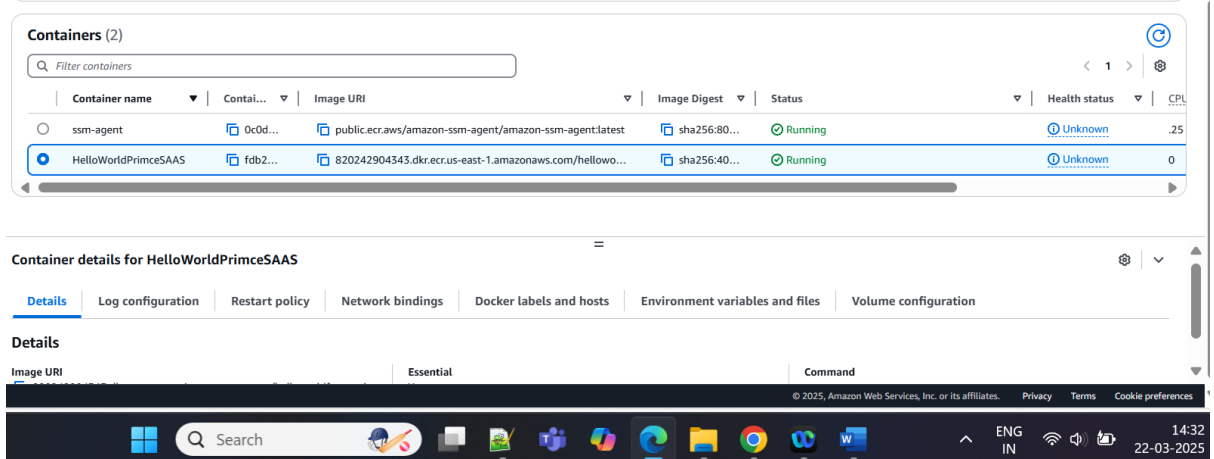
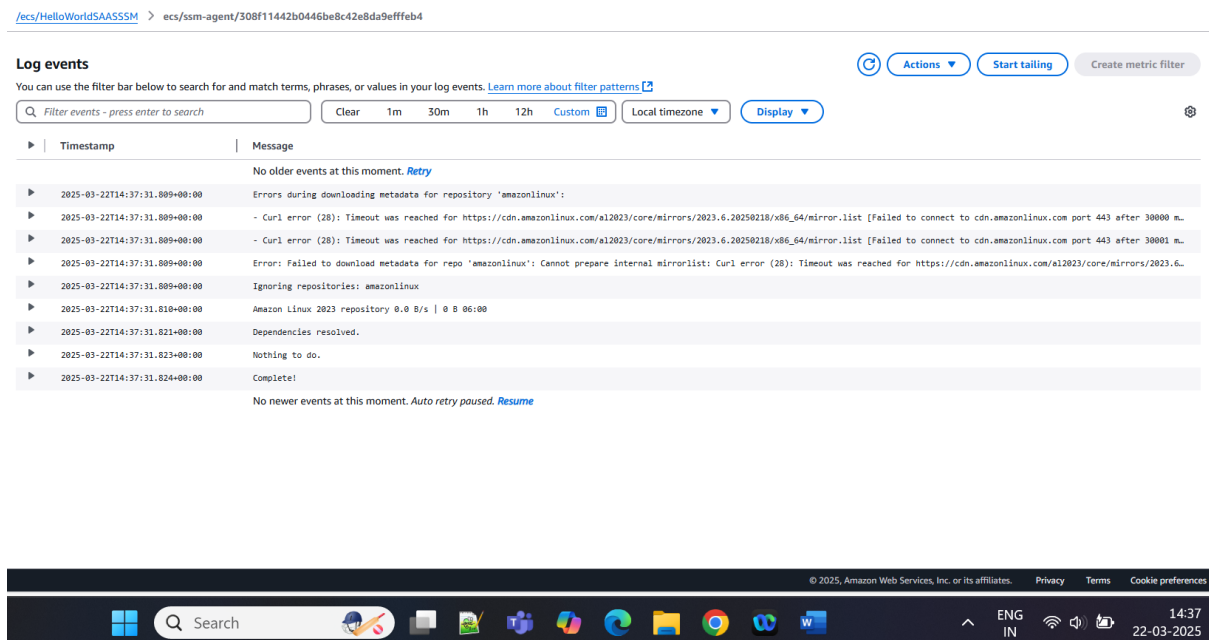


1. Main service application and SSM agent start first



2. The Amazon CloudWatch loggroup showing the container couldn't connect with AWS ECR to download.



3. The SSM agent crashes after sometime

Service
HelloSaasFIS

Containers (2)

Filter containers

Container name	Container ID	Image URI	Image Digest	Status	Health status	Restart count
ssm-agent	0c0d...	public.ecr.aws/amazon-ssm-agent/amazon-ssm-agent:latest	sha256:80...	Stopped Exit code: 1	Unknown	2
HelloWorldPrinceSAAS	fdb2...	820242904343.dkr.ecr.us-east-1.amazonaws.com/hellowo...	sha256:40...	Running	Unknown	0

Container details for ssm-agent

Details

Exit code: 1

Diagnose with Amazon Q

- Exit code 1 with following error message
SSM agent is already running,exiting

"Error extracting Task ARN from ECS Container Metadata,exiting

```
ECS_TASK_AVAILABILITY_ZONE_REGEX='^(af|ap|ca|cn|eu|me|sa|us|us-gov)-(central|north|(north(east|west))|south|south(east|west)|east|west)-[0-9]{1}[a-z]{1}$'; if ! [[ $ECS_TASK_AVAILABILITY_ZONE =~ $ECS_TASK_AVAILABILITY_ZONE_REGEX ]]; then echo "Error extracting Availability Zone from ECS Container Metadata,exiting\" 1>&2; exit 1; fi; ECS_TASK_ARN_REGEX='^arn:(aws|aws-cn|aws-us-gov):ecs:[a-z0-9-]+:[0-9]{12}:task/[a-zA-Z0-9-]+/[a-zA-Z0-9-]+$'; if ! [[ $ECS_TASK_ARN =~ $ECS_TASK_ARN_REGEX ]]; then echo "Error extracting Task ARN from ECS Container Metadata,exiting\" 1>&2; exit 1; fi; CREATE_ACTIVATION_OUTPUT=$(aws ssm create-activation --iam-role $MANAGED_INSTANCE_ROLE_NAME --tags Key=ECS_TASK_AVAILABILITY_ZONE,Value=$ECS_TASK_AVAILABILITY_ZONE Key=ECS_TASK_ARN,Value=$ECS_TASK_ARN Key=FAULT_INJECTION_SIDECAR,Value=true --region $ECS_TASK_REGION); ACTIVATION_ID=$(echo $CREATE_ACTIVATION_OUTPUT | jq -e -r .ActivationCode); if ! amazon-ssm-agent -register -code $ACTIVATION_CODE -id $ACTIVATION_ID -region $ECS_TASK_REGION; then echo "\"Failed to register with AWS Systems Manager (SSM),exiting\" 1>&2; exit 1; fi; amazon-ssm-agent & SSM_AGENT_PID=$!; wait $SSM_AGENT_PID; else echo "\"ECS Container Metadata not found,exiting\" 1>&2; exit 1; fi; else echo "\"SSM agent is already running,exiting\" 1>&2; exit 1; fi"
```

- ENI has no public IP

Network interface summary for eni-0d8a5e995c90cb43

Delete network interface Actions

Network interface details	Name	Description
Network interface ID eni-0d8a5e995c90cb43	-	90da-e133a3450812
Network interface status In-use	Interface type Elastic network interface	Security groups sg-0c6c8a043d2254b9 (default)
VPC ID vpc-0a5e995c90cb43	Subnet ID subnet-0a5e995c90cb43	Availability Zone us-east-1d
Owner 820242904343	Requester ID 578734482556	Requester-managed True
Source/dest. check True	Managed False	Operator -
IP addresses	Private IPv4 DNS ip-172-31-95-102.ec2.internal	Elastic Fabric Adapter False

- Creating NAT Gateway with and Attaching Elastic IP.

✓ Elastic IP address 34.239.84.84 (eipalloc-0cc3389d32b4dfbb) allocated.
A highly available, managed network address translation (NAT) service that instances in private subnets can use to connect to services in other VPCs, on-premises networks, or the internet.

NAT gateway settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.

CustomGatewayCircuitBreaker

The name can be up to 256 characters long.

Subnet
Select a subnet in which to create the NAT gateway.

subnet-01b-0831-1a4b-1d8-8ca

Connectivity type
Select a connectivity type for the NAT gateway.

☒ Public
☐ Private

Elastic IP allocation ID [Info](#)
Assign an Elastic IP address to the NAT gateway.

eipalloc-0cc3389d32b4dfbb [Allocate Elastic IP](#)

► [Additional settings](#) [Info](#)

7. Wait for NAT Gateway to turn active

NAT gateways (1) [Info](#)

Find resources by attribute or tag

Name	NAT gateway ID	Connectivity...	State	State message	Primary public I...	Primary private I...	Primary network...	VPC
CustomGatewayCicul...	nat-01b-0831-1a4b-1d8-8ca	Public	Pending	-	-	-	en-01b-0831-1a4b-1d8-8ca	vpc-01b-0831-1a4b-1d8-8ca

NAT gateways (1) [Info](#)

Find resources by attribute or tag

Name	NAT gateway ID	Connectivity...	State	State message	Primary public I...	Primary private I...	Primary network...	VPC
CustomGatewayCicul...	nat-01b-0831-1a4b-1d8-8ca	Public	Available	-	34.239.84.84	172.31.58.191	en-01b-0831-1a4b-1d8-8ca	vpc-01b-0831-1a4b-1d8-8ca

8. Create custom route table

Create route table [Info](#)

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.

CustomRouteTable

VPC
The VPC to use for this route table.

vpc-01b-0831-1a4b-1d8-8ca

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

Q Name X

Value - optional

Q CustomRouteTable X [Remove](#)

[Add new tag](#)

You can add 49 more tags.

[Cancel](#) [Create route table](#)

9. Edit Route Table to attach NAT gateway

rtb-0c3ac0146f764d1c0 / CustomRouteTable

Actions

Details

Route table ID

rtb-0c3ac0146f764d1c0

VPC

vpc-0c3ac0146f764d1c0

Main

No

Owner ID

arn:aws:iam::123456789012:user:admin

Explicit subnet associations

-

Edge associations

-

Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Both

Edit routes

Filter routes

Destination	Target	Status	Propagated
0.0.0.0/0	na-0c3ac0146f764d1c0	Active	No
172.31.0.0/16	local	Active	No

10. Attach subnet for Amazon EC2 where task will run

rtb-0c3ac0146f764d1c0 / CustomRouteTable

Actions

Details

Route table ID

rtb-0c3ac0146f764d1c0

VPC

vpc-0c3ac0146f764d1c0

Main

No

Owner ID

arn:aws:iam::123456789012:user:admin

Explicit subnet associations

subnet-0c3ac0146f764d1c0

Edge associations

-

Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (1)

Edit subnet associations

Find subnet association

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
-	subnet-0c3ac0146f764d1c0	172.31.0.0/16	-

11. Confirm from corresponding subnet NAT gateway attached and not internet gateway.

12. SSM Agent starts

2025-03-22T15:05:00.000	2025-03-22 15:05:00.000 INFO Checking if agent identity type Unprem can be assumed
2025-03-22T15:05:00.000	2025-03-22 15:05:00.6707 INFO Agent will take identity from OnPrem
2025-03-22T15:05:00.000	2025-03-22 15:05:05.7738 INFO [amazon-ssm-agent] amazon-ssm-agent - v3.3.1957.0
2025-03-22T15:05:00.000	2025-03-22 15:05:05.7738 INFO [amazon-ssm-agent] OS: linux, Arch: amd64
2025-03-22T15:05:00.000	2025-03-22 15:05:05.7738 INFO [amazon-ssm-agent] Starting Core Agent
2025-03-22T15:05:00.000	2025-03-22 15:05:05.7739 INFO [CredentialRefresher] credentialRefresher has started
2025-03-22T15:05:00.000	2025-03-22 15:05:05.7739 INFO [CredentialRefresher] Starting credentials refresher loop
2025-03-22T15:05:00.000	2025-03-22 15:05:05.8533 INFO [CredentialRefresher] Credentials ready
2025-03-22T15:05:00.000	2025-03-22 15:05:05.8540 INFO [CredentialRefresher] Next credential rotation will be in 29.99286461905 minutes
2025-03-22T15:05:00.000	2025-03-22 15:05:06.8561 INFO [amazon-ssm-agent] [LongRunningWorkerContainer] [WorkerProvider] Worker ssm-agent-worker is not running, starting worker process
2025-03-22T15:05:00.000	2025-03-22 15:05:06.8583 INFO [amazon-ssm-agent] [LongRunningWorkerContainer] [WorkerProvider] Worker ssm-agent-worker (pid:165) started
2025-03-22T15:05:00.000	2025-03-22 15:05:06.8583 INFO [amazon-ssm-agent] [LongRunningWorkerContainer] Monitor long running worker health every 60 seconds

13. SSM agent confirmation

Containers (2)

Filter containers

Container name	Contai...	Image URI	Image Digest	Status	Health status	CPU
ssm-agent	ead3...	public.ecr.aws/amazon-ssm-agent/amazon-ssm-agent:latest	sha256:80...	Running	Unknown	.25
HelloWorldPrinceSAAS	7aa3...	...	sha256:40...	Running	Unknown	0

Container details for HelloWorldPrinceSAAS

Details Log configuration Restart policy Network bindings Docker labels and hosts Environment variables and files Volume configuration

Details

Image URI

Essential

Command

14. AWS IAM roles



Permissions policies (1/2) [Info](#)

You can attach up to 10 managed policies.

Q Search

Filter by Type

All types

<input type="checkbox"/>	Policy name ↗	Type
<input checked="" type="checkbox"/>	 AmazonSSMManagedInstanceCore	AWS managed
<input type="checkbox"/>	 SSMInline	Customer inline

SSMInline

```
2  "Version": "2012-10-17",
3  "Statement": [
4    {
5      "Effect": "Allow",
6      "Action": [
7        "ssm:DeleteActivation",
8        "ssm:DeregisterManagedInstance",
9        "ssm:RegisterManagedInstance",
10       "ssm:UpdateInstanceInformation",
11       "ssm:ListInstanceAssociations",
12       "ssm:DescribeInstanceInformation",
13       "ec2messages:*",
14       "ssmmessages:*",
15       "cloudwatch:PutMetricData",
16       "ec2:DescribeInstanceStatus"
17     ],
18     "Resource": "*"
19   }
20 ]
21 }
```