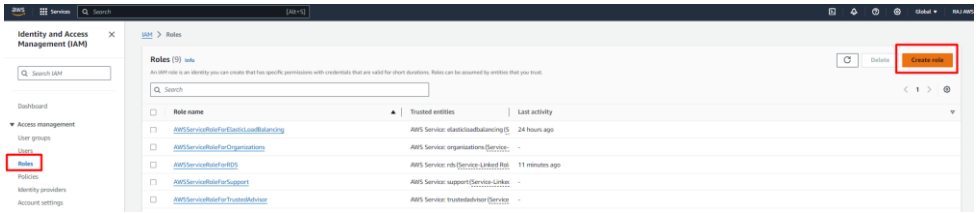
Install CloudWatch agent in Widows EC2 Instance - enable Memory and Storage metrics.

(Using System Manager)

STEP 1: Create a IAM role

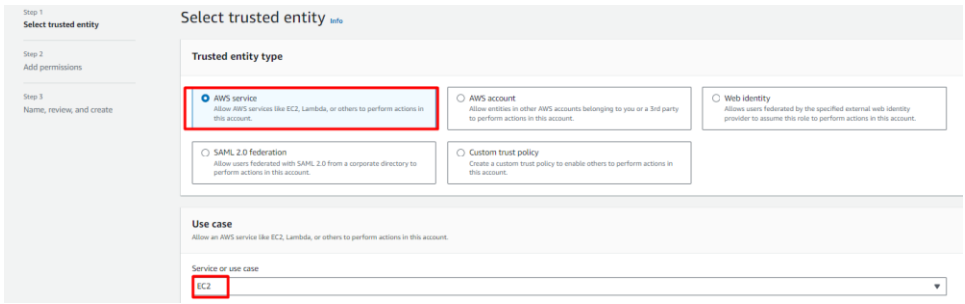
- Go to IAM
- On the Left Side of the screen search for Roles
- Then Click on Create Role



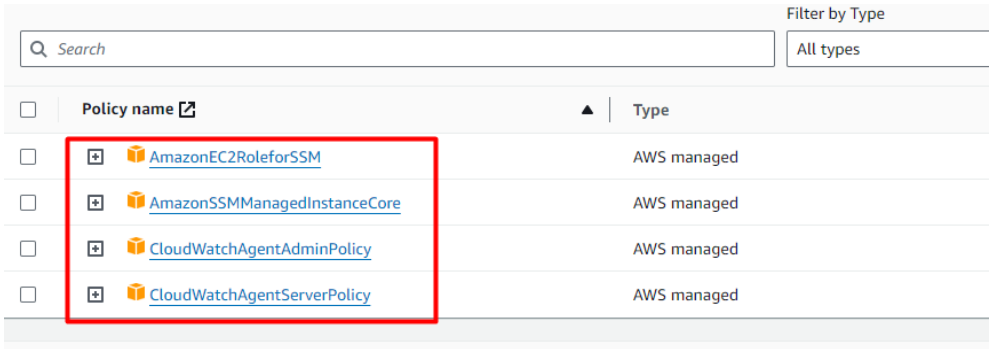
As we want to use this role inside the This Account

We will choose AWS service

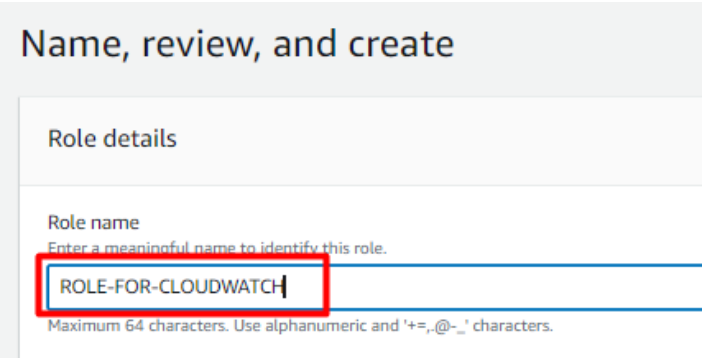
Now we want this Role Applicable for EC2 Instance So we will Choose EC2



- Then Click on next
- Now Attach policy (permission) :
  - “ AmazonEC2RoleforSSM
  - AmazonSSMManagedInstanceCore
  - CloudWatchAgentServerPolicy
  - CloudWatchAgentAdminPolicy “



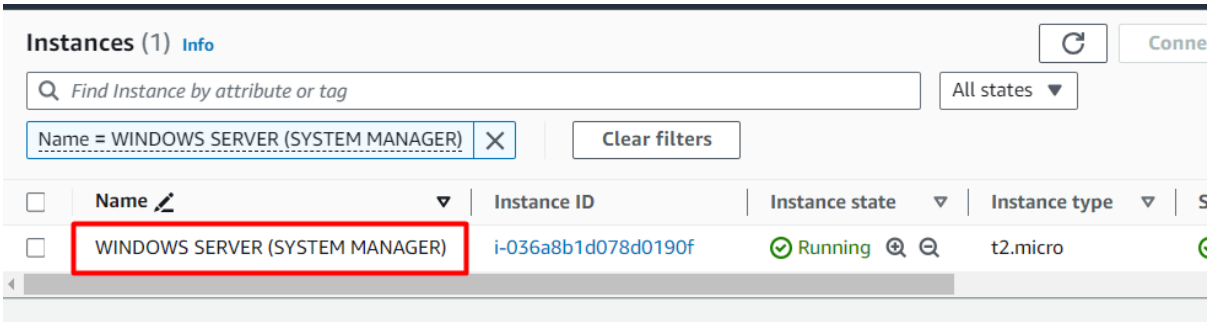
- Then Click on Next
- Enter Name of the Role and Create this Role



- Hence, we have Created a IAM Role.

STEP 2: Now create a Windows Server

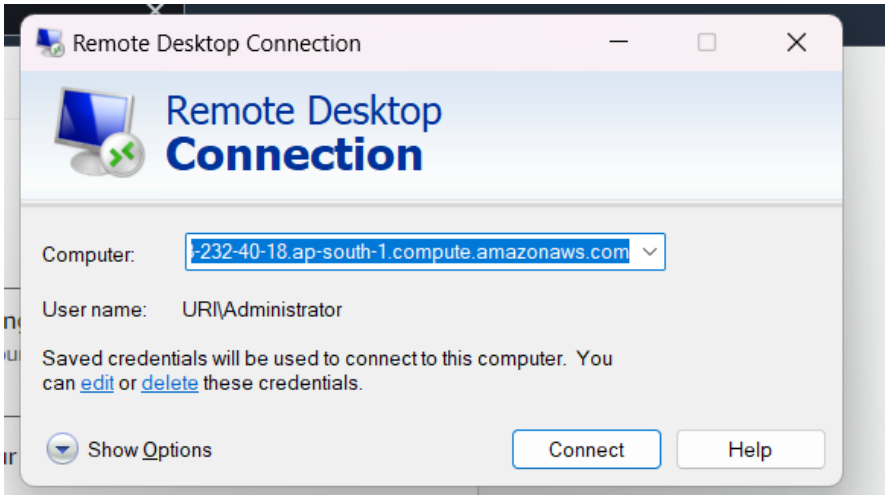
- Choose AMI as Windows Server
- In security Group Choose RDP at Anywhere
- Create a Key Pair (It is used for the password to Decrypt)
- Then Scroll Down to Advance Details
- There Select IAM instance Profile
- There Choose your Create Role



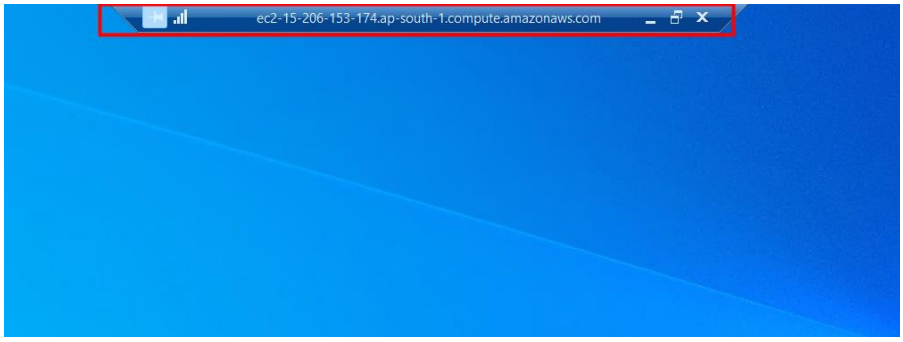
- Hence we have create the Windows Sever

STEP 3: Connect to RDP

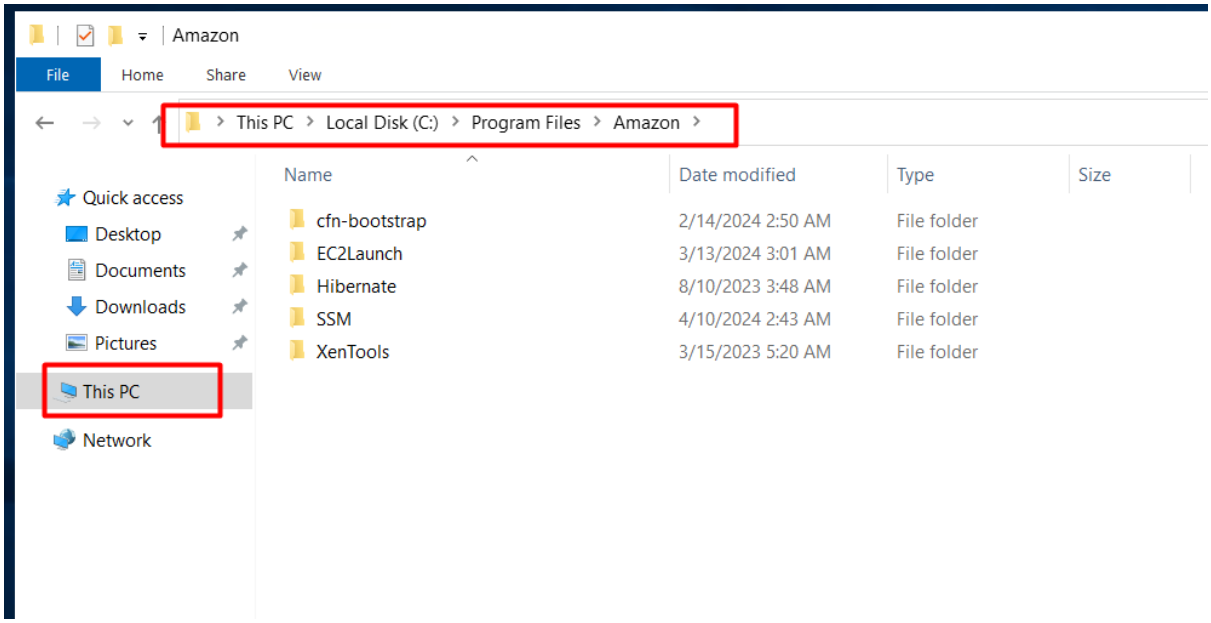
Connect Inside RDP using credentials



- Hence, we are inside the Window server,



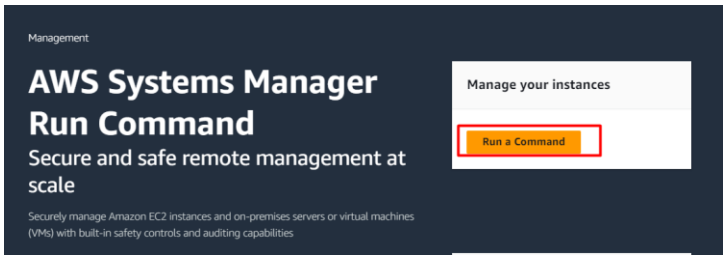
- Now go to My PC
- **Path : C:>Program Files>Amazon**



- So here we can see the CloudWatch agent is not install,

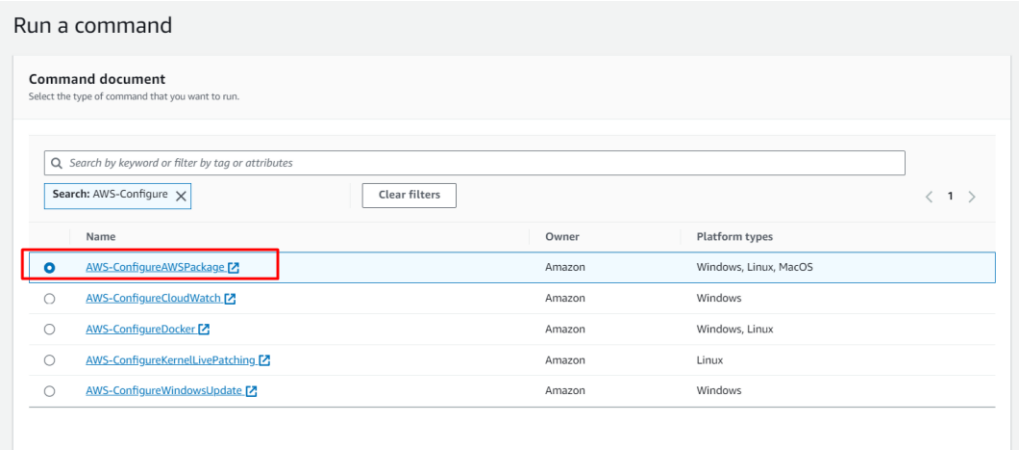
STEP 4: Install CloudWatch Agent using SSM (Systems Manager)

- Go to System Manager
- There search for Run command
- Click on it

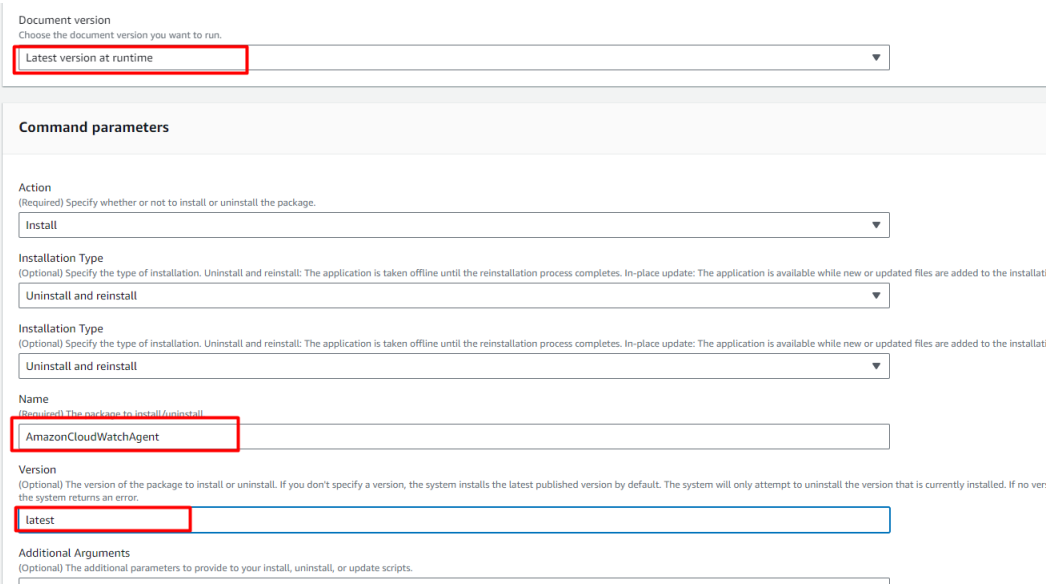


- Search for this in search bar:

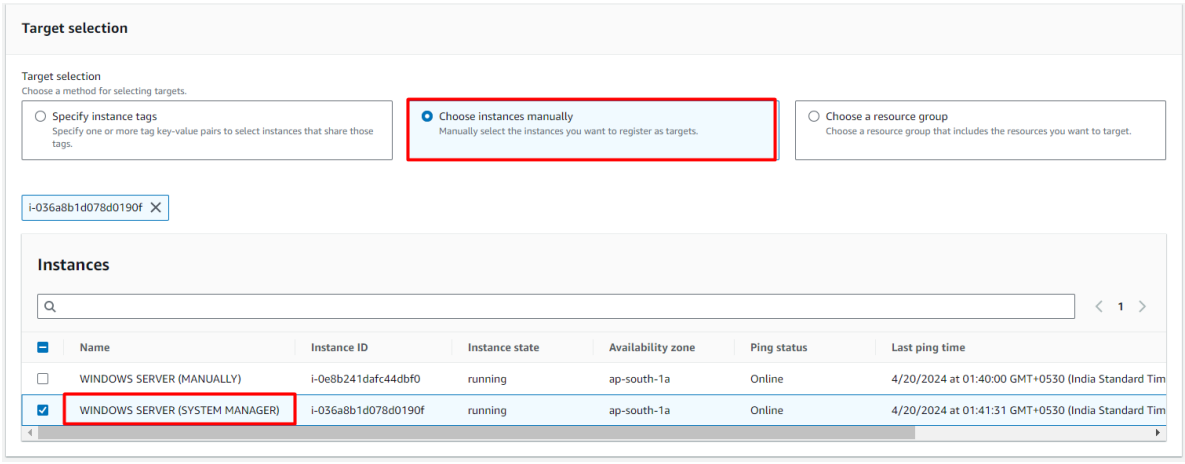
"**AWS-ConfigureAWSPackage**"



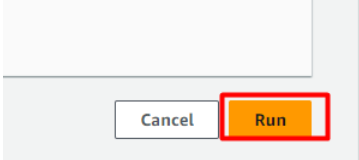
- Select the Package and Scroll down
- Then Choose Document version : Latest version
- And In Name enter : AmazonCloudWatchAgent
- Version : Latest



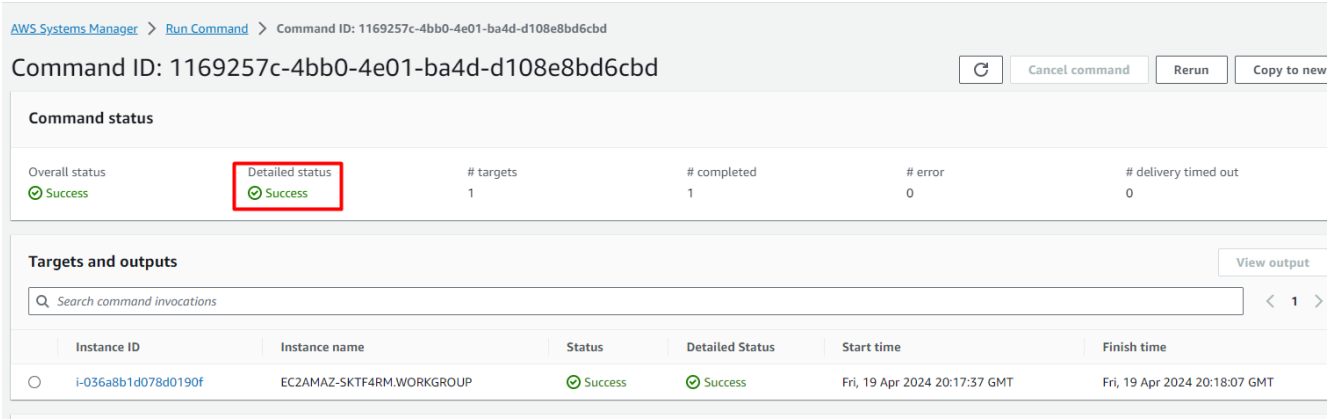
- Scroll Down to target selection,
- Choose Instance Manually
- Select the instance which we need to configure,



- And **RUN** the package.



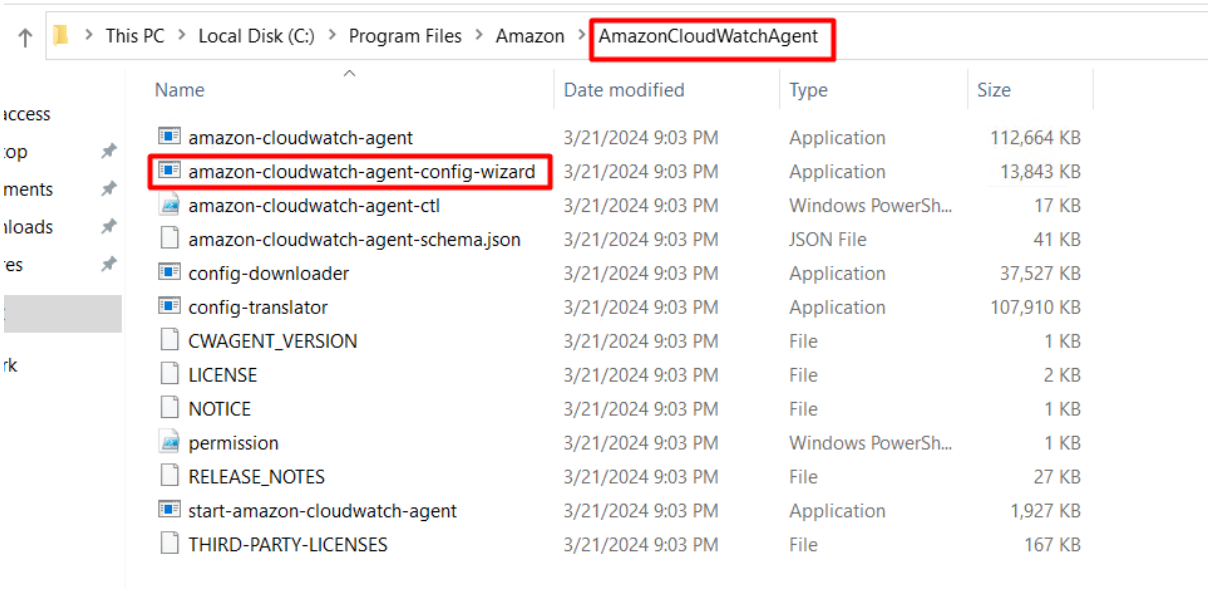
- Wait for few minutes to gets it done



- Hence,we can see the package has been created successfully.

STEP 6: Run Cloudwatch Agent Wizard

- Open RDP
- Hence we can see the CloudWatch agent is install now we need to Configure the wizard File



- Open PowerShell

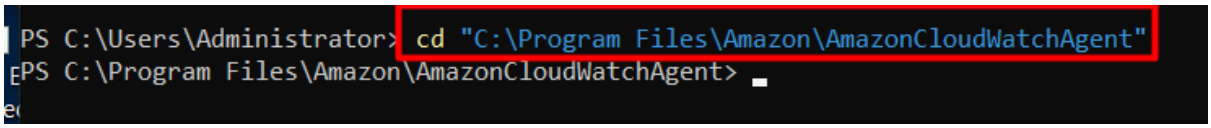
Command used :

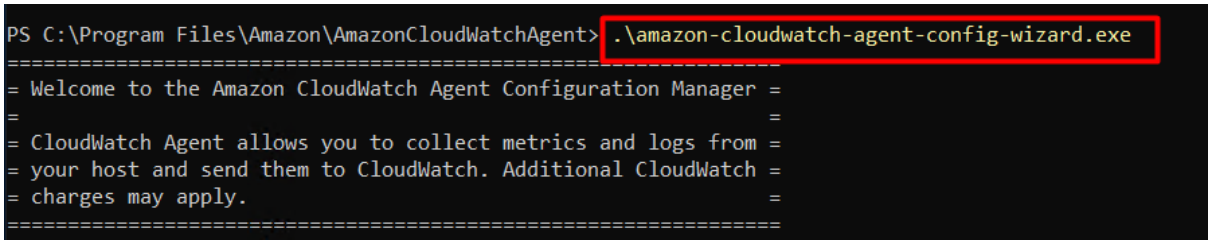
cd "C:\Program Files\Amazon\AmazonCloudWatchAgent"

//change the directory to the location where the CloudWatch agent is installed

.\amazon-cloudwatch-agent-config-wizard.exe

// this command will use to execute the wizard file



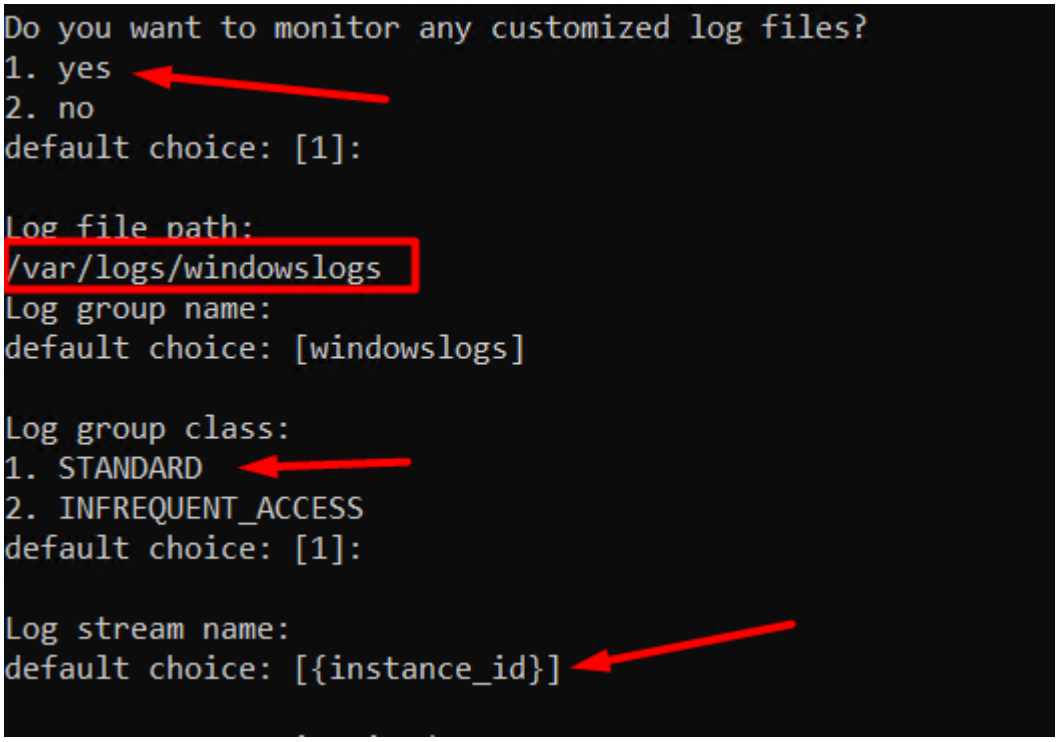


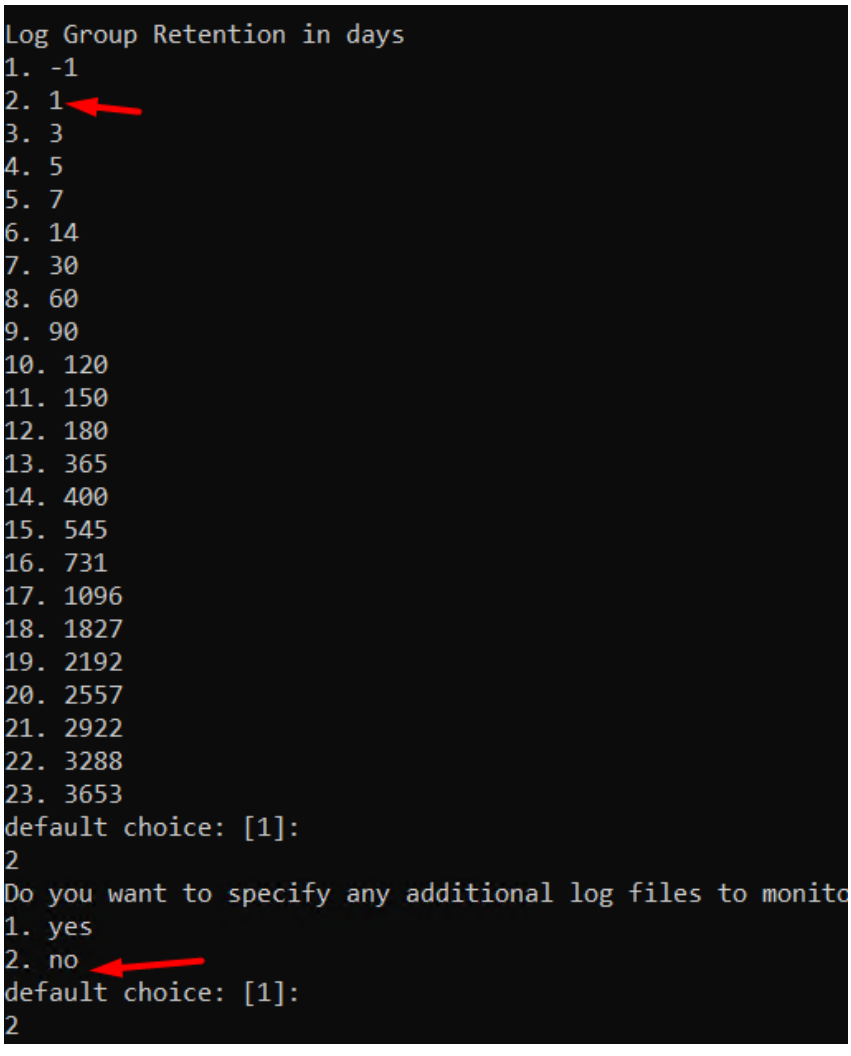
```
============================================================
= Welcome to the Amazon CloudWatch Agent Configuration Manager =
=                                                          =
= CloudWatch Agent allows you to collect metrics and logs from =
= your host and send them to CloudWatch. Additional CloudWatch =
= charges may apply.                                       =
============================================================
On which OS are you planning to use the agent?
1. linux
2. windows
3. darwin
default choice: [2]:
2
Trying to fetch the default region based on ec2 metadata...
I! imds retry client will retry 1 timesAre you using EC2 or On-Premises hosts?
1. EC2
2. On-Premises
default choice: [1]:
1
Do you want to turn on StatsD daemon?
1. yes
2. no
default choice: [1]:
1
Which port do you want StatsD daemon to listen to?
default choice: [8125]
8125
What is the collect interval for StatsD daemon?
1. 10s
2. 30s
3. 60s
default choice: [1]:
1
What is the aggregation interval for metrics collected by StatsD daemon?
1. Do not aggregate
2. 10s
3. 30s
4. 60s
default choice: [4]:
4
Do you have any existing CloudWatch Log Agent configuration file to import for migration?
1. yes
2. no
default choice: [2]:
2
```

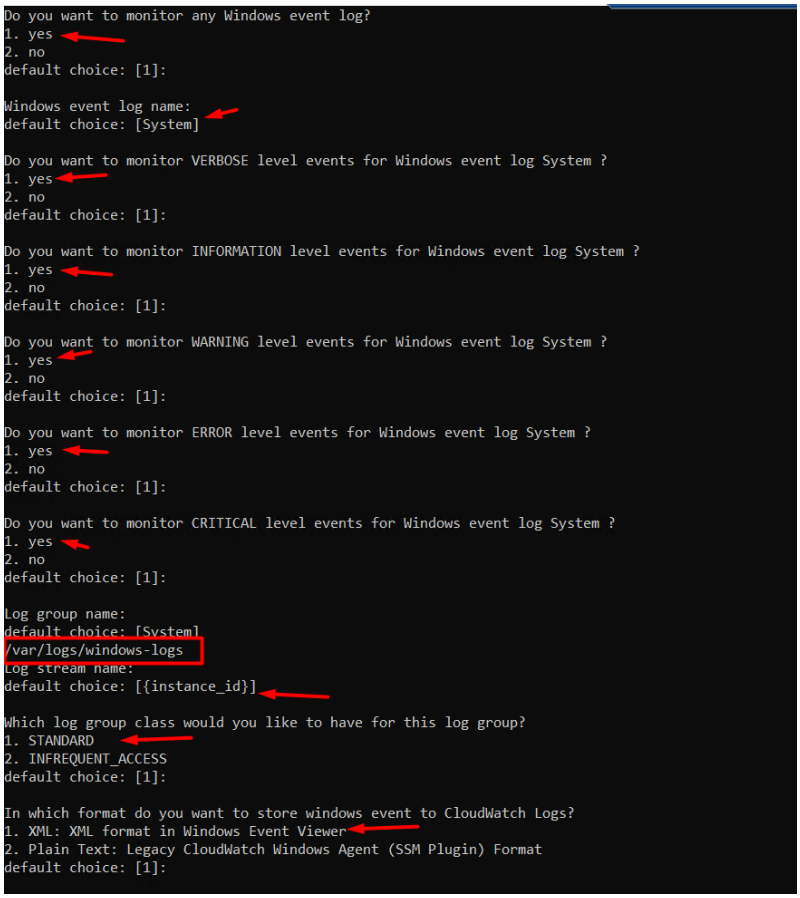
```
Do you want to monitor any host metrics? e.g. CPU, memory, etc.
1. yes
2. no
default choice: [1]:
1
Do you want to monitor cpu metrics per core?
1. yes
2. no
default choice: [1]:
1
Do you want to add ec2 dimensions (ImageId, InstanceId, InstanceType, AutoScalingGroupName) in
1. yes
2. no
default choice: [1]:
1
Do you want to aggregate ec2 dimensions (InstanceId)?
1. yes
2. no
default choice: [1]:
1
Would you like to collect your metrics at high resolution (sub-minute resolution)? This enable
1. 1s
2. 10s
3. 30s
4. 60s
default choice: [4]:
4
```

```
Which default metrics config do you want?
1. Basic
2. Standard
3. Advanced
4. None
default choice: [1]:
1
Current config as follows:
{
        "metrics": {
                "aggregation_dimensions": [
                        [
                                "InstanceId"
                        ]
                ],
                "append_dimensions": {
                        "AutoScalingGroupName": "${aws:AutoScalingGroupNam
                        "ImageId": "${aws:ImageId}",
                        "InstanceId": "${aws:InstanceId}",
                        "InstanceType": "${aws:InstanceType}"
                },
                "metrics_collected": {
                        "LogicalDisk": {
                                "measurement": [
                                        "% Free Space"
                                ],
                                "metrics_collection_interval": 60,
                                "resources": [
                                        "*"
                                ]
                        },
                        "Memory": {
                                "measurement": [
                                        "% Committed Bytes In Use"
                                ],
                                "metrics_collection_interval": 60
                        },
                        "statsd": {
                                "metrics_aggregation_interval": 60,
                                "metrics_collection_interval": 10,
                                "service_address": ":8125"
                        }
                }
        }
}
Are you satisfied with the above config? Note: it can be manually customiz
1. yes
2. no
default choice: [1]:
1
```

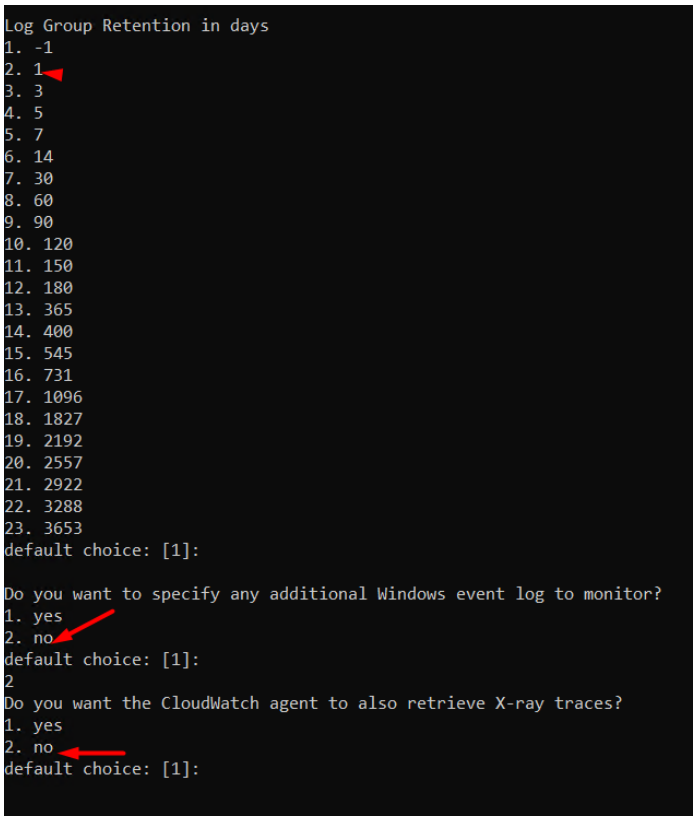
```
Are you satisfied with the above config? Note: it can b
1. yes
2. no
default choice: [1]:
1
Do you want to monitor any customized log files?
1. yes
2. no
default choice: [1]:
1
Log file path:
/demo/logs/windowslogs
Log group name:
default choice: [windowslogs]

Log group class:
1. STANDARD
2. INFREQUENT_ACCESS
default choice: [1]:
1
Log stream name:
default choice: [{instance_id}]
```


Do you want to monitor any customized log files?
1. yes
2. no
default choice: [1]:
Log file path:
/var/logs/windowslogs
Log group name:
default choice: [windowslogs]
Log group class:
1. STANDARD
2. INFREQUENT_ACCESS
default choice: [1]:
Log stream name:
default choice: [{instance_id}]

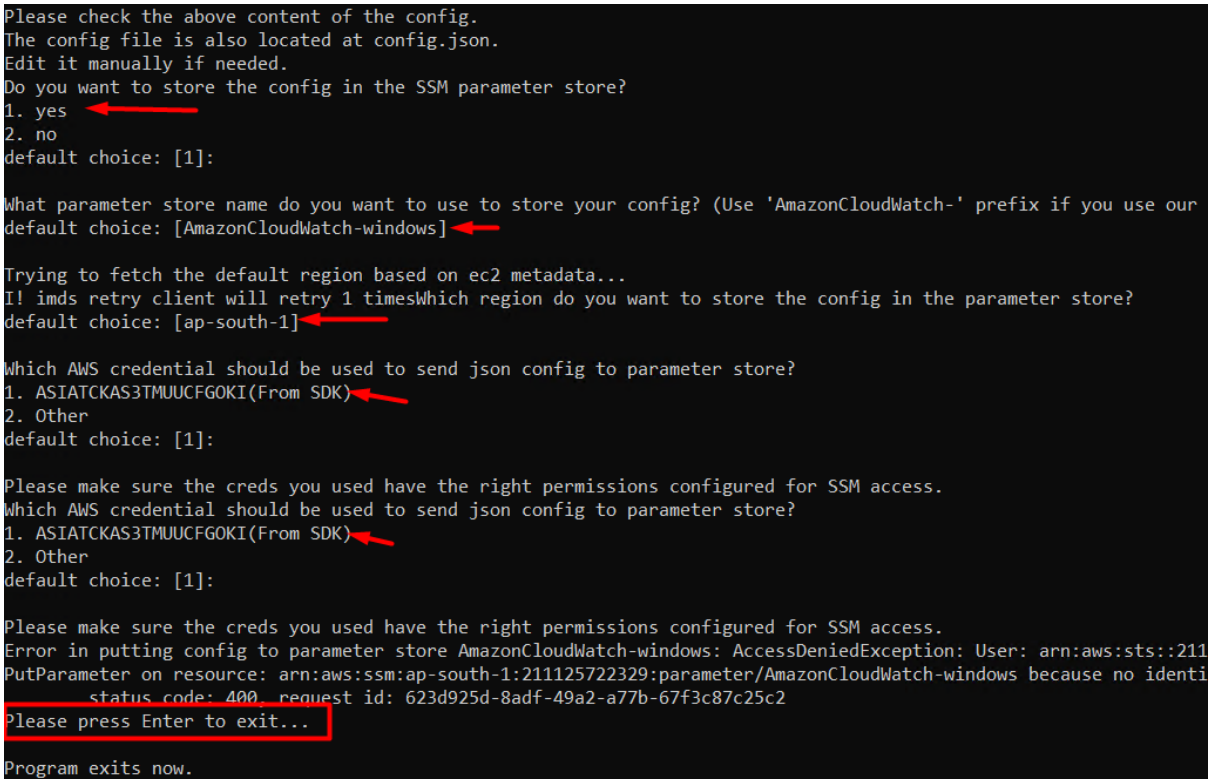

Log Group Retention in days
1. -1
2. 1
3. 3
4. 5
5. 7
6. 14
7. 30
8. 60
9. 90
10. 120
11. 150
12. 180
13. 365
14. 400
15. 545
16. 731
17. 1096
18. 1827
19. 2192
20. 2557
21. 2922
22. 3288
23. 3653
default choice: [1]:
2
Do you want to specify any additional log files to monito
1. yes
2. no
default choice: [1]:
2



- Enter the Log group name where you want to send the log of this server



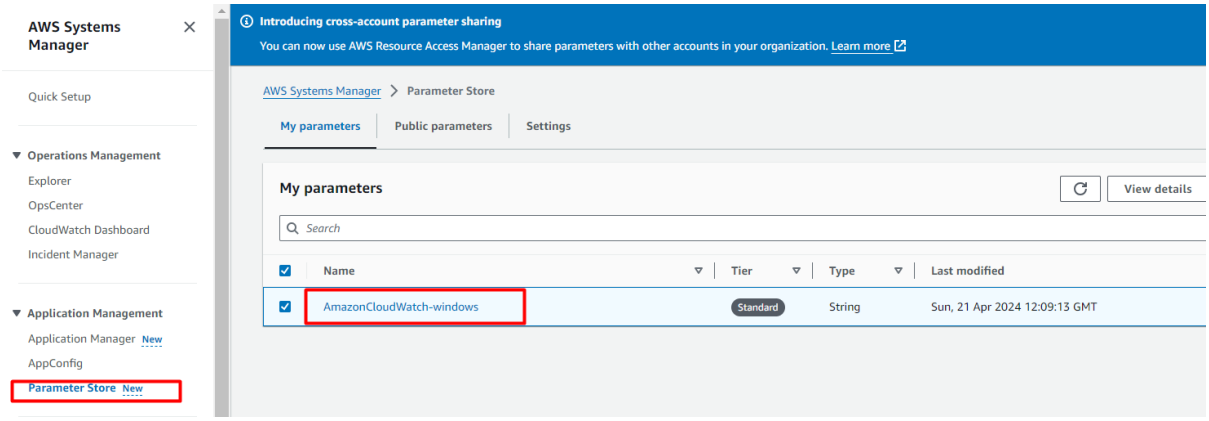
- Choose by default
- Wait at config file is also Located at “config.json” :
- The config file will be get stored in SSM parameters and if we want to run any other instance with the same configuration, we can use this easy and perform it easily



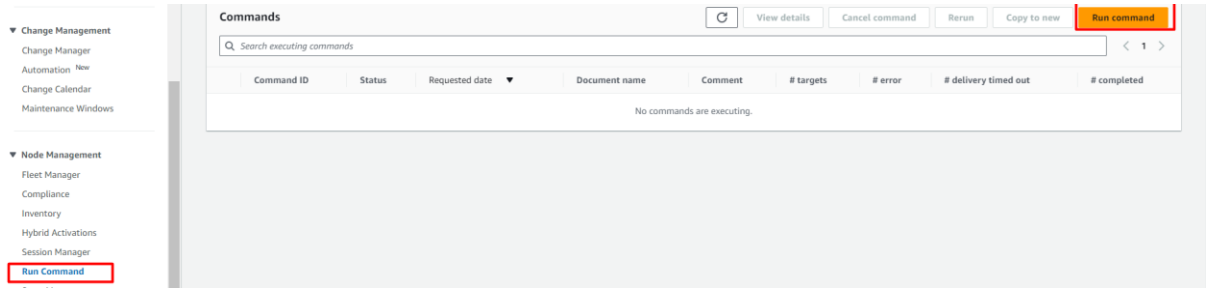
- Hence, we have configure everything
- Now exit from the Windows server.

STEP 8: Now run the CloudWatch Agent

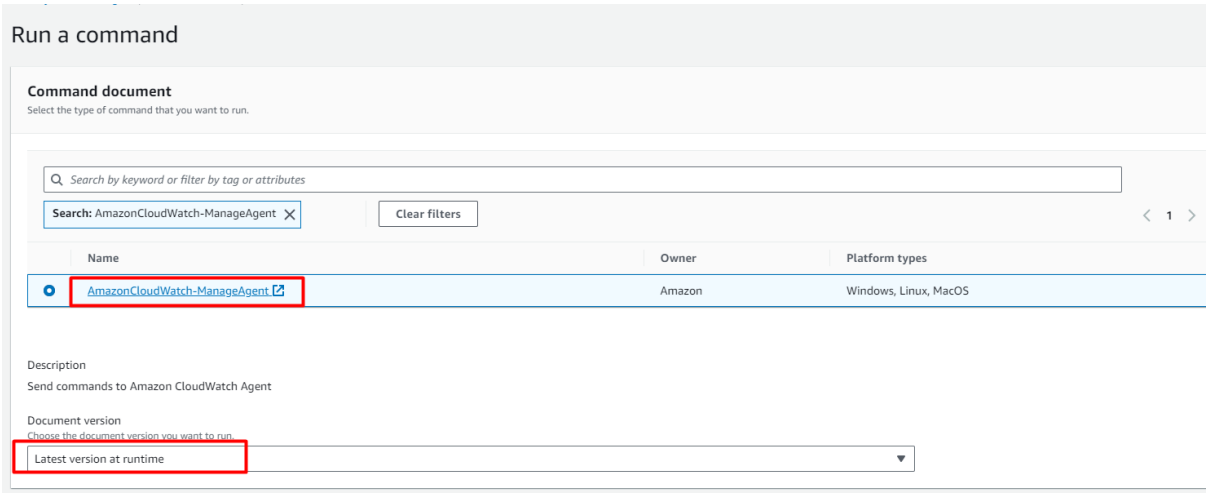
- Open Session Manager
- Go to parameter Store
- Hence we can see the Parameter for Windows Server has been Created for Cloudwatch Agent



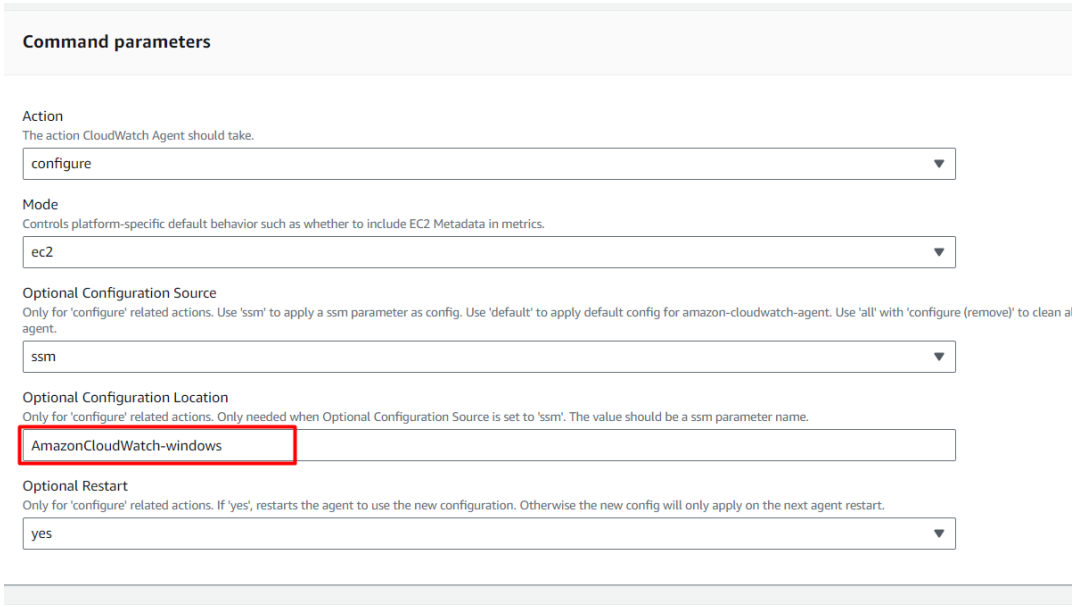
- Then Click on Run Command



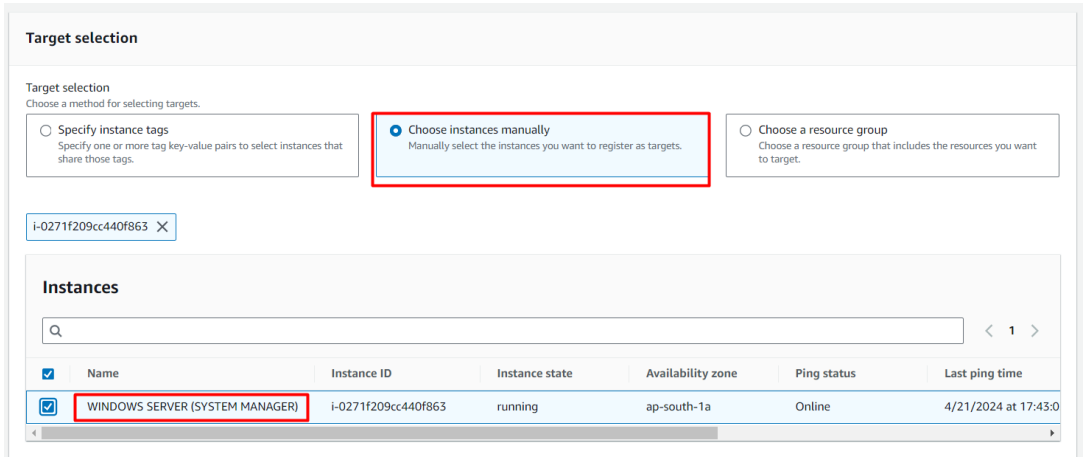
- Search for "**AmazonCloudWatch-ManageAgent**"
- And Choose it
- And in Document version Choose Latest Version



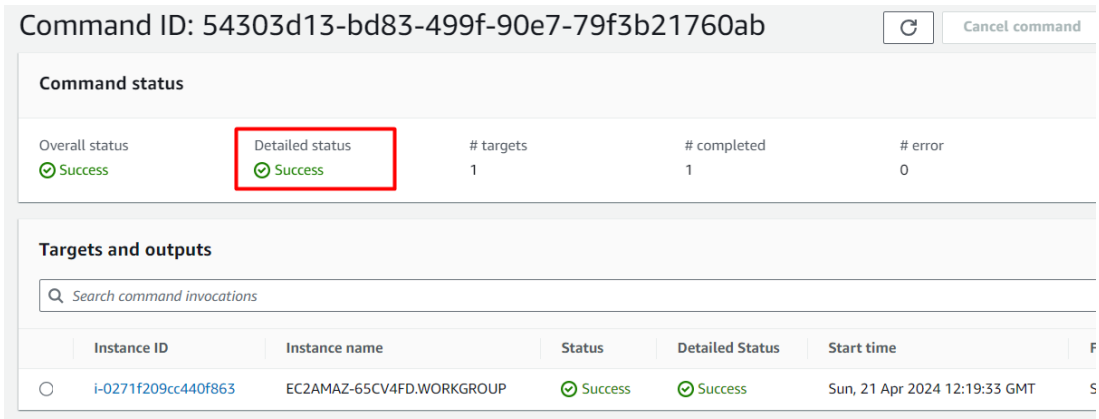
- And scroll down to Optional configuration source :
- Enter the Parameter Store name : "**AmazonCloudWatch-windows**"



- Choose your instance where you want to run this command
- And Run the Command

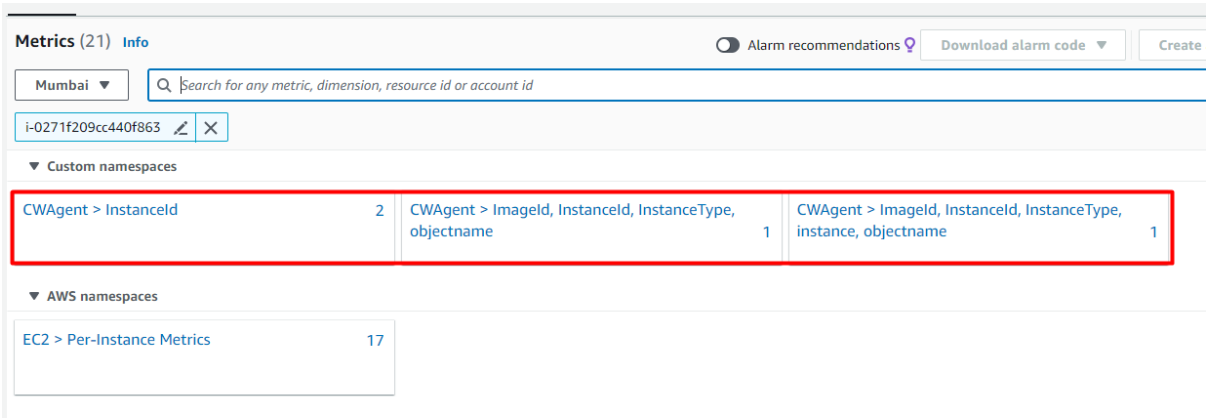


- Wait for 5-10 inn till the process is going on
- Once it success



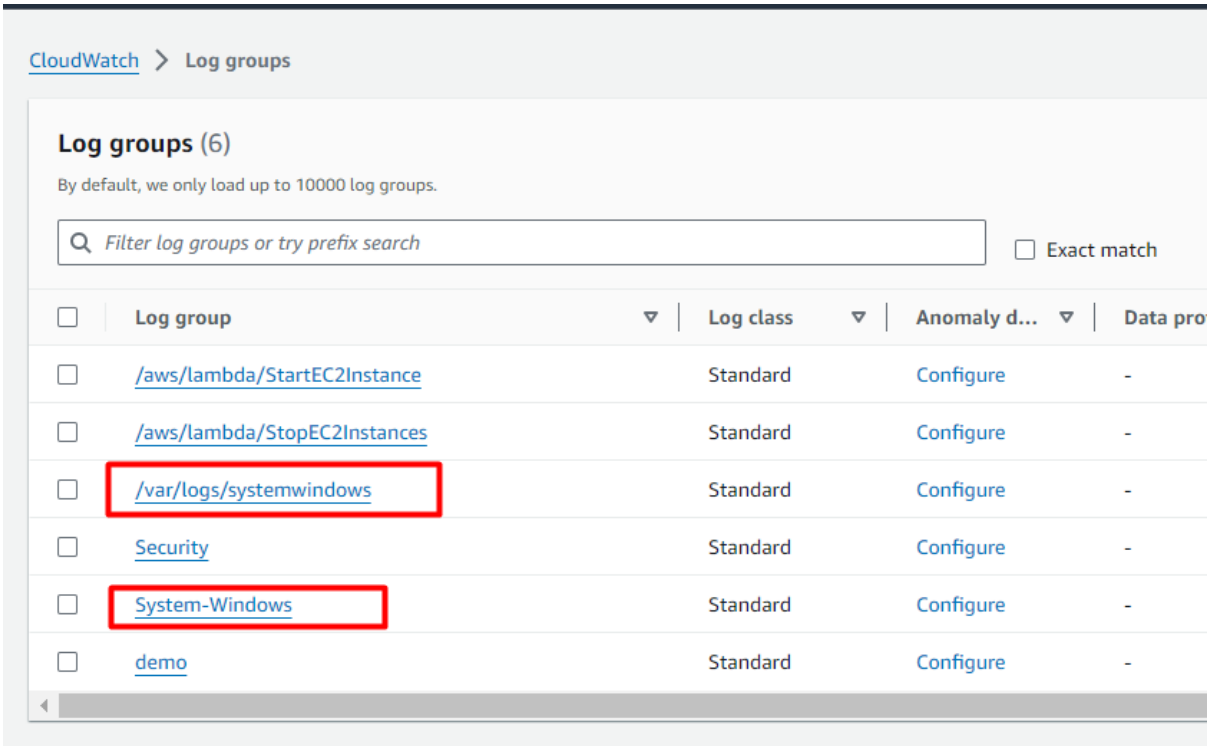
STEP 9: Open CloudWatch to check Metrics of this Instance

- Go to CloudWatch
- Then in CloudWatch go to All metric
- Copy the Instance ID and paste the ID in the search bar of the Metric,
- Hence we can see the Disk , memory Metric is Visible .



STEP 10: Check the Logs are coming in the Log group

- Go to Log group in CloudWatch
- Hence, we can see the Log group has been created for Windows logs



Reference Link:

YOUTUBE : https://youtu.be/vAnIhIwE5hY?si=T494Z0Aa6y_whW9x