

Recipe App API DevOps Course - Approx. AWS Cost Calculations

Note: The below are calculations based on approximate values and should be used as a guideline only. Costs are not gaurenteed and may vary depending a number of factors. Students follow the course at their own risk and the course creator accepts no responsibility for any costs incurred while following the steps in the course.

	Estimated monthly cost (USD)			
Product	One	Two	Three	Used for...
EC2	\$8.50 [1]	\$17.00	\$25.50	Bastion instance (1 per environment)
RDS	\$15.48 [2]	\$30.96	\$46.44	Database instance (1 per environment)
ECS Fargate	\$9.02 [3]	\$18.04	\$27.06	Running API and Proxy docker containers (1 per environment)
ECR	\$1.90 [4]	\$1.90	\$1.90	Storing Docker images and allowing Fargate to access them (2 repos shared by all environments)
ALB	\$22.27 [5]	\$44.54	\$66.81	Accepting incoming connections and routing to appropriate task (1 per environment)
NAT Gateway	\$33.17 [6]	\$66.34	\$99.51	Providing internet access through the VPC networks (1 per environment)
S3	\$0.36 [7]	\$0.72	\$2.16	Storing Terraform state backend (shared by all environments) and storing/serving images uploaded by the users (one per envionment)
Route53	\$1.50 [8]	\$3.00	\$4.50	Registering and handling DNS requests for adding a custom domain name with TLS/SSL
Approx. Monthly	<u>\$92.20</u>	<u>\$182.50</u>	<u>\$273.88</u>	
Approx. Daily [9]	<u>\$2.97</u>	<u>\$5.89</u>	<u>\$8.83</u>	
Approx. Hourly [10]	<u>\$0.13</u>	<u>\$0.25</u>	<u>\$0.38</u>	

[1] Assumes:

- 1 t2.small EC2 instance running all month

[2] Assumes:

- 1 db.t2.micro instance
- Running all month
- 20GB General Purpose SSD

[3] Assumes:

- 1 task with 0.25 vCPU and 0.5GB Memory running all month

[4] Assumes:

- 10GB stored data
- 11GB data transfers per month

[5] Assumes:

- 1GB processed bytes per hour
- Avg. 10 new connections
- Avg. 10 seconds per connection
- Avg. 10 requests per second
- Avg. 10 rule evaluations per request

(Calculations done using <https://calculator.aws>)

[6] Assumes:

- 5GB/month data processed

[7] Estimate based on:

- 5GB stored per month
- 1000 PUT, COPY, POST, LIST requests
- 1000 GET, SELECT and other requests

[8] Assumes:

- Registered .com (\$12/yr) spread over 12 months
- 1 zone shared across all environments

[9] Assumes 31 days per month

[10] Assumes 730 hours per month