

# Section 1

## **LESSON: Exam Blueprint**

<https://aws.amazon.com/certification/certified-cloud-practitioner/>

[https://d1.awsstatic.com/training-and-certification/docs-cloud-practitioner/AWS Certified Cloud Practitioner Exam Guide v2.1.pdf](https://d1.awsstatic.com/training-and-certification/docs-cloud-practitioner/AWS_Certified_Cloud_Practitioner_Exam_Guide_v2.1.pdf)

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/>

# Section 2

## **LESSON: The 6 Advantages of Cloud**

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/six-advantages-of-cloud-computing.html>

# Section 3

## **LESSON: The AWS Global Infrastructure**

<https://aws.amazon.com/about-aws/global-infrastructure/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-global-infrastructure/>

## **LESSON: Billing and Pricing Overview**

<https://aws.amazon.com/pricing/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-billing-and-pricing/>

## **LESSON: AWS Acceptable Use Policy**

<https://aws.amazon.com/aup/>

# Section 4

## **LESSON: IAM Overview**

<https://aws.amazon.com/iam/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/identity-and-access-management/>

## **LESSON: IAM Best Practices**

<https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html>

# Section 5

## **LESSON: Creating an AWS Free Tier Account**

<https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html>

# Section 6

## **LESSON: Amazon Elastic Compute Cloud (EC2)**

<https://aws.amazon.com/ec2/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-compute/>

## **LESSON: Amazon Elastic Container Service (ECS)**

<https://aws.amazon.com/ecs/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-compute/>

## **LESSON: AWS Lambda**

<https://aws.amazon.com/lambda/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-compute/>

# Section 6

## **LESSON: Amazon LightSail**

<https://aws.amazon.com/lightsail/faq/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-compute/>

## **LESSON: Instance User Data and Metada Hands-on (optional)**

```
#!/bin/bash
yum update -y
yum install httpd -y
systemctl start httpd
systemctl enable httpd
cd /var/www/html
echo "Congratulations, you've launched your first web server on Amazon EC2" > index.html
```



# Section 7

## **LESSON: Amazon Simple Storage Service (S3)**

<https://aws.amazon.com/s3/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-storage/>

# Section 7

## **LESSON: Create S3 bucket and upload data (HOL)**

Change the code highlighted in **red** to your bucket name

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::awscloudpractitionerneal/*"
    }
  ]
}
```

# Section 7

## **LESSON: Amazon Elastic Block Store (EBS)**

<https://aws.amazon.com/ebs/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-storage/>

## **LESSON: Amazon Elastic File System (EFS)**

<https://aws.amazon.com/efs/faq/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-storage/>

## **LESSON: AWS Storage Gateway**

<https://aws.amazon.com/storagegateway/features/>

<https://aws.amazon.com/storagegateway/faqs/>

# Section 8

## **LESSON: Amazon Virtual Private Cloud (VPC)**

<https://aws.amazon.com/vpc/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-networking/>

## **LESSON: Security Groups and Network ACLs**

[https://docs.aws.amazon.com/vpc/latest/userguide/VPC\\_SecurityGroups.html](https://docs.aws.amazon.com/vpc/latest/userguide/VPC_SecurityGroups.html)

## **LESSON: Public, private and Elastic IP addresses**

<https://docs.aws.amazon.com/vpc/latest/userguide/vpc-ip-addressing.html>

## **LESSON: NAT Instances and NAT Gateways**

<https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-comparison.html>

# Section 8

## **LESSON: Virtual Private Network (VPN) and AWS Direct Connect**

<https://docs.aws.amazon.com/vpc/latest/userguide/vpn-connections.html>

<https://aws.amazon.com/directconnect/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-networking/>

# Section 9

## **LESSON: Amazon Relational Database Service (RDS)**

<https://aws.amazon.com/rds/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-databases/>

## **LESSON: Amazon DynamoDB**

<https://aws.amazon.com/dynamodb/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-databases/>

## **LESSON: Amazon RedShift**

<https://aws.amazon.com/redshift/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-databases/>

# Section 9

## **LESSON: Amazon ElastiCache**

<https://aws.amazon.com/elasticache/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-databases/>

# Section 10

## **LESSON: Elastic Load Balancing (ELB)**

<https://aws.amazon.com/elasticloadbalancing/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/elastic-load-balancing-and-auto-scaling/>

## **LESSON: Create Application Load Balancer with EC2 instances hands-on (optional)**

```
#!/bin/bash
yum update -y
yum install httpd -y
systemctl start httpd
systemctl enable httpd
cd /var/www/html
echo "This is INSTANCE 1" > index.html
```



# Section 10

## **LESSON: Amazon EC2 Auto Scaling**

<https://aws.amazon.com/autoscaling/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/elastic-load-balancing-and-auto-scaling/>

# Section 10

## **LESSON: Create ALB with Auto Scaling Group hands-on (optional)**

<https://aws.amazon.com/autoscaling/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/elastic-load-balancing-and-auto-scaling/>

```
#!/bin/bash
yum update -y
yum install httpd -y
systemctl start httpd
systemctl enable httpd
cd /var/www/html
EC2AZ=$(curl -s http://169.254.169.254/latest/meta-data/hostname)
echo "This instance is named $EC2AZ" > index.html
```

# Section 11

## **LESSON: Amazon Route 53**

<https://aws.amazon.com/route53/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/content-delivery-and-dns-services/>

## **LESSON: Amazon CloudFront**

<https://aws.amazon.com/cloudfront/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/content-delivery-and-dns-services/>

# Section 12

## **LESSON: Amazon CloudWatch**

<https://aws.amazon.com/cloudwatch/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/monitoring-and-logging-services/>

## **LESSON: Amazon CloudTrail**

<https://aws.amazon.com/cloudtrail/faqs/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/monitoring-and-logging-services/>

# Section 13

## **LESSON: Amazon CloudFormation**

<https://aws.amazon.com/cloudformation/faqs/>

## **LESSON: Amazon Elastic BeanStalk**

<https://aws.amazon.com/elasticbeanstalk/faqs/>

# Section 14

## **LESSON: AWS Database Migration Service**

<https://aws.amazon.com/dms/faqs/>

## **LESSON: AWS Snowball and Snowmobile**

<https://aws.amazon.com/snowball/faqs/>

<https://aws.amazon.com/snowmobile/faqs/>

# Section 15

## **LESSON: Getting Started with Pricing**

<https://aws.amazon.com/pricing/>

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/aws-billing-and-pricing/>

## **LESSON: Tools for estimating pricing and TCO**

<https://calculator.s3.amazonaws.com/index.html>

<https://aws.amazon.com/tco-calculator/>

## **LESSON: AWS Support Plans**

<https://aws.amazon.com/premiumsupport/plans/>

## **LESSON: AWS Organizations and Consolidated Billing**

<https://aws.amazon.com/organizations/>

<https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/consolidated-billing.html>

# Section 16

## **LESSON: The Shared Responsibility Model**

<https://aws.amazon.com/compliance/shared-responsibility-model/>  
<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/cloud-security/>

## **LESSON: AWS Cloud Compliance and AWS Artifact**

<https://aws.amazon.com/compliance/>  
<https://aws.amazon.com/artifact/>

## **LESSON: AWS Config and Service Catalog**

<https://aws.amazon.com/config/faq/>  
<https://aws.amazon.com/servicecatalog/faqs/>

## **LESSON: AWS KMS and CloudHSM**

<https://aws.amazon.com/kms/faqs/>  
<https://aws.amazon.com/cloudhsm/faqs/>



# Section 16

## **LESSON: AWS Inspector and Trusted Advisor**

<https://aws.amazon.com/inspector/faqs/>

<https://aws.amazon.com/premiumsupport/technology/trusted-advisor/faqs/>

## **LESSON: AWS Personal Health Dashboard**

<https://aws.amazon.com/premiumsupport/technology/personal-health-dashboard/>

## **LESSON: AWS WAF & Shield**

<https://aws.amazon.com/waf/faq/>

<https://aws.amazon.com/shield/faqs/>

## **LESSON: Penetration Testing**

<https://aws.amazon.com/security/penetration-testing/>

# Section 17

## **LESSON: Architecting for the Cloud: AWS Best Practices**

[https://d1.awsstatic.com/whitepapers/AWS\\_Cloud\\_Best\\_Practices.pdf](https://d1.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf)

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/architecting-for-the-cloud/>

## **LESSON: The Five Pillars of Operational Excellence**

<https://aws.amazon.com/blogs/apn/the-5-pillars-of-the-aws-well-architected-framework/>

# Section 18

## **Additional Services and Tools**

Some of these can come up on the exam so a high-level understanding is useful:

<https://digitalcloud.training/certification-training/aws-certified-cloud-practitioner/additional-aws-services-tools/>

## **LESSON: Application Load Balancer - Path Based Routing**

```
#!/bin/bash
yum update -y
yum install httpd -y
systemctl start httpd
systemctl enable httpd
cd /var/www/html
aws s3 cp s3://dctlabs/names.csv ./
aws s3 cp s3://dctlabs/index.txt ./
EC2NAME=`cat ./names.csv|sort -R|head -n 1|xargs`
sed "s/INSTANCE/$EC2NAME/" index.txt > index.html
cp index.html orders.html
```

## LESSON: CloudFront with ALB and EC2 Custom Origin

```
#!/bin/bash
yum update -y
yum install httpd -y
systemctl start httpd
systemctl enable httpd
cd /var/www/html
aws s3 cp s3://dctlabs/names.csv ./
aws s3 cp s3://dctlabs/index.txt ./
EC2NAME=`cat ./names.csv|sort -R|head -n 1|xargs`
sed "s/INSTANCE/$EC2NAME/" index.txt > index.html
cp index.html orders.html
```

## **LESSON: Install Wordpress on EC2 using RDS MySQL DB**

```
#!/bin/bash
yum update -y
amazon-linux-extras install -y php7.2
yum install -y httpd
systemctl start httpd
systemctl enable httpd
cd /var/www/html
wget https://wordpress.org/latest.tar.gz
tar -xzf latest.tar.gz
cp -r wordpress/* ./
chmod -R 755 wp-content
chown -R apache:apache wp-content
```

## **LESSON: Install Wordpress on EC2 using RDS MySQL DB (continued)**

```
yum install php-mbstring -y
systemctl restart httpd
systemctl restart php-fpm
wget https://www.phpmyadmin.net/downloads/phpMyAdmin-latest-all-languages.tar.gz
mkdir phpMyAdmin && tar -xvzf phpMyAdmin-latest-all-languages.tar.gz -C phpMyAdmin --strip-components 1
rm phpMyAdmin-latest-all-languages.tar.gz
```

```
nano config.sample.inc.php
```

**Add text (enter RDS endpoint):**

```
$cfg['Servers'][$i]['host'] = 'RDS MYSQL ENDPOINT';
$cfg['Servers'][$i]['compress'] = false;
$cfg['Servers'][$i]['AllowNoPassword'] = false;
$cfg['Servers'][$i]['connect_type'] = 'tcp';
$cfg['Servers'][$i]['extension'] = 'mysqli';
```

```
cp config.sample.inc.php config.inc.php
service httpd restart
```