

Sticky Sessions and Idle Timeouts



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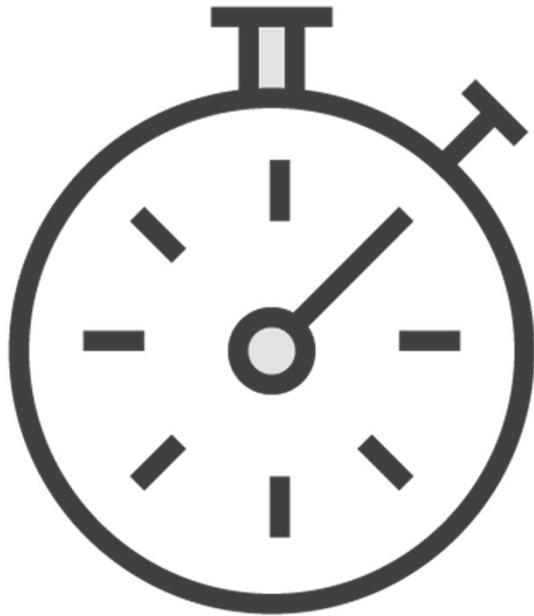
Sticky Sessions



Ensure a unique client's request always gets forwarded to the same target



Idle Timeouts



Client and load balancer establish a TCP connection

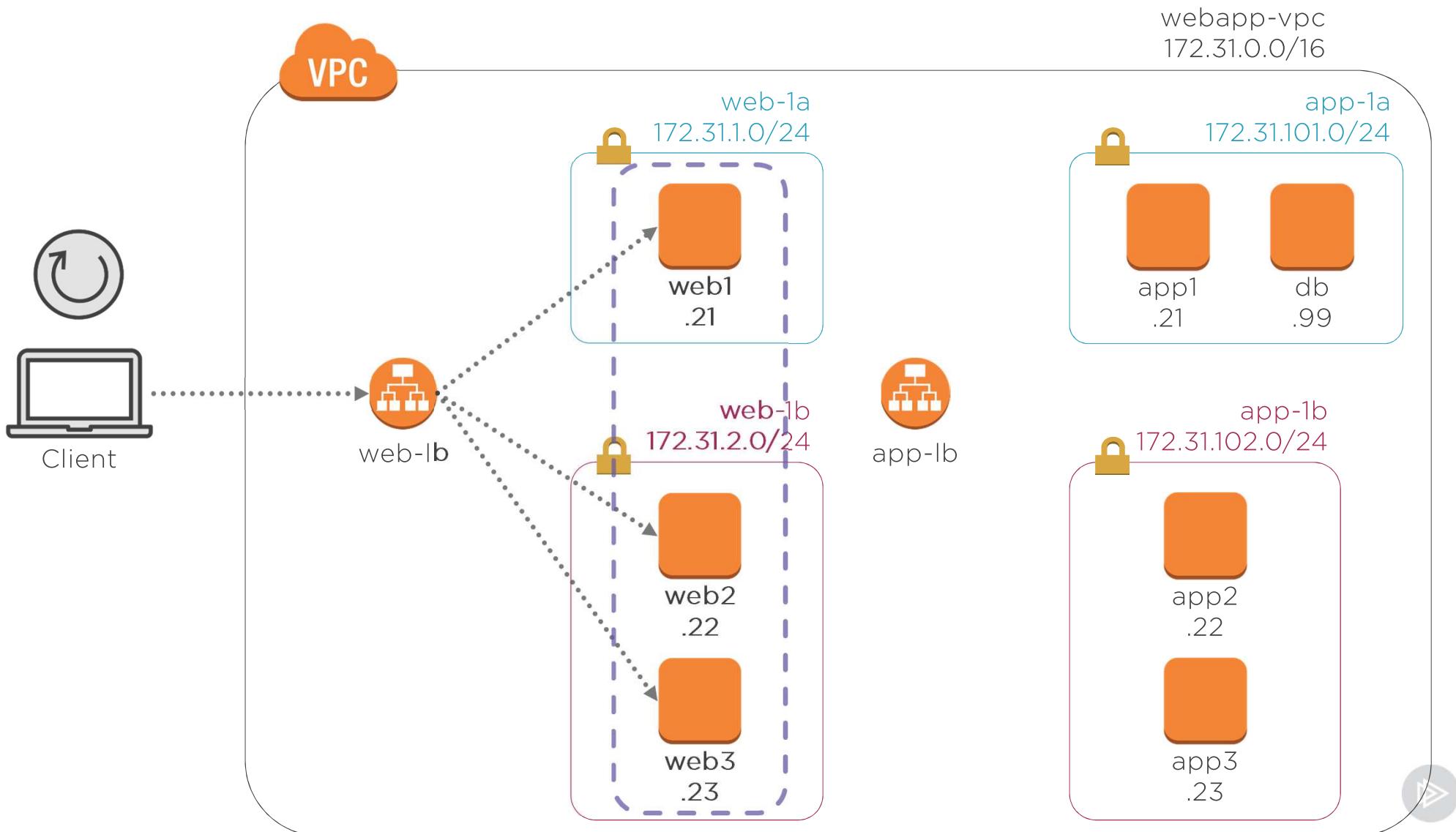
HTTP(S) requests and responses traverse this connection

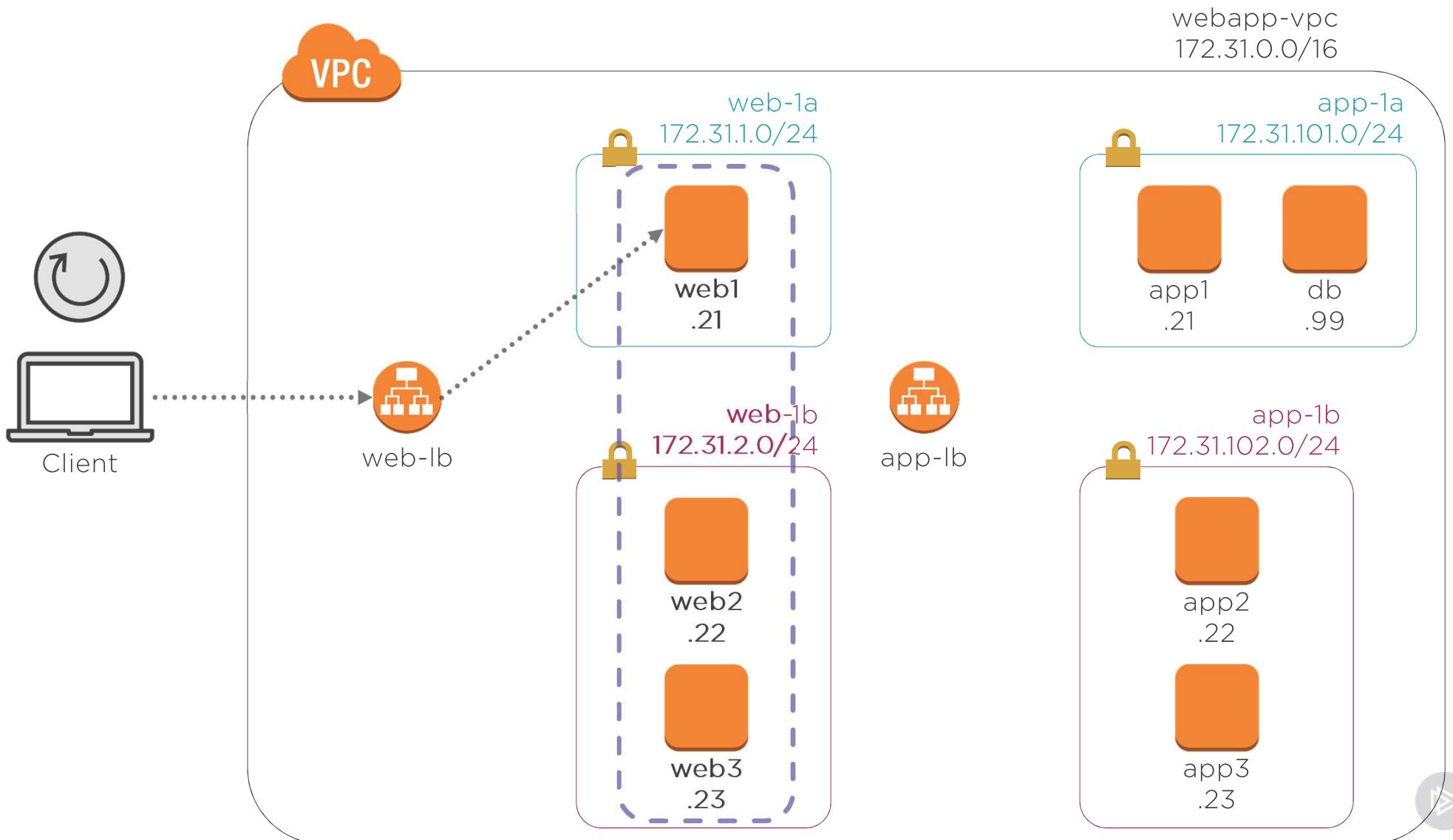
Control how long the TCP connection with a client can remain idle before closing it



Sticky Sessions







Stickiness Duration

How long load balancer will maintain sticky session between client and target

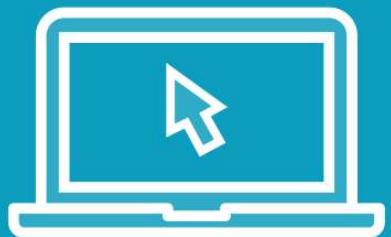
Load balancer sets a browser cookie with a unique, encrypted value

Client sends back the cookie with each subsequent request

Between 1 second and 7 days



Demo



Enable sticky sessions for the web tier



Idle Timeouts



Idle Timeout

How long the load balancer will maintain an idle TCP connection before closing it

Default is 60 seconds

Can be between 1 and 4000 seconds



No Outstanding HTTP Requests



TCP connection remains open
Load balancer closes idle connection

Target Doesn't Respond to HTTP Request



**Load balancer responds with a 504
Gateway Timeout**

This response resets the idle timer

Load balancer closes idle connection

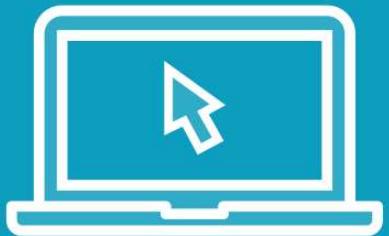


504 Gateway Timeout

The server, while acting as a gateway or proxy, did not receive a timely response from an upstream server it needed to access in order to complete the request. (RFC 7231)



Demo



Simulate a long-running request
Configure idle timeout



Keep-alive



Summary



Stickiness duration can be between 1 second and 7 days

Idle timeout can be between 1 and 4000 seconds

Keep-alive setting controls how long web server will maintain idle TCP connection with load balancer



Coming Up Next



Securing Web Applications with HTTPS

