



## **Namecast Platform Use Cases**

### Overview:

Namecast's advanced DNS GSLB software platform allows clients to control and direct traffic dynamically, based on network health, application state, or geographic requirements. Normal DNS queries, by comparison, are static and based on predefined settings. For example, a normal DNS query looks like this:

Client: What is the address for [www.example.com](http://www.example.com)?

Name server: The address for [www.example.com](http://www.example.com) is 10.1.1.1.

A DNS query powered by Namecast has an intermediate step. Once a client asks for the address of a domain powered by Namecast, one of our edge DNS nodes receives the query, and before answering, analyzes the request, checks it against the specific ruleset for the domain, and directs traffic to the proper destination

based on the rules that have been configured.

Active Failover:

For example, a simple HTTP failover configuration, describing what takes place after a web server outage:

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast platform: Is 10.1.1.1 responding to checks for ICMP requests?  
If so, return properly; if not, return 20.2.2.2.

Namecast edge DNS node: 20.2.2.2.

### **Advanced Load Balancing:**

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast platform: Is the web server at 10.1.1.1 responding on port 80?  
If so, respond with 10.1.1.1; if not, remove from pool.

Is the web server at 10.2.2.2 responding on port 80?  
If so, respond with 10.2.2.2; if not, remove from pool.

Is the web server at 10.3.3.3 responding on port 80?  
If so, respond with 10.2.2.2; if not, remove from pool.

Namecast edge DNS node: 10.1.1.1, 10.2.2.2, 10.3.3.3.

Monitoring rules can be based on TCP port status, HTTP status code, HTTP string comparisons, performance, test object download speed, load, or time of day; customized monitoring rules can be configured on a per-customer basis.

### **Geographic Targeting:**

Namecast can also perform geographic IP direction based on the client resolver's source address; for example:

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast: If client is from US, 10.1.1.1; if from China, 10.2.2.2; anywhere else, 10.3.3.3.

Namecast edge DNS node: 10.3.3.3.

Geographic targeting can be combined with failover or advanced load balancing as well; for example:

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast: If client is from US, 10.1.1.1; if 10.1.1.1 is unreachable, return 10.1.1.2; if from China, return 10.2.2.2; anywhere else, 10.3.3.3.

Namecast edge DNS node: 10.1.1.1.

## **CDN Load Balancing**

Finally, because Namecast's platform also allows for CNAME load balancing, you can manage traffic for multiple CDN providers, or even roll your own CDN using existing cloud service providers. For example:

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast: If speed of test object download #1 takes less than 20 seconds, then return Cotendo CNAME; otherwise, return Akamai CNAME

Namecast edge DNS node: [www.example.com.edgekey.net](http://www.example.com.edgekey.net).

Client: What is the address for [www.example.com](http://www.example.com)?

Namecast: If the client is from the US, return the CNAME for an Amazon Web Server EC2 instance; if not, return the Edgecast CDN CNAME.

Namecast edge DNS node: [20-2-2-2-ec2-amazon.com](http://20-2-2-2-ec2-amazon.com).

Got questions that we haven't answered? Interested in a no-risk trial? Reach out to us at [info@namecast.net](mailto:info@namecast.net) to get started with Namecast today!