

# What is AWS CodeCommit?

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## Overview

AWS CodeCommit is a fully managed source control service that hosts secure and highly scalable private Git repositories. It eliminates the need to operate your own source control system or worry about scaling its infrastructure.

## Key Features

- **Git Compatibility:** Fully compatible with standard Git commands and workflows
- **Managed Service:** AWS handles infrastructure, scaling, and availability
- **Unlimited Repositories:** Create as many repositories as needed
- **Scalability:** Handles large codebases and lengthy revision histories
- **High Availability:** Built-in redundancy and fault tolerance

## Collaboration Features

- **Branching and Merging:** Standard Git workflows for parallel development
- **Pull Requests:** Code review and approval workflows
- **Code Reviews:** Comment and approve changes before merging
- **Notifications:** Amazon SNS integration for repository events
- **Team Collaboration:** Multiple developers working simultaneously

## Security and Access Control

- **IAM Integration:** Fine-grained access control with AWS IAM
- **Encryption:** Data encrypted at rest and in transit
- **MFA Support:** Multi-factor authentication for enhanced security
- **CloudTrail Logging:** Audit trail of all repository activities
- **VPC Endpoints:** Private connectivity without internet exposure

## AWS Integration

- Seamless integration with AWS CodePipeline for CI/CD
- Works with AWS CodeBuild for automated builds
- Integrates with AWS CodeDeploy for deployments
- Amazon CloudWatch for monitoring and alerts
- AWS CodeGuru Reviewer for automated code analysis

**Fully Managed Git:** CodeCommit provides enterprise-grade source control without the operational overhead of managing your own Git servers, with built-in security, scalability, and AWS service integration.