**APPLICATION LOAD BALANCER**

* Automatically distributes incoming traffic across the backend targets
* Layer 7 load balancer (IT works on the application layer)
* Infrastructure managed by AWS, highly available, elastic

**Alb INTEGRATION**

Diagram

Description automatically generated

**WHY USE A LOAD BALANCER**

* Spread load across multiple downstream instances.
* Expose a single point of access (DNS) to your application
* Seamlessly handle failures of downstream instances
* Do regular health check to your instances
* Provide SSL termination (HTTPS) for your wbsites
* Enforce stickiness with cookies
* High availability across zones
* Separate public traffic from private traffic

**TYPES OF LOAD BALANCER ON AWS**

* Classic load balancer (v1 old generation) 2009
* Application load balancer (v2 new generation) 2016
* Network load balancer (v2 new generation) 2017

Note : recommended to use the newer versions as they provide more features

**APPLICATION LOAD BALANCER (V2)**

* Load balancer to multiple HTTP applications across machines (target groups)
* Load balancing to multiple applications on the same machine (containers)
* Load balancer based on route in URL
* Load balancer based on the hostname in URL

Graphical user interface

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