



Introduction to **Site Reliability Engineering (SRE)**



What is SRE?

- SRE is the application of software engineering to IT operations.
- SRE uses code to manage systems and improve system resilience, management, and design.
- SRE was first proposed by Google and is now a mature and prominent practice across the IT industry.



Roles and Responsibilities in SRE

- SRE engineers usually have a software development background and experience in IT operations.
- SRE engineers are responsible for automation, system management, availability, emergency response, and capacity management.



Technologies used in SRE

- SRE practices take advantage of automation solutions that streamline operational tasks and standardize them across the application lifecycle.
- SRE teams often turn to cloud-native development styles and solutions, such as containers.



SRE vs DevOps

- SRE and DevOps have a lot of overlap.
- SRE focuses on balancing site reliability and speedy implementation of new code, while DevOps focuses on creating a fast and efficient development pipeline.
- The main difference is that SRE places Site Reliability Engineers inside the development team to remove communication issues.



Managed SRE or SRE as a Service

- Managed SRE or SRE as a Service is delivered by expert IT companies with SRE and DevOps experts on board.
- Enterprises turn to specialized SRE consultants to deliver faster and in a more cost-effective manner.