

# AWS Lambda

- Export Layer
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# Export Layer

## 1. Get the Layer ARN

Ensure you have the full ARN of the Lambda Layer. It typically looks like:

```
arn:aws:lambda:<region>:<account-id>:layer:<layer-name>:<version>
```

For example:

```
arn:aws:lambda:us-east-1:123456789012:layer:my-nodejs-layer:3
```

## 2. Download the Layer Using AWS CLI

You can use the AWS CLI to download the Lambda Layer as a ZIP file:

```
aws lambda get-layer-version-by-arn --arn <layer-arn> --query 'Content.Location' --output text
```

This command returns a pre-signed URL to download the layer. Use curl or wget to download it:

```
curl -o nodejs-layer.zip "<download-url>"
```

## 3. Extract the Layer

Unzip the downloaded file:

```
unzip nodejs-layer.zip -d nodejs-layer
```

## 4. Inspect the Directory Structure

For Node.js 18, the Lambda Layer typically follows this structure:

```
nodejs-layer/  
├─ nodejs/  
│  └─ node_modules/
```

└─ package.json

- nodejs/: The directory containing the Node.js libraries.
- node\_modules/: The installed dependencies.
- package.json: The package manifest file.

If the layer contains native binaries or other resources, they might be located in additional directories within the ZIP file.

# Debugging

## Cannot find package 'uuid' imported from /var/task/index.mjs

If your Lambda Layer contains `@types/uuid` but not the actual `uuid` package, it means you only have the TypeScript type definitions installed, not the actual library. The `@types/uuid` package provides type information for TypeScript, but it does not include the actual code for `uuid`. This is why your Lambda function is throwing an error when it tries to import it.

### How to Fix It

You need to make sure that both `uuid` and `@types/uuid` are installed in your Lambda Layer.

#### 1. Install `uuid` Library

If you haven't already, install the `uuid` package along with its type definitions:

```
npm install uuid @types/uuid
```

#### 2. Verify the `node_modules` Structure

Ensure that your `node_modules` directory has both the `uuid` and `@types/uuid` folders:

```
nodejs/  
├─ node_modules/  
│ ├─ uuid/  
│ └─ @types/  
│   └─ uuid/  
└─ package.json
```