

# CheatSheet: Amazon AWS

## CLOUD

- PDF Link: [cheatsheet-aws-A4.pdf](#), Category: Cloud
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-aws-A4>
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## 1.1 AWS CLI Basic

Name	Summary
List all used resources in all regions	Github: List all resources
Install aws cli	<code>pip install awscli, aws help</code>
Load aws cli profile	<code>aws configure</code>
List regions	<code>aws ec2 describe-regions</code>
List instances	<code>aws ec2 describe-instances</code>
AWS CLI config files	<code>~/.aws/credentials, ~/.aws/config</code>
Reference	Github: <a href="#">aws-labs/aws-shell</a>

## 1.2 AWS EC2

Name	Summary
List images by amazon	<code>aws ec2 describe-images, aws ec2 describe-images --owners self amazon</code>
Run a new instance	<code>aws ec2 run-instances --image-id ami-c3b8d6aa --count 1 --key-name mykey</code>

## 1.3 AWS DNS

Name	Summary
List hosted zones	<code>aws route53 list-hosted-zones</code>
List hosted zone by name	<code>aws route53 list-hosted-zones-by-name --dns-name my.com</code>
List DNS records by hosted zone	<code>aws route53 list-resource-record-sets --hosted-zone-id "/hostedzone/XXX"</code>

## 1.4 AWS ECS

Name	Summary
Delete Route53 zone From ECS	Use aws cli

## 1.5 AWS Products - Fundamental

Name	Summary
AWS EC2	Virtual servers
AWS EKS	Kubernetes services in AWS
AWS ECS	Docker container service with orchestrated by AWS itself.
AWS EBS	Block storage
AWS S3	Object storage
AWS RDS	Relational Database: e.g, mysql
AWS VPC	Virtual private cloud: provides networking isolation
AWS ELB	Load balancer
AWS CloudWatch	Monitoring
AWS CloudFormation	Create AWS infra in a programming way
AWS Lambda	Function as a service
AWS Machine Learning	Build Smart Applications Quickly and Easily
AWS Outposts	Run AWS infrastructure on-premises. And it's fully managed and supported by AWS
Reference	Link: <a href="#">check AWS availability</a> , Link: <a href="#">AWS products</a>

## 1.6 AWS Products - Big Data

Name	Summary
AWS Kinesis	Real-time processing of streaming Big Data
AWS Redshift	PB-scale Data Warehouse
AWS DynamoDB	DynamoDB NoSQL DB service from AWS
AWS EMR	Managed Hadoop Framework
AWS CloudSearch	Managed Search Service. e.g, elasticsearch

## 1.7 AWS Products - Orchestration

Name	Summary
AWS Step functions	Orchestration for serverless workflows
AWS SQS	Queue Service
AWS SNS	Notification Service
AWS OpsWorks	Configuration management service. e.g, chef, puppet
AWS Beanstalk	Enable you to easily deploy and manage your application in the cloud.
AWS CodeDeploy	Automated Deployments
AWS SWF	Workflow Service for Coordinating Application Components
AWS Data Pipeline	Orchestration for Data-Driven Workflows

## 1.8 AWS Products - Enterprise

Name	Summary
AWS WorkSpaces	Desktops in the Cloud
AWS WorkDocs	Secure Enterprise Storage and Sharing Service. e.g, Office 365, google doc
AWS WorkMail	Secure Email and Calendaring Service. e.g, gmail and google calendar

## 1.9 AWS Products - Mobile

Name	Summary
AWS Cognito	User Identity and App Data Synchronization
AWS Mobile Analytics	Mobile usage data analysis
AWS AppStream	Low Latency Application Streaming. e.g, video watching

## 1.10 AWS Products - More

Name	Summary
AWS ElasticCache	Caching service. e.g, memcache, redis.
AWS Route53	DNS
AWS CloudFront	CDN
AWS CloudHSM	Hardware Security Module
AWS CloudTrail	User Activity and Change Tracking
AWS SES	Send emails
AWS Glacier	Archive storage. Backend by tape
AWS CodeCommit	Host Git repos
AWS Import/Export	Import your on-prem VMs to AWS public cloud
AWS DevPay	Online billing service
AWS AutoScaling	Monitor your applications, then scale out or scale in
AWS Lightsail	VPS. More raw than EC2
AWS Direct Connect	Dedicated Network Connection to AWS
AWS Lex	Conversational interfaces for your applications

## 1.11 AWS VPC

Name	Summary
IGW(Internet gateway)	An Internet gateway enables your instances to connect to the Internet
VPG(Virtual Private Gateway)	The Amazon VPC side of a VPN Connection
NAT Gateway	Enable instances in a private subnet to connect to the internet or other AWS services
Customer Gateway	Your side of a VPN Connection
NAT	NAT maps multiple private IP addresses to a single public IP address.
NAT Instance	EC2 instances provide Port Address Translation for non-EIP instances to access Internet via Internet Gateway
Router	Routers interconnect subnets and direct traffic between IGW, VPG, NAT instances and Subnets
Subnet	A segment of a VPC's IP address range where you can place groups of isolated resources
VPC Peering	A networking connection between two VPCs enable traffic by private IP
ClassicLink	Allow you to link an EC2-Classic instance to a VPC in your account, within the same region

## 1.12 More Resources

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<http://docs.aws.amazon.com/cli/latest/index.html>

<https://www.expeditedssl.com/aws-in-plain-english>