Cloud Development Environments

Accelerating and Enhancing Developer Experience with Agentic Al Enablement

amdocs studios

Experience & Digital Engineering | Cloud Data & GenAl | Quality Engineering

Cloud Platforms Service Lines 2025





Challenges Faced by Developers Today

Software Developers are having to wear Multiple Hats the require a variety of skills

Software Engineer



Write high-quality code to deliver high-quality solutions to customers.

Python | Java | JavaScript | C# | C++ | SQL

Security Engineer



Ensure appropriate guardrails are in place, cloud services are correctly configured, and application vulnerabilities are managed.

Policies | Code Vulnerabilities | Infra Security | Secrets Mgmt. | Threat Modelling

DevOps Engineer



Manage multiple deployment pipelines across multiple environments and for software applications and cloud infrastructure.

CI/CD | Automation | SRE | SCM

Infrastructure Engineer



Manage complex cloud infrastructure & services across multiple environments

Terraform | Cloud-Formation | K8S | Containers | Databases

Test Engineer



Optimise application code & cloud services to ensure everything is running optimally.

Unit Testing | Performance Tests | Integration Tests

Legacy Process



Having to deal with legacy processes designed for an on-premise operating model, not the Cloud.

Raise Tickets | Review Board |

Developer Enablement Challenges

Productivity headwinds and friction points



Lengthy Onboarding

Developer onboarding is often measured in 'weeks,' delaying productivity and project timelines.



Inconsistent Standards

No centralized way to maintain environment standards, leading to the notorious "it works on my machine" issues.



High Equipment Costs

Developers increasingly need costly dedicated compute devices to handle resource-intensive tasks.



Outdated Software

Developer environments often run old, nonpatched dependencies, posing security and compatibility risks.



Data Security Risks

Sensitive data and source code can be stolen from laptops, compromising intellectual property.



Compliance and Monitoring

Lack of insight or telemetry from local environments, changing license models, and no centralized way to audit developer activity increase compliance risks and hinder performance monitoring.



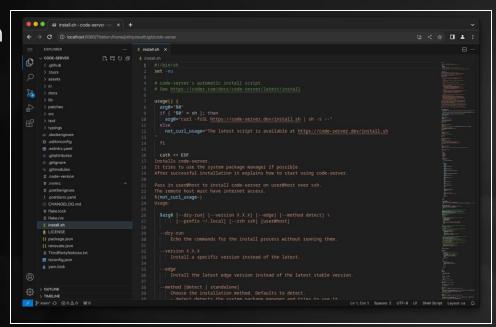
Introducing Cloud Development Environments

Ready-to-Use. Cloud-Hosted. Agent-Enabled

CDEs offer remote, consistent, and **ready-to-use development workspaces**—eliminating local setup friction and "it works on my machine" issues.

Built around the Coder.com technology stack and reference architecture, It streamlines onboarding, enhance collaboration, and provides scalable cloud resources for demanding workloads.

Beyond traditional use, **CDEs act as automation interfaces for Agentic development environments**—enabling autonomous execution of development, review, refactoring, analysis, and planning tasks through tools like Amazon Q, Microsoft Copilot, and Anthropic.





Solution Features and Capabilities



Developer Experience

Decoupled from physical workstations, offering self-service capabilities to launch, configure, and manage development environments.



Comprehensive Tooling

Includes next-generation capabilities (such as GenAI) and integrates seamlessly with existing platform and tooling ecosystems.



Cloud Native

Our solution deployment & management is aligned with cloud native principals and gitops best practices and provides optimal scalability, flexibility, and performance



Security & Compliance

Meets stringent enterprise compliance and security standards with robust protection features.



FinOps

A variety of cost optimization features including rightsized resources and work hour scheduling drives down the cost of development tooling and the operational overhead relating to maintenance



Resilience & Recovery

Leveraging cloud native infrastructure and PaaS Services means that the solution seamlessly handles failures across all critical components without interrupting application availability



