
AWS
re:Invent
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PEX306

Automatically stay in sync with AWS innovations at launch

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Agenda

Background behind the genesis of AWS Cloud Control API

Overview and benefits

Demo

User stories

What’s new in AWS Cloud Control API

Getting started

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Background

What is the story behind AWS Cloud Control API?

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Access the latest AWS innovation faster







Increase
pace of innovation

Accelerate
time to market

Can new AWS features and services be supported closer to launch?

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Simplified support for new AWS capabilities

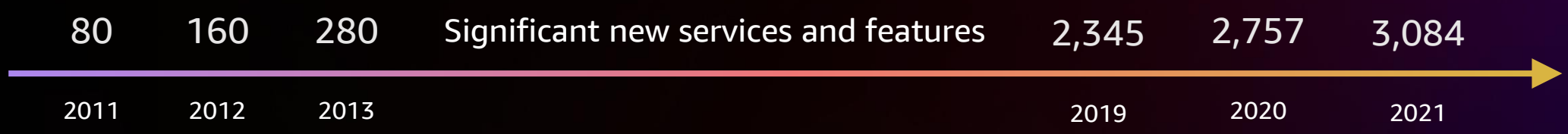
AWS continues to innovate rapidly on behalf of our customers

200+ fully featured services

3,084 significant new features in 2021

Ongoing investments support new AWS services and features

Few weeks for each new AWS resource



How can AWS help you stay in sync with the latest AWS innovations?

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Standardized APIs to manage AWS services



Multiple AWS services

Applications are becoming increasingly sophisticated



Service-specific API

AWS services and third-party APIs equipped with specific implementation



Author custom code

The variety of API implementation requires engineering effort

How can you use a consistent API method to interact with hundreds of AWS services?

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Standardized APIs to manage AWS services

How can you use a consistent API method to interact with hundreds of AWS services?

Service-specific API operations

```
aws ec2 run-instances \
  --image-id ami-xxxxxxxx --count 1 \
  --instance-type t2.micro \
  --key-name MyKeyPair \
  --security-group-ids sg-903004f8 \
  --subnet-id subnet-6e7f829e

aws lambda create-function \
  --function-name my-function \
  --runtime nodejs10.x \
  --zip-file fileb://my-function.zip \
  --handler my-function.handler \
  --role arn:aws:iam::123456789012:role/service-role/My-Function-role

aws ecs run-task \
  --cluster default \
  --task-definition my-task-def:1
```

Workflow-based API operations

```
aws kinesis create-stream \
  --stream-name samplestream \
  --shard-count 3

aws kinesis add-tags-to-stream \
  --stream-name samplestream \
  --tags samplekey=example

aws kinesis increase-stream-retention-period \
  --stream-name samplestream \
  --retention-period-hours 168
```

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Overview and benefits

How does AWS Cloud Control API help AWS customers and AWS Partners?

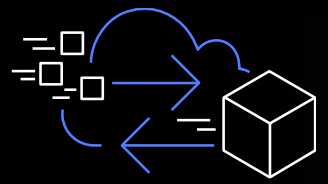
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AWS Cloud Control API

A set of standardized create, read, update, delete, and list (CRUD-L) APIs to manage services in an intuitive and descriptive way

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Introduction to AWS Cloud Control API



AWS Cloud Control API

```
CreateResource
GetResource
UpdateResource
DeleteResource
ListResources
```

Consistent CRUD-L

```
AWS::Amplify::App
AWS::ECS::Cluster
AWS::Logs::LogGroup
        …
AWS::S3::Bucket
AWS::Xray::Group
```

Resource types

Handlers
Error codes

Standardized behavior

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Benefits to AWS customers and AWS Partners

Faster access
to new AWS services and features, typically on the day of launch

+

Unified interface
for one-time integration that automatically exposes new AWS launches

+

Consistent CRUD-L APIs
Designed to make it easy to manage cloud infrastructure consistently

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Using AWS Cloud Control API


AWS SDKs


AWS CLI


AWS Toolkits


HashiCorp Terraform


Pulumi


Red Hat Ansible Automation Platform

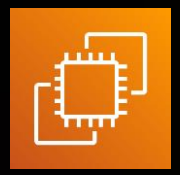
Infrastructure as code

Integrating AWS Partners

Cloud security posture management
Configuration management

AWS Cloud Control API

AWS CloudFormation Public Registry


Amazon EC2


AWS Transit Gateway


Amazon S3


Amazon Kinesis


Amazon Kendra


Hundreds of AWS and third-party resources

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User stories

How are AWS Partner Network (APN) Partners using AWS Cloud Control API to benefit our mutual customers?

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What are AWS Partners saying?



HashiCorp Terraform

"Integrating HashiCorp Terraform with AWS Cloud Control API means developers are able to use new AWS features and services as soon as they are available in Cloud Control API, typically on the day of launch."

James Bayer – EVP of Product Management, HashiCorp

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What are AWS Partners saying?



Pulumi

"Pulumi's new AWS Native Provider, powered by the AWS Cloud Control API, gives Pulumi's users faster access to the latest AWS innovations, typically the day they launch, without any need for us to manually implement support."

Joe Duffy – CEO, Pulumi

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What are AWS Partners saying?



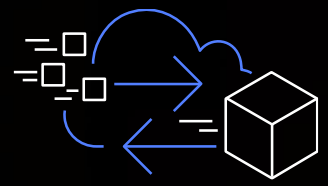
"The AWS Cloud Control API helps produce an improved cloud automation experience supporting AWS infrastructure consisting of hundreds of services and features. It allows Ansible to quickly develop content for the automation of new AWS services and the implementation of new features."

Tom Anderson – VP Ansible Business Unit, Red Hat

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Many more AWS Partner use cases



AWS Cloud Control API

Consistent resource discovery

Uniform state management



Cloud security posture management



Configuration management



Monitoring and observability



Cost and resource optimization



Infrastructure as code

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What’s new?

How has AWS Cloud Control API evolved over the past year?
How do we envision the future?

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The journey so far

(September ’21)
AWS Cloud Control API

HashiCorp Terraform AWS Cloud Control Provider

Pulumi AWS Native Provider

1

(April ’22)
AWS Cloud Control API launches in Amazon Web Services China Region

2

(May ’22)
Red Hat Ansible AWS Cloud Control Collection

3

(September ’22)
AWS Cloud Control API supports AWS PrivateLink

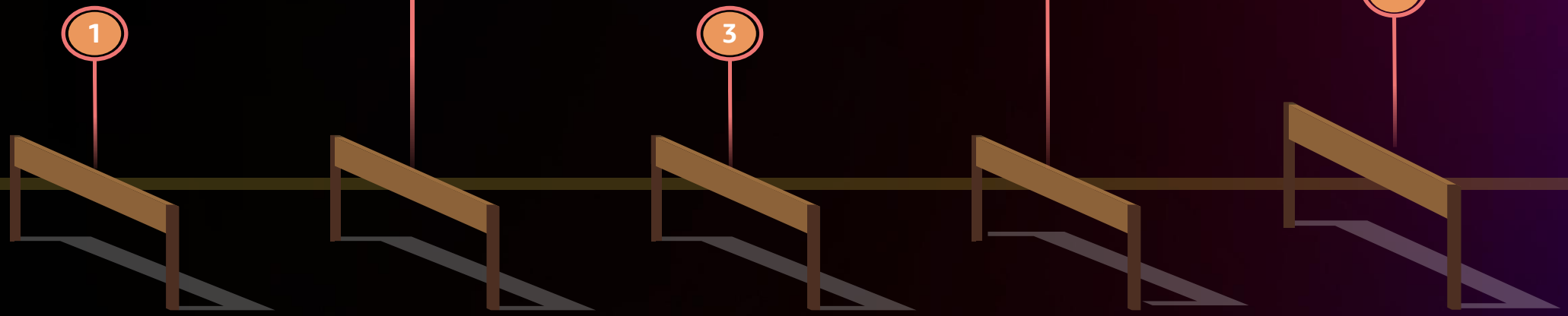
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(October–December ’22)
AWS resources: Several new AWS resources (and counting), supported on Day-1

Third-party resources:
50+ new resources added

New AWS Region support:
Middle East (UAE), Europe (Zurich), Europe (Spain), Asia Pacific (Hyderabad)

5



200+ new AWS resource types supported on AWS Cloud Control API since September ’21

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What’s in store for the future



Increased AWS resource coverage – including resources from services such as Amazon EC2, Amazon S3, etc.



Added support for third-party resource types



Developer experience improvements and greater standardization in AWS experience

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Getting started

Resources to get you started with building integrations using AWS Cloud Control API

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Getting started

AWS Cloud Control API product page
https://aws.amazon.com/cloudcontrolapi/

AWS Cloud Control API blog
https://aws.amazon.com/blogs/aws/announcing-aws-cloud-control-api/

User guide and API references
https://docs.aws.amazon.com/cloudcontrolapi/

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Thank you!

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