Comparison of AEM as a Cloud Service (AEMaaCS) and AEM on-prem in AWS

1. Architecture & Deployment
AEMaaCS:
- Fully managed by Adobe
- Adobe's cloud-native architecture
- Continuous integration & auto-scaling
- Limited to best practices defined by Adobe
AEM on-prem in AWS:
- Self-managed in AWS
- AWS EC2, S3, RDS, etc.
- Manual setup & scaling
- Fully customizable
2. Scalability & Performance
AEMaaCS:
- Auto-scaling of Author & Publish instances
- Adobe manages performance tuning
- Built-in Adobe Edge Delivery Service
- Automatically scales to traffic spikes
AEM on-prem in AWS:
- Requires manual scaling (EC2 Auto Scaling can be used)
- Requires manual optimizations in AWS
- Requires AWS CloudFront, Varnish, or Dispatcher setup
- Must configure AWS services like ALB & Auto Scaling
3. Maintenance & Updates
AEMaaCS:
- Auto-updated by Adobe
- Managed by Adobe

- Managed by Adobe

- Zero-downtime updates
AEM on-prem in AWS:
- Manual updates & migrations
- Needs manual security patching
- Needs AWS backup & recovery strategies
- Possible downtime during upgrades
4. Cost Considerations
AEMaaCS:
- Subscription-based (SaaS)
- Included in Adobe subscription
- No need for infra management
AEM on-prem in AWS:
- License + AWS infrastructure costs
- Pay for EC2, RDS, S3, CloudFront, etc.
- Requires DevOps & AWS management teams
5. Development & Flexibility
AEMaaCS:
AEMaaCS: - Git-based Cloud Manager (CI/CD)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra)
AEMaaCS: - Git-based Cloud Manager (CI/CD)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS:
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.)
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.) - Full flexibility with AWS services
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.) - Full flexibility with AWS services 6. Security & Compliance
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.) - Full flexibility with AWS services 6. Security & Compliance
AEMaaCS: - Git-based Cloud Manager (CI/CD) - Minimal (Adobe manages infra) - Limited to Adobe-supported methods AEM on-prem in AWS: - Manual CI/CD (Jenkins, GitHub Actions, etc.) - High (AWS infra setup, monitoring, etc.) - Full flexibility with AWS services 6. Security & Compliance

AEM on-prem in AWS:

- Requires AWS security best practices
- Compliance depends on AWS & in-house security
- Custom IAM setup in AWS

7. Use Cases

AEMaaCS:

- Best for enterprises needing a fully managed service
- Limited by Adobe's guidelines
- Good for general compliance

AEM on-prem in AWS:

- Best for organizations needing full control over infra
- Fully customizable
- Better for strict data residency needs

Conclusion:

- Choose AEMaaCS if you want a fully managed, auto-scaling, and always-updated AEM instance with minimal DevOps overhead.
- Choose AEM on AWS if you need complete control over infrastructure, custom integrations, and full flexibility over deployments and security.