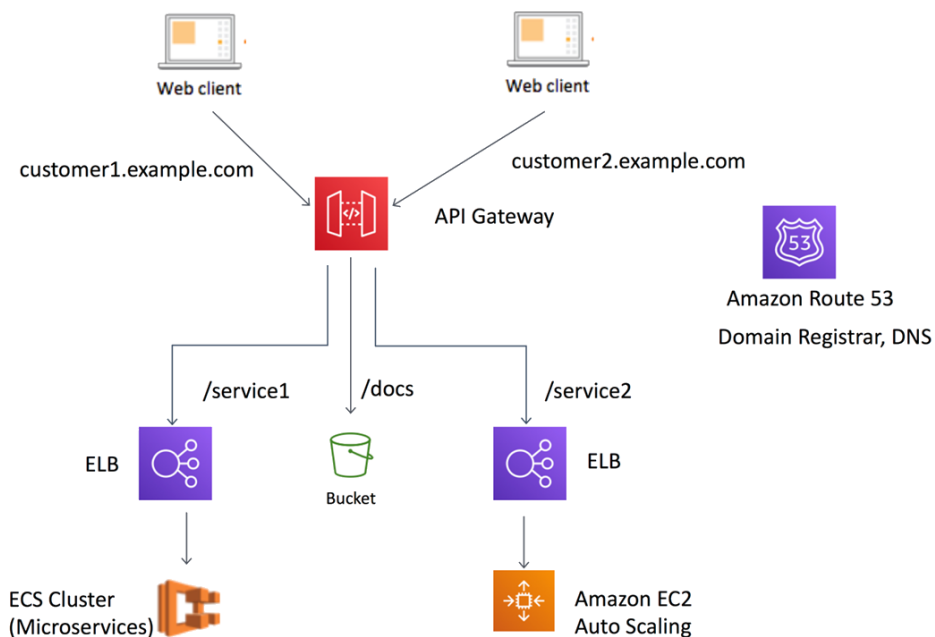




# API Gateway

APIs are a widespread part of the modern technical world, serving as the middlemen powering communications between many software applications using the internet. In order to allow organizations to more easily create, publish, maintain and monitor APIs at scale, Amazon has a fully-managed service called API Gateway. It handles all the tasks involved in accepting and processing up to hundreds of thousands of concurrent API calls, including traffic management, CORS support, authorization and access control, throttling, monitoring, and API version management thereby reducing a great deal of the hassle associated with APIs.

An architecture diagram of an organization that uses an API Gateway as an entry point to multiple software applications is shown below:



Source: AWS

Also worth mentioning is that the service has no minimum fees or startup costs and that we only have to pay for the amount of times the API was called and the amount of data transferred out. In fact, the mentioned advantages of API Gateway have led to a great deal of organizations moving their legacy API workloads to Amazon API Gateway, which often operate on the company's domain name and corresponding certificate.

**(Optional: Only necessary reading for AWS administrators)**

To design the API Gateway URL with the company's domain name and corresponding certificate, the company needs to do the following:

1. Create a Regional API Gateway endpoint: This will allow the company to create an endpoint that is specific to a region.
2. Associate the API Gateway endpoint with the company's domain name: This will allow the company to use its own domain name for the API Gateway URL.
3. Import the public certificate associated with the company's domain name into AWS Certificate Manager (ACM) in the same Region: This will allow the company to use HTTPS for secure communication with its APIs.
4. Attach the certificate to the API Gateway endpoint: This will allow the company to use the certificate for securing the API Gateway URL.
5. Configure Route 53 to route traffic to the API Gateway endpoint: This will allow the company to use Route 53 to route traffic to the API Gateway URL using the company's