AWS 실습

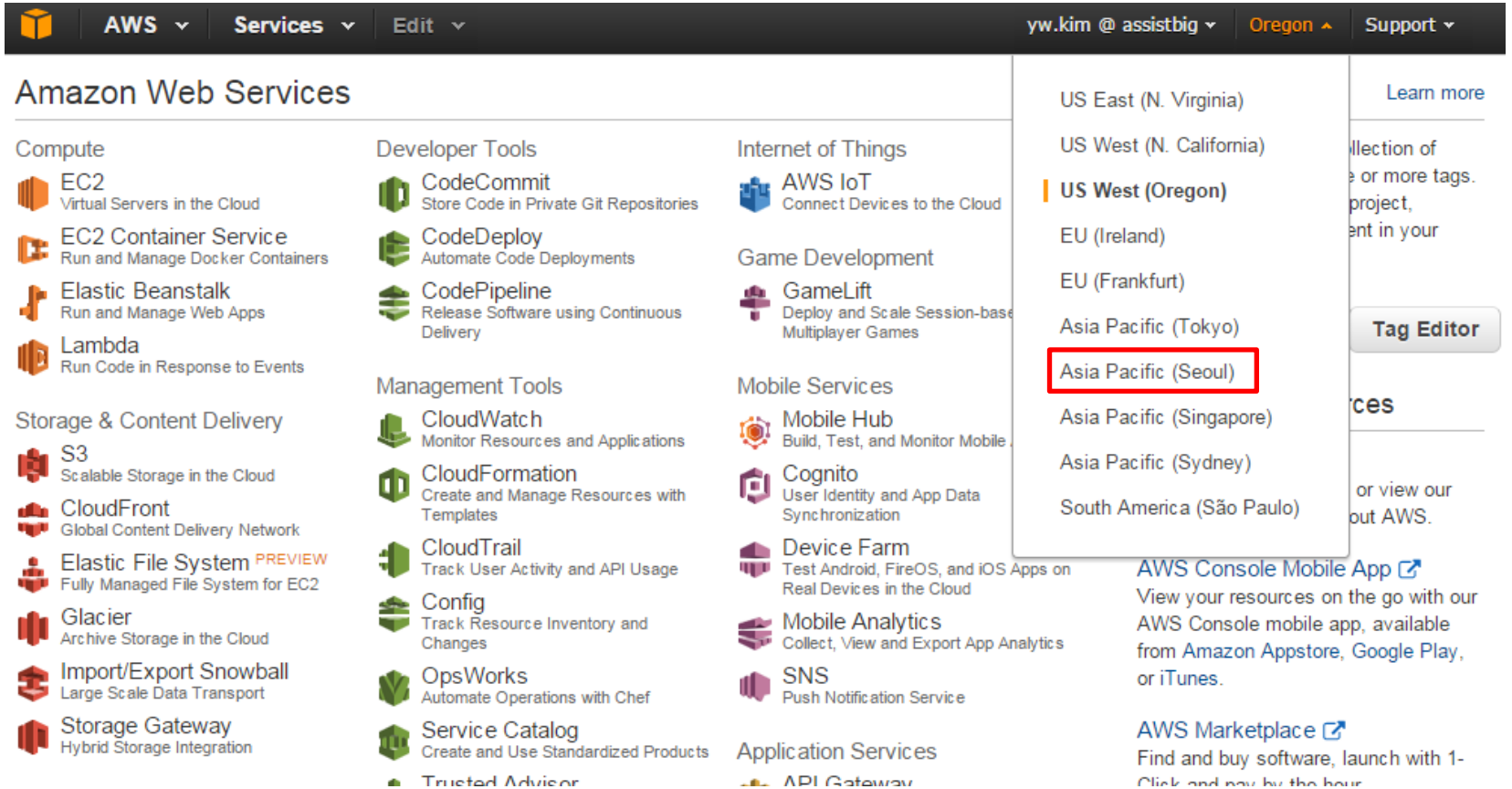
AWS Console 주소

https://assistbig.signin.aws.amazon.com/console

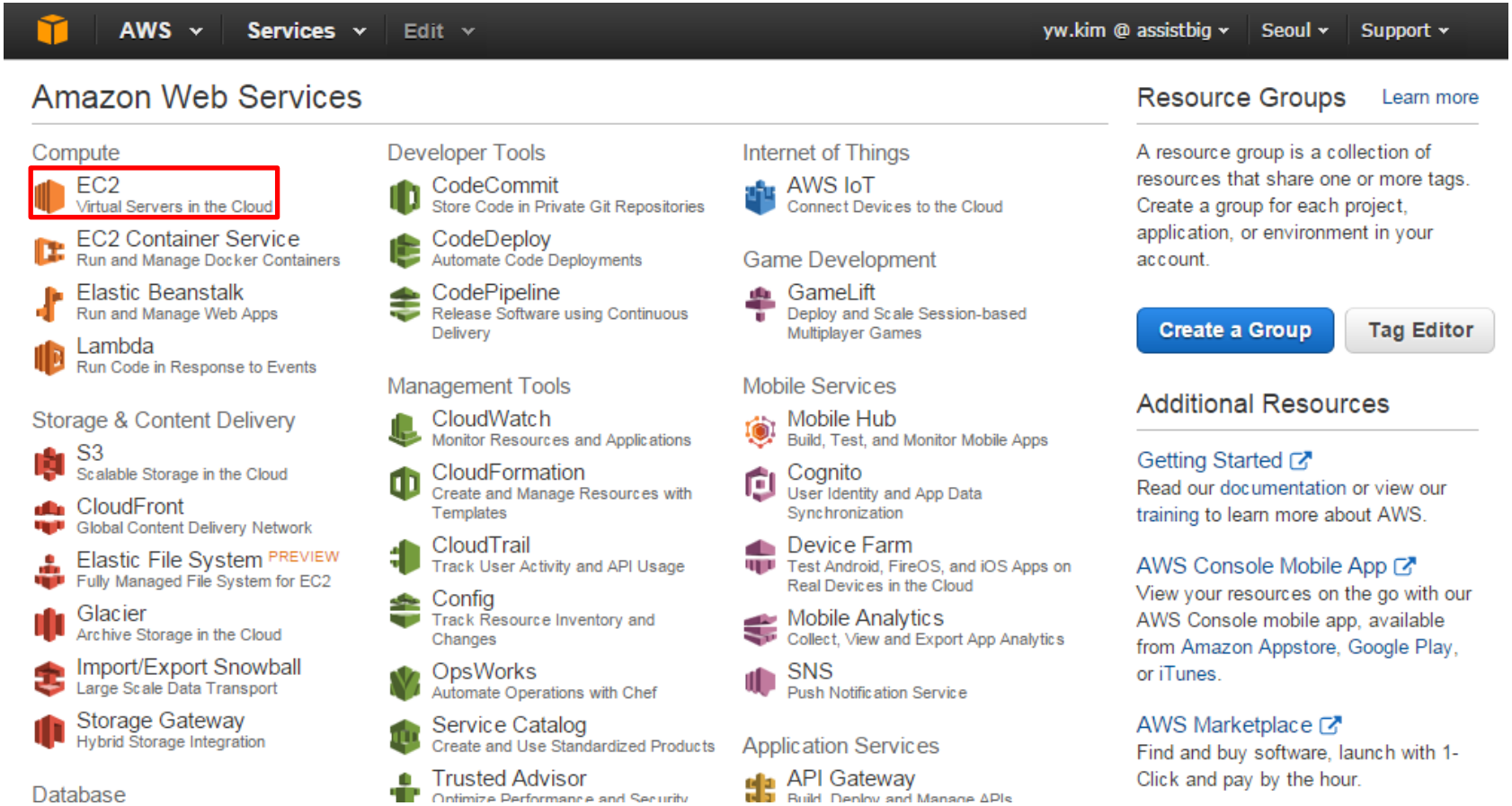
본인의 패스워드로
변경 해주세요.

- 아이디 : Github Username
- 패스워드 : assist2016

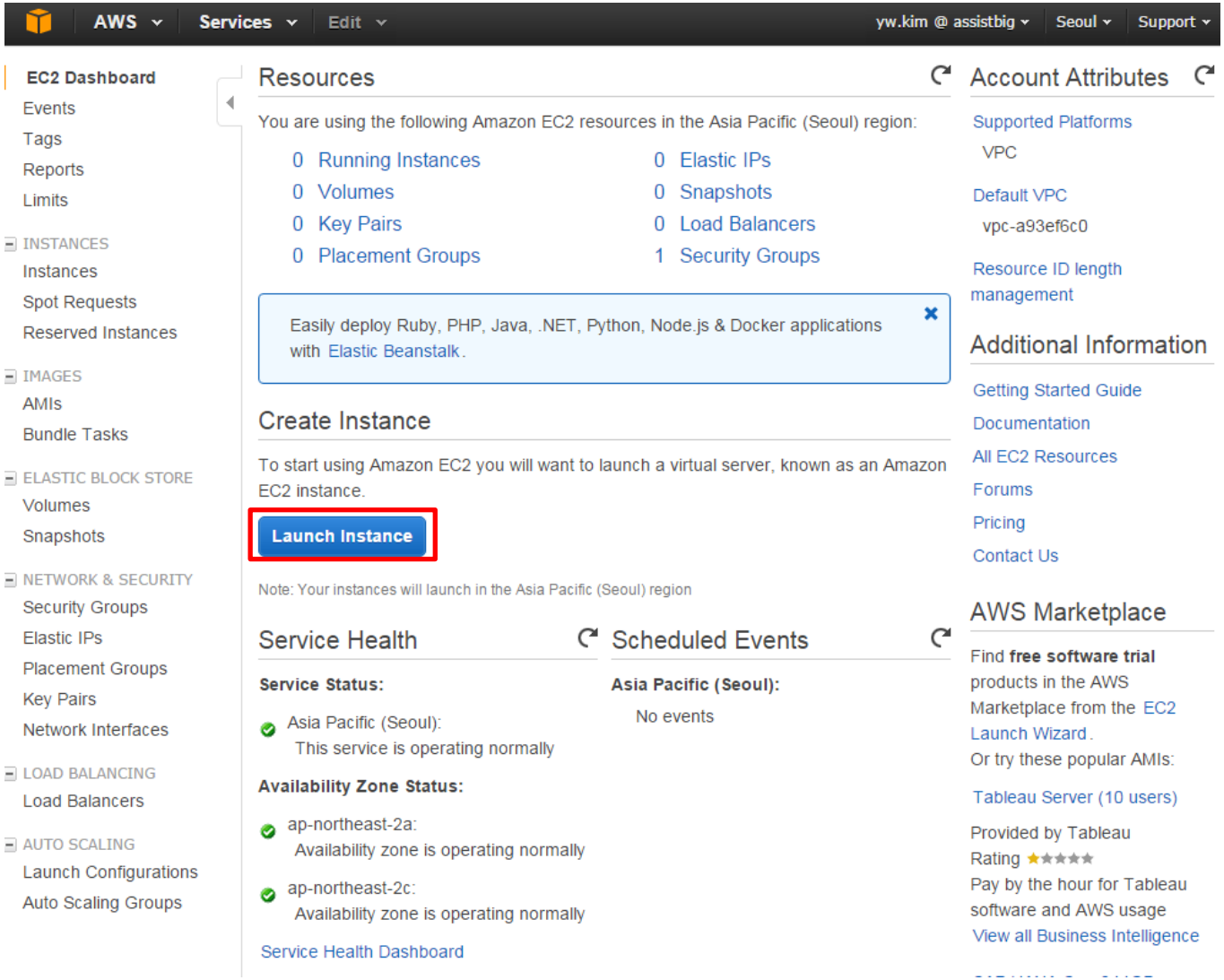
Region


AWS
Services
Edit
yw.kim @ assistbig
Oregon
Support
Amazon Web Services
Learn more
US East (N. Virginia)
US West (N. California)
US West (Oregon)
EU (Ireland)
EU (Frankfurt)
Asia Pacific (Tokyo)
Asia Pacific (Seoul)
Asia Pacific (Singapore)
Asia Pacific (Sydney)
South America (São Paulo)
Compute
EC2
Virtual Servers in the Cloud
EC2 Container Service
Run and Manage Docker Containers
Elastic Beanstalk
Run and Manage Web Apps
Lambda
Run Code in Response to Events
Storage & Content Delivery
S3
Scalable Storage in the Cloud
CloudFront
Global Content Delivery Network
Elastic File System PREVIEW
Fully Managed File System for EC2
Glacier
Archive Storage in the Cloud
Import/Export Snowball
Large Scale Data Transport
Storage Gateway
Hybrid Storage Integration
Developer Tools
CodeCommit
Store Code in Private Git Repositories
CodeDeploy
Automate Code Deployments
CodePipeline
Release Software using Continuous Delivery
Management Tools
CloudWatch
Monitor Resources and Applications
CloudFormation
Create and Manage Resources with Templates
CloudTrail
Track User Activity and API Usage
Config
Track Resource Inventory and Changes
OpsWorks
Automate Operations with Chef
Service Catalog
Create and Use Standardized Products
Internet of Things
AWS IoT
Connect Devices to the Cloud
Game Development
GameLift
Mobile Services
Mobile Hub
Cognito
User Identity and App Data Synchronization
Device Farm
Test Android, FireOS, and iOS Apps on Real Devices in the Cloud
Mobile Analytics
Collect, View and Export App Analytics
SNS
Push Notification Service
Application Services
Tag Editor
AWS Console Mobile App
View your resources on the go with our AWS Console mobile app, available from Amazon Appstore, Google Play, or iTunes.
AWS Marketplace
Find and buy software, launch with 1-

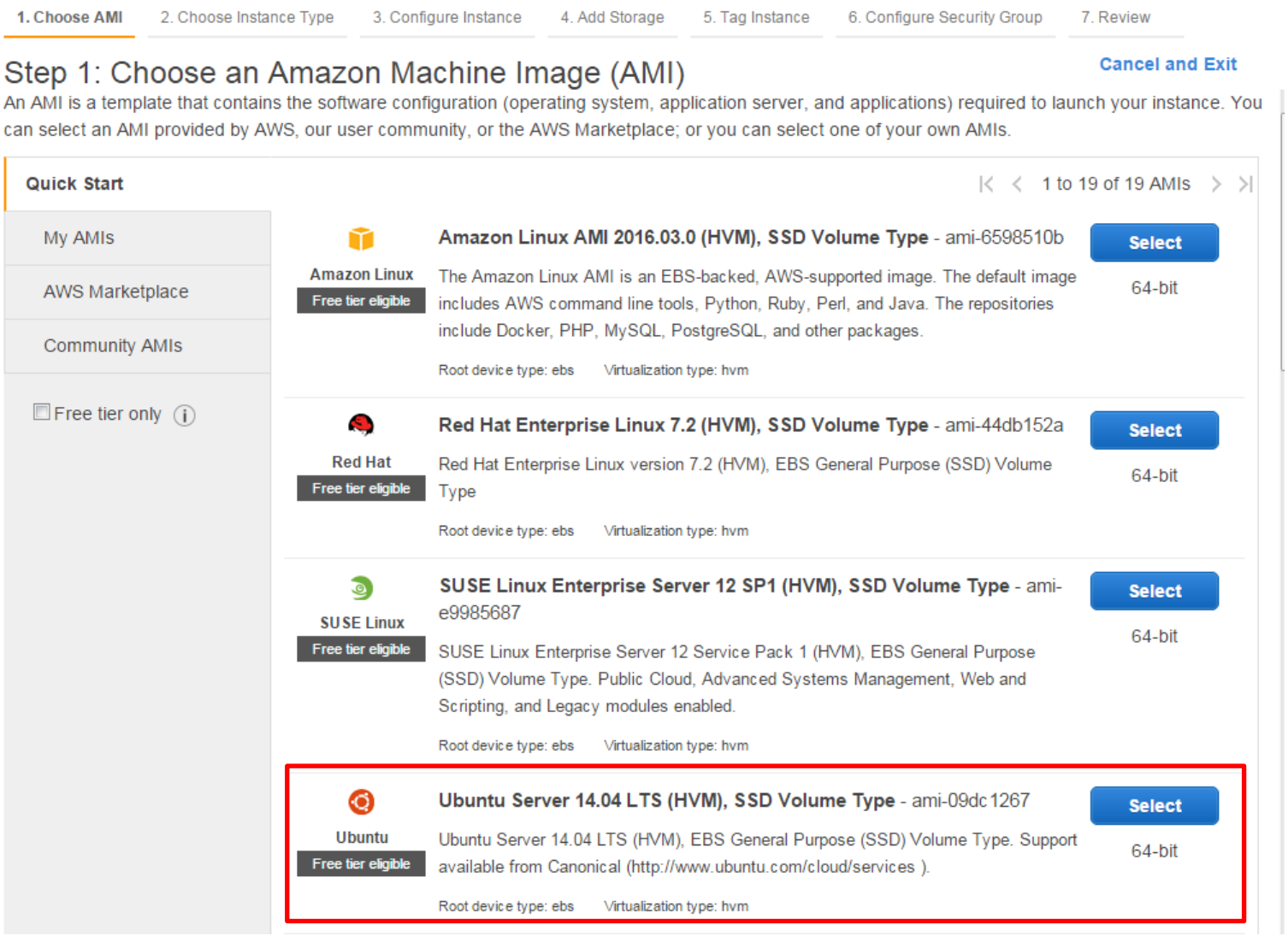
EC2 (Elastic Compute Cloud)



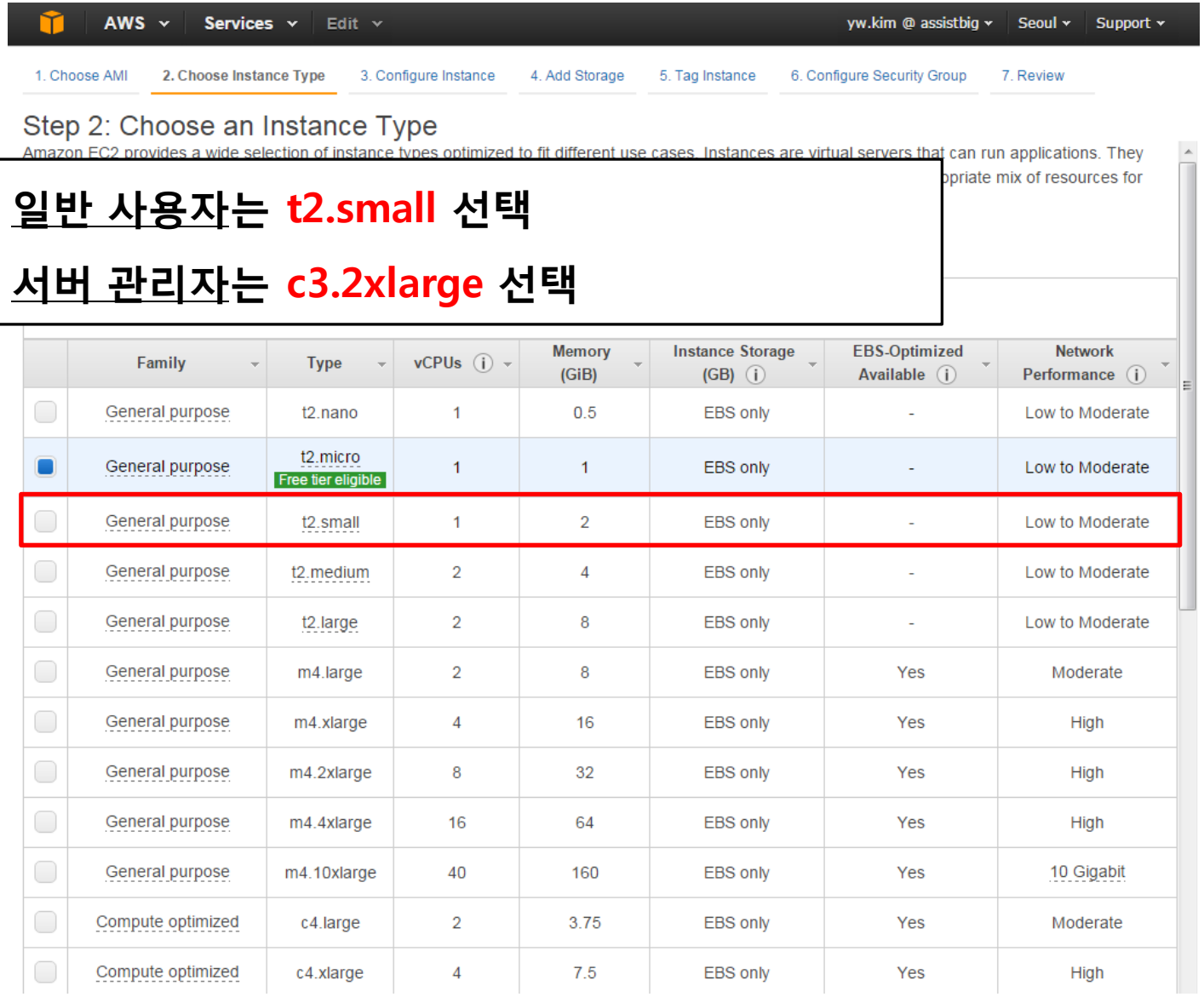
인스턴스(서버) 생성


AWS
Services
Edit
yw.kim @ assistbig
Seoul
Support
EC2 Dashboard
Events
Tags
Reports
Limits
INSTANCES
Instances
Spot Requests
Reserved Instances
IMAGES
AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
NETWORK & SECURITY
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
LOAD BALANCING
Load Balancers
AUTO SCALING
Launch Configurations
Auto Scaling Groups
Resources
You are using the following Amazon EC2 resources in the Asia Pacific (Seoul) region:
0 Running Instances
0 Volumes
0 Key Pairs
0 Placement Groups
0 Elastic IPs
0 Snapshots
0 Load Balancers
1 Security Groups
Easily deploy Ruby, PHP, Java, .NET, Python, Node.js & Docker applications with Elastic Beanstalk.
Create Instance
To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.
Launch Instance
Note: Your instances will launch in the Asia Pacific (Seoul) region
Service Health
Service Status:
Asia Pacific (Seoul):
This service is operating normally
Availability Zone Status:
ap-northeast-2a:
Availability zone is operating normally
ap-northeast-2c:
Availability zone is operating normally
Service Health Dashboard
Scheduled Events
Asia Pacific (Seoul):
No events
Account Attributes
Supported Platforms
VPC
Default VPC
vpc-a93ef6c0
Resource ID length management
Additional Information
Getting Started Guide
Documentation
All EC2 Resources
Forums
Pricing
Contact Us
AWS Marketplace
Find free software trial products in the AWS Marketplace from the EC2 Launch Wizard.
Or try these popular AMIs:
Tableau Server (10 users)
Provided by Tableau
Rating
Pay by the hour for Tableau software and AWS usage
View all Business Intelligence

운영체제 종류 선정

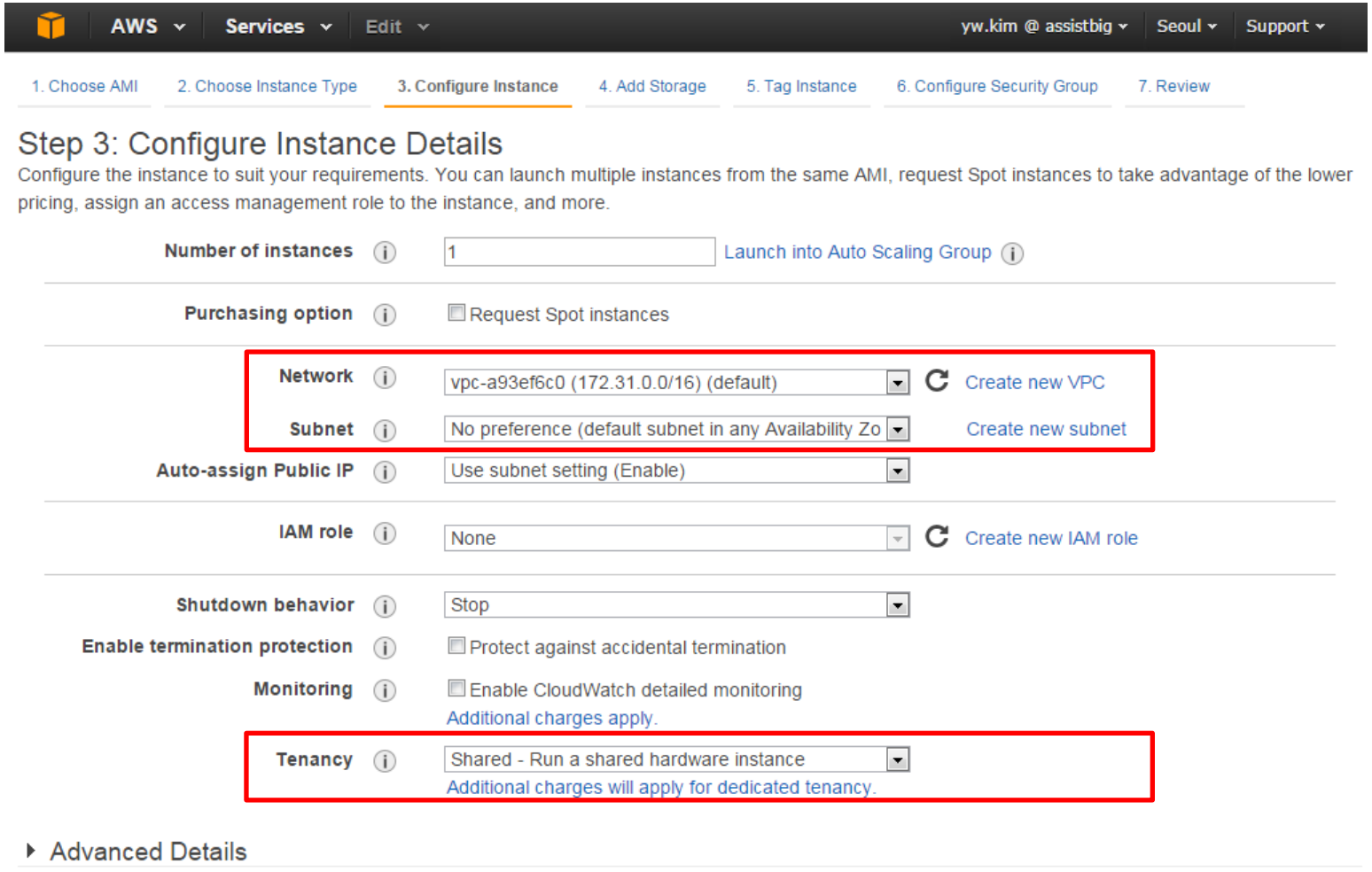

1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Tag Instance
6. Configure Security Group
7. Review
Step 1: Choose an Amazon Machine Image (AMI)
Cancel and Exit
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.
Quick Start
1 to 19 of 19 AMIs
My AMIs
AWS Marketplace
Community AMIs
Free tier only
Amazon Linux
Free tier eligible
Amazon Linux AMI 2016.03.0 (HVM), SSD Volume Type - ami-6598510b
The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.
Root device type: ebs Virtualization type: hvm
Select
64-bit
Red Hat
Free tier eligible
Red Hat Enterprise Linux 7.2 (HVM), SSD Volume Type - ami-44db152a
Red Hat Enterprise Linux version 7.2 (HVM), EBS General Purpose (SSD) Volume Type
Root device type: ebs Virtualization type: hvm
Select
64-bit
SUSE Linux
Free tier eligible
SUSE Linux Enterprise Server 12 SP1 (HVM), SSD Volume Type - ami-e9985687
SUSE Linux Enterprise Server 12 Service Pack 1 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.
Root device type: ebs Virtualization type: hvm
Select
64-bit
Ubuntu
Free tier eligible
Ubuntu Server 14.04 LTS (HVM), SSD Volume Type - ami-09dc1267
Ubuntu Server 14.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).
Root device type: ebs Virtualization type: hvm
Select
64-bit

서버 사양 선정



	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
☐	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
☑	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate
☐	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
☐	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
☐	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
☐	General purpose	m4.large	2	8	EBS only	Yes	Moderate
☐	General purpose	m4.xlarge	4	16	EBS only	Yes	High
☐	General purpose	m4.2xlarge	8	32	EBS only	Yes	High
☐	General purpose	m4.4xlarge	16	64	EBS only	Yes	High
☐	General purpose	m4.10xlarge	40	160	EBS only	Yes	10 Gigabit
☐	Compute optimized	c4.large	2	3.75	EBS only	Yes	Moderate
☐	Compute optimized	c4.xlarge	4	7.5	EBS only	Yes	High

서버 설정


AWS
Services
Edit
yw.kim @ assistbig
Seoul
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
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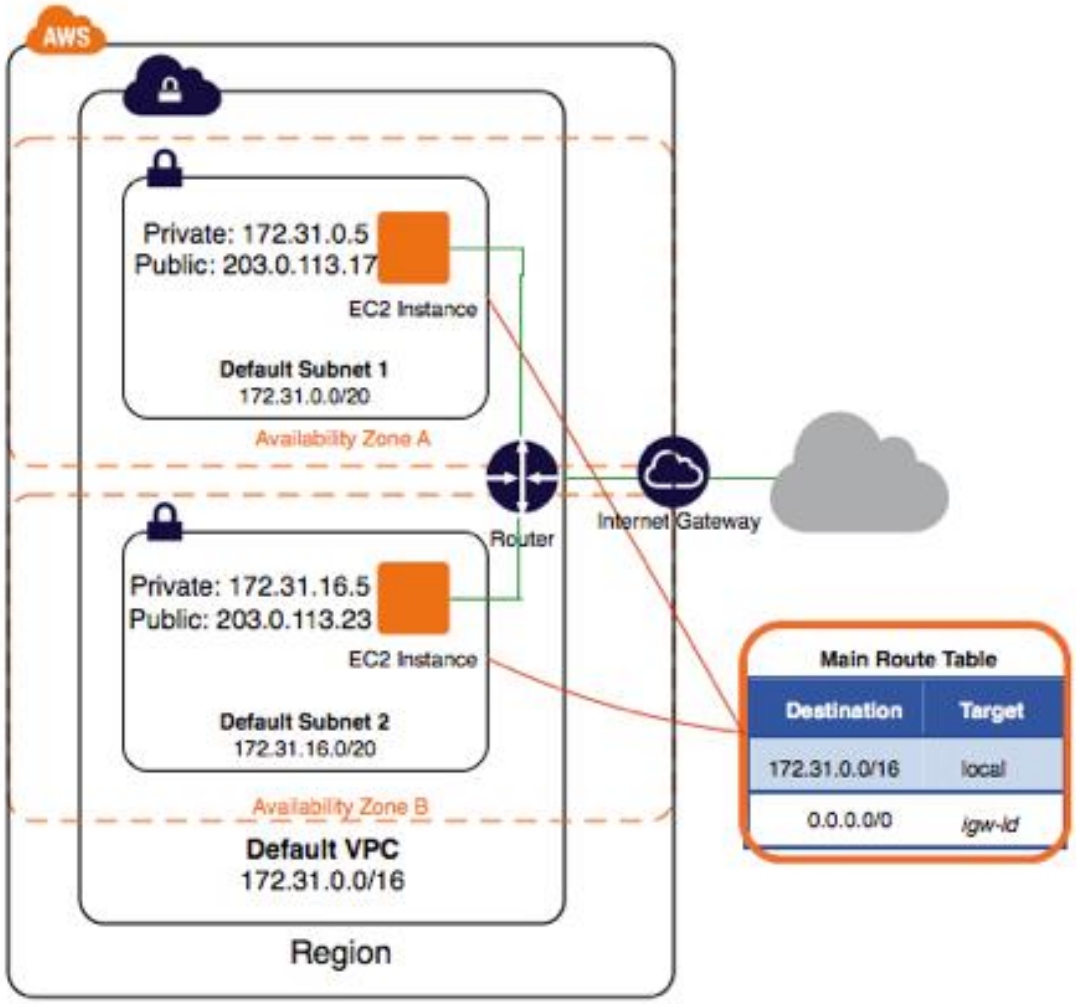
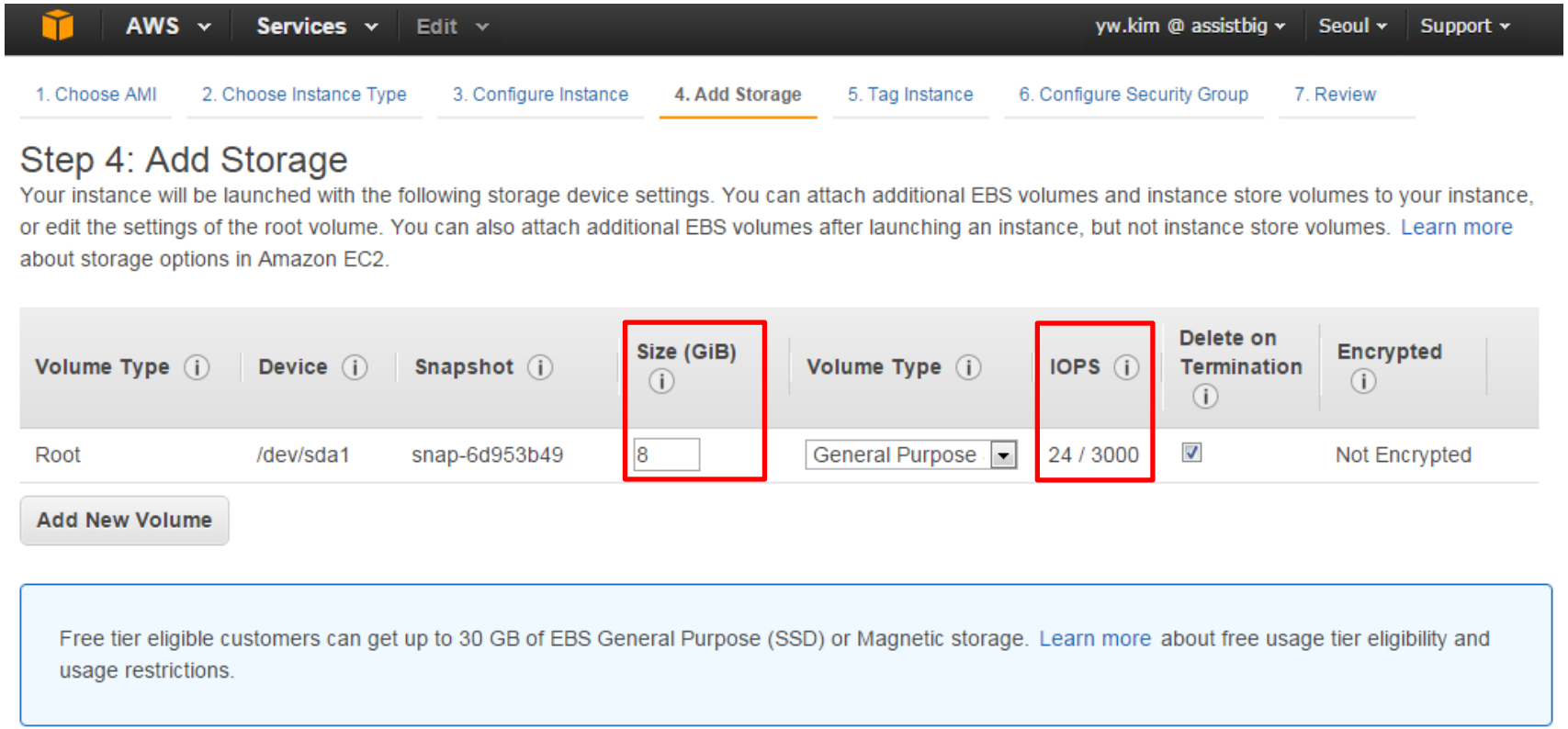
7. Review
Step 3: Configure Instance Details
Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.
Number of instances
1
Launch into Auto Scaling Group
Purchasing option
Request Spot instances
Network
vpc-a93ef6c0 (172.31.0.0/16) (default)
Create new VPC
Subnet
No preference (default subnet in any Availability Zo
Create new subnet
Auto-assign Public IP
Use subnet setting (Enable)
IAM role
None
Create new IAM role
Shutdown behavior
Stop
Enable termination protection
Protect against accidental termination
Monitoring
Enable CloudWatch detailed monitoring
Additional charges apply.
Tenancy
Shared - Run a shared hardware instance
Additional charges will apply for dedicated tenancy.
Advanced Details

VPC(Virtual Private Cloud)와 Subnet

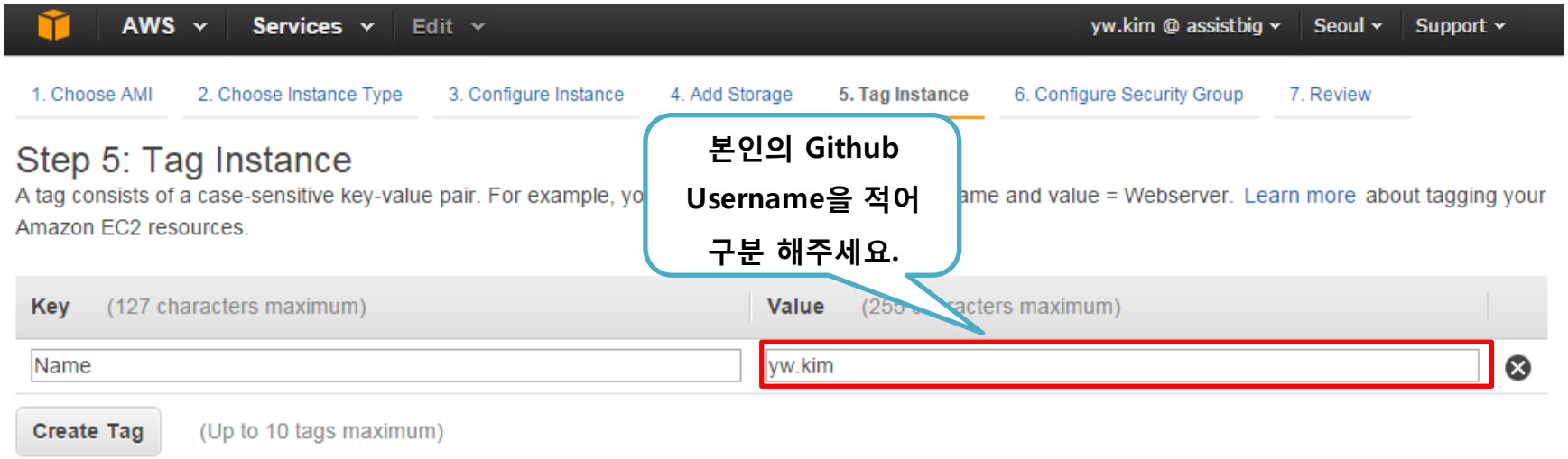


Storage 타입 선정



- **IOPS : Input/Output Operations per second**

Tag 설정


AWS
Services
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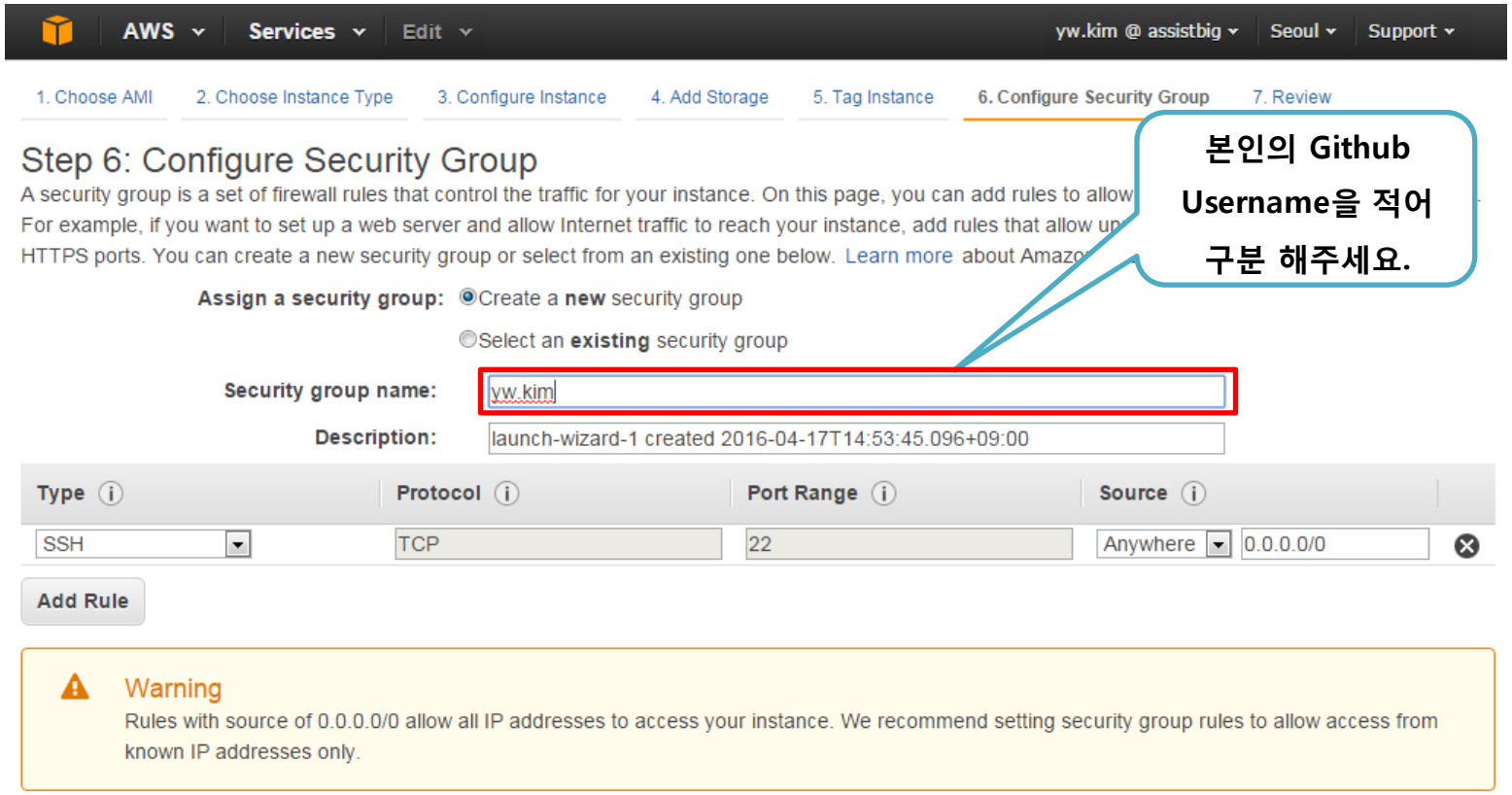
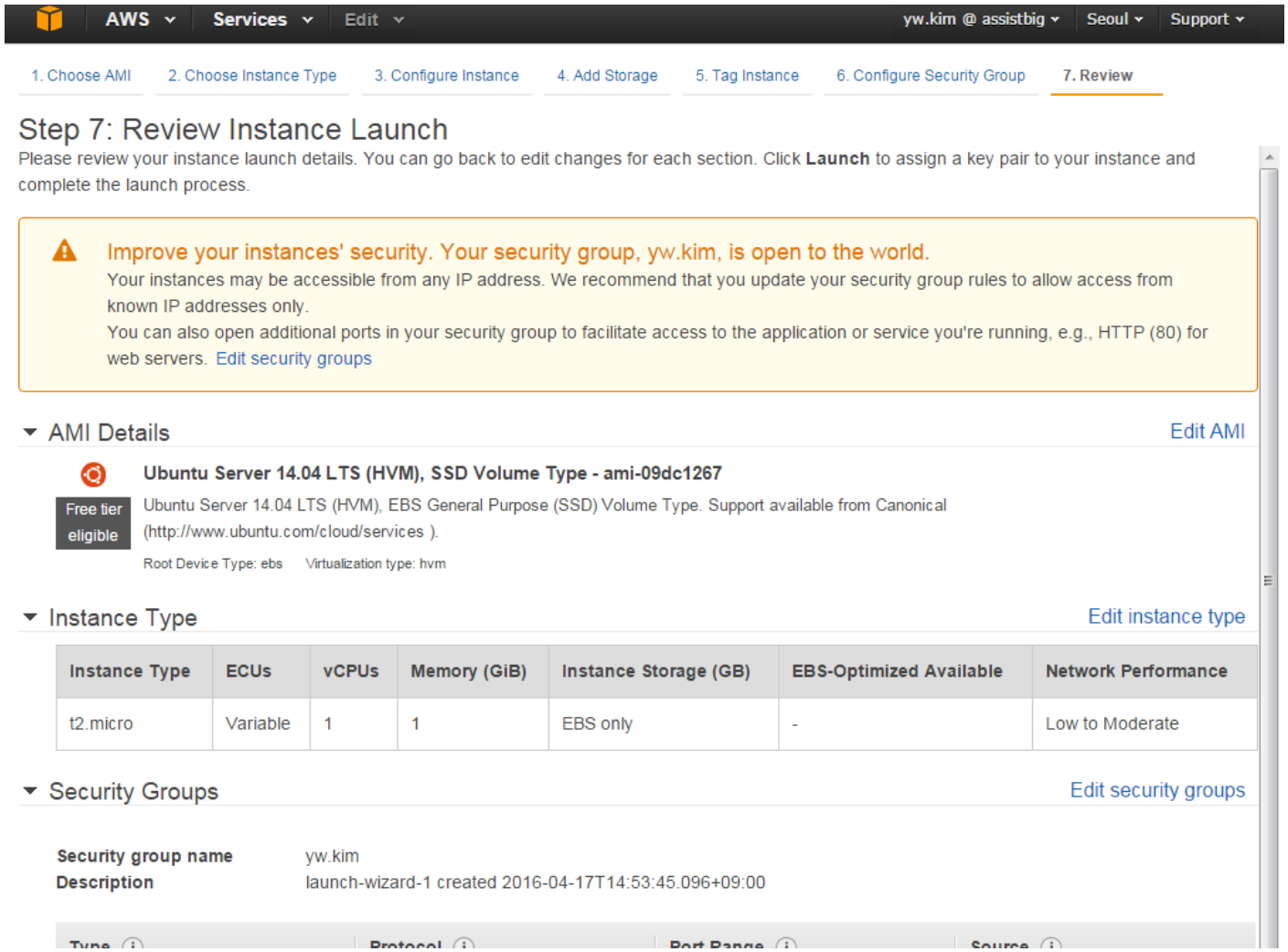
yw.kim @ assistbig
Seoul
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Tag Instance
6. Configure Security Group
7. Review
Step 5: Tag Instance
A tag consists of a case-sensitive key-value pair. For example, yo
ame and value = Webserver. Learn more about tagging your Amazon EC2 resources.
본인의 Github Username을 적어 구분 해주세요.
Key (127 characters maximum)
Value
Name
yw.kim
Create Tag
(Up to 10 tags maximum)

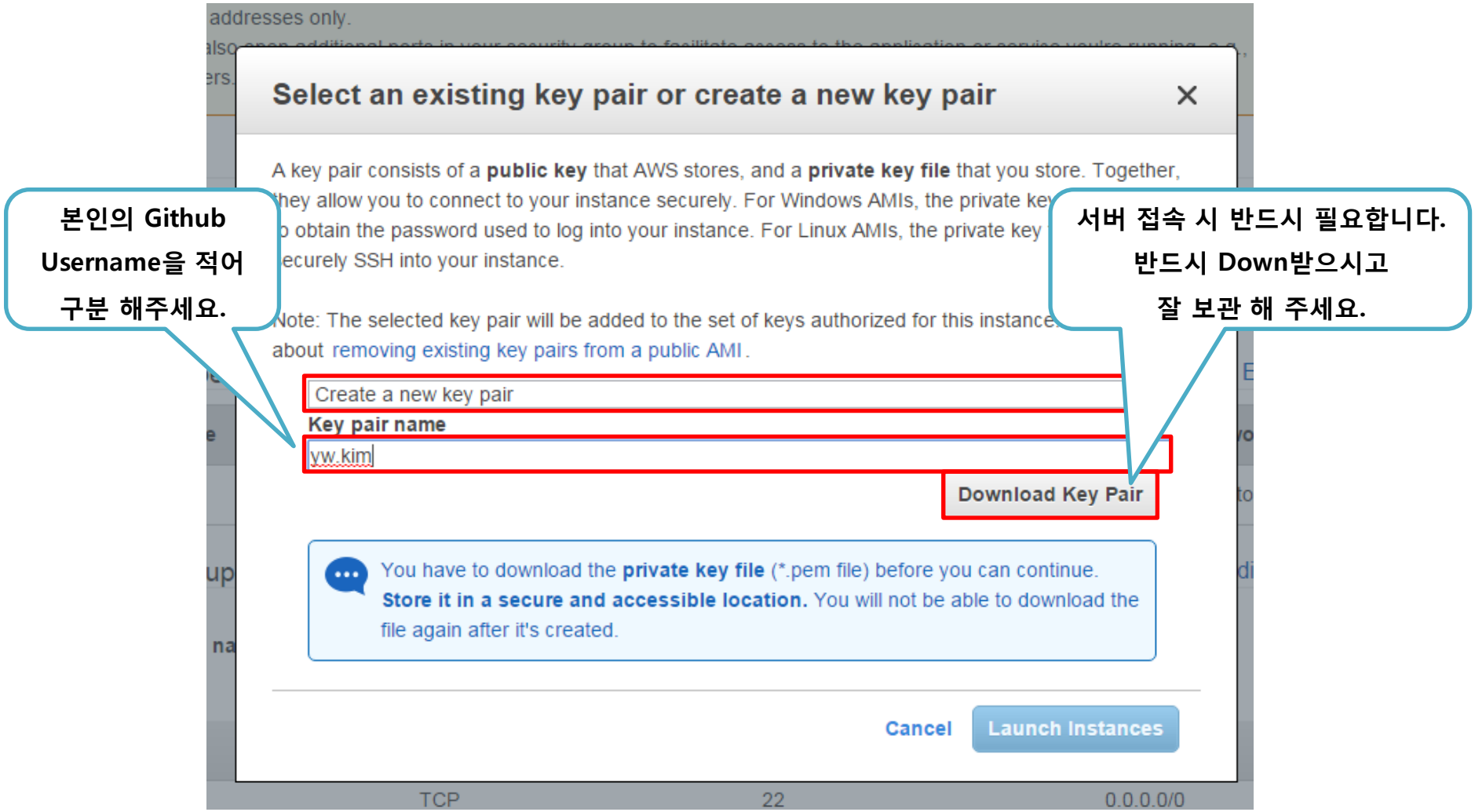
Security Group 설정



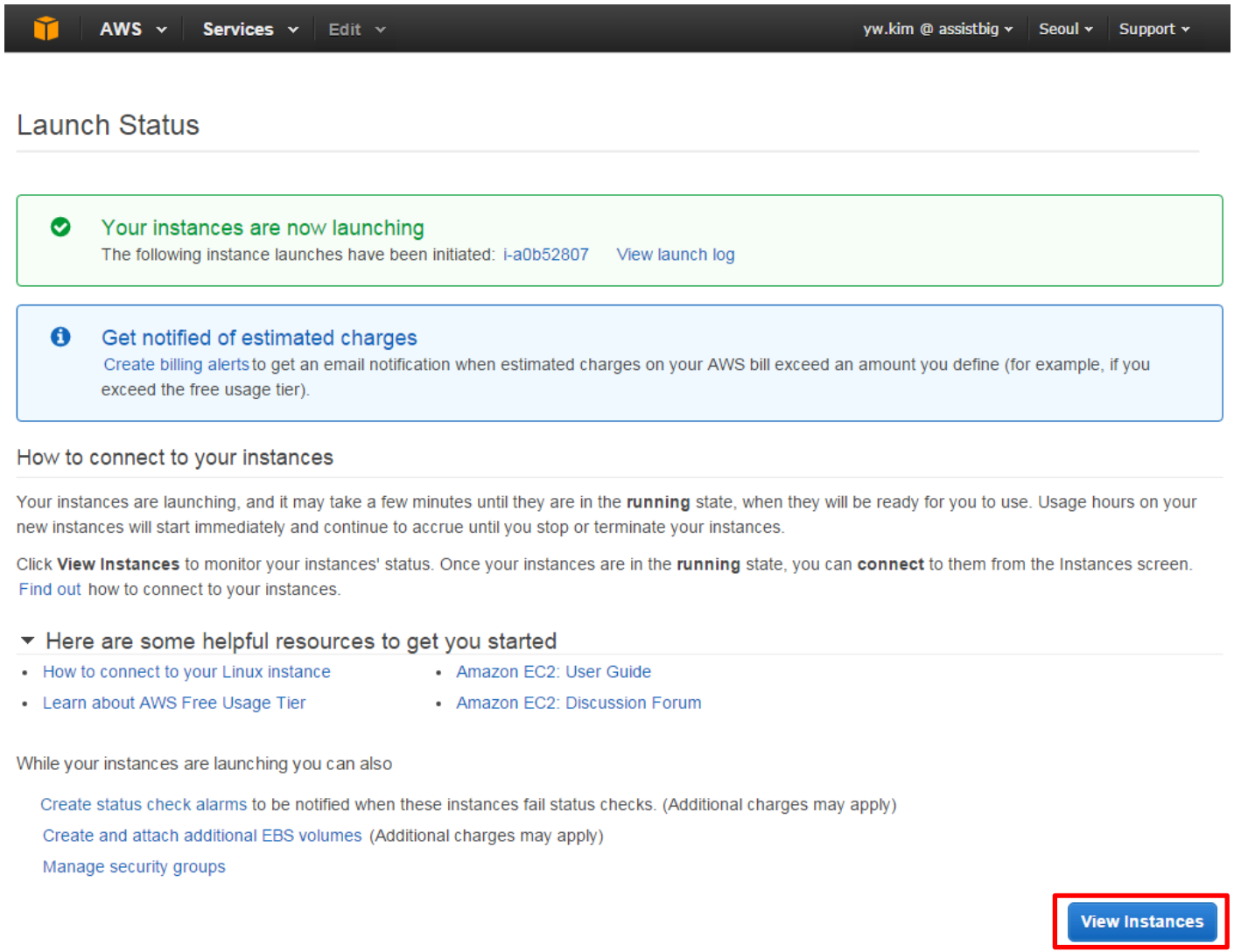
인스턴스 설정 Review



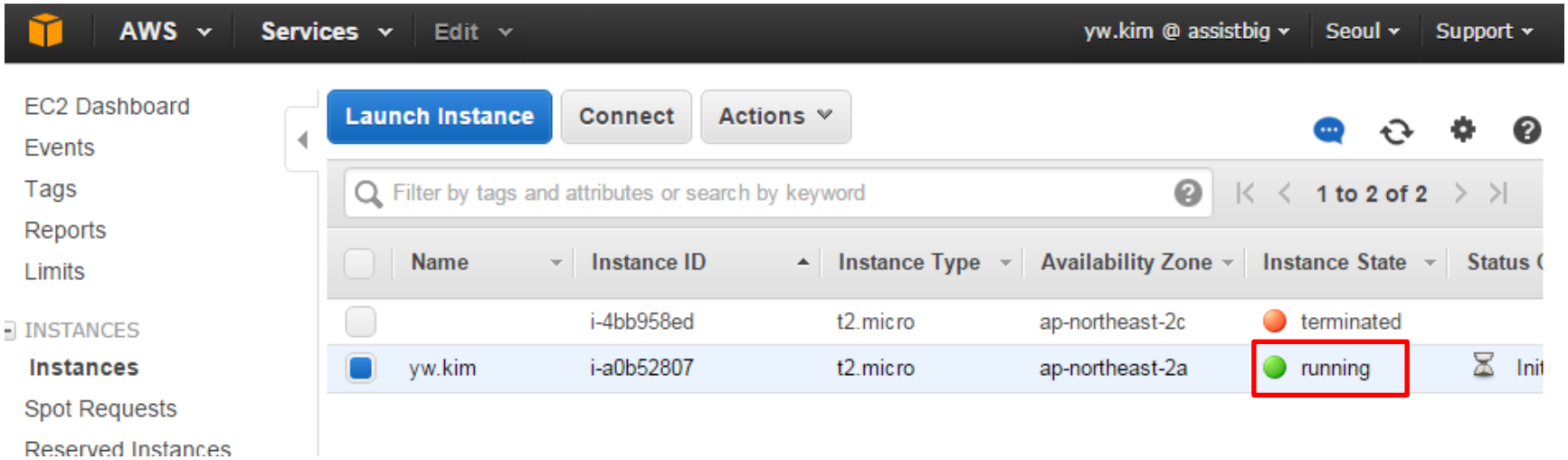
Key pair 생성


본인의 Github Username을 적어 구분 해주세요.
서버 접속 시 반드시 필요합니다.
반드시 Down받으시고
잘 보관 해 주세요.
addresses only.
Select an existing key pair or create a new key pair
A key pair consists of a public key that AWS stores, and a private key file that you store. Together,
Note: The selected key pair will be added to the set of keys authorized for this instance.
about removing existing key pairs from a public AMI.
Create a new key pair
Key pair name
yw.kim
Download Key Pair
You have to download the private key file (*.pem file) before you can continue.
Store it in a secure and accessible location. You will not be able to download the file again after it's created.
Cancel
Launch Instances
TCP
22
0.0.0.0/0

인스턴스 생성 완료


AWS
Services
Edit
yw.kim @ assistbig
Seoul
Support
Launch Status
Your instances are now launching
The following instance launches have been initiated: i-a0b52807
View launch log
Get notified of estimated charges
Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).
How to connect to your instances
Your instances are launching, and it may take a few minutes until they are in the running state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.
Click View Instances to monitor your instances' status. Once your instances are in the running state, you can connect to them from the Instances screen.
Find out how to connect to your instances.
Here are some helpful resources to get you started
How to connect to your Linux instance
Learn about AWS Free Usage Tier
Amazon EC2: User Guide
Amazon EC2: Discussion Forum
While your instances are launching you can also
Create status check alarms to be notified when these instances fail status checks. (Additional charges may apply)
Create and attach additional EBS volumes (Additional charges may apply)
Manage security groups
View Instances

인스턴스 조회


AWS
Services
Edit
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Seoul
Support
EC2 Dashboard
Events
Tags
Reports
Limits
INSTANCES
Instances
Spot Requests
Reserved Instances
Launch Instance
Connect
Actions
Filter by tags and attributes or search by keyword
1 to 2 of 2
Name
Instance ID
Instance Type
Availability Zone
Instance State
Status
i-4bb958ed
t2.micro
ap-northeast-2c
terminated
yw.kim
i-a0b52807
t2.micro
ap-northeast-2a
running

EC2 접속

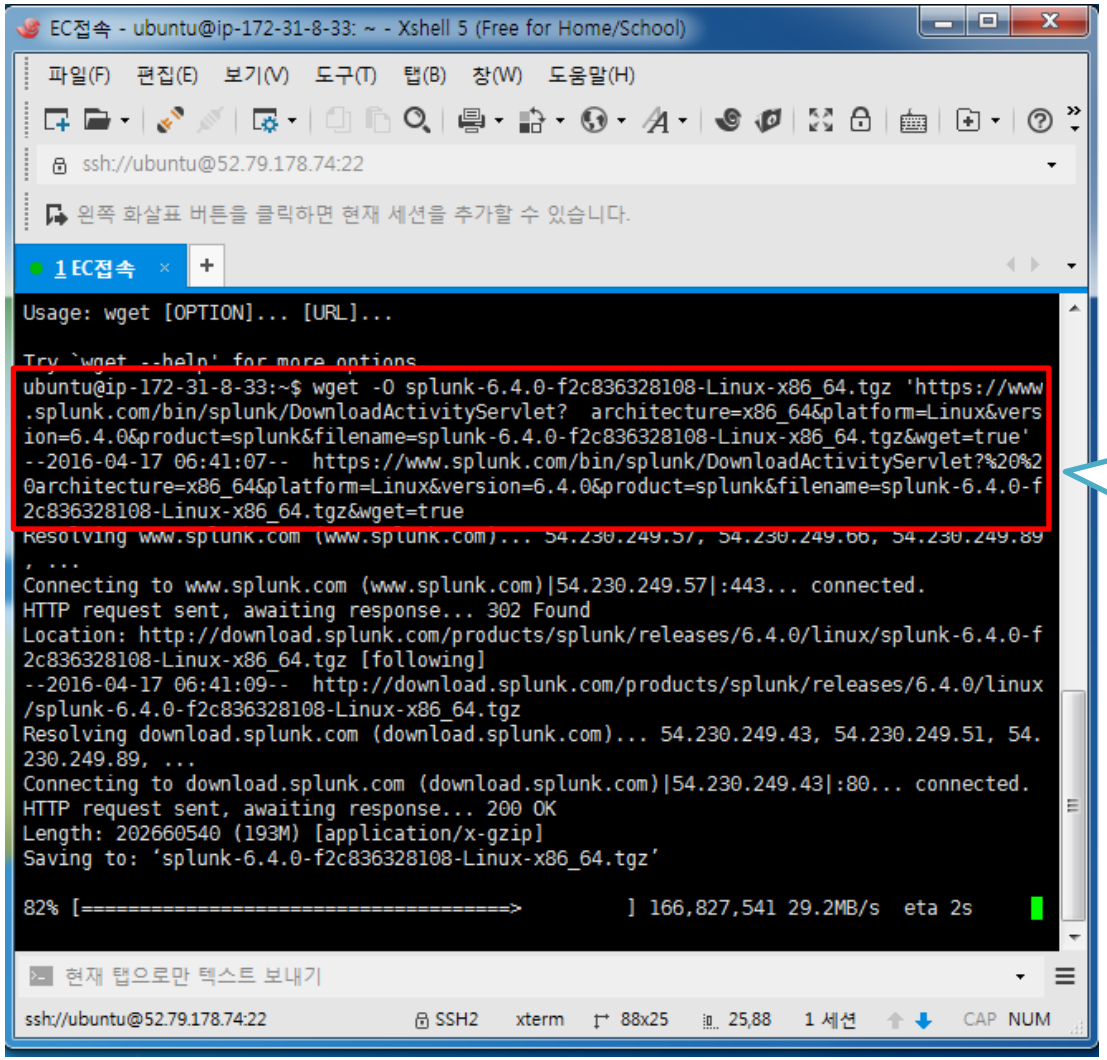
- **윈도우 사용자 (Xshell)**
  - Wiki 참고 : https://github.com/assistbig/bigdata/wiki/활용--툴#xshell

- **맥OS 사용자**
  - Terminal 실행
  - ssh –i <pem키 경로> ubuntu@<인스턴스 ip>

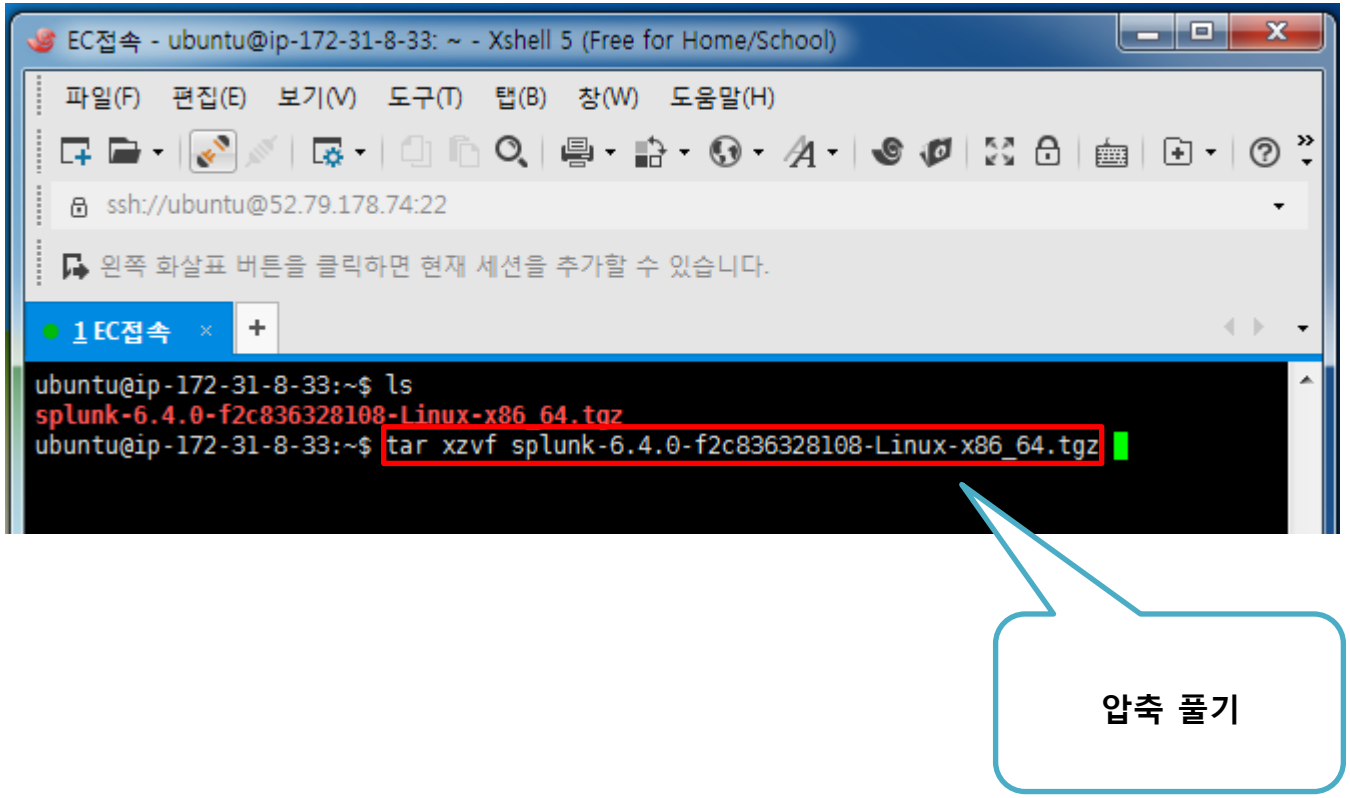
Splunk 설치

1. Wiki 이동 : https://github.com/assistbig/bigdata/wiki/활용--툴#splunk
2. wget URL 복사
3. 프롬프트 창에 복사한 URL 붙여넣기

Splunk Download



압축 풀기

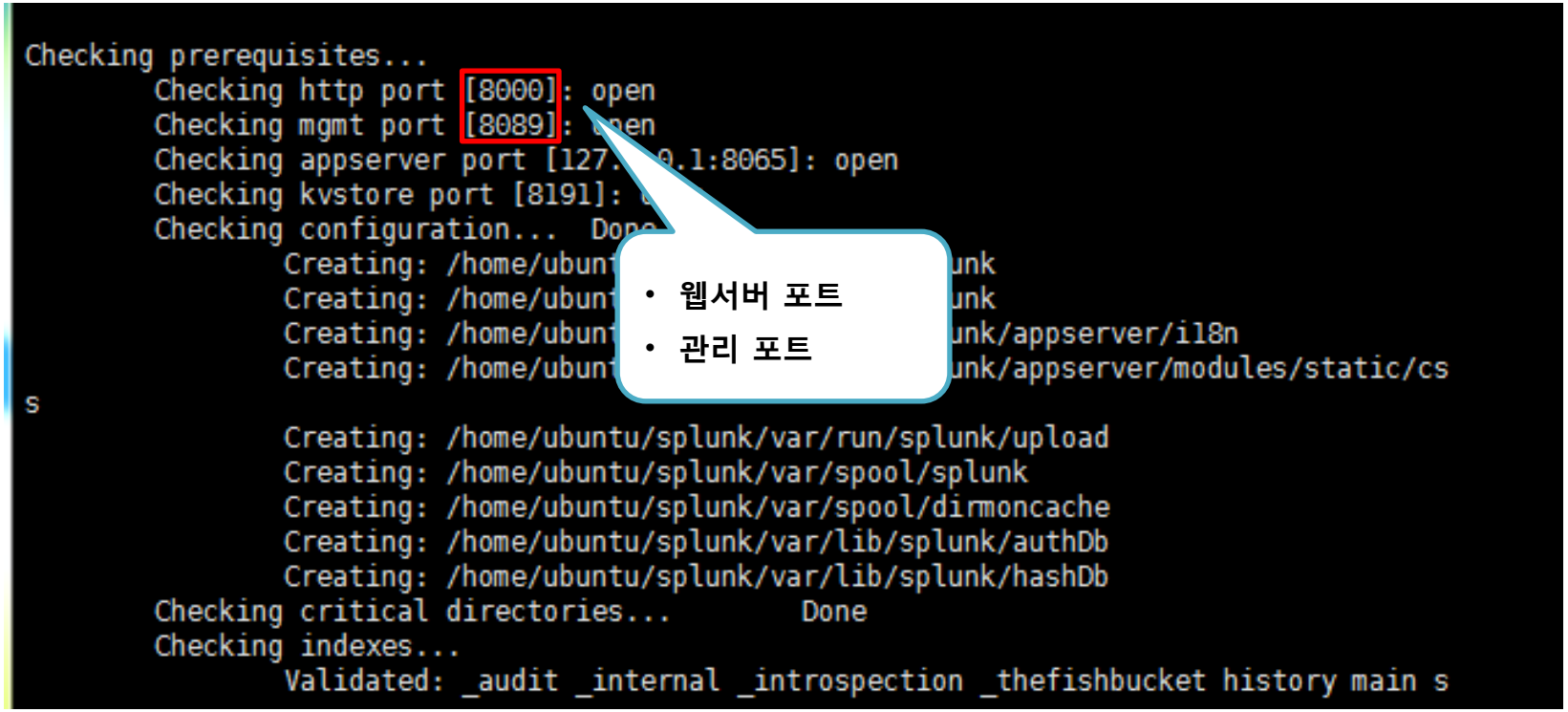


$> tar xzvf splunk + *<TAB키 클릭>*

Splunk 실행

$> cd splunk/bin

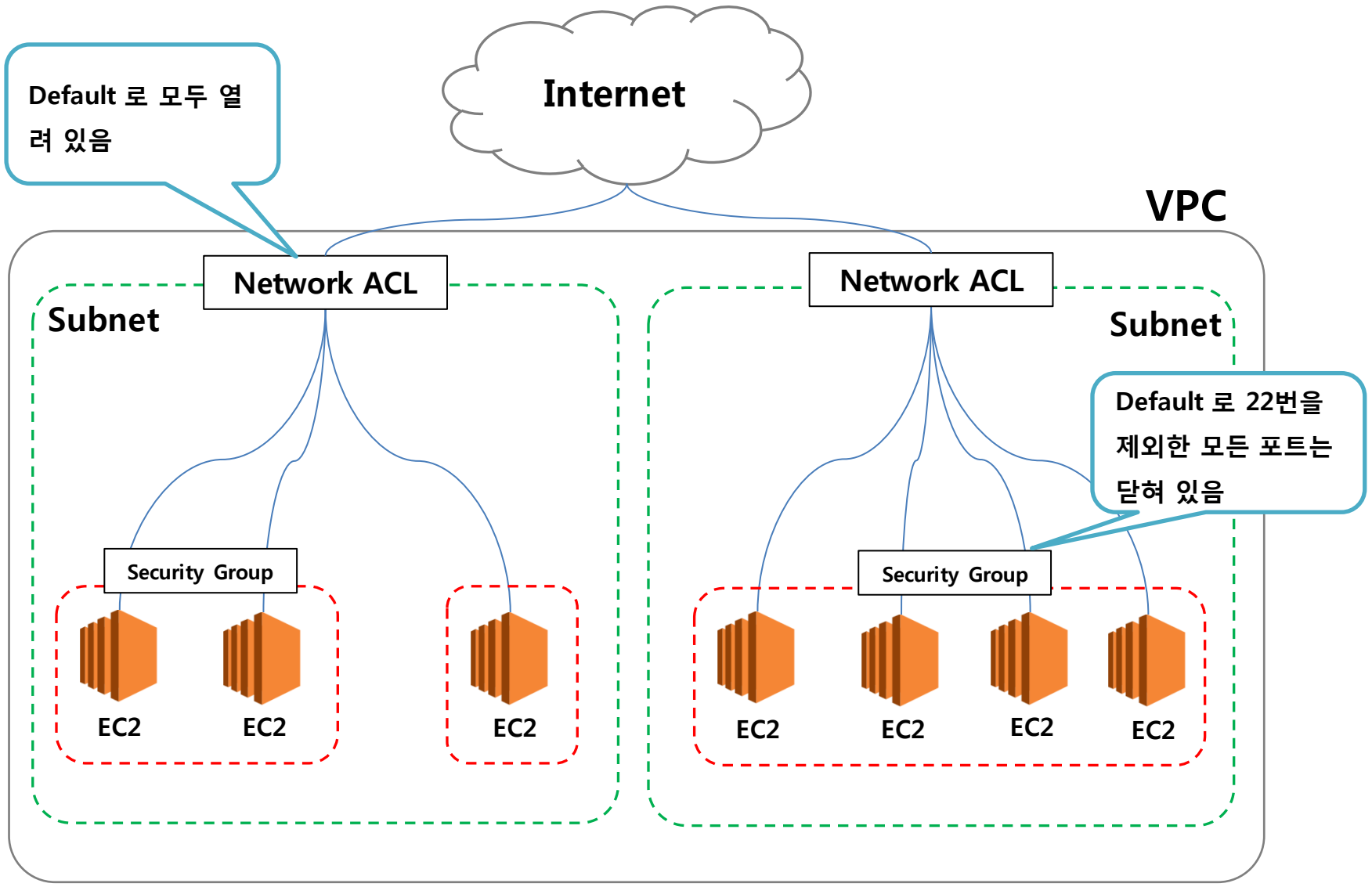
$> ./splunk start --accept-license



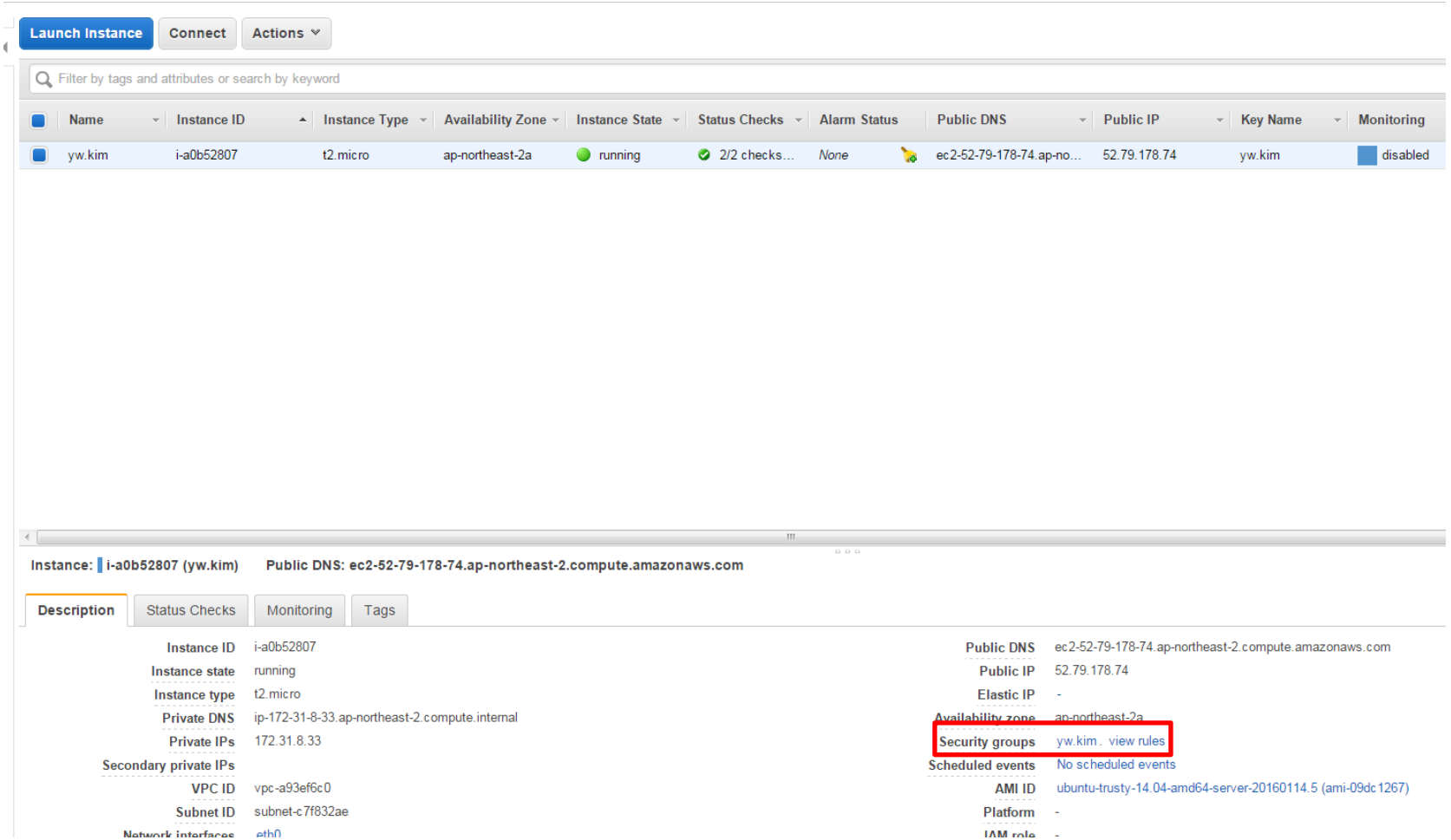
Splunk 웹서버 접속

http://<*본인의 인스턴스 IP*>:8000

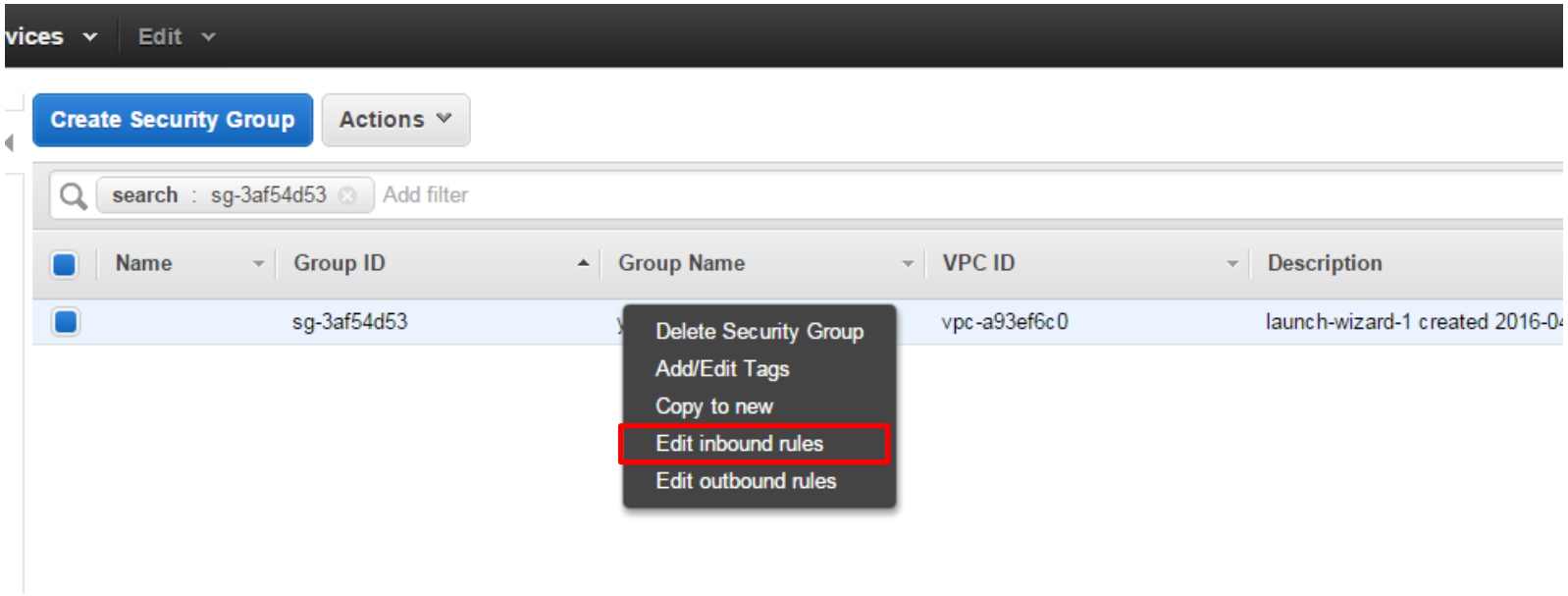
AWS 방화벽


Default 로 모두 열려 있음
Internet
VPC
Network ACL
Network ACL
Subnet
Subnet
Default 로 22번을 제외한 모든 포트는 닫혀 있음
Security Group
Security Group
EC2
EC2
EC2
EC2
EC2
EC2
EC2

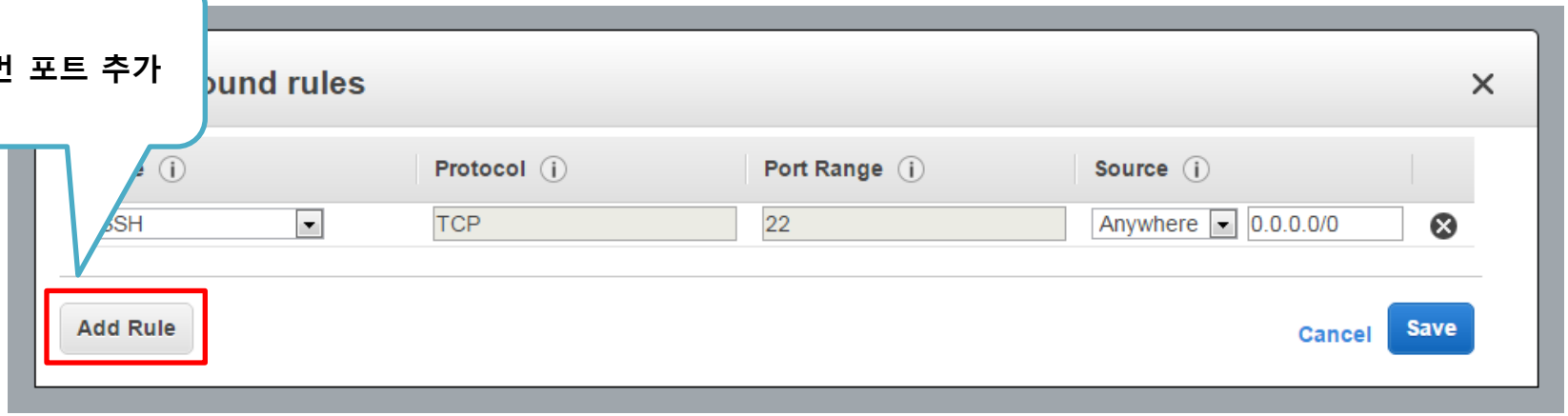
Security Group 설정



Security Group 설정



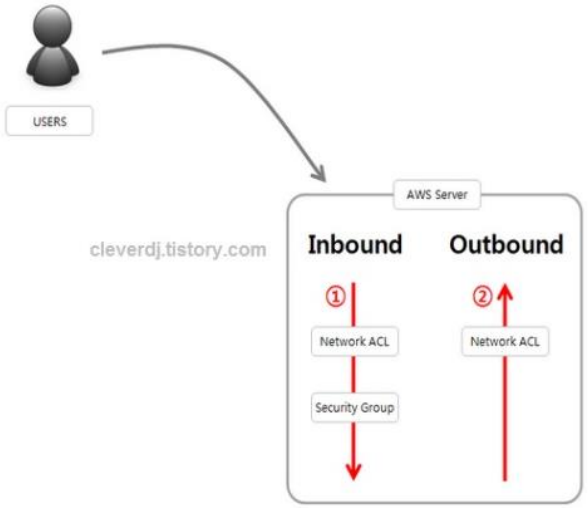
8000번 포트 추가



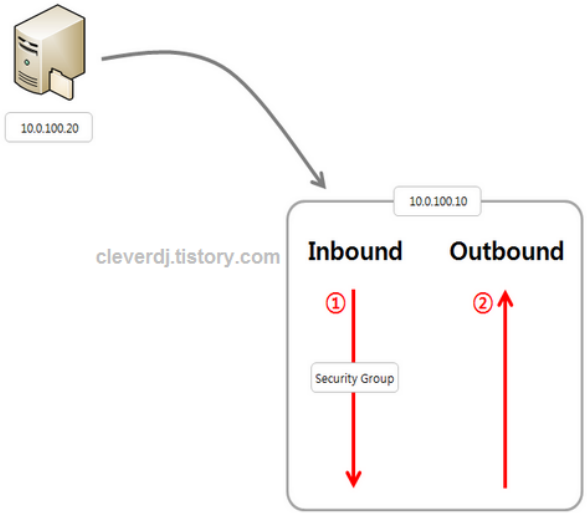
Break Time

Backup | AWS 방화벽 상세 Case

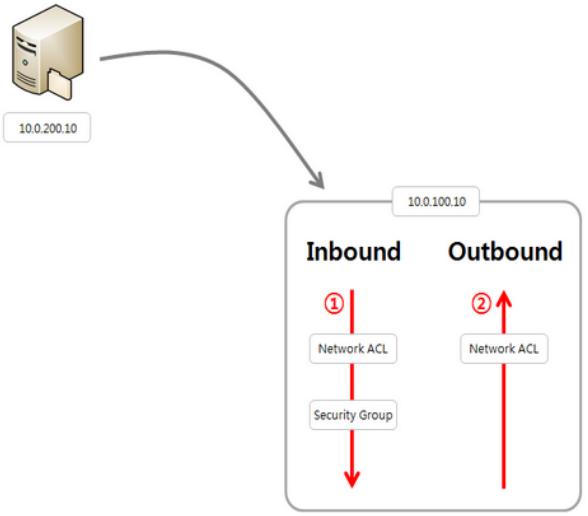
Case1. From External to AWS



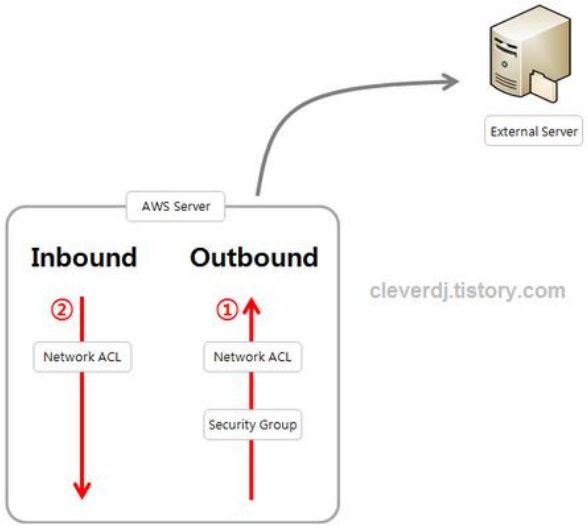
Case2. Same Subnet



Case3. Another Subnet



Case4. From Internal to External



Source : http://cleverdj.tistory.com/122