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:

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;

determining, by a particular CDN name server of said one or more CDN name servers, an estimated popularity of the particular CDN name server for a particular resolver;

determining, based on the estimated popularity, network data with respect to the particular CDN name server relative to the particular resolver;

determining network map data using at least the network data from the particular CDN name server;

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; and

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:

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 1 to 7, wherein said grouping of said distinct delivery servers 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 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:

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;

determining, by a particular CDN name server of said one or more CDN name servers, an estimated round-trip time between the particular CDN name server and a particular resolver using a customised CNAME response to an initial name resolution request from the particular resolver, wherein the customized CNAME response is configured to cause the 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;

determining, based on the estimated round trip time, network data with respect to the particular CDN name server relative to the particular resolver;

determining network map data using at least the network data from the particular CDN name server;

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; and

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 the one of said CDN name servers that receives the second name resolution request is the particular CDN name server.

17. A system for providing a delivery server 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 system comprising:

at least one processor;

memory, operatively connected to the at least one processor and containing instructions that, when executed, causes the system to perform a method, the method comprising:

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;

determining, by a particular CDN name server of said one or more CDN name servers, an estimated popularity of the particular CDN name server for a particular resolver;

determining, based on the estimated popularity, network data with respect to the particular CDN name server relative to the particular resolver;

determining network map data using at least the network data from the particular CDN name server;

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; and

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

18. The system of claim 17, 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.

19. The system of claim 18, 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.

20. 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:

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;

determining, by a particular CDN name server of said one or more CDN name servers, an estimated popularity for a particular CDN name server for a particular resolver, 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 a particular hostname in a domain name system (DNS) record for said particular hostname;

determining, based on the estimated popularity, network data with respect to the particular CDN name server relative to the particular resolver;

determining network map data using at least the network data from the particular CDN name server;

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; and

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