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PowerShell on AWS

Introduction

- Senior DevOps Engineer
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Agenda

- Intro to AWS
- Getting the AWS PowerShell module
- What can we automate?
- How can we use PowerShell on AWS

Intro to AWS

- Amazon Web Services (AWS), a subsidiary of Amazon.com, is a cloud-focused service provider with a very pure vision of highly automated, cost-effective IT capabilities, delivered in a flexible, on-demand manner.
- over 10 times more cloud IaaS compute capacity in use than the aggregate total of the other 14 providers
- AWS leader of Gartner MQ for IaaS

Getting the AWS PowerShell module

- PowerShell PackageManagement
- Download from AWS
- Get-AWSPowerShellVersion -ListServiceVersionInfo -Verbose

What can we automa[te]

Azure has 756

- 1666 PowerShell cmdlets
- Non-representative study:
  - Most commonly automated tasks on AWS
    - Creating, editing, launching VPCs
    - Executing CloudFormation
  - Demos

Service	Noun Prefix	Version
AWS Cloud HSM	HSM	2014-05
AWS CloudFormation	CFN	2010-05
AWS CloudTrail	CT	2013-11
AWS CodeCommit	CC	2015-04
AWS CodeDeploy	CD	2014-10
AWS CodePipeline	CP	2015-07
AWS Config	CFG	2014-11
AWS Data Pipeline	DP	2012-10
AWS Device Farm	DF	2015-06
AWS Direct Connect	DC	2012-10
AWS Directory Service	DS	2015-04
AWS Elastic Beanstalk	EB	2010-12
AWS Identity and Access Management	IAM	2010-05
AWS Import/Export	IE	2010-06
AWS IoT	IOT	2015-05
AWS Key Management Service	KMS	2014-11
AWS Marketplace Commerce Analytics	MCA	2015-07
AWS OpsWorks	OPS	2013-02
AWS Security Token Service	STS	2011-06
AWS Storage Gateway	SG	2013-06
AWS Support API	ASA	2013-04
AWS WAF	WAF	2015-08
Amazon API Gateway	AG	2015-07
Amazon CloudFront	CF	2015-09
Amazon CloudSearch	CS	2013-01
Amazon CloudSearchDomain	CSD	2013-01
Amazon CloudWatch	CW	2010-08
Amazon CloudWatch Logs	CWL	2014-03
Amazon Cognito Identity	CGI	2014-06
Amazon DynamoDB	DDB	2012-08
Amazon EC2 Container Registry	ECR	2015-09
Amazon EC2 Container Service	ECS	2014-11
Amazon ElastiCache	EC	2015-02
Amazon Elastic Compute Cloud	EC2	2015-10
Amazon Elastic File System	EFS	2015-02
Amazon Elastic MapReduce	EMR	2009-03
Amazon Elastic Transcoder	ETS	2012-09
Amazon Elasticsearch	ES	2015-01
Amazon Inspector	INS	2015-08
Amazon Kinesis	KIN	2013-12
Amazon Kinesis Firehose	KINF	2015-08
Amazon Lambda	LM	2015-03
Amazon Machine Learning	ML	2014-12
Amazon Redshift	RS	2012-12
Amazon Relational Database Service	RDS	2014-10
Amazon Route 53	R53	2013-04
Amazon Route 53 Domains	R53D	2014-05
Amazon Simple Email Service	SES	2010-12
Amazon Simple Notification Service	SNS	2010-03
Amazon Simple Queue Service	SQS	2012-11
Amazon Simple Storage Service	S3	2006-03
Amazon Simple Systems Management	SSM	2014-11
Amazon WorkSpaces	WKS	2015-04
Auto Scaling	AS	2011-01
Elastic Load Balancing	ELB	2012-06

DEMO

Thank you!

```
PS C:\Users\vagrant> class speaker
{
    [string]$firstname
    [string]$lastname
    [int]$age
    [string]$email
    [string]$url
    [string]$twitter

    speaker (
        [string]$firstname,
        [string]$lastname,
        [int]$age,
        [string]$email,
        [string]$url,
        [string]$twitter
    )
    {
        $this.firstname = $firstname
        $this.lastname = $lastname
        $this.age = $age
        $this.email = $email
        $this.url = $url
        $this.twitter = $twitter
    }
}
PS C:\Users\vagrant> [speaker]::new('David',"O'Brien",30,'me@david-obrien.net','http://www.david-obrien.net','@david_obrien')


firstname : David
lastname  : O'Brien
age       : 30
email     : me@david-obrien.net
url       : http://www.david-obrien.net
twitter   : @david_obrien
```