Playlist: Services Deep Dive | AWS re:Invent 2014:
https://www.youtube.com/playlist?list=PLhr1KZpdzukcYj6y9nm5jVtt5fQ1-XClr

Domain 1: High Availability and Business Continuity

Building Fault-Tolerant Applications on AWS:
http://media.amazonwebservices.com/AWS_Building_Fault_Tolerant_Applications.pdf

AWS Re:Invent 2014: Deploy High Availability & Disaster Recovery Architectures with AWS: https://www.youtube.com/watch?v=XU6KDBQiwEM

AWS Re:Invent 2014: Deploying a DR Site on AWS: Min. Cost with Max. Efficiency:
https://www.youtube.com/watch?v=A-AsaQeFhb0

Re:Invent 2014: Deploying a Low-Latency Multiplayer Game Globally: Loadout:
https://www.youtube.com/watch?v=HfGK6Fwpops

AWS Re:Invent 2013: Stop Worrying about Prodweb001 and Start Loving i-98fb9856:
https://www.youtube.com/watch?v=lQUdjPBJX5c

EC2 Instance Recovery: https://aws.amazon.com/blogs/aws/new-auto-recovery-for-amazon-ec2/ and http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-recover.html

Amazon Relational Database Service: High Availability (Multi-AZ):
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html

Upgrading, and Amazon RDS Resource Maintenance:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_UpgradingDBInstances.html

Amazon Relational Database Service Backing up and Restoring:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_CommonTasks.BackupRestore.html

Replication Groups and Read Replicas (Redis):
http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/Replication.html

Using Amazon Web Services for Disaster Recovery:
http://media.amazonwebservices.com/AWS_Disaster_Recovery.pdf

Amazon Relational Database Service Copying a DB Snapshot:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CopySnapshot.html

Working with PostgreSQL and MySQL Read Replicas:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_ReadRepl.html

Using Amazon Web Services for Disaster Recovery:
http://media.amazonwebservices.com/AWS_Disaster_Recovery.pdf

RDS cross-region snapshot copy:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CopySnapshot.html

DynamoDB cross-region copy:
http://docs.aws.amazon.com/datapipeline/latest/DeveloperGuide/dp-template-crossregiondbcopy.html

EBS cross-region snapshots:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-copy-snapshot.html

S3 cross-region replication: https://aws.amazon.com/blogs/aws/new-cross-region-replication-for-amazon-s3/

Using OpsWorks Auto Healing:
http://docs.aws.amazon.com/opsworks/latest/userguide/workinginstances-autohealing.html

Configuring your Auto Scaling Groups:
http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/WorkingWithASG.html

Suspending and resuming Auto Scaling Processes:
http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/US_SuspendResume.html

Domain 2: Costing

Amazon Web Services – How AWS Pricing Works:
https://d0.awsstatic.com/whitepapers/aws_pricing_overview.pdf

AWS Re:Invent 2014: Running Lean Architectures: How to optimize for cost efficiency:
https://www.youtube.com/watch?v=Z1CEZzzxKes

AWS Re:Invent 2014: Cost Optimization on AWS *or* How to squeeze a dime in AWS:
https://www.youtube.com/watch?v=mqY8xfKU5yE

AWS re:Invent 2014: Cloud-Native Cost Optimization:

https://www.youtube.com/watch?v=LZwlkqERv2g

Amazon EC2 Reserved Instances:http://aws.amazon.com/ec2/purchasing-options/reserved-instances/

Modifying your Reserved Instances:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ri-modifying.html

Amazon RDS Reserved Instances: http://aws.amazon.com/rds/reserved-instances/

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Amazon Elastic MapReduce: Instance Groups:
https://docs.aws.amazon.com/ElasticMapReduce/latest/DeveloperGuide/InstanceGroups.html

Amazon Elastic MapReduce: Choose What to Launch as Spot Instances:
http://docs.aws.amazon.com/ElasticMapReduce/latest/DeveloperGuide/ChoosingWhatt
oLaunchasSpotInstances.html

S3 Reduced Redundancy Storage:
http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingRRS.html

Glacier pricing: http://aws.amazon.com/glacier/pricing/

CloudFront pricing and reserved capacity: http://aws.amazon.com/cloudfront/pricing/

Consolidated Billing:
http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/consolidated-billing.html

Understanding Blended Rates:
http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/con-bill-blended-
rates.html

Understanding Your Usage with Detailed Billing Reports:
http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/detailed-billing-
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Domain 3:   Deployment management

Amazon Web Services – Overview of Deployment Options on AWS:
https://d0.awsstatic.com/whitepapers/overview-of-deployment-options-on-aws.pdf

Amazon Web Services – Managing Your AWS Infrastructure at Scale:
https://d0.awsstatic.com/whitepapers/managing-your-aws-infrastructure-at-scale.pdf

AWS re:Invent 2014: Deploy, Manage, Scale Apps w/ AWS OpsWorks and AWS Elastic
Beanstalk: https://www.youtube.com/watch?v=KZoTh3hZTyo

AWS re:Invent 2014: AWS OpsWorks Under the Hood:
https://www.youtube.com/watch?v=cuf7Rqlgeq4

AWS re:Invent 2014: AWS CloudFormation Best Practices:
https://www.youtube.com/watch?v=sAqkN0vIhAY

AWS Summit 2014 San Francisco: Amazon EC2 Container Service: Manage Docker-
Enabled Apps in EC2: https://www.youtube.com/watch?v=c0EnHl3o-L4

Elastic Beanstalk – Using configuration files:
http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/customize-
containers.html#customize-containers-format

Elastic Beanstalk – Customizing software on EC2 instances:
http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/customize-containers-windows-
ec2.html

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OpsWorks – Adding Apps:

http://docs.aws.amazon.com/opsworks/latest/userguide/workingapps-creating.html

OpsWorks – Deploying Apps:

http://docs.aws.amazon.com/opsworks/latest/userguide/workingapps-deploying.html

OpsWorks - Cookbooks and Recipes:

http://docs.aws.amazon.com/opsworks/latest/userguide/workingcookbook.html

CloudFormation Stacks Updates:

http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/using-cfn-updating-stacks.html

CloudFormation – Resource Attribute Reference:

http://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-product-attribute-reference.html

Elastic Beanstalk – Deploying applications to existing environments:

http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/using-features.deploy-existing-version.html

CodeDeploy – deployment steps:

http://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-steps.html

Domain 4: Network Design

Amazon Web Services – Amazon VPC Connectivity Options:
https://media.amazonwebservices.com/AWS_Amazon_VPC_Connectivity_Options.pdf

Re:Invent 2014: Amazon VPC Deep Dive:
https://www.youtube.com/watch?v=HexrVfuIY1k

Re:Invent 2014: From One to Many: Evolving VPC Design:
https://www.youtube.com/watch?v=jjk_zZRLXXw

Re:Invent 2014: Black-Belt Networking for the Cloud Ninja:
https://www.youtube.com/watch?v=-klyaq9R0XU

Re:Invent 2014: Amazon Route 53 Deep Dive: Delivering Resiliency, Minimizing
Latency: https://www.youtube.com/watch?v=f9y-T7mQVxs

Re:Invent 2014: Elastic Load Balancing Deep Dive and Best Practices:
https://www.youtube.com/watch?v=K-YFw9-_NPE

AWS Webcast - Best Practices for Content Delivery using Amazon CloudFront:
https://www.youtube.com/watch?v=s9Xt1qzD6SA

Working With AWS Direct Connect Connections:
http://docs.aws.amazon.com/directconnect/latest/UserGuide/WorkingWithConnections.html

Working With AWS Direct Connect Virtual Interfaces:
http://docs.aws.amazon.com/directconnect/latest/UserGuide/WorkingWithVirtualInterfaces.html

Amazon Virtual Private Cloud: VPC with Public and Private Subnets (NAT):
http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario2.html

Amazon Virtual Private Cloud: IP Addressing in Your VPC:
http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-ip-addressing.html

Amazon Route 53: Routing Queries to AWS Resources:
http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-to-aws-resources.html

Amazon Route 53 Health Checks and DNS Failover:
http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/dns-failover.html

Amazon Route 53: Choosing a Routing Policy:
http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html

Tutorial: Using Latency and Weighted Resource Record Sets in Amazon Route 53 to Route Traffic to Multiple Amazon EC2 Instances in a Region:
http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/Tutorials.html#TutorialLBRMultipleEC2InRegion

Amazon CloudFront: Values that You Specify When You Create or Update a Web Distribution:
http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-values-specify.html

Amazon CloudFront: Serving Private Content through CloudFront:

http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/PrivateContent.html

Domain 5: Data Storage

Amazon Web Services – AWS Storage Options:
https://d1.awsstatic.com/whitepapers/Storage/AWS%20Storage%20Services%20White
paper-v9.pdf

Amazon Web Services – Best Practices for Amazon EMR:
https://aws.amazon.com/blogs/aws/new-whitepaper-amazon-elastic-mapreduce-emr-
best-practices/

Eventually Consistent – Revisited:
http://www.allthingsdistributed.com/2008/12/eventually_consistent.html

Re:Invent 2014: Understanding AWS Storage Options:
https://www.youtube.com/watch?v=WnycsuQ4SF8

Re:Invent 2014: Amazon S3 Deep Dive and Best Practices:
https://www.youtube.com/watch?v=2DpOS0zu8O0

Re:Invent 2014: Amazon EBS Deep Dive:
https://www.youtube.com/watch?v=xtuRD2AZt3M

Re:Invent 2014: Choosing Among AWS Managed Database Services:
https://www.youtube.com/watch?v=XVfjbG7wfzs

Re:Invent 2014: From Zero to NoSQL Hero: Amazon DynamoDB Tutorial:
https://www.youtube.com/watch?v=tDgLwzQEOmM

Re:Invent 2014: Amazon DynamoDB: Data Modeling and Scaling Best Practices:

https://www.youtube.com/watch?v=KmHGrONoif4

Amazon S3 FAQs: http://aws.amazon.com/s3/faqs/

Amazon Simple Storage Service: Object Key and Metadata:
http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html

Amazon Simple Storage Service: Request Rate and Performance Considerations:
http://docs.aws.amazon.com/AmazonS3/latest/dev/request-rate-perf-considerations.html

Amazon EBS Product Details: https://aws.amazon.com/ebs/details/

Amazon EBS–Optimized Instances:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSOptimized.html

Amazon EBS Volume Performance on Linux Instances:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSPerformance.html

Amazon EBS Snapshots:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSSnapshots.html

Amazon Glacier Data Model:
http://docs.aws.amazon.com/amazonglacier/latest/dev/amazon-glacier-data-model.html

Working with Archives in Amazon Glacier:

http://docs.aws.amazon.com/amazonglacier/latest/dev/working-with-archives.html

Uploading an Archive in Amazon Glacier:

http://docs.aws.amazon.com/amazonglacier/latest/dev/uploading-an-archive.html

Downloading an Archive in Amazon Glacier:

http://docs.aws.amazon.com/amazonglacier/latest/dev/downloading-an-archive.html

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http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/WorkingWithTables.html

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Provisioned Throughput in Amazon DynamoDB:

http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProvisionedThroughputIntro.html

Improving Data Access with Secondary Indexes in DynamoDB:

http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/SecondaryIndexes.html

Amazon ElastiCache: Clusters:

http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/CacheCluster.html

Amazon ElastiCache: Node Considerations for Memcached:
http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/CacheNode.Memcached.html

Amazon ElastiCache: Node Considerations for Redis:
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Configuring ElastiCache Clients:
http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/ClientConfig.html

Redis data model and consistency: http://antirez.com/news/36

Best Practices for Amazon RDS:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_BestPractices.html

Amazon Relational Database Service: High Availability (Multi-AZ):
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html

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http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_ReadRepl.html

Domain 6: Security

AWS Security Center: https://aws.amazon.com/security

AWS Compliance: https://aws.amazon.com/compliance/

Auditing Security Checklist for Use of AWS:
https://d1.awsstatic.com/whitepapers/compliance/AWS_Auditing_Security_Checklist.pdf

Amazon Web Services – Encrypting Data at Rest:
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Amazon Web Services – Overview of Security Processes:
https://d1.awsstatic.com/whitepapers/Security/AWS_Security_Whitepaper.pdf

Amazon Web Services Risk and Compliance:
https://d0.awsstatic.com/whitepapers/compliance/AWS_Risk_and_Compliance_Whitepaper.pdf

Amazon Web Services – Automating Governance on AWS:
https://d0.awsstatic.com/whitepapers/compliance/Automating_Governance_on_AWS.pdf

Amazon Web Services – Security at Scale: Logging in AWS:
https://d0.awsstatic.com/whitepapers/compliance/AWS_Security_at_Scale_Logging_in_AWS_Whitepaper.pdf

Amazon Web Services – Security at Scale: Governance in AWS:
https://d0.awsstatic.com/whitepapers/compliance/AWS_Security_at_Scale_Governance_in_AWS_Whitepaper.pdf

AWS Re:Invent 2014: AWS Security Keynote Address:
https://www.youtube.com/watch?v=OEK7mHn4JLs

AWS Re:Invent 2014: Architecting for End-to-End Security in the Enterprise:
https://www.youtube.com/watch?v=IT-krK_wI3o

AWS Re:Invent 2014: SSL with Amazon Web Services:
https://www.youtube.com/watch?v=8AODa_AazY4

AWS re:Invent 2014: Bring Your Own Identities – Federating Access to Your AWS
Environment: https://www.youtube.com/watch?v=debJ3o5w0MA

Cloud Migration, Application Modernization and Security for Partners:
https://www.youtube.com/watch?v=UpeV4OqB6Us

Amazon Simple Storage Service: Using Bucket Policies and User Policies:
http://docs.aws.amazon.com/AmazonS3/latest/dev/using-iam-policies.html

Amazon Simple Storage Service: Bucket Policy Examples:
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AWS Identity and Access Management: IAM Roles (Delegation and Federation):
http://docs.aws.amazon.com/IAM/latest/UserGuide/roles-toplevel.html

AWS Identity and Access Management: How Roles Differ from Resource-Based
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AWS Identity and Access Management: Using Identity Providers:
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http://docs.aws.amazon.com/STS/latest/UsingSTS/Welcome.html

AWS Security Token Service: Scenarios for Granting Temporary Access:
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AWS Security Token Service: Using the AssumeRole API to Delegate API Access:
http://docs.aws.amazon.com/STS/latest/UsingSTS/sts_delegate.html

Amazon Cognito identity pools:
http://docs.aws.amazon.com/cognito/devguide/identity/identity-pools/

Amazon Redshift Database Encryption:
http://docs.aws.amazon.com/redshift/latest/mgmt/working-with-db-encryption.html

Encrypting Amazon RDS Resources:
http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.Encryption.html

Amazon Simple Storage Service: Protecting Data Using Encryption:
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Amazon EBS Encryption:
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Amazon CloudFront Custom SSL: http://aws.amazon.com/cloudfront/custom-ssl-domains/

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http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/PrivateContent.html

SSL Certificates for Elastic Load Balancing:
http://docs.aws.amazon.com/ElasticLoadBalancing/latest/DeveloperGuide/ssl-server-cert.html

Domain 7: Scalability and Elasticity

Amazon Web Services – Web Application Hosting in the AWS Cloud: Best Practices:
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Amazon Web Services - Architecting for The Cloud: Best Practices:
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Re:Invent 2014: Scaling Up to Your First 10 Million Users:
https://www.youtube.com/watch?v=ccojvcQq858

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Auto Scaling: Configuring Your Auto Scaling Groups:
http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/WorkingWithASG.html

Auto Scaling: Scaling Based on Amazon SQS:
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Amazon Simple Queue Service: Using Amazon SQS Message Attributes:
http://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/SQSMessageAttributes.html

Amazon Simple Queue Service: Amazon SQS Long Polling:
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Amazon Simple Notification Service: Sending Amazon SNS Messages to Amazon SQS
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Amazon Simple Queue Service: Increasing Throughput with Horizontal Scaling and
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http://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/thro
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Using Amazon SNS Topic Attributes for Message Delivery Status:
http://docs.aws.amazon.com/sns/latest/dg/msg-status-topics.html

Amazon Simple Storage Service: Request Rate and Performance Considerations:
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Introduction to Amazon Simple Workflow Service:
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Basic Concepts in Amazon SWF:
http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-basic.html

Amazon EBS: Expanding the Storage Space of an EBS Volume on Linux:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-expand-volume.html

Amazon Relational Database Service: ModifyDBInstance:
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http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ProvisionedThroughputIntro.html

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http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/GuidelinesForTables.html

Amazon Kinesis: Managing Streams:
http://docs.aws.amazon.com/kinesis/latest/dev/working-with-streams.html

Domain 8: Cloud Migration and Hybrid Architecture

Amazon Web Services – AWS Cloud Adoption Framework:
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Amazon Web Services - Migrating Your Existing Applications to the AWS Cloud:
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AWS re:Invent 2014 | (ENT401) Hybrid Infrastructure Integration:
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