

Monitoring and Observability for Development and DevOps

Module 3 Glossary: Methodologies and Tools in Logging

Welcome! This alphabetized glossary contains many of the terms in this course. This comprehensive glossary also includes additional industry-recognized terms not used in course videos. These terms are essential for you to recognize when working in the industry, participating in user groups, and participating in other certificate programs.

Term	Definition
Application log	Contains information about events that have occurred within a software application
Access logs	Record information about who accessed the application, when they accessed it, and what actions they performed. They can help with auditing and monitoring user activity
API	An application programming interface or API is a set of outlined rules that help various applications communicate with each other. APIs aid in simplifying the process of software development and innovation by allowing applications to exchange data and functionality in a simple and secure manner
Context propagation	How information about a trace is passed between different services and systems
Custom parsing	Implemented when users are required to enter values in a form that the current parse operations do not accept or if some other processing needs to be completed on values before submitting to the application server
CI/CD	CI/CD stands for continuous integration and continuous delivery. CI/CD establishes a quicker and more accurate way of combining the work of multiple people into a single cohesive product
Destinations	Represent where you want your logs to be sent; for example, to console output or a file
Debugging	A process that includes finding a problem, then its source, and then resolution or identifying a way to work around it
Debugging logs	Contain detailed information about variables, method calls, and other debugging data and is used by developers during the development process to trace program flow and identify bugs
Distributed logging	A technique used in computing systems to collect and store log data from multiple sources across different nodes or servers
Distributed tracing	A method used to profile and monitor applications, especially those that are composed of many microservices
Event logs	Record application events and user actions, such as login attempts and data modifications, and help troubleshoot issues and detect security breaches
Error logs	Record error messages generated by the application or system. They contain information about exceptions, stack traces, and error codes that can help developers diagnose and fix problems
Ingestion	The process where log data is formatted and uploaded from external sources such as applications, hosts, and cloud-based logging services
JSON	JavaScript Object Notation or JSON is the de facto standard for structured logging, but consider using key-value pairs, XML, or another format for your application logs
Log monitoring software	Perform essential event log monitoring tasks consistently and accurately
Log parsing	Metrics represent resource usage or behavior that can be observed and collected throughout your systems.
Logging	A series of messages from an application that provide a recorded log of the activities of application
Mezmo CLI	The Mezmo Command Line Interface (CLI) client helps in tailing the servers with terminal commands
Parent/Child relationship	One span calls another span as part of its operation, the calling span becomes the parent, and the called span becomes the child
Performance logs	Track the performance of application metrics, such as response times, CPU usage, memory consumption, and network traffic. They help identify bottlenecks and optimize performance
Spike protection feature	Helps to set dynamic thresholds and alerts when data volume limits are being hit
Span	Represents a single operation within a trace
Syslog monitoring software	A tool designed to compare real-time metrics with historical metrics to offer a comprehensive understanding of a performance of network over time
Trace	A collection of spans representing a single logical request or workflow
Trace ID	Unique identifier for an entire trace



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