

Trends in Cloud Computing

Introduction

Cloud computing is always changing, and AWS is always innovating. AWS is regularly introducing new services and features and making improvements, such as lower costs, more granular billing options, higher quotas, new Regions, and faster performance. Because of these changes, it is vital to stay up to date on what is happening.

This document provides an overview of some of the latest trends in cloud computing at AWS, along with resources that you can use to stay informed.

Latest advancements

Generative AI is changing the way that organizations do work. AWS has infrastructure, tools, and applications to help customers use generative AI in their business. Here are some of the generative AI services that AWS has announced:

- **Amazon Bedrock** is a fully managed service that offers a choice of high-performing foundation models (FMs) along with a broad set of capabilities that you need to build generative AI applications. Amazon Bedrock simplifies development with security, privacy, and responsible AI.
- **Amazon Q** is a generative AI-powered assistant for work that is designed to be secure and private by default. Amazon Q is integrated into many AWS products. Two of the primary Amazon Q products are the following:
 - **Amazon Q Business** is a generative AI-powered assistant that can answer questions, provide summaries, generate content, and securely complete tasks. You can tailor Amazon Q Business to do any of those tasks based on data and information in your enterprise systems.
 - **Amazon Q Developer** is a coding assistant that can accelerate development time for developers of all skills levels and for many tasks across the software development lifecycle. Amazon Q Developer can chat about code, provide in-line code completions, generate new code, and scan your code for security vulnerabilities. It can also make code upgrades and improvements, such as language updates, debugging, and optimizations. With Amazon Q Developer, you can describe the application you want to create in natural language, and Amazon Q Developer will generate and suggest code for the application.

For more information about AWS generative AI offerings, see the following resources:

- Transform your business with generative AI (<https://aws.amazon.com/generative-ai/>)
- Amazon Bedrock (<https://aws.amazon.com/bedrock/>)
- Amazon Q (<https://aws.amazon.com/q/>)
- Getting started with Amazon Q (<https://aws.amazon.com/q/getting-started/>)
- AWS Skill Builder courses (account needed):
 - Amazon Bedrock Getting Started (https://explore.skillbuilder.aws/learn/course/external/view/elearning/17508/amazon-bedrock-getting-started?trk=ee07cb31-3033-4942-90a7-33e1ce8bb768&sc_channel=el)
 - Amazon Q Business Getting Started (<https://explore.skillbuilder.aws/learn/course/19320/play/140441/amazon-q->

- business-getting-started?trk=ee07cb31-3033-4942-90a7-33e1ce8bb768&sc_channel=el
- Amazon Q Developer Getting Started
(https://explore.skillbuilder.aws/learn/course/internal/view/elearning/19491/amazon-q-developer-getting-started?trk=ee07cb31-3033-4942-90a7-33e1ce8bb768&sc_channel=el)
- Introduction to Generative AI - Art of the Possible
(https://explore.skillbuilder.aws/learn/course/external/view/elearning/17176/introduction-to-generative-ai-art-of-the-possible?trk=ee07cb31-3033-4942-90a7-33e1ce8bb768&sc_channel=el)

Staying informed

Whatever your role in cloud computing is, you can use the following resources to stay informed:

- What's New with AWS? (<https://aws.amazon.com/new>)
- AWS Architecture Blog (<https://aws.amazon.com/blogs/architecture/>)
- AWS Certification (<https://aws.amazon.com/certification>)
- AWS Training and Certification Blog (<https://aws.amazon.com/blogs/training-and-certification/>)
- AWS Skill Builder courses (account needed)
(https://explore.skillbuilder.aws/learn/catalog/view/54?trk=ee07cb31-3033-4942-90a7-33e1ce8bb768&sc_channel=el)