
AWS
re:Invent
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Exploring the serverless developer experience with TypeScript

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Agenda

- Bootstrap a new application
- Enhance your developer experience
- Simplify logs and metrics
- Set up CI/CD

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Meet AWS Serverless Application Model (AWS SAM)

AWS SAM CLI

AWS SAM template



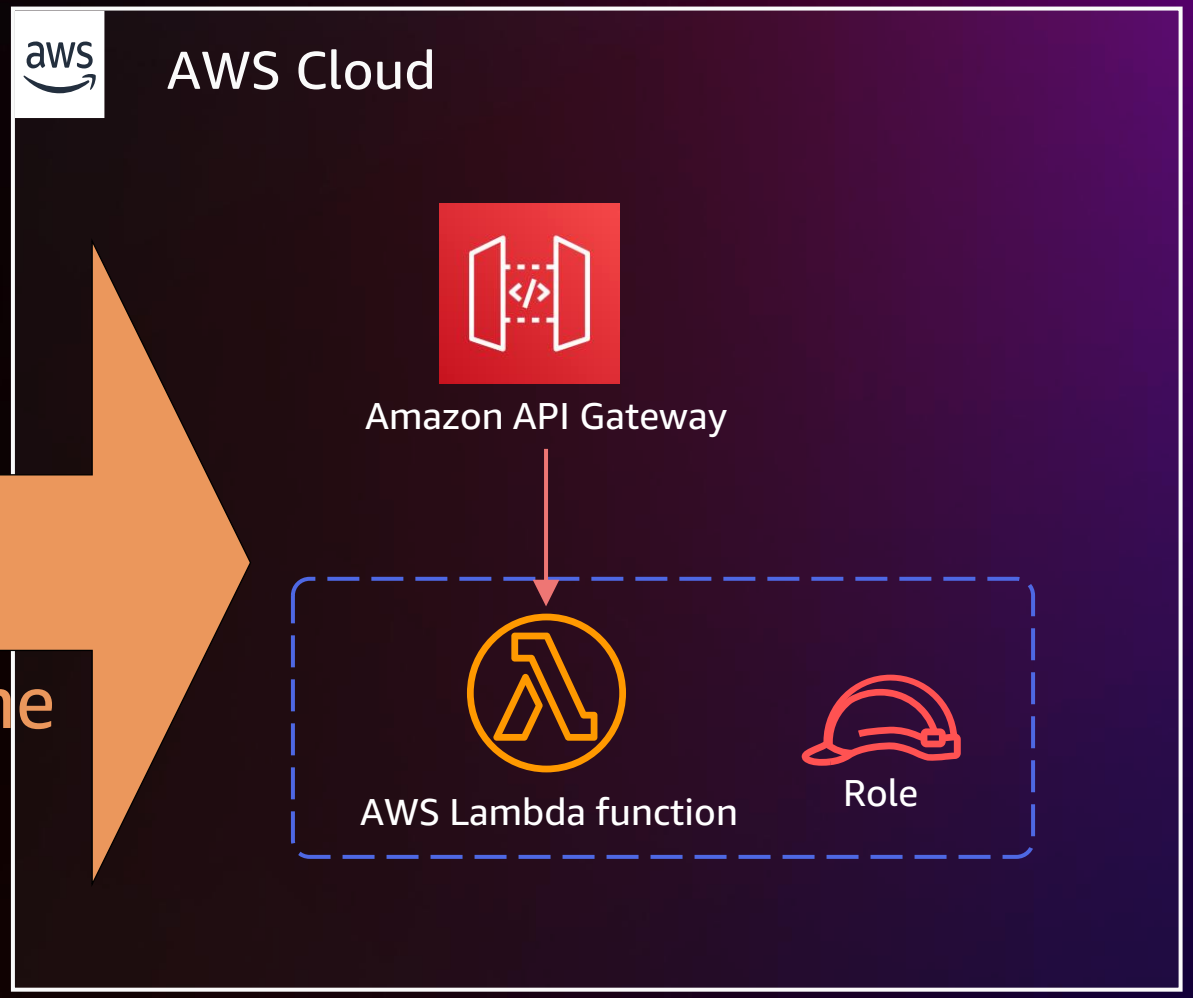
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Example of AWS SAM template

```
AWSTemplateFormatVersion: '2010-09-09'
Transform: AWS::Serverless-2016-10-31
Description: >
  sam-node16
 Globals:
  Function:
    Timeout: 3
Resources:
  HelloWorldFunction:
    Type: AWS::Serverless::Function
    Properties:
      CodeUri: hello-world/
      Handler: app.lambdaHandler
      Runtime: nodejs16.x
      Architectures:
        - x86_64
      Events:
        HelloWorld:
          Type: Api
          Properties:
            Path: /hello
            Method: get
    Metadata: # Manage esbuild properties
      BuildMethod: esbuild
      BuildProperties:
        Minify: true
        Target: "es2020"
        Sourcemap: true
        EntryPoints:
        - app.ts
```

Allowing ← this

To become this →



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What about your developer experience?

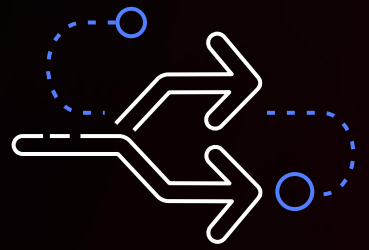
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AWS SAM Accelerate





AWS SAM sync



Incremental
build & deployment



Aggregated
feedback

Iterate against the cloud with the speed of local development

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How can you standardize the observability strategy?

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Lambda Powertools for TypeScript

A suite of utilities for Lambda functions

- Logging: output as structured JSON
- Tracing: send traces to AWS X-Ray
- Metrics: custom metrics with embedded metric format

https://awslabs.github.io/aws-lambda-powertools-typescript/latest/

aws

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How can you set up an automation pipeline for serverless workloads?

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AWS SAM Pipelines



GitHub Actions (pipeline)

AWS SAM Pipelines

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Resources



Powertools



Serverless
land patterns

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Check out these other sessions

SVS309: Securing serverless applications (workshop)

Tuesday, November 29, 2022; 11:45 AM; Wynn Cristal 5

SVS401: Best practices for advanced serverless developers

Tuesday, November 29; 12:30 PM; Mandalay Bay South Pacific F

SVS404: A closer look at AWS Lambda

Wednesday, November 30; 10:00 AM; Mandalay Bay South Pacific F

aws

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Thank you!

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