Securing Endpoints

Elastic Load Balancing (ELB)

Elastic Load Balancing works with Amazon Virtual Private Cloud (VPC) to provide robust security features, including integrated certificate management, user-authentication, and SSL/TLS decryption. Together, they give you the flexibility to centrally manage TLS settings and offload CPU intensive workloads from your applications.  For more information on ELB, see <https://aws.amazon.com/elasticloadbalancing/>

Additional information about TLS termination for Network Load balancers is available in this AWS Blog posting: <https://aws.amazon.com/blogs/aws/new-tls-termination-for-network-load-balancers/>

Amazon API Gateway

Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. With a few clicks in the AWS Management Console, you can create REST and WebSocket APIs that act as a “front door” for applications to access data, business logic, or functionality from your backend services, such as workloads running on Amazon Elastic Compute Cloud (Amazon EC2), code running on AWS Lambda, any web application, or real-time communication applications.  Information about Amazon API Gateway can be found at: https://aws.amazon.com/api-gateway/

AWS Shield

AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS. AWS Shield provides always-on detection and automatic inline mitigations that minimize application downtime and latency, so there is no need to engage AWS Support to benefit from DDoS protection. There are two tiers of AWS Shield - Standard and Advanced.  Details on AWS Shield are available at: https://aws.amazon.com/shield/

AWS WAF

AWS WAF is a web application firewall that helps protect your web applications from common web exploits that could affect application availability, compromise security, or consume excessive resources. AWS WAF gives you control over which traffic to allow or block to your web applications by defining customizable web security rules. You can use AWS WAF to create custom rules that block common attack patterns, such as SQL injection or cross-site scripting, and rules that are designed for your specific application. New rules can be deployed within minutes, letting you respond quickly to changing traffic patterns. Also, AWS WAF includes a full-featured API that you can use to automate the creation, deployment, and maintenance of web security rules.  Details on AWS WAF are available at: https://aws.amazon.com/waf/