

Monitoring ELB



A CLOUD GURU



ELB - Load Balancer Types

3 Different Types of Elastic Load Balancers;

- Application Load Balancer
- Network Load Balancer
- Classic Load Balancer





ELB - Monitoring Types

4 Different Ways To Monitor Your Load Balancers;

- CloudWatch metrics
- Access logs
- Request tracing
- CloudTrail logs



CloudWatch vs CloudTrail?



- CloudWatch monitors performance.
- CloudTrail monitors API calls in the AWS platform.



CloudWatch Metrics



Elastic Load Balancing publishes data points to Amazon CloudWatch for your load balancers and your targets. CloudWatch enables you to retrieve statistics about those data points as an ordered set of time-series data, known as metrics. Think of a metric as a variable to monitor, and the data points as the values of that variable over time. For example, you can monitor the total number of healthy targets for a load balancer over a specified time period. Each data point has an associated time stamp and an optional unit of measurement.



Access Logs



Elastic Load Balancing provides access logs that capture detailed information about requests sent to your load balancer. Each log contains information such as the time the request was received, the client's IP address, latencies, request paths, and server responses. You can use these access logs to analyze traffic patterns and troubleshoot issues.

Access logging is an optional feature of Elastic Load Balancing that is disabled by default. After you enable access logging for your load balancer, Elastic Load Balancing captures the logs and stores them in the Amazon S3 bucket that you specify as compressed files. You can disable access logging at any time.

Access Logs - SUPER IMPORTANT

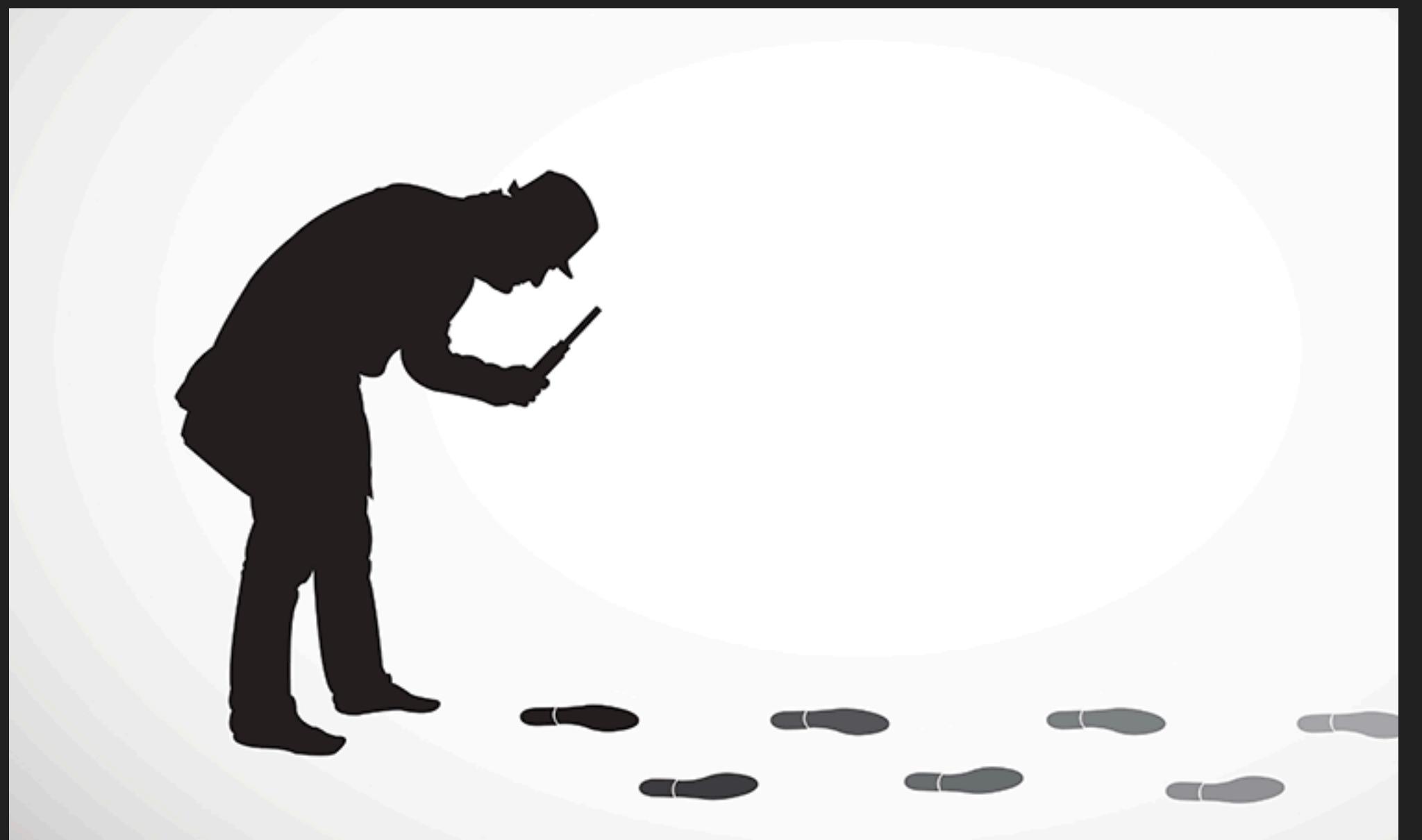
Access Logs can store data where the EC2 instance has been deleted. For example say you have a fleet of EC2 instances behind an auto scaling group. For some reason your application has a load of 5XX errors which is only reported by your end customers a couple of days after the event. If you aren't storing the web server logs anywhere persistent, it is still possible to trace these 5XX errors using Access Logs which would be stored on S3.





Request Tracing

You can use request tracing to track HTTP requests from clients to targets or other services. When the load balancer receives a request from a client, it adds or updates the X-Amzn-Trace-Id header before sending the request to the target. Any services or applications between the load balancer and the target can also add or update this header. **Available for Application Load Balancers Only.**



CloudTrail



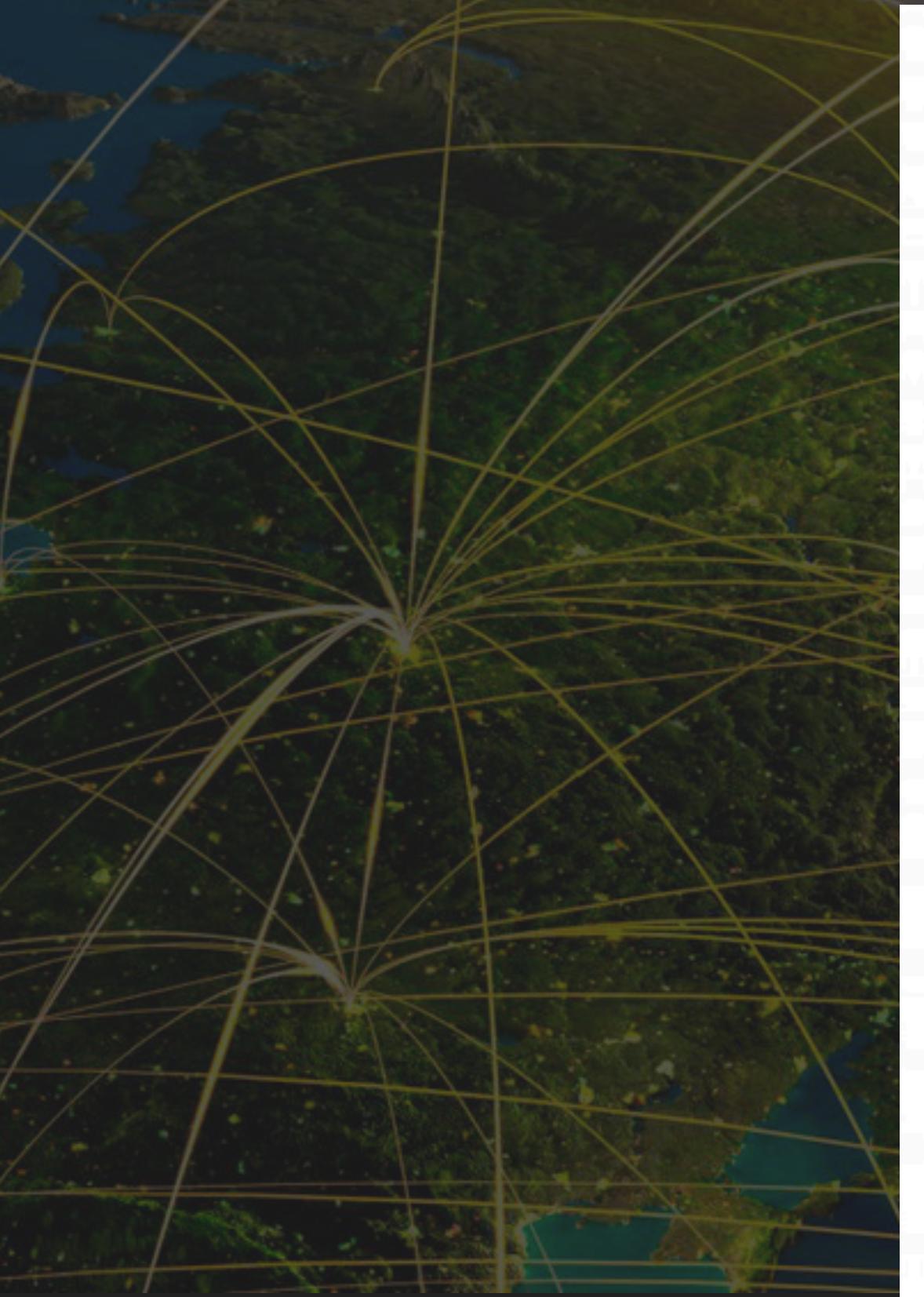
You can use AWS CloudTrail to capture detailed information about the calls made to the Elastic Load Balancing API and store them as log files in Amazon S3. You can use these CloudTrail logs to determine which calls were made, the source IP address where the call came from, who made the call, when the call was made, and so on.



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Access Logs - Exam Tips



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