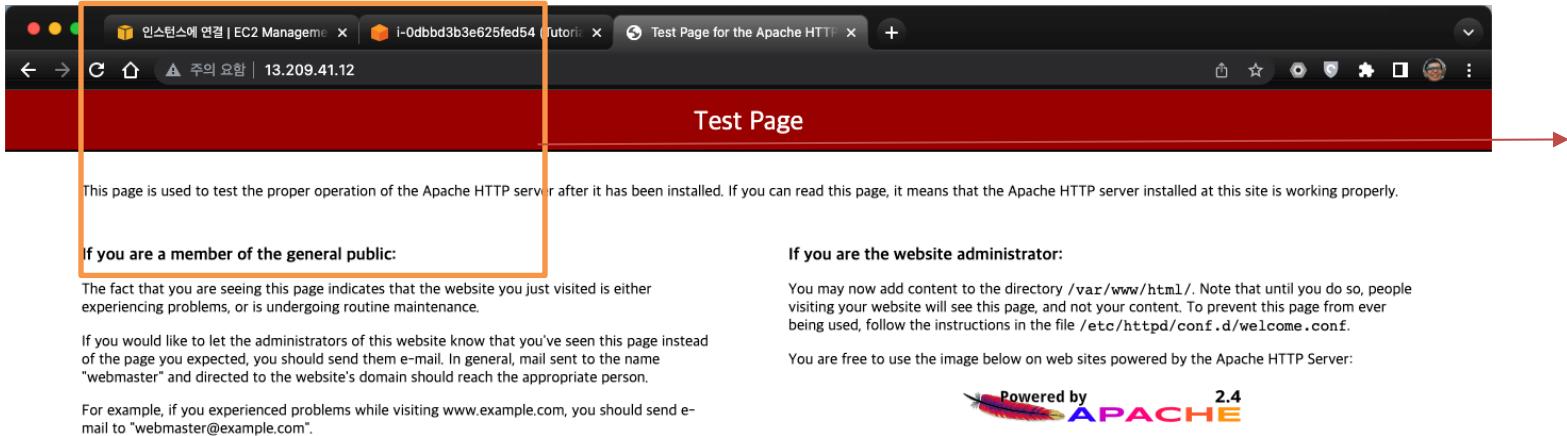
6-6. 실습 - Web02 웹서버 실행

A screenshot of a terminal window titled "i-0dbbd3b3e625fed54 (Tutorial-EC2-Web02)" running on a Linux system. The window shows the output of a package manager (likely yum) performing a transaction. The transaction starts with a "Running transaction check" and ends with a "Transaction test succeeded". It then moves into a "Running transaction" phase, listing various packages being installed or verified. The packages include apr, apr-util, httpd-tools, httpd-filesystem, generic-logos-httpd, mailcap, and mod_http2. The transaction concludes with an "Installed" section showing the final state of the packages. At the bottom, the user runs the command "sudo service httpd start", which is highlighted with a red arrow pointing to the right.

```
Total                                         7.5 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-2.4.54-1.amzn2.x86_64      4/9  
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch 5/9  
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/9  
  Installing : mailcap-2.1.41-2.amzn2.noarch        7/9  
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64    8/9  
  Installing : httpd-2.4.54-1.amzn2.x86_64           9/9  
  Verifying   : apr-util-1.6.1-5.amzn2.0.2.x86_64      1/9  
  Verifying   : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 2/9  
  Verifying   : httpd-tools-2.4.54-1.amzn2.x86_64      3/9  
  Verifying   : mod_http2-1.15.19-1.amzn2.0.1.x86_64 4/9  
  Verifying   : httpd-2.4.54-1.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   : httpd-filesystem-2.4.54-1.amzn2.noarch 8/9  
  Verifying   : apr-1.7.0-9.amzn2.x86_64             9/9  
Installed  
  httpd.x86_64 0:2.4.54-1.amzn2  
  
Dependency Installed:  
  apr.x86_64 0:1.7.0-9.amzn2  
  apr-util.x86_64 0:1.6.1-5.amzn2.0.2  
  httpd-filesystem.noarch 0:2.4.54-1.amzn2  
  mailcap.noarch 0:2.1.41-2.amzn2  
  
Complete!  
[ec2-user@ip-10-0-22-164 ~]$ sudo service httpd start  
Redirecting to /bin/systemctl start httpd.service  
[ec2-user@ip-10-0-22-164 ~]$
```

→ sudo service httpd start

6-7. 실습 - 웹서버 확인



- 퍼블릭IP를 복사하여 웹브라우저에서 실행하여 TestPage 확인

6-8. 실습 - 웹서버 활성화 및 루트권한 변경

The screenshot shows a terminal window with the following output:

```
Running transaction
  Installing : apr-1.7.0-9.amzn2.x86_64
  Installing : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64
  Installing : apr-util-1.6.1-5.amzn2.0.2.x86_64
  Installing : httpd-tools-2.4.54-1.amzn2.x86_64
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch
  Installing : mailcap-2.1.41-2.amzn2.noarch
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64
  Installing : httpd-2.4.54-1.amzn2.x86_64
  Verifying   : apr-1.6.1-5.amzn2.0.2.x86_64
  Verifying   : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64
  Verifying   : httpd-tools-2.4.54-1.amzn2.x86_64
  Verifying   : mod_http2-1.15.19-1.amzn2.0.1.x86_64
  Verifying   : httpd-2.4.54-1.amzn2.x86_64
  Verifying   : mailcap-2.1.41-2.amzn2.noarch
  Verifying   : generic-logos-httpd-18.0.0-4.amzn2.noarch
  Verifying   : httpd-filesystem-2.4.54-1.amzn2.noarch
  Verifying   : apr-1.7.0-9.amzn2.x86_64
  1/9
  2/9
  3/9
  4/9
  5/9
  6/9
  7/9
  8/9
  9/9
  9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2
  apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2
  apr-util.x86_64 0:1.6.1-5.amzn2.0.2
  generic-logos-httpd.noarch 0:18.0.0-4.amzn2
  httpd-tools.x86_64 0:2.4.54-1.amzn2
  mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[ec2-user@ip-10-0-22-164 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-22-164 ~]$ sudo chkconfig httpd on
Note: Forwarding request to 'systemctl enable httpd.service'.
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-10-0-22-164 ~]$ sudo groupadd www
[ec2-user@ip-10-0-22-164 ~]$ sudo usermod -a -G www ec2-user
[ec2-user@ip-10-0-22-164 ~]$ exit
```

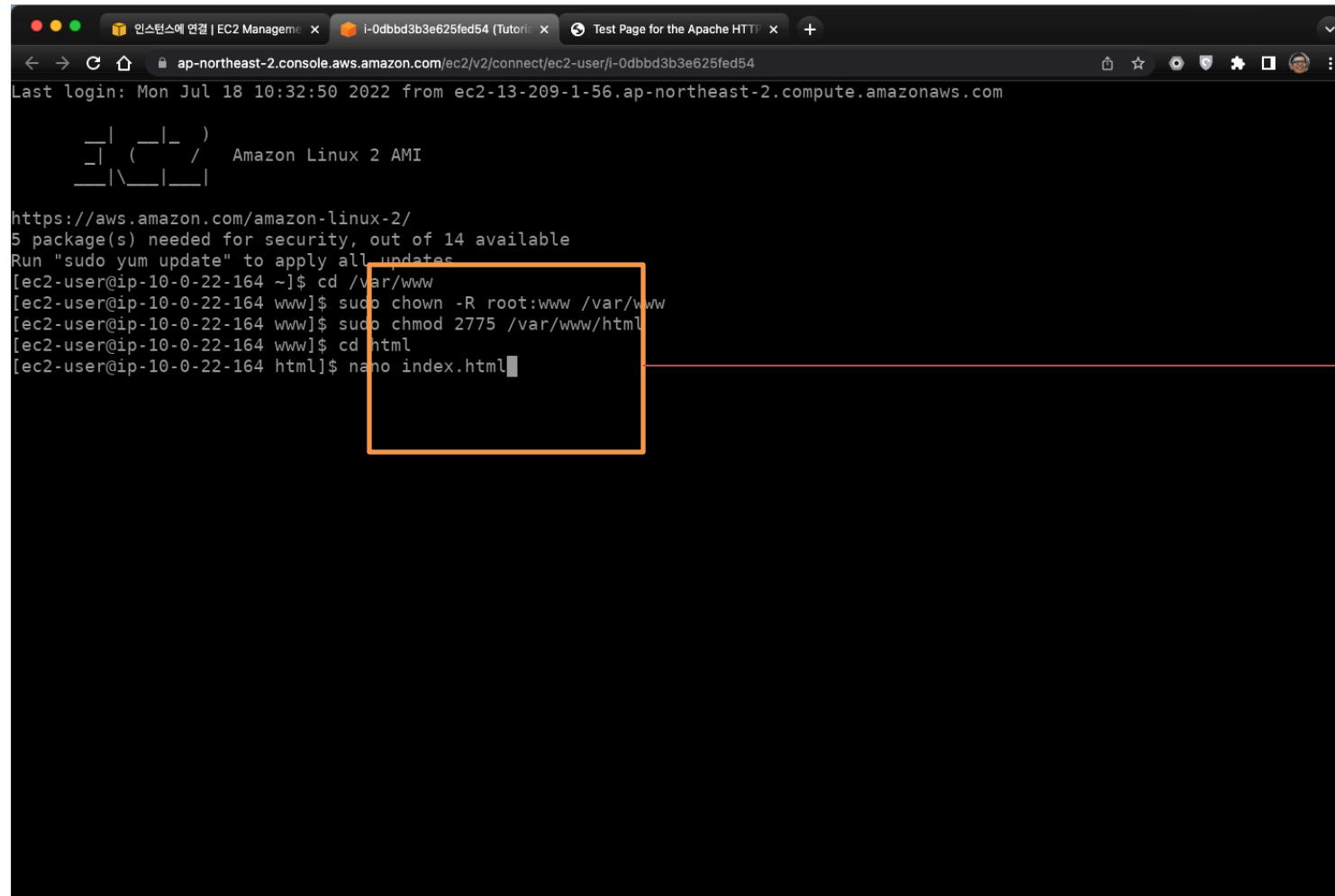
sudo service httpd start
sudo groupadd www
sudo usermod -a -G www ec2-user
exit

6-9. 실습 - Web02 웹서버 재연결

The screenshot shows the AWS EC2 Management console with the URL ap-northeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-northeast-2#ConnectToInstance:instanceId=i-0dbbd3b3e625fed54. The page displays information about the instance **i-0dbbd3b3e625fed54 (Tutorial-EC2-Web02)**, including its Public IP (13.209.41.12) and User Name (ec2-user). A callout box highlights the note: "사용자 지정 사용자 이름을 사용하여 연결하거나 인스턴스 시작에 사용한 AMI의 기본 사용자 이름 ec2-user(를) 사용합니다." (Use the specified user name or the default user name used when starting the instance AMI.) Below this, a note states: "참고: 대부분의 경우 추정된 사용자 이름은 정확합니다. 하지만 AMI 사용 지침을 읽고 AMI 소유자가 기본 AMI 사용자 이름을 변경했는지 확인하십시오." (Note: In most cases, the estimated user name is accurate. However, please refer to the AMI usage guidelines to check if the AMI owner has changed the default AMI user name.) A red arrow points from this note to the **연결** (Connect) button, which is highlighted with an orange border.

- 연결

6-10. 실습 - html 루트 권한 설정 및 나노 실행



A screenshot of a terminal window on an Amazon Linux 2 AMI. The terminal shows the user's home directory (~) and the /var/www directory. The user runs several commands to change ownership and permissions of the /var/www/html directory, and then uses the nano editor to edit the index.html file.

```
Last login: Mon Jul 18 10:32:50 2022 from ec2-13-209-1-56.ap-northeast-2.compute.amazonaws.com
[ec2-user@ip-10-0-22-164 ~]$ cd /var/www
[ec2-user@ip-10-0-22-164 www]$ sudo chown -R root:www /var/www
[ec2-user@ip-10-0-22-164 www]$ sudo chmod 2775 /var/www/html
[ec2-user@ip-10-0-22-164 www]$ cd html
[ec2-user@ip-10-0-22-164 html]$ nano index.html
```

```
cd /var/www
sudo chown -R root:www /var/www
sudo chmod 2775 /var/www/html
cd html
nano index.html
```

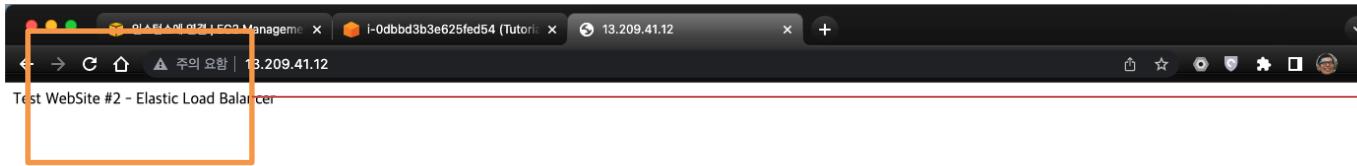
6-11. 실습 - Web02 나노 에디터 편집

```
 GNU nano 2.9.8
Test Website #2 - Elastic Load Balancer
Modified

Save modified buffer? (Answering "No" will DISCARD changes.)
Y Yes
N No
C Cancel
```

Test Website #2 – Elastic Load
Balancer 입력후 CTRL+X 키 누른 후
Y 누르고 엔터키 누르면 저장됨

6-12. 실습 - Web02 웹서버 실행 확인



퍼블릭 IP를 웹브라우저에 복사하여
"Test WebSite #2 – Elastic Load
Balancer" 나오는지 최종 확인