CLAIMS

1. A computer-implemented method, in a content delivery (CD) network, wherein said CD network (CDN) delivers content on behalf of multiple content providers, and

wherein a particular content provider of said multiple content providers has a first plurality of content provider domain names associated therewith, and wherein said CDN allocates a first plurality of CDN domain names to said particular content provider, and wherein said first plurality of content provider domain names are mapped to said first plurality of CDN domain names, wherein said CDN comprises a plurality of CDN clusters, and wherein at least some of said CDN clusters are marker clusters,

the method comprising:

(A) maintaining a binding of said first plurality of CDN domain names to corresponding CDN clusters, wherein each of said first plurality of CDN domain names is bound to at least one CDN cluster;

(B) maintaining, for at least some of said marker clusters, a first mapping having, for at least some of said first plurality of CDN domain names, a corresponding set of cluster/virtual IP (VIP) address pairs, wherein each marker cluster has multiple VIPs, and wherein each of said at least some of said first plurality of CDN domain names is mapped to at most one VIP per marker cluster, and wherein client requests for content from the particular content provider are directed to one or more VIPs in the set of cluster/VIP pairs associated with a CDN domain name of that particular content provider; and then

(C) determining a second mapping, based on (i) one or more content requests received at one or more marker clusters, and (ii) the first mapping, said second mapping being a mapping from at least said first plurality of content provider domain names to said first plurality of CDN domain names, wherein the first plurality of content provider domain names are included in the one or more content requests and wherein the second mapping is also determined based on at least correlating the first plurality of content provider domain names included in the one or more content requests received at the one or more marker clusters with the one or more marker clusters receiving such requests and using the first mapping to correlate the first plurality of content provider domain names to the first plurality of CDN domain names; and

(D) determining an amount of traffic or load associated with a particular domain name of said particular content provider; and

(E) based at least in part on said amount of traffic or load determined in (D) and the second mapping, modifying said binding of said first plurality of CDN domain names to corresponding CDN clusters.

2. The method of claim 1, wherein said plurality of content provider domain names are mapped in a many-to-one relationship to said plurality of CDN hostnames.

3. The method of claim 1 or 2, wherein said plurality of content provider domain names are mapped using CNAMEs to said plurality of CDN domain names.

4. The method of any of claims 1 to 3, wherein each of said first plurality of CDN domain names has a corresponding unique identifier associated therewith, and wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on the unique identifier associated with that CDN domain name.

5. The method of claim 4, wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on a hash function applied to the unique identifier associated with that CDN domain name.

6. The method of any of claims 1 to 5, wherein:

the set of cluster/VIP pairs is unique for each CDN domain name; and/or

each CDN domain name has a unique VIP at each of a plurality of clusters.

7. The method of any of claims 1 to 6, wherein the binding of said first plurality of CDN domain names to corresponding CDN clusters is maintained in a rendezvous system of said CDN.

8. The method of any of claims 1 to 7, wherein, for said determining in (C), the one or more requests comprise one or more requests for content of said particular content provider.

9. The method of any of claims 1 to 8, wherein either:

said modifying in (E) increases the number of CDN clusters associated with a particular CDN domain name; or

said modifying in (E) decreases the number of CDN clusters associated with a particular CDN domain name.

10. The method of any of claims 1 to 9, wherein at least one of said CDN clusters comprises multiple marker clusters.

11. An article of manufacture comprising a computer-readable medium having program instructions stored thereon, the program instructions, operable on a computer system in a content delivery network (CDN), said computer system implementing at least one content delivery (CD) service,

wherein said CD network (CDN) delivers content on behalf of multiple content providers, and

wherein a particular content provider of said multiple content providers has a first plurality of content provider domain names associated therewith, and wherein said CDN allocates a first plurality of CDN domain names to said particular content provider, and wherein said first plurality of content provider domain names are mapped to said first plurality of CDN domain names, wherein said CDN comprises a plurality of CDN clusters, and wherein at least some of said CDN clusters are marker clusters,

wherein execution of the program instructions by one or more processors of said computer system causes the one or more processors to carry out the acts of:

(A) maintaining a binding of said first plurality of CDN domain names to corresponding CDN clusters, wherein each of said first plurality of CDN domain names is bound to at least one CDN cluster;

(B) maintaining, for at least some of said marker clusters, a first mapping having, for at least some of said first plurality of CDN domain names, a corresponding set of cluster/virtual IP (VIP) address pairs, wherein each marker cluster has multiple VIPs, and wherein each of said at least some of said first plurality of CDN domain names is mapped to at most one VIP per marker cluster, and wherein client requests for content from the particular content provider are directed to one or more VIPs in the set of cluster/VIP pairs associated with a CDN domain name of that particular content provider; and then

(C) determining a second mapping, based on (i) one or more content requests received at one or more marker clusters, and (ii) the first mapping, said second mapping being a mapping from at least said first plurality of content provider domain names to said first plurality of CDN domain names wherein the first plurality of content provider domain names are included in the one or more content requests and wherein the second mapping is

also determined based on at least correlating the first plurality of content provider domain names included in the one or more content requests received at the one or more marker clusters with the one or more marker clusters receiving such requests and using the first mapping to correlate the first plurality of content provider domain names to the first plurality of CDN domain names; and

(D) determining an amount of traffic or load associated with a particular domain name of said particular content provider; and

(E) based at least in part on said amount of traffic or load determined in (D), modifying said binding of said first plurality of CDN domain names to corresponding CDN clusters.

12. The article of manufacture of claim 11, wherein:

said plurality of content provider domain names are mapped in a many-to-one relationship to said plurality of CDN hostnames; and/or

said plurality of content provider domain names are mapped using CNAMEs to said plurality of CDN domain names.

13. The article of manufacture of claim 11 or 12, wherein each of said first plurality of CDN domain names has a corresponding unique identifier associated therewith, and wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on the unique identifier associated with that CDN domain name, optionally wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on a hash function applied to the unique identifier associated with that CDN domain name.

14. The article of manufacture of any of claims 11 to 13, wherein:

the set of cluster/VIP pairs is unique for each CDN domain name; and/or

each CDN domain name has a unique VIP at each of a plurality of clusters.

15. The article of manufacture of any of claims 11 to 14, wherein any of:

the binding of said first plurality of CDN domain names to corresponding CDN clusters is maintained in a rendezvous system of said CDN;

for said determining in (C), the one or more requests comprise one or more requests for content of said particular content provider; and/or

wherein at least one of said CDN clusters comprises multiple marker clusters.

16. A device in a content delivery network (CDN), wherein said CDN delivers content on behalf of at least one content provider, said device implementing a content delivery (CD) service,

wherein said CD network (CDN) delivers content on behalf of multiple content providers, and

wherein a particular content provider of said multiple content providers has a first plurality of content provider domain names associated therewith, and wherein said CDN allocates a first plurality of CDN domain names to said particular content provider, and wherein said first plurality of content provider domain names are mapped to said first plurality of CDN domain names, wherein said CDN comprises a plurality of CDN clusters, and wherein at least some of said CDN clusters are marker clusters, wherein

the device:

at least one processor; and

memory, operatively connected to the at least one processor storing instructions that, when executed by the at least one processor, cause the device to:

(a) maintain a binding of said first plurality of CDN domain names to corresponding CDN clusters, wherein each of said first plurality of CDN domain names is bound to at least one CDN cluster;

(b) maintain, for at least some of said marker clusters, a first mapping having, for at least some of said first plurality of CDN domain names, a corresponding set of cluster/virtual IP (VIP) address pairs, wherein each marker cluster has multiple VIPs, and wherein each of said at least some of said first plurality of CDN domain names is mapped to at most one VIP per marker cluster, and wherein client requests for content from the particular content provider are directed to one or more VIPs in the set of cluster/VIP pairs associated with a CDN domain name of that particular content provider; and then

(c) determine a second mapping, based on (i) one or more content requests received at one or more marker clusters, and (ii) the first mapping, said second mapping being a mapping from at least said first plurality of content provider domain names to said first plurality of CDN domain names wherein the first plurality of content provider domain names are included in the one or more content requests and wherein the second mapping is also determined based on at least correlating the first plurality of content provider domain names included in the one or more content requests received at the one or more marker clusters with the one or more marker clusters receiving such requests and using the first

mapping to correlate the first plurality of content provider domain names to the first plurality of CDN domain names; and

(d) determine an amount of traffic or load associated with a particular domain name of said particular content provider; and

(e) based at least in part on said amount of traffic or load determined in (d), modify said binding of said first plurality of CDN domain names to corresponding CDN clusters.

17. The device of claim 16, wherein:

said plurality of content provider domain names are mapped in a many-to-one relationship to said plurality of CDN hostnames; and/or

said plurality of content provider domain names are mapped using CNAMEs to said plurality of CDN domain names.

18. The device of claim 16 or 17, wherein each of said first plurality of CDN domain names has a corresponding unique identifier associated therewith, and wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on the unique identifier associated with that CDN domain name, optionally wherein said set of cluster/VIP pairs associated with each CDN domain name is determined based on a hash function applied to the unique identifier associated with that CDN domain name.

19. The device of any of claims 16 to 18, wherein:

the set of cluster/VIP pairs is unique for each CDN domain name; and/or

each CDN domain name has a unique VIP at each of a plurality of clusters.

20. The device of any of claims 16 to 19, wherein any of:

the binding of said first plurality of CDN domain names to corresponding CDN clusters is maintained in a rendezvous system of said CDN;

for said determining in (b), the one or more requests comprise one or more requests for content of said particular content provider; and/or

at least one of said CDN clusters comprises multiple marker clusters.