| **Term** | **Definition** |
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| Alerting | It helps developers quickly spot issues and pinpoint areas for improvement in their applications. |
| API | An application programming interface or API is a set of outlined rules that help various applications communicate with each other. |
| Alert manager | A flexible metrics collection and alerting tool that can be combined with Prometheus. |
| Application monitoring | Process developers use to ensure their software performs as intended. |
| Application monitoring tools | Application monitoring tools, or application performance monitoring (APM) tools, systematically collect and analyze data to provide real-time insights into the behavior of your application. |
| Availability monitoring | Checks the uptime and downtime of your application by periodically sending requests to verify its responsiveness. |
| Bosun | An open-source alerting tool that has regular features capable of displaying simple graphs and creating alerts using a powerful expression language for alert rules and conditions. |
| Cabot | It doesn't collect any data but uses another method to access data by hooking into the APIs of the alerting tools and a pull (rather than a push) model for the data it requires to make alerting decisions. |
| Checkpoint | Computers that regularly attempt to interact with a web or network entity. |
| Distributed tracing | A technique used to track and observe application requests as they move through distributed systems or microservice environments. |
| DNS | Domain Name System or DNS is a distributed database system for managing host names and their associated Internet Protocol (IP) addresses. |
| Error monitoring | Captures stack traces and provides detailed information about the root cause of errors, enabling efficient debugging. |
| Grafana | A professional cross-platform, open-source data visualization and metrics analysis tool that provides time-series analytics, which can help you study, analyze, and monitor data metrics over time. |
| HTTP | Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. |
| HTTPS | HTTPS stands for "Secure Hypertext Transfer Protocol" and is HTTP with a security feature. |
| Kibana | An open-source web application that is often used in conjunction with Elasticsearch, a powerful, highly scalable open-source search and analytics engine that allows storing, searching, and analyzing large volumes of data. |
| Log alerts | Use log analytics queries to evaluate resource logs at predefined intervals to see how your applications or services are and have been performing. |
| Log monitoring | Analyzes logs generated by your application, allowing you to gain insights into its behavior, detect patterns, trace specific events or transactions, and troubleshoot issues effectively. |
| Metric alerts | These are based on raw data collected by your monitoring system and provide information about the availability of resources on systems, applications, databases, and web servers. |
| Operational insight | Gives DevOps staff a deeper understanding of IT infrastructure and business systems. |
| Performance monitoring | Involves tracking metrics like response time, throughput, error rates, and resource utilization to ensure optimal performance. |
| Prometheus | An open-source monitoring and alerting solution built by a company called SoundCloud to monitor servers, virtual machines (or VMs), and databases. |
| PromQL | Prometheus provides a functional query language called PromQL (Prometheus Query Language), allowing users to select and aggregate time series data in real-time. |
| Real-user monitoring (RUM) | A passive monitoring technique relying on real users to collect performance data on user paths or transactions. |
| SaaS | SaaS, or software-as-a-service, is application software hosted on the cloud and used over an internet connection via a web browser, mobile app, or thin client. |
| Scripting | The ability to specify the precise actions of a test with synthetic monitoring enables you to walk through important application flows, such as a checkout flow or a sign-up flow, to evaluate the functionality and performance of the system. |
| SLAs | Service Level Agreements document the commitments that you plan to fulfill for customers. |
| Software-based agent | A computer program that carries out a wide range of tasks on a continuous and self-directed basis on behalf of a person or organization. |
| Splunk | A software platform that is a proprietary solution used to monitor, search, analyze, and visualize big data. |
| StatsAgg | It is an alerting and metrics aggregation platform that can act as a proxy for other systems. |
| Synthetic monitoring | Tracks anomalies and ensures that potential threats are stopped before they are a problem. |
| Synthetic monitoring tools | Solutions offered to verify the performance, availability, reachability, and reliability of a website or application at any time. |
| Synthetic traffic | Lightweight, non-intrusive, and secure traffic that emulates user behavior on the network. |
| Telemetry | System data that is automatically gathered and recorded for monitoring. |
| TSDB | A time series database or TSDB is a software system optimized for storing and serving time series about related time-value pairs. |
| User experience monitoring | Includes tracking user actions, session durations, conversion rates, and other relevant metrics to measure customer satisfaction. |
| Visual elements | Charts, graphs, timelines, and other illustrations. |
| Visualization | Graphical representation of information of data collected from your business infrastructure that helps you understand and maintain your application's performance. |
| Web transaction | An interaction between a client, commonly a web browser, and one or more databases as the backend of a multi-tier engineering. |