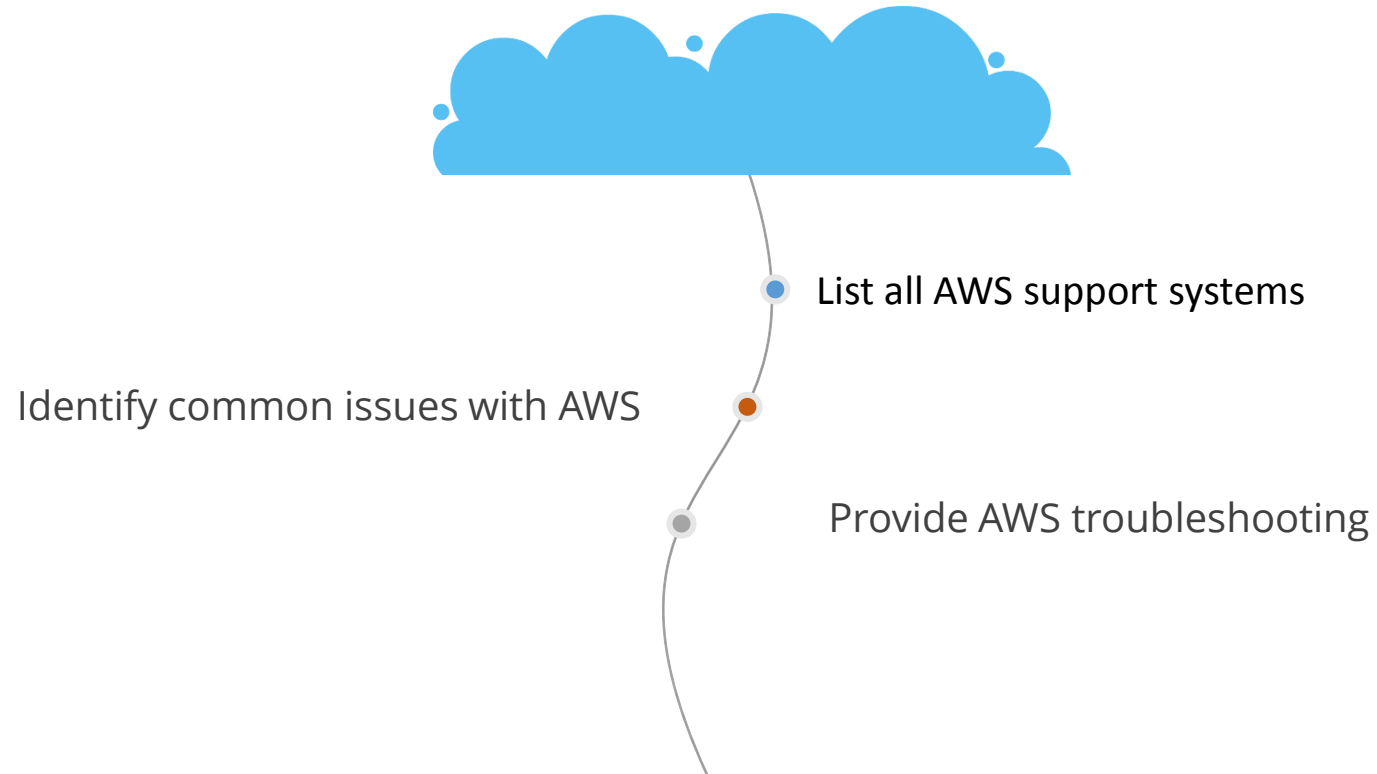


AWS Certified Developer Associate

Lesson 15: Troubleshooting



What You'll Learn



AWS Support

AWS Support



AWS Support—Online Documentation

AWS Support provides all the necessary assistance for users of Amazon Web Services.

Services				Getting Started			
Compute				Developer Tools			
Amazon EC2				AWS CodeStar			
Amazon EC2 Container Registry				AWS CodeCommit			
Amazon EC2 Container Service				AWS CodeBuild			
Amazon Lightsail				AWS CodeDeploy			
Amazon VPC				AWS CodePipeline			
AWS Batch				AWS X-Ray			
AWS Elastic Beanstalk				AWS Tools & SDKs			
AWS Lambda				Management Tools			
Auto Scaling				Amazon CloudWatch			
Elastic Load Balancing				AWS CloudFormation			
Storage				AWS CloudTrail			
Amazon S3				AWS Config			
Amazon EBS				AWS OpsWorks			
Amazon EFS				AWS Service Catalog			
Amazon Glacier				Trusted Advisor			
Internet of Things				Mobile Services			
AWS Greengrass				AWS Mobile Hub			
AWS IoT				Amazon API Gateway			
Contact Center				Amazon Cognito			
Amazon Connect				AWS Device Farm			
Game Development				Amazon Mobile Analytics			
Amazon Lumberyard (beta)				Additional Software & Services			
Amazon GameLift				AWS Billing and Cost Management			
SDKs & Toolkits				AWS Marketplace			
AWS SDK for C++							
AWS SDK for Go							
AWS SDK for Java							
AWS SDK for JavaScript							
AWS SDK for .NET							
AWS SDK for PHP							
AWS SDK for Python (Boto 3)							
AWS SDK for Ruby							
AWS Toolkit for Eclipse							
AWS Toolkit for Visual Studio							
AWS Tools for Visual Studio Team Services							

AWS Support—Online Troubleshooting

Most AWS service documentation contain troubleshooting topics that can get you started before contacting AWS Support.

Troubleshooting Instances

The following documentation can help you troubleshoot problems that you might have with your instance.

Contents

- What to Do If an Instance Immediately Terminates
- Troubleshooting Connecting to Your Instance
- Troubleshooting Stopping Your Instance
- Troubleshooting Terminating (Shutting Down) Your Instance
- Troubleshooting Instance Recovery Failures
- Troubleshooting Instances with Failed Status Checks
- Troubleshooting Instance Capacity
- Getting Console Output and Rebooting Instances
- My Instance Is Booting from the Wrong Volume

▢ Troubleshooting

- ▢ Launching Your Instance
- ▢ Connecting to Your Instance
- ▢ Stopping Your Instance
- ▢ Terminating Your Instance
- ▢ Instance Recovery Failures
- ▢ Failed Status Checks
- ▢ Instance Capacity
- ▢ Getting Console Output and Rebooting Instances

AWS Support Plans

Basic

Developer

Business

Enterprise

	Basic	Developer	Business	Enterprise
Customer Service and Communities	24x7 access to customer service, documentation, whitepapers, and support forums	24x7 access to customer service, documentation, whitepapers, and support forums	24x7 access to customer service, documentation, whitepapers, and support forums	24x7 access to customer service, documentation, whitepapers, and support forums
Best Practices	Access to 6 core Trusted Advisor checks	Access to 6 core Trusted Advisor checks	Access to full set of Trusted Advisor checks	Access to full set of Trusted Advisor checks
Health status and Notifications	Access to Personal Health Dashboard	Access to Personal Health Dashboard	Access to Personal Health Dashboard & Health API	Access to Personal Health Dashboard & Health API
Technical Support		Business hours** access to Cloud Support Associates via email	24x7 access to Cloud Support Engineers via email, chat & phone	24x7 access to Sr. Cloud Support Engineers via email, chat & phone
Who Can Open Cases		One primary contact/ Unlimited cases	Unlimited contacts/ Unlimited cases (IAM supported)	Unlimited contacts/ Unlimited cases (IAM supported)
		General guidance: < 24 business hours	General guidance: < 24 hours	General guidance: < 24 hours

AWS Support Center

Support Center

Account number: 483299754427

Support plan: Basic [Change](#) | [View Support plans](#)

My support cases

Health events **0**

Recent cases sorted by created date.

[Create case](#)

Subject	Created (UTC+5:30)	Severity	Status
Call: Bill amount heavy on experimenting with Storage Gateway	2017-10-31T21:36	Normal functionality	Pending Customer Action

[View all support cases](#)

Community Forums for Troubleshooting

Search Forums:

GO

Advanced search options

Forum / Category	Views	Threads / Messages	Last Post
Amazon Web Services Click Amazon Web Services to see a list of AWS Forums for each service. Then click on the forum for the service you have a question for.			
AWS Startups The following forums are for customers using AWS Startups only. For all other customers please choose Amazon Web Services and choose the specific service.			
AWS Web Site & Resources			
General Feedback This forum is provided for general feedback on AWS. Forums for discussion on specific AWS services can be found here .	821,442	3,068 / 7,967	Oct 12, 2017 12:12 PM by: mike3133
AWS Quick Start Reference Deployments AWS Quick Start Reference Deployments outline the architectures for popular enterprise solutions on AWS and provide AWS CloudFormation templates to automate their deployment.	3,698	141 / 371	Oct 11, 2017 11:18 AM by: ryanrockey
Java Development	156,599	1,646 / 3,897	Oct 10, 2017 3:51 PM by: Chit

Popular Tags

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[connectivity](#) [ebs](#) [ec2](#)
[elb](#) [error](#) [instance](#)
[problem](#) [rds](#) [s3](#) [ses](#)
[vpc](#) [windows](#)

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[Amazon Relational Database Service...](#)
Messages: 26,793
Last message posted at:
Oct 13, 2017 12:11 AM

[Amazon Cognito](#)
Messages: 5,061
Last message posted at:
Oct 12, 2017 8:26 PM

[Amazon Elasticsearch](#)

Troubleshooting—1

Issue 1

When you launch an EC2 instance, it starts and then terminates immediately



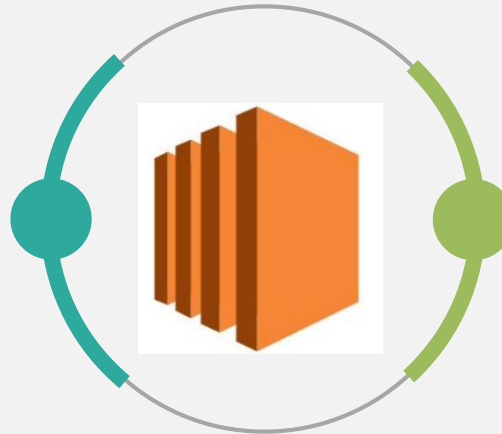
Troubleshooting

- You might have reached the EBS storage limit. Check your account limitations
- Snapshot with which EBS is being launched is corrupt

Troubleshooting—2

Issue 2

You terminate your instance, but the termination is taking more time than usual



Troubleshooting

- If underlying hardware is stuck, EC2 will forcefully terminate it. In case it's stuck for several hours, raise a support ticket
- A few shut down scripts are running and taking more time

Troubleshooting—3

Issue 3

While launching the instance,
you get
*“InsufficientInstanceCapacity
error”*



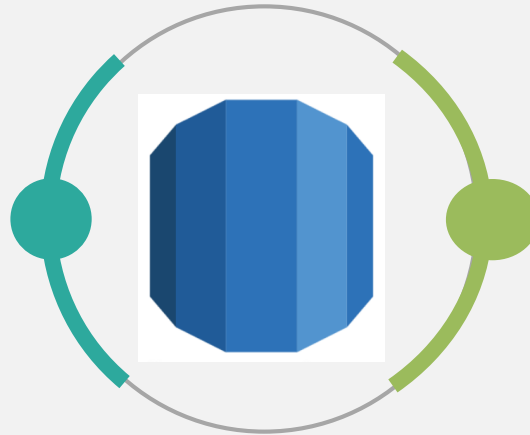
Troubleshooting

- If underlying hardware is stuck, EC2 will forcefully terminate it. In case it's stuck for several hours, raise a support ticket
- Submit a new request with a different instance type
- Launch instances with less number of instances multiple times

Troubleshooting—4

Issue 4

Unable to connect to RDS instance



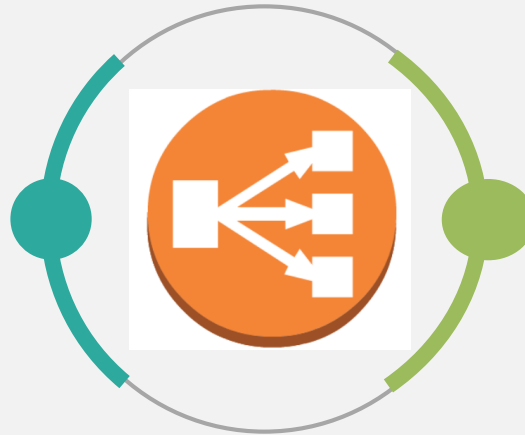
Troubleshooting

- Check the security group ingress rules
- Check whether the port which was specified while creating instance is working properly or not
- DB is still getting created. It takes 20 mins for an RDS instance to be available after you click on launch instance

Troubleshooting—5

Issue 5

LoadBalancer is sending request to unhealthy instances



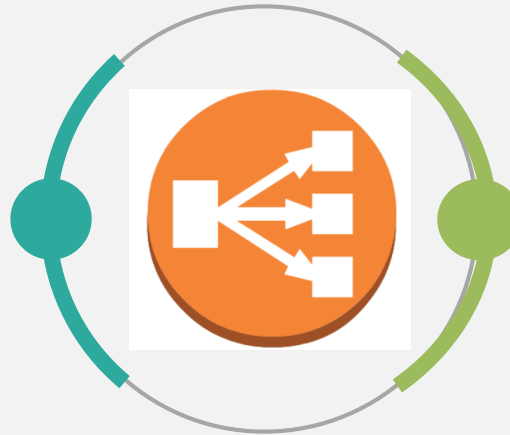
Troubleshooting

If there is at least one healthy registered target for your load balancer, it will route request to the healthy registered target. However, if there are only unhealthy registered targets, the load balancer will route requests to all unhealthy registered targets.

Troubleshooting—6

Issue 6

A target registered with ELB is not in service



Troubleshooting

- A security group does not allow traffic
- A network access control list (ACL) does not allow traffic
- The ping path is incorrect
- Network issue leading to connection timeout



QUIZ

1

Which option would be the best reason for the error message while auto scaling:
“<number of instances> instance(s) are already running. Launching EC2 instance failed.”

- a. Desired capacity has reached
- b. EBS limit of your account has reached
- c. Instance max limit of your account has reached
- d. Instance max limit of your VPC has reached



QUIZ

1

Which option would be the best reason for the error message while auto scaling:
“<number of instances> instance(s) are already running. Launching EC2 instance failed.”

- a. Desired capacity has reached
- b. EBS limit of your account has reached
- c. Instance max limit of your account has reached
- d. Instance max limit of your VPC has reached



The correct answer is **a**

Explanation: When the desired capacity reaches its maximum value, you get the error message “<number of instances> instance(s) are already running. Launching EC2 instance failed.”

QUIZ

2

Which option leads to the error “HTTPCode_Backend_4XX error” in ELB?

- a. Server response error
- b. Client error from instance
- c. Redirect response from instance
- d. ELB backend error



QUIZ

2

Which option leads to the error “HTTPCode_Backend_4XX error” in ELB?

- a. Server response error
- b. Client error from instance
- c. Redirect response from instance
- d. ELB backend error



The correct answer is **b**

Explanation: With client error from instance, you get the error “HTTPCode_Backend_4XX.” Refer <http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/ts-elb-http-errors.html> for more details.

QUIZ

3

Which option is the best solution when you get “failure of public key authentication” error after SSL certificate update?

- a. Reinstall the SSL certificate in the load balancer
- b. Reinstall the SSL certificate on the web server
- c. Check the private key format compatibility with SSL
- d. After SSL certificate update, keys need to be regenerated



QUIZ

3

Which option is the best solution when you get “failure of public key authentication” error after SSL certificate update?

- a. Reinstall the SSL certificate in the load balancer
- b. Reinstall the SSL certificate on the web server
- c. Check the private key format compatibility with SSL
- d. After SSL certificate update, keys need to be regenerated



The correct answer is **A**

Explanation: When you get the “failure of public key authentication error after SSL certificate update,” you need to reinstall the SSL certificate in the load balancer. You can refer [“http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/ts-elb-healthcheck.html”](http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/ts-elb-healthcheck.html) for more details.

QUIZ

4

In EC2, an “InstanceLimitExceeded” error means you have reached the maximum limit for running EC2 instances. Which is the default concurrent running instance limit?

- a. 10
- b. No limit
- c. 20
- d. 5



QUIZ

4

In EC2, an “InstanceLimitExceeded” error means you have reached the maximum limit for running EC2 instances. Which is the default concurrent running instance limit?

- a. 10
- b. No such limit
- c. 20
- d. 5



The correct answer is **c**

Explanation: If you get an “InstanceLimitExceeded” error when you try to launch an instance, you have reached your concurrent running instance limit. For new AWS accounts, the default limit is 20. If you need additional running instances, complete the form at [Request to Increase Amazon EC2 Instance Limit](#).

The background of the slide is a dense, repeating pattern of small, light gray line-art icons. These icons represent a wide variety of concepts including technology (laptops, smartphones, cameras), education (books, pencils, lightbulbs), science (flasks, microscopes), and general objects (umbrellas, glasses, tools).

This concludes “Troubleshooting”.