AWS Cloud Solutions

Whether you are running applications that share photos to millions of mobile users or you’re supporting the critical operations of your business, the ‘cloud’ provides rapid access to flexible and low cost IT resources.

With cloud computing, you don’t need to make large upfront investments in hardware and spend a lot of time on the heavy lifting of managing that hardware.

Instead, you can provision exactly the right type and size of computing resources you need to power your newest bright idea or operate your IT department. You can access as many resources as you need almost instantaneously.

Hundreds of thousands of customers have joined the Amazon Web Services (AWS) community and use AWS solutions to build their businesses.

The AWS cloud computing platform provides the flexibility to build your application, your way, regardless of your use case or industry. You can save time and money, without compromising scalability, security, or dependability.

For more information visit www.globalknowledge.dk/aws

AWS White Papers

Our AWS whitepapers can help broaden your technical understanding on topics including AWS architecture, security and economics.

For a full list of AWS white papers visit www.globalknowledge.dk/aws

Join our community

Connect with our community and view all the latest IT and business industry updates, course information, events, webinars, videos and much more!

Visit www.globalknowledge.dk/socialmedia for more information
As a leading Amazon Web Services (AWS) Authorised Training partner in Europe, the Middle East and Africa (EMEA), we help individuals delivering cloud-based solutions, gain proficiency with AWS services and solutions. Our hands-on, role-based training courses are designed around the three primary roles that comprise engineering teams delivering cloud-based solutions: solutions architect, sysops administrator and developer.

With the accelerating adoption of cloud computing and the AWS Cloud around the world, organisations are increasingly seeking ways to identify individuals with demonstrated knowledge of AWS best practices. AWS Certifications recognise IT professionals that possess the skills and technical knowledge necessary for designing, deploying, and managing applications on the AWS platform. Earning certification helps you gain visibility and credibility for your proven experience working with AWS, as well as contributes to your organisation’s proficiency with AWS-based applications.

AWS certifications certify the technical skills and knowledge associated with best practices for building secure and reliable cloud-based applications using AWS technology. Earning AWS certification enables you to:

- Demonstrate that you have skills, knowledge, and expertise to design, deploy, and manage projects applications on the AWS platform
- Gain recognition and visibility for your proven skills and proficiency
- Foster credibility with your employer and peers
“Cloud Computing”, by definition, refers to the on-demand delivery of IT resources and applications via the Internet with pay-as-you-go pricing.

The Basics
Whether you are running applications that share photos to millions of mobile users or you’re supporting the critical operations of your business, the “cloud” provides rapid access to flexible and low cost IT resources.

With cloud computing, you don’t need to make large upfront investments in hardware and spend a lot of time on the heavy lifting of managing that hardware. Instead, you can provision exactly the right type and size of computing resources you need to power your newest bright idea or operate your IT department. You can access as many resources as you need, almost instantly, and only pay for what you use.

How Does it Work?
Cloud Computing provides a simple way to access servers, storage, databases and a broad set of application services over the Internet. Cloud Computing providers such as Amazon Web Services own and maintain the network-connected hardware required for these application services, while you provision and use what you need via a web application.

Types of Cloud Computing
Cloud computing has three main types that are commonly referred to as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). Selecting the right type of cloud computing for your needs can help you strike the right balance of control and the avoidance of undifferentiated heavy lifting.
Advantages and Benefits of Cloud Computing

Trade capital expense for variable expense
Instead of having to invest heavily in data centers and servers before you know how you’re going to use them, you can only pay when you consume computing resources, and only pay for how much you consume.

Benefit from massive economies of scale
By using cloud computing, you can achieve a lower variable cost than you can get on your own. Because usage from hundreds of thousands of customers are aggregated in the cloud, providers such as Amazon Web Services can achieve higher economies of scale which translates into lower pay as you go prices.

Stop guessing capacity
Eliminate guessing on your infrastructure capacity needs. When you make a capacity decision prior to deploying an application, you often either end up sitting on expensive idle resources or dealing with limited capacity. With Cloud Computing, these problems go away. You can access as much or as little as you need, and scale up and down as required with only a few minutes notice.

Increase speed and agility
In a cloud computing environment, new IT resources are only ever a click away, which means you reduce the time it takes to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organisation, since the cost and time it takes to experiment and develop is significantly lower.

Stop spending money on running and maintaining data centers
Focus on projects that differentiate your business, not the infrastructure. Cloud Computing lets you focus on your own customers, rather than on the heavy lifting of racking, stacking and powering servers.

Go global in minutes
Easily deploy your application in multiple regions around the world with just a few clicks. This means you can provide a lower latency and better experience for your customers simply and at minimal cost.
Cloud Computing with Amazon Web Services

Amazon Web Services (AWS) is a secure cloud services platform, offering compute power, database storage, content delivery and other functionality to help businesses scale and grow. Explore how millions of customers are currently leveraging AWS cloud products and solutions to build sophisticated applications with increased flexibility, scalability and reliability.

A Broad IT Infrastructure Platform
The AWS Cloud provides a broad set of infrastructure services, such as computing power, storage options, networking and databases, delivered as a utility: on-demand, available in seconds, with pay-as-you-go pricing.

A Platform for Virtually Every Use Case
From data warehousing to deployment tools, directories to content delivery, over 50 services are available in just a few mouse clicks with AWS. New services are quick to provision, without upfront capital expense, allowing enterprises, start-ups, SMBs and customers in the public sector to access the building blocks they need to respond quickly to changing business requirements.

Deep Features and getting deeper by the day
After almost a decade of working closely with organisations as diverse as Pinterest, GE and MLB, the AWS Cloud allows customers to pin, power and play ball in entirely new ways. Deep features such as a wide range of database engines, server configurations, encryption and powerful big data tools let you stay focused on your core business, and not on corralling or cooling infrastructure. With over 500 new features added in recent times, the AWS Cloud is getting better by the day.

Security Recognised as Stronger than On-premises
Security in the cloud is recognised as better than on-premises. Broad security certification and accreditation, data encryption at rest and in-transit, hardware security modules and strong physical security all contribute to a more secure way to manage your business’ IT infrastructure.

Deep Visibility into Compliance and Governance
Controlling, auditing and managing identity, configuration and usage is a crucial part of today’s IT infrastructure landscape. With the AWS Cloud, these capabilities come built into the platform helping you meet your compliance, governance and regulatory requirements.

Hybrid Capabilities
Choosing between your existing investment in infrastructure and moving to the cloud is not a binary decision. Deep features, dedicated connectivity, identity federation and integrated tools allow you to run ‘hybrid’ applications across on-premises and cloud services.

A Global Platform
The AWS Cloud is available in 190 countries, through 12 geographic regions and over 50 local areas. Build applications which span the globe, or choose to maintain data sovereignty in compliance with your regulatory needs. Compared to other cloud computing companies, the global footprint of AWS is second to none.
AWS Business Essentials (1 day)

AWS Business Essentials helps IT business leaders and professionals understand the benefits of cloud computing and how a cloud strategy can help you meet your business objectives. In this course we discuss the advantages of cloud computing for your business and the fundamentals of AWS, including financial benefits. This course also introduces you to successful cloud adoption frameworks so to help you consider the AWS platform within your cloud computing strategy.

Course Objectives
This course is designed to teach you how to:
• Identify the value and benefits of the AWS cloud
• Recognise the valuable ways that the AWS platform can be used
• Understand the robust security capabilities, controls, and assurances in place to maintain security and data protection
• Articulate the financial impact the AWS cloud can have on an organisation’s procurement cycle, cost management, and contracts, while minimising risks associated with consumption-based pricing models

Intended Audience
This course is intended for:
• IT Business Leaders and Professionals
• Individuals who are new to working with AWS

Course Outline
This course will cover the following concepts:
• Benefits of Cloud Computing and Defining Your Cloud Strategy
• Introduction to the AWS Cloud
• Security and Compliance
• Cloud Financials
• Migrating to the Cloud: Next Steps

AWS Technical Essentials (1 day)

AWS Technical Essentials introduces you to AWS products, services, and common solutions. It provides you with fundamentals to become more proficient in identifying AWS services so that you can make informed decisions about IT solutions based on your business requirements and get started working on AWS.

Course Objectives
This course teaches you how to:
• Understand basic data center design concepts.
• Recognise terminology and concepts as they reite to the AWS platform and navigate the AWS Management Console
• Understand the foundational infrastructure services, including Amazon Virtual Private Cloud (VPC), Amazon Elastic Compute Cloud (EC2), Amazon Elastic Block Store (EBS), Amazon Simple Storage Service (S3), Auto Scaling, and Elastic Load Balancing (ELB).
• Understand the security measures AWS provides and key concepts of AWS Identity and Access Management (IAM)
• Understand AWS database services, including Amazon DynamoDB and Amazon Relational Database Service (RDS)
• Understand AWS management tools, including Amazon CloudWatch and AWS Trusted Advisor

Intended Audience
This course is intended for:
• Individuals responsible for articulating the technical benefits of AWS services to customers
• Individuals interested in learning how to get started with using AWS
• SysOps administrators, Solution Architects and developers interested in using AWS services

Course Outline
This course covers the following concepts:
• Introduction and History of AWS
• AWS Infrastructure: Compute, Storage, and Networking
• AWS Security, Identity, and Access Management
• AWS Databases
• AWS Management Tools
AWS Solutions Architect Track

AWS Certified Solutions Architect - Associate Level
Achieving AWS Certified Solutions Architect - Associate Level certification validates that you have the hands-on experience using AWS to design highly available, cost-efficient, fault-tolerant, and scalable distributed systems. It confirms your ability to identify and define requirements for an Amazon Web Services-based application and to follow best practices for building secure and reliable applications on the AWS platform.

Required Exam and Recommended Training
The AWS Certified Solutions Architect - Associate Level exam includes multiple-choice and multiple-answer questions.

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<thead>
<tr>
<th>Required Exam</th>
<th>Recommended Training</th>
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<tbody>
<tr>
<td>AWS Certified Solutions Architect - Associate Level</td>
<td>Architecting with Amazon Web Services (GK4502)</td>
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</table>

AWS Certified Solutions Architect - Professional Level
Achieving the AWS Certified Solutions Architect Professional Level exam validates advanced technical skills and experience in designing distributed applications and systems on the AWS platform.

Required Exam and Recommended Training
The AWS Certified Solutions Architect - Professional Level exam includes multiple-choice and multiple-answer questions.

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<td>AWS Certified Solutions Architect - Professional Level</td>
<td>Advanced Architecting on AWS (GK1980)</td>
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Required Prerequisite
AWS Certified Solutions Architect – Associate Level
AWS Workshops and Developer Track

**AWS Certification Exam Readiness Workshop: AWS Certified Solutions Architect – Associate**

Designed to complement Architecting on AWS, this half-day workshop is intended for individuals who are preparing for the AWS Certified Solutions Architect – Associate exam. In this workshop, we review what to expect at the testing center and while taking the exam. We walk you through how the exam is structured, including question formats, content domains, and the breakdown of questions across those domains. We also teach you how to interpret the concepts being tested by a question so that you can better eliminate incorrect responses. During the workshop, you will have the chance to apply knowledge and test concepts through a series of practice exam questions. At the end of the workshop, you’ll also receive a voucher to take an additional online practice exam at no cost.

**Course Objectives**

This workshop is designed to teach you how to:

- Navigate the logistics of the examination process
- Understand the exam structure and question types
- Identify how questions are written to test AWS architectural concepts
- Interpret the concepts being tested by an exam question
- Allocate your time in studying for the AWS Certified Solutions Architect – Associate exam

**Audience**

This workshop is intended for:

- Individuals who are preparing to take the AWS Certified Solutions Architect – Associate exam

**Prerequisites**

We recommend that attendees of this workshop have the following prerequisites:

- Attended the Architecting on AWS course (or have equivalent knowledge)
- One or more years of hands-on experience designing and deploying scalable, highly available, and fault tolerant systems on AWS

**Course Outline**

This workshop will cover the following concepts:

- Testing Center Information and Expectations
- Exam Overview and Structure
- Content Domains and Question Breakdown
- Topics and Concepts with Content Domains
- Question Structure and Interpretation Techniques
- Practice Exam Questions

**Amazon Web Services (AWS) Certified Developer - Associate Level**

Achieving the Amazon Web Services (AWS) Certified Developer – Associate Level exam validates technical expertise in developing and maintaining applications on the AWS platform.

Below are the areas which you will require knowledge and understand to pass the exam:

- Picking the right AWS services for the application
- Leveraging AWS SDKs to interact with AWS services from your application
- Writing code that optimizes performance of AWS services used by your application
- Code-level application security (IAM roles, credentials, encryption, etc.)

**Required Exam and Recommended Training**

The AWS Certified Solutions Developer - Associate Level exam includes multiple-choice and multiple-answer questions.

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<tr>
<td>AWS Certified Developer - Associate Level exam</td>
<td>Developing on AWS (GK4504)</td>
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AWS SysOps Administrator Track

AWS Certified SysOps Administrator - Associate Level

Achieving AWS Certified SysOps Administrator - Associate Level certification validates your experience provisioning, operating, and maintaining systems running on AWS. It confirms your ability to identify and gather requirements to define a solution to be built and operated on Amazon Web Services. It also validates your ability to provide AWS operations and deployment guidance and recommend best practices throughout the lifecycle of a project.

Required Exam and Recommended Training

The AWS Certified SysOps Administrator - Associate Level exam includes multiple-choice and multiple-answer questions.

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<tr>
<td>AWS Certified SysOps Administrator - Associate Level exam</td>
<td>Systems Operations on AWS (GK4503)</td>
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AWS DevOps Engineer Track

AWS Certified DevOps Engineer - Professional Level

Achieving Amazon Web Services Certified DevOps Engineer - Professional Level exam validates technical expertise in provisioning, operating, and managing distributed application systems on the AWS platform.

Required Exam and Recommended Training

The AWS Certified DevOps Engineer - Professional Level exam includes multiple-choice and multiple-answer questions.

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<tr>
<td>AWS Certified DevOps Engineer - Professional Level exam</td>
<td>DevOps Engineering on AWS (GKI979)</td>
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We offer a range of learning delivery formats to match your requirements, location and budget and happy to advise on how a series of courses can be combined and delivered over a period of time to provide a programme which meets your requirements.

**Classroom - Public Training Schedule and Private Company Training**
Our expert instructors and hands-on labs provide results-oriented, classroom training. We offer public dates at a wide variety of locations. If a public scheduled course is not available, we will work with you to provide a Private Company Training alternative, at a Global Knowledge office or at your location.

**Alternative delivery formats**
We accept that skilled, motivated employees work more effectively, and thanks to the dawn of flexible and non-classroom-based learning, there are more options than ever before. At Global Knowledge we offer a range of flexible delivery formats to help you choose when and how you want your learning.

**V&C Select™ (Virtual learning & Classroom learning)**
V&C is a simple and flexible award winning solution from Global Knowledge. You can select a course from our robust public schedule and attend the course in person or as a virtual delegate - the choice is yours!

**Virtual Classroom Live**
Anywhere, anytime, almost any technology or business training topic, taught by expert instructors, the Global Knowledge Virtual Classroom Live learning experience is unlike anything you’ve seen before.

**Class-Connect™ HD**
Our Class-Connect™ HD is live, hands-on interactive learning where you can attend a course from different training centres.

**Learning On-Demand**
We offer interactive self-paced e-learning that provides flexibility in terms of pace, place and time to suit individuals and organisations. These resources also consist of online books, educational podcasts and vodcasts, and video-based learning.

**Community Learning Portals**
Our Community Learning Portals provides access to a range of learning resources including forums and blogs to deliver learning programmes whilst creating communities of practice and communities of learners.

**Blended Learning**
Many organisations are seeking a blended approach to learning, one that provides flexibility and choice around instructor-led (classroom-based), e-learning or combinations that optimise your planned learning programme.