

AWS ELB (Elastic Load Balancing) Cheat Sheet

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	Description	Application	Network	Classic
Protocols	Layer 4 and layer 7 load balancing. Internet or internal facing ELB.	HTTP/HTTPS	TCP	TCP/SSL HTTP/HTTPS
Health Checks	ELB monitors and sends traffic only to healthy targets or instances.	HTTP/HTTPS	TCP HTTP/HTTPS	TCP/SSL HTTP/HTTPS
Round Robin	Routing Algorithm, even distribution.	✓		✓
Least Outstanding	Routing Algorithm, least connections.			✓
Flow Hash	Routing Algorithm, a hash of packet elements.		✓	
Configuration Specifications	Must be in one VPC. Can be in many AZs. Must be in a one subnet per AZ.	✓		✓
Zonal Isolation	Distributes traffic evenly in a single AZ. Can fail over to other AZ or region if all targets in initial AZ are unhealthy.		✓	
AWS Auto Scaling	Automatically register and deregister instances with ELB.	✓	✓	✓
Sticky Sessions	Mechanism to route requests from the same client to the same target or instance.	✓		✓
Path/Host based routing	foo.com/images and images.foo.com	✓		
Multiple port routing	Route to many ports on single target.	✓	✓	
HTTP/2	Support for HTTP/2	✓		
Websockets	Provides bi-directional communication channels between a client and a server over a long-running TCP connection.	✓	✓	
SSL Offloading	ELB encrypts and decrypts HTTPS requests.	✓		✓
Multiple SSL Certificates	Can have more than one SSL certificate on ELB.	✓		
SNI	ELB can present many certificates which enable it to support many websites using a single secure listener.	✓		
Pricing		per hour per LCU	per hour per LCU	per hour per GB
ELB per region		20	20	20
Subnets per AZ per ELB		1	1	1
IPv6 support		✓		
AWS ECS support	Container-based applications.	✓	✓	
X-Forward-For	Header to send info about the HTTP message.	✓		✓
Proxy header	Provides client information.			TCP/SSL
Preserve source IP	Preserves client side source IP allowing the back-end to see it.		✓	
Connection Draining	Time to complete existing connections when target/instance is unhealthy.	✓	✓	✓
IP as a target	An IP can be used as a target instead of an instance. Works for on-premises resources.	✓	✓	
Logging	Access logs written to S3 or CloudWatch.	✓	✓	✓
Request Tracing	Allow each request to be uniquely identified, providing improved monitoring and request-level diagnostics.	✓		
AWS WAF	Works with a web application firewall that protects from malicious requests.	✓		
Cross-zone load balancing	Distributes traffic evenly across all AZs	✓		✓
Static IP	Provides a static IP for the IELB.		✓	
EIP	Assign EIP to the ELB.		✓	