

AWS API Architect

Description

Experience

10–15 years in software engineering and enterprise architecture with strong expertise in AWS cloud, API architecture, microservices, and Generative AI integrations.

Role Overview

We are seeking an experienced **API Architect** with deep expertise in **AWS cloud-native architectures, enterprise API ecosystems, and Generative AI integrations**, including hands-on experience with **Claude APIs and modern LLM platforms**.

The ideal candidate will lead the design and implementation of scalable, secure, and high-performance APIs while enabling AI-powered enterprise solutions on AWS. This role requires strong architectural leadership across API management, cloud integration, AI orchestration, security, and DevOps practices.

The architect will collaborate closely with engineering, AI/ML, DevOps, security, and product teams to build intelligent digital platforms and reusable enterprise integration frameworks.

Required Skills & Qualifications

AWS & Cloud Expertise

- Strong hands-on experience with:
 - AWS API Gateway
 - Lambda
 - ECS/EKS
 - S3
 - DynamoDB
 - RDS
 - EventBridge
 - Step Functions
 - CloudWatch
- Expertise in serverless and cloud-native architectures.
- Experience designing scalable distributed systems on AWS.

API Architecture

- Strong expertise in:
 - REST APIs
 - GraphQL
 - SOAP integrations
 - Microservices architecture
 - Event-driven systems
- Experience with API management platforms:
 - AWS API Gateway
 - Kong
 - Apigee
 - MuleSoft

Generative AI & Claude

- Hands-on experience integrating:
 - Claude APIs (Anthropic)
 - Amazon Bedrock
 - OpenAI APIs
 - Other LLM platforms
- Strong understanding of:
 - Prompt engineering
 - RAG architecture
 - Vector databases
 - AI agents and orchestration frameworks
 - Responsible AI practices
- Experience with:
 - LangChain
 - LangGraph
 - LlamaIndex

- Semantic Kernel
- Pinecone / FAISS / Weaviate / Chroma

Security & DevOps

- Expertise in:
 - OAuth2
 - JWT
 - OpenID Connect
 - IAM
 - OWASP API Security
- Experience with:
 - Docker
 - Kubernetes
 - CI/CD pipelines
 - Terraform / CloudFormation
 - GitHub Actions / Jenkins

Developer & Integration Tools

- Familiarity with:
 - Swagger / OpenAPI
 - Postman
 - AsyncAPI
 - API observability tools

Preferred Qualifications

- Bachelor's or Master's degree in Computer Science, Engineering, or related field.
- AWS Certified Solutions Architect / DevOps Engineer certification preferred.
- TOGAF certification is a plus.
- Experience leading enterprise digital transformation programs.
- Exposure to regulated industries such as BFSI, healthcare, or telecom.

Key Deliverables

- Enterprise API governance framework
- AWS-native API architecture standards
- Claude/Bedrock AI integration architecture
- Secure and scalable API ecosystem
- RAG and AI orchestration frameworks
- API observability and monitoring strategy
- CI/CD and Infrastructure automation standards

Nice to Have

- Experience with MCP (Model Context Protocol)
- AI agent orchestration platforms
- API monetization and developer portals
- Hybrid cloud and multi-cloud architecture experience
- Serverless AI deployment patterns

Role

Key Responsibilities

API & Cloud Architecture

- Define enterprise API architecture standards, governance models, and integration strategies.
- Design scalable RESTful, GraphQL, and event-driven APIs using AWS-native services.
- Lead API-first and microservices architecture initiatives for enterprise platforms.
- Architect reusable integration frameworks and API lifecycle management processes.
- Design highly available, fault-tolerant, and secure cloud-native solutions on AWS.

AWS Platform Engineering

- Design and implement API solutions using:
 - AWS API Gateway

- AWS Lambda
- ECS/EKS
- EventBridge
- SQS/SNS
- Step Functions
- AppSync
- Develop scalable serverless and containerized architectures.
- Enable observability and monitoring using:
 - CloudWatch
 - X-Ray
 - OpenTelemetry
 - Grafana
- Optimize API performance, caching, throttling, and resiliency strategies.

GenAI & Claude Integration

- Architect and implement integrations with:
 - Claude APIs (Anthropic)
 - Amazon Bedrock
 - OpenAI APIs
 - Other enterprise LLM platforms
- Build AI-powered enterprise services such as:
 - Conversational AI
 - Intelligent search
 - Document summarization
 - Workflow automation
 - Knowledge assistants
- Design enterprise AI patterns including:
 - Retrieval-Augmented Generation (RAG)
 - Prompt orchestration

- Multi-model routing
- AI observability
- AI governance
- Integrate vector databases and AI orchestration frameworks into enterprise architectures.

Security & Governance

- Define enterprise API security standards using:
 - OAuth2
 - JWT
 - OpenID Connect
 - IAM
 - AWS security best practices
- Ensure governance around:
 - AI data privacy
 - Secure prompt handling
 - Compliance
 - API access management
- Implement DevSecOps and zero-trust security principles.

DevOps & Automation

- Drive CI/CD automation for APIs and AI workloads.
- Implement Infrastructure as Code (IaC) using:
 - Terraform
 - AWS CloudFormation
 - CDK
- Collaborate with DevOps teams for deployment automation and environment management.

Leadership & Collaboration

- Mentor engineering teams on API architecture, AWS best practices, and GenAI integration patterns.

- Conduct architecture reviews and technical governance sessions.
- Evaluate emerging technologies in APIs, cloud, and AI ecosystems.

Partner with stakeholders to align technical architecture with business objectives