

Module 10 : Monitoring, Compliance, and Governance in the AWS Cloud

4 Progression Steps for Monitoring the cloud: 1. Secure 2. Monitor 3. Audit 4. Comply

Amazon CloudWatch: ***Reduce MTTR and improve CTO

- Monitor AWS resources and applications in real time.
- System-wide visibility to resource utilization, app performance & operational health
- 4 features: (i) Metrics (ii) Dashboard (iii) Alarms (iv) Logs

Amazon CloudTrail: ***Audit

- Track user activities, including API calls
- 3 features: (i) Events (ii) Logs (iii) Insights

AWS Artifact:

- Access security-compliance reports & online agreements
- 2 types: (i) AWS Artifact Reports & (ii) Agreements

AWS Config:

AWS Compliance

- Monitors & Records AWS resource configurations
- Audit, Assess, & Evaluate **configurations** of AWS resources

AWS Audit Manager:

- Continually audit AWS usage to simplify risk and compliance assessment
- Automated **evidence** collection

AWS Organization:

- Manage Policies for Groups of Accounts
- Automate Account Creation

AWS Control Tower:

- Manage governance rules for security, operations, and compliance across all your organizations and accounts in the AWS Cloud.
- 4: (i) Dashboard (ii) Acct Factory (iii) Controls (Guardrails)-- High-level rules (iv) Landing zone

AWS Service Catalog:

- Create, share, and organize from a curated catalog of AWS resources.
- **Provision resources** for AWS accounts.
- Accelerate provisioning of **CI/CD pipeline.**

AWS License Manager:

- AWS BYOL model allows software purchase from licensed third parties, cost savings.

AWS Health: - Data source for events & changes affecting health of AWS Cloud resources.

AWS Trusted Advisor:

5 major areas : (1) Cost Optimization (2) Performance (3) Security (4) Fault Tolerance (5) Service Limit

- Evaluate your AWS environment by using best practice checks across several categories.
- Helps to align with AWS best practices

AWS IAM Access Analyzer:

- Set, verify, and refine permissions by analyzing external access
- Validate IAM policies to meet least-privilege goals