

# CompTIA Cloud Essentials

## Chapter 1: What is Cloud Computing?

Defining Cloud Computing

Understanding Distributed Application Design

Understanding Resource Management Automation

Understanding Virtualized Computing Environments

Understanding High-Performance Computing Models

Understanding Cloud Computing Technologies

## Chapter 2: Cloud Models

Evolving from Virtualization to the Cloud

Planning Organizational Roles in the Cloud

Identifying Cloud Deployment Models and Scope Modifiers

Including Future Cloud Models

## Chapter 3: Service Models

Categorizing Cloud Services

Examining Software as a Service

Examining Platform as a Service

Examining Infrastructure as a Service

Identifying Emerging Cloud Database Capabilities

Defining Everything as a Service

## Chapter 4: Current Cloud Technologies

Comparing Traditional Technologies and Cloud Alternatives

Accessing the Cloud

Leveraging Software as a Service

Developing within Platform as a Service

Implementing Infrastructure as a Service

Empowering Mobile Computing

## Chapter 5: Cloud Business Value

Identifying Business Drivers for Cloud Computing

Examining the Business Impact

## Chapter 6: Cloud Infrastructure Planning

Understanding Cloud Networks

Leveraging Automation and Self-Service

Understanding Federated Cloud Services

Achieving Interoperability

## Chapter 7: Strategies for Cloud Adoption

Aligning Cloud Deployments with Organizational Goals

Identifying the Impact of Cloud Adoption to Business Processes

Understanding the Importance of Service-Level Agreements

## Chapter 8: Applications in the Cloud

Understanding the Role of Standard Applications

Developing Cloud-Ready Applications

Migrating Applications to the Cloud

Preparing for Technical Challenges

Identifying and Mitigating Risks

## Chapter 9: Cloud Service Rollout

Identifying Vendor Roles and Responsibilities

Identifying Organizational Skill Requirements

Transitioning to Live Environments

Preparing for Incident Management

## Chapter 10: Cloud Service-Level Management

Understanding ITIL Service Management

Applying ITIL to Cloud Computing

Developing and Utilizing Performance Metrics

Implementing Continual Process Improvement

## Chapter 11: Security in the Cloud

Understanding Security and Risk

Reviewing Security Standards

Exploring Common Security Risks and Mitigations

Implementing an ISMS

Responding to Incidents

Recognizing Security Benefits

## Chapter 12: Privacy and Compliance

Identifying Legal Risks

Identifying Privacy Risks

Managing Identity in the Cloud