CLAIMS

1. A computer-implemented method in a content delivery network (CDN), wherein said CDN comprises a plurality of delivery servers, and wherein said CDN delivers content on behalf of at least one content provider, the computer-implemented method comprising:

(A) logically grouping distinct delivery servers of said plurality of delivery servers into delivery server groups, and associating one or more CDN name servers with at least some of said delivery server groups;

(B) determining network map data using network data determined by at least some of said one or more CDN name servers associated with at least some of said deliver server groups, wherein said network data with respect to a particular CDN name server of said one or more CDN name servers relative to a particular resolver is based on an estimated popularity of said particular CDN name server for said particular resolver, said estimated popularity being determined by said particular CDN name server;

(C) in response to a client request, said request comprising a hostname associated with a content provider, at least one CDN name server determining at least one delivery server to process said client request, wherein said determining uses said network map data;

(D) providing said client with information about said at least one delivery server to process said client request.

2. The computer-implemented method of claim 1 further comprising:

(E) updating said network map based on changes in said network data.

3. The computer-implemented method of claim 1 or 2, wherein said network data are also generated from monitoring agents located around the network.

4. The computer-implemented method of any one of claims 1 to 3, wherein said particular resolver is separated from said one or more CDN name servers by a firewall that prevents unsolicited inbound connections from said CDN name servers to said particular resolver.

5. The computer-implemented method of any one of claims 1 to 4,

wherein said estimated popularity of said particular CDN name server for said particular resolver is based on one or more attempts by said resolver to resolve a particular hostname associated with a content provider.

6. The computer-implemented method of claim 5 wherein said estimated popularity of said particular CDN name server is determined by said particular CDN name server based on a time-to-live (TTL) value associated with said particular hostname in a domain name system (DNS) record for said particular hostname.

7. The computer-implemented method of any one of claims 1 to 6, wherein said particular CDN name server determines its estimated popularity based on a number of name resolution requests said particular CDN name server receives from said particular resolver, as a function of said TTL.

8. The computer-implemented method of any one of claims 1to 7, wherein said grouping of said distinct delivery servers in (A) is based on a physical location of said delivery servers.

9. The computer-implemented method of claim 8 wherein said associating of said one or more CDN name servers in (A) is based on said physical location of said delivery servers.

10. The computer-implemented method of any one of claims 1 to 9, wherein said one or more CDN name servers are co-located with corresponding physically co-located delivery servers.

11. The computer-implemented method of claim 10 wherein said physically co-located delivery servers comprise a cluster.

12. The computer-implemented method of any one of claims 1 to 11, wherein said client request is made via a given resolver, and wherein, when said at least one CDN name server that determines that it is popular with respect to said

given resolver, said at least one CDN name server provides said client with information about a cluster of co-located delivery servers.

13. A computer-implemented method in a content delivery network (CDN), wherein said CDN comprises a plurality of delivery servers, and wherein said CDN delivers content on behalf of at least one content provider, the computer-implemented method comprising:

(A) logically grouping distinct delivery servers of said plurality of delivery servers into delivery server groups, and associating one or more CDN name servers with at least some of said delivery server groups;

(B) determining network map data using network data determined by at least some of said one or more CDN name servers associating with at least some of said deliver server groups, wherein said network data with respect to a particular CDN name server of said one or more CDN name servers relative to a particular resolver is based on an estimated round-trip time between said particular CDN name server and said particular resolver, said round-trip time being determined by said particular CDN name server using a customized CNAME response to a first name resolution request from said particular resolver;

(C) in response to a client request, said request comprising a hostname associated with a content provider, at least one CDN name server determining at least one delivery server to process said client request, wherein said determining uses said network map data;

(D) providing said client with information about said at least one delivery server to process said client request.

14. The method of claim 13 wherein said particular resolver is separated from said one or more CDN name servers by a firewall that prevents unsolicited inbound connections from said CDN name servers to said particular resolver.

15. The method of claim 13 or 14, wherein said customized CNAME response is generated by said particular CDN name server.

16. The method of any one of claims 13 to 15, wherein:

(i) in response to said first name resolution request received at said particular CDN name server, said particular CDN name server provides said customized CNAME response to said particular resolver, and causes said particular resolver to make a second name resolution request to one of said CDN name servers, and wherein said round-trip time is determined based on an outbound time when said particular CDN name server provides said customized CNAME response to said particular resolver and an inbound time when said second name resolution request is received by one of said CDN name servers.

17. The method of claim 16 wherein the one of said CDN name servers that receives the second name resolution request is the particular CDN name server.