

# Creating a Test Framework for Amazon S3

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# Overview



What is LocalStack?

Local vs. Real Amazon S3

Create an Integration Test Framework

Add Files Controller Tests





# LocalStack

**LocalStack provides an easy-to-use test/mock framework for developing applications hosted in AWS**



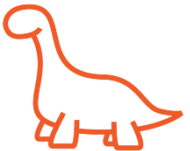
# Local vs. Real Amazon S3



Allows integration tests to run faster



Provides cost savings



Could be out of date with the real Amazon S3



# Demo



## Create Integration Test Project and Folders

## Add NuGet Packages

## Create Collection Fixture Class



# Demo



## Set up and Run the LocalStack Docker Image



# Demo



What Is the WebApplicationFactory

Set up the WebApplicationFactory



# Demo



Create Bucket Inside Our Local Instance  
of Amazon S3





# Demo



## Test Our Add Files Endpoint

- Create a file ready to be uploaded
- Create an instance of the file
- Call off to our add files endpoint
- Confirm that we get a 200 status back



# Demo



## Test Our List Files Endpoint



# Demo



## Test Our Download Files Endpoint



# Demo



## Test Our Delete Files Endpoint



# Demo



## Test Our AddJSONObject Endpoint



# Summary



## Local vs. Real Amazon S3

- Execute tests faster
- Cost savings
- Local S3 could be out of date

**Added tests for our files controller**

