

CDK

L'infrastructure-as-code avec son langage favori

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Les façons de provisionner de l'infrastructure

- Manuel : Documents Word, Wikis, demande-a-robert-il-l'a-déjà-fait
- Scripté: #!/bin/bash
- **Déclaratif** : CloudFormation, Terraform
- **Générateurs** : Troposphere, GoFormation
- Abstractions : AWS CDK, Pulumi

AWS Cloud Development Kit



Programmez l'infrastructure en Python, Typescript, Javascript, Java, C#, Go

```
//-Create-random-value
         const pet = new random.Pet(this, "random-name", {
           length: 2,
                                     constructor S3Bucket(scope: Construct, id: string, config?:
         });
                                     aws.s3.S3BucketConfig | undefined): aws.s3.S3Bucket
         //-Create-Lambda-executabl Create a new aws_s3_bucket Resource
         const asset = new Terrafor
           path: path.resolve(__dir @param scope — The scope in which to define this construct
           type: AssetType.ARCHIVE, @param id — The scoped construct ID. Must be unique amongst siblings in
         });
                                     the same scope
         //-Create-unique-S3-bucket @param options — S3BucketConfig = {}
         const bucket = new aws.s3.S3Bucket(this, "bucket", {
           bucketPrefix: `learn-cdktf-${name}`,
53
         //-Upload-Lambda-zip-file-to-newly-created-S3-bucket
         const lambdaArchive = new aws.s3.S3Object(this, "lambda-archive", {
           bucket: bucket.bucket,
           key: `${config.version}/${asset.fileName}`,
           source: asset.path, // returns a posix path
         });
         // Create Lambda role
         const role = new aws.iam.lamRole(this, "lambda-exec", {
           name: `learn-cdktf-${name}-${pet.id}`,
           assumeRolePolicy: JSON.stringify(lambdaRolePolicy)
         });
```

3 projets

- AWS CDK
- CDK for Terraform
- Cloud Development Kit for Kubernetes CDK8s

Tous basés sur JSSI

3 cycles

- [Python, TS, JS, Java, C#, Go] => AWS CDK => CloudFormation
- [Python, TS, JS, Java, C#, Go] => CDKTF => Terraform HCL
- [Python, TS, JS, Java, C#, Go] => CDK8s => Kubernetes manifests

Séquence

- cdktf init
- X npm run build
- **#** cdktf synth
- Q cdktf diff
- 🚀 cdktf deploy



Merci

🦫 @ojacques2