The Importance of Monitoring on CI/CD, and AWS Services Used Towards It

The core principle of agile and DevOps is the continuous delivery of value. By architecting and building continuous integration and continuous delivery (CI/CD) pipelines, development teams can automate the process and ensure quality and safety for continuous compliance.

CI/CD is at the core of any DevOps practice, combining the processes and tooling that move code changes through the application delivery pipeline. Implementing CI/CD can unlock a competitive advantage for your business, helping you resolve issues faster, reduce time to market, and increase employee and customer satisfaction.

Amazon CloudWatch is a monitoring and observability service built for DevOps engineers, developers, site reliability engineers (SREs), and IT managers. CloudWatch provides you with data and actionable insights to monitor your applications, respond to system-wide performance changes, optimize resource utilization, and get a unified view of operational health.

Benefits of CloudWatch

- Observability on a single platform across applications and infrastructure
- Easiest way to collect metrics in AWS and on-premises
- Improve operational performance and resource optimization
- Get operational visibility and insight
- Derive actionable insights from logs

In addition to Amazon CloudWatch metrics, alarms and dashboards, you can also use a service called Amazon Managed Service for Grafana (AMG). Grafana is a widely deployed data visualization tool that is popular for its extensible data support, and AMG is a fully managed and secure data visualization service. You can use AMG to instantly query, correlate, and visualize operational metrics, logs, and traces from multiple sources. AMG makes it easy to deploy, operate, and scale Grafana.

Depending on your case or usage, you might already use another service for monitoring and reporting. There are good monitoring and reporting services in the market, and even some open-source services. Make sure to explore every possibility and choose the one that best suits your needs. Remember that the most important part is not which service you use for monitoring: it’s having a way to monitor your systems and be notified about potential issues. As Raf said in one of the videos, operating your infrastructure without monitoring is similar to flying an airplane with no instruments!

These links contain more information about CloudWatch Alarms and CloudWatch Logs:
Using Amazon CloudWatch alarms - Amazon CloudWatch
What is Amazon CloudWatch Logs? - Amazon CloudWatch Logs