CYBERSECURITY DAILY DAIRY

Day 14: Cloud Security under DevOps (July 3, 2025)

Topics Covered:

- Cloud security in DevOps.
- Cloud service models: laaS, PaaS, SaaS.
- Amazon AWS services (e.g., EC2).
- IAM (Identity and Access Management) in cloud.
- Hosting websites with Apache2.

What is Cloud Security?

Cloud security protects cloud infrastructure, apps, and data. In DevOps, it's integrated into every phase (DevSecOps).

Cloud Service Models:

Model	Full Form	Description	Example
laaS	Infrastructure as a Service	Virtual machines, storage, networking	AWS EC2
PaaS	Platform as a Service	Development environment with OS, tools, DBs	Google App Engine
SaaS	Software as a Service	Complete software applications over internet	Gmail, Google Docs

Amazon Web Services (AWS):

- EC2 (Elastic Compute Cloud): Virtual machines for hosting websites, apps, labs.
- IAM (Identity and Access Management): Manages user access and permissions in AWS.

Hosting a Website with Apache2:

Apache2 is a popular web server, installed on EC2 or Linux, used to:

- Host websites.
- Serve web pages (HTTP/HTTPS).
- Run backend apps.

Key Learnings:

- Cloud security must be part of DevOps.
- IAM enforces least privilege access.