A **service mesh** is a dedicated infrastructure layer in a microservices architecture that manages **communication between services** in a secure, reliable, and observable way — **without changing the application code**. It uses lightweight **sidecar proxies** (like **Envoy**) deployed alongside each service instance to handle tasks like **traffic routing, load balancing, encryption (mTLS), retries, timeouts, and monitoring**. A popular service mesh like **Istio** helps developers focus on writing business logic, while the mesh takes care of **service-to-service communication** policies. This improves **security, observability, and traffic control** across complex distributed systems.