

USE CASE: Backing-up data using AWS Lambda

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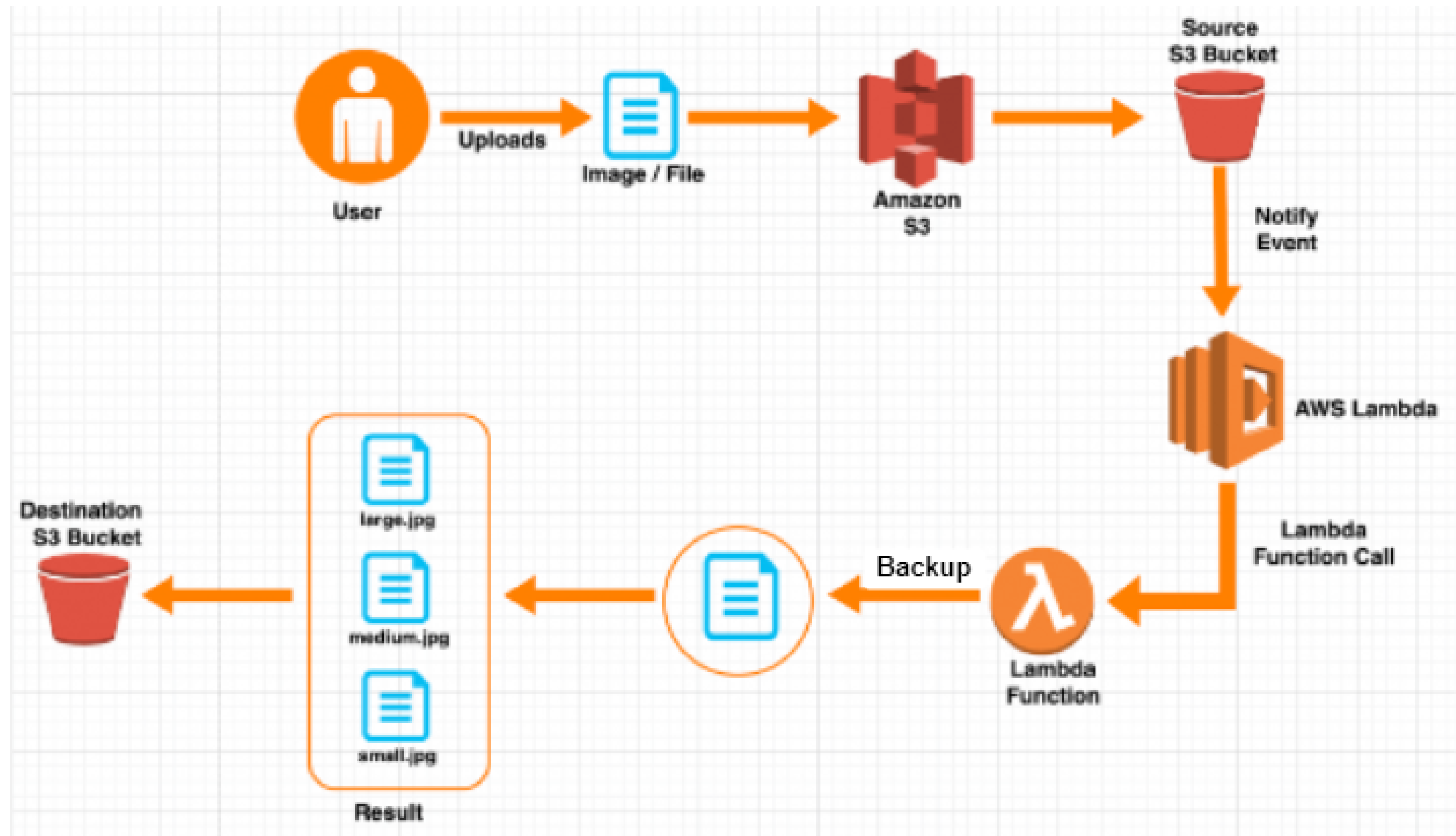
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AWS LAMBDA

- Lambda is a compute service that lets you run code without provisioning or managing servers.
- Lambda runs your code on a high-availability compute infrastructure and performs all of the administration of the compute resources.
- With Lambda, you can run code virtually for any type of application or backend service. All you need to do is supply your code in one of the languages that Lambda supports.
- Lambda uses a "serverless" design where you don't have to worry about managing servers or scaling instances.
- AWS describes Lambda in simple words like this," Run code without thinking about servers. Pay only for the compute time you consume."

Architecture



- A user uploads an file. The file is saved in the Amazon S3 Source bucket.
- ‘Create Event’ is triggered once the file upload to S3 is successful.
- The event calls/invokes the configured Lambda lambda function function.
- The code inside the is executed for backing-up the files.
- The file will be stored in S3 Destination Bucket.

Key features of Lambda

AWS Lambda allows you to add custom logic to AWS resources.

create new backend application.

You can also package any code as a Lambda Layer.

fault tolerant infrastructure, freeing you to focus on building differentiated backend services.


maintains compute capacity across multiple Availability Zones (AZs) in each AWS Region to help protect your code against individual machine or data center facility failures.




Benefits

- No servers to manage
- Continuous scaling
- Millisecond metering

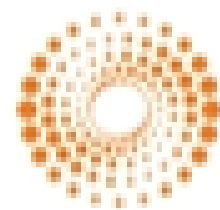
Rich ecosystem

- Increases innovation
 - Modernize your applications
 - Rich ecosystem
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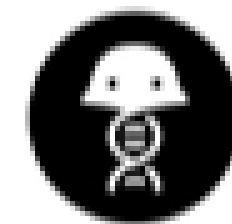
Limitations

- Runtime Environment limitations:
 - The disk space (ephemeral) is limited to 512 MB.
 - The default deployment package size is 50 MB.
 - The memory range is from 128 to 3008 MB.
 - The maximum execution timeout for a function is 15 minutes*.
 - Requests limitations by Lambda:
 - Request and response (synchronous calls) body payload size can be up to 6 MB.
 - Event request (asynchronous call) can be up to 256 KB.
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Where is Lambda Used?



THOMSON REUTERS



Benchling

NORDSTROM

Some of the
companies that use
AWS Lambda
include...

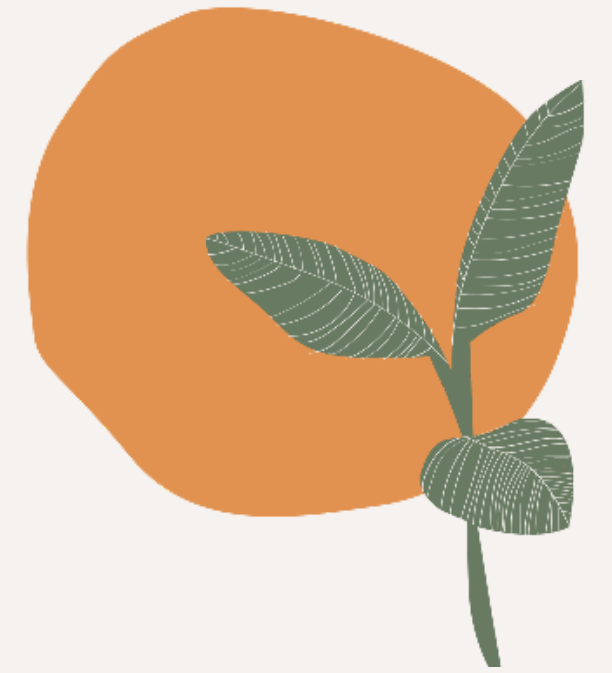
Coca-Cola

Robot



CONCLUSION

- AWS Lambda is a serverless architecture that enables custom development of an application using an event-driven computing platform. Managing and forwarding RPC calls to remote servers is avoided thereby optimizing computational time. Lambda function works seamlessly with Amazon S3.
- AWS Lambda should be your first choice to create serverless apps if you are looking for low maintenance, low cost, ease of scalability, and are ready to build and manage your FaaS infrastructure.





Thank You