

# Cost Calculation for Scraping Modules on AWS

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# Hosting Options

Options explored:

- AWS Lightsail (*current*)
- AWS API Gateway
- AWS Lambda
- AWS EC2

The prices per article or profile are shown in  $10^{-4}$  USD per month.

# Calculation Assumptions

The following assumptions were made to calculate costs.

- maximum usage per month
- **6GB** memory per module
- 1 month = 2,628,000 seconds

The **number of articles or profiles per month** is derived first to obtain the **price per article or profile per month**.

# AWS Lightsail

An easy-to-use, low-cost, and pre-configured cloud service.

- great for small businesses
- testing environments
- relevant features: virtual server and container

AWS Lightsail services will be billed at a fixed rate per month.

Feature <sup>1</sup>	Price	Linkedin	Glassdoor	Reuters
Virtual Server	39.24	5.97	23.89	0.60
Container	156.99	23.89	95.58	2.39

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<sup>1</sup>8GB memory to meet scraper requirements.

# AWS Lambda

A serverless, event-driven cloud service that allows code to be run from any application without any server management.

AWS Lambda services will be billed based on the number of requests sent. However, AWS Lambda has a restriction of 900 seconds per function call.

Usage <sup>2</sup>	Price <sup>3</sup>	Linkedin	Glassdoor	Reuters
100%	256.13	38.98	155.94	3.90
50%	124.73	37.97	151.88	3.80

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<sup>2</sup>Utilization per month (%).

<sup>3</sup>Free tier prices.

# AWS Elastic Compute Cloud (EC2)

The broadest and deepest compute platform with many instance choices to match user needs.

AWS EC2 comes with different payment plans to suit needs.

- EC2 Instance Savings Plans (plan 1)
- On-Demand (plan 2)

The EC2 Instance Savings Plan will be billed at a fixed rate, while the On-Demand plan will only be billed based on usage.

Plan	Price	Linkedin	Glassdoor	Reuters
1	38.98	5.93	23.73	0.59
2 (100%)	61.90	9.42	37.69	0.94
2 (62%)	38.41	9.43	37.72	0.94
2 (10%)	6.19	9.42	37.69	0.94

# Summary

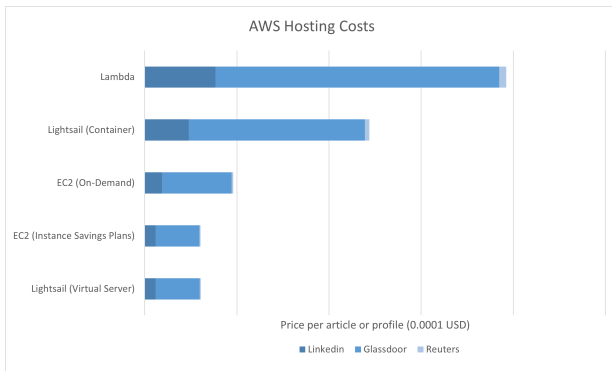


Figure 1: AWS Hosting Costs

Consider a virtual server on *AWS Lightsail* or *AWS EC2* with the Instance Savings Plan.