WHAT IS CLAIMED IS:

1. A system for routing packets, the system comprising:

a first level of a hierarchy of physical routing components comprising one or more first level physical routing components, wherein each of the one or more first level physical routing components is configured to:

receive a packet for routing, wherein the packet comprises at least a destination address, and wherein the destination address comprises a first subset of the destination address and a second subset of the destination address;

identify a second level physical routing component based at least in part on an association of the first subset of the destination address with the identified second level physical routing component, wherein the identified second level physical routing component is associated with the first subset of the destination address based at least in part on a dynamic allocation of individual portions of a set of destination addresses to individual second level physical routing components of the second level of the physical routing component hierarchy; and

transmit the packet to the identified second level routing component;

a second level of the hierarchy of physical routing components comprising one or more second level physical routing components, wherein each of the one or more second level physical routing components is configured to:

receive the packet from a first level physical routing component;

identify a third level physical routing component based at least in part on an association of the second subset of the destination address with the identified third level physical routing component, wherein the identified third level physical routing component is associated with the second subset of the destination address based at least in part on a dynamic allocation of individual portions of the set of destination addresses to individual third level physical routing components of the third level of the physical routing component hierarchy; and

transmit the packet to the identified third level physical routing component; and

a third level of the hierarchy of physical routing components comprising one or more third level physical routing components, wherein each of the one or more third level physical routing components is configured to:

receive the packet from a second level physical routing component;

identify an additional component to which to transmit the packet; and

transmit the packet to the identified additional component.

2. The system of Claim 1, wherein the destination address corresponds to an IP address.

3. The system of Claim 2, wherein the first subset of the destination address corresponds to the eight most significant bits of the IP address.

4. The system of Claim 1, wherein at least two physical routing components corresponding to at least one of the first level, the second level, or the third level of the hierarchy of physical routing components are implemented in a common physical router device.

5. The system of Claim 1, wherein each physical routing component corresponding to at least one of the first level, the second level, or the third level is allocated a portion of destination addresses of packets based at least in part on traffic volume associated with one or more destination addresses of the packets.

6. The system of Claim 1 further comprising a router management device configured to dynamically allocate the individual portions of the set of destination addresses to the individual second level routing components of the second level of the routing component hierarchy.

7. A computer-implemented method for routing packets, the method comprising:

receiving, at a router component of a first level of a routing component hierarchy, a packet comprising a first subset of a destination address and a second subset of the destination address;

identifying a second level routing component of a second level of the routing component hierarchy based at least in part on an association of the first subset of the destination address with the identified second level physical routing component, wherein the identified second level physical routing component is associated with the first subset of the destination address based at least in part on a dynamic allocation of individual

portions of a set of destination addresses to individual second level physical routing components of the second level of the physical routing component hierarchy;

transmitting the packet to the second level routing component;

identifying, at the second level router component, a third level routing component of a third level of the routing component hierarchy based at least in part on an association of the second subset of the destination address with the identified third level physical routing component, wherein the identified third level physical routing component is associated with the second subset of the destination address based at least in part on a dynamic allocation of individual portions of the set of destination addresses to individual third level physical routing components of the third level of the physical routing component hierarchy;

transmitting the packet to the third level routing component;

identifying, at the third level router component, an additional component to which to transmit the packet; and

transmitting the packet to the additional component.

8. The computer-implemented method of Claim 7, wherein the destination address corresponds to an IP address.

9. The computer-implemented method of Claim 8, wherein the second subset of the destination address corresponds to at least one of the sixteen or twenty four most significant bits of the IP address.

10. The computer-implemented method of Claim 7, wherein at least one routing component of the first level of the routing component hierarchy, the second level of the routing component hierarchy, and the third level of the routing component hierarchy are dynamically allocated individual portions of the set of destination addresses of packets based at least in part on traffic volume associated with the allocated portions of the set of destination addresses of the packets.

11. The computer-implemented method of Claim 10, wherein remaining routing components of the first level of the routing component hierarchy, the second level of the routing component hierarchy, and the third level of the routing component hierarchy are allocated approximately equal portions of the set of destination addresses of the packets.

12. The computer-implemented method of Claim 10, wherein remaining routing components of the first level of the routing component hierarchy, the second level of the routing component hierarchy, and the third level of the routing component hierarchy are allocated portions of the set of destination addresses of packets based on at least one of random selection, round robin selection, hashing and load balancing.

13. The computer-implemented method of Claim 7, wherein identifying a second level routing component of a second level of the routing component hierarchy comprises:

attempting to identify the second level routing component from address information persisted in a first memory, and

if the address information is not available in the first memory component, attempting to identify the second level routing component from address information persisted in a second memory;

wherein the first memory is associated with a faster access time than the second memory.

14. A system for routing packets, the system comprising one or more physical routing devices configured with specific computer-executable instructions that, when executed by the physical routing devices, cause the physical routing devices to implement at least:

a first level of a routing component hierarchy comprising one or more first level routing components, wherein the first level of the routing component hierarchy is configured to:

in response to reception of a packet comprising a destination address, identify a second level routing component based at least in part on an association of a first subset of the destination address with the identified second level physical routing component, wherein the identified second level physical routing component is associated with the first subset of the destination address based at least in part on a dynamic allocation of individual portions of a set of destination addresses to individual second level physical routing components of the second level of the physical routing component hierarchy; and

transmit the packet to the identified second level routing component;

a second level of the routing component hierarchy comprising one or more second level routing components, wherein the second level of the routing component hierarchy is

configured to:

in response to reception of the packet from the first level of the routing component hierarchy, identify a third level routing component based at least in part on an association of a second subset of the destination address with the identified third level physical routing component, wherein the identified third level physical routing component is associated with the second subset of the destination address based at least in part on a dynamic allocation of individual portions of the set of destination addresses to individual third level physical routing components of the third level of the physical routing component hierarchy; and

transmit the packet to the identified third level routing component;

a third level of the routing component hierarchy comprising one or more third level routing components, wherein the third level of the routing component hierarchy is configured to:

in response to reception of the packet from the second level of the routing component hierarchy, identify an additional component to which to transmit the packet; and

transmit the packet to the identified additional component.

15. The system of Claim 14, wherein the destination address corresponds to an IP address.

16. The system of Claim 15, wherein the first subset of the destination address corresponds to at least one of the eight, the sixteen, or the twenty four most significant bits of the IP address.

17. The system of Claim 14, wherein each of the second level routing components comprises a first memory and a second memory for storing destination address information, and wherein the first memory is associated with a faster access time than the second memory.

18. The system of Claim 17, wherein each of the second level routing components are further configured to:

attempt to identify the third level routing component from address information persisted in the first memory, and

if the address information is not available in the first memory, attempt to identify the third level routing component from address information persisted in the second memory component.

19. The system of Claim 14, wherein at least one routing component of the first level, the second level, and the third level are dynamically allocated individual portions of the set of destination addresses of packets based at least in part on traffic volume associated with the allocated portions of the set of destination addresses of the packets.

20. The system of Claim 14 further comprising a router management device configured to dynamically allocate the individual portions of the set of destination addresses to the individual second level routing components of the second level of the routing component hierarchy.

21. The system of Claim 19, wherein remaining routing component of the first level, the second level, and the third level are allocated approximately equal portions of the set of destination addresses of the packets.

22. The system of Claim 19, wherein remaining routing component of the first level, the second level, and the third level are allocated portions of the set of destination addresses of packets based on at least one of random selection, round robin selection, hashing and load balancing.

WHAT IS CLAIMED IS:

1. A system for routing packets comprising:

a router management component, executed on a computing device, for associating destination address information to a router hierarchy;

one or more router components corresponding to a first level of the router hierarchy, the first level of the router hierarchy for receiving an incoming packet for routing;

one or more router components corresponding to a second level of a router hierarchy, the second level of the router hierarchy for processing an incoming packet for routing received from at least one of the one or more router components corresponding to the first level of a router hierarchy;

one or more router components corresponding to a third level of a router hierarchy, the third level of the router hierarchy for processing an incoming packet for routing received from at least one of the one or more router components corresponding to the second level of a router hierarchy;

wherein the one or more router components corresponding to the first level of a router hierarchy identifies one or more router components from the one or more router components corresponding to the second level of a router hierarchy based on a first subset of a destination address associated with the incoming packet, wherein the first subset is assigned by the router management component;

wherein each of the one or more router components corresponding to the second level of a router hierarchy correspond to portions of the first subset of the destination address associated with the incoming packet; and

wherein the one or more router components corresponding to the second level of a router hierarchy identifies one or more router components from the one or more router components corresponding to third level of a router hierarchy based on a second subset of a destination address associated with the incoming packet, wherein the second subset is assigned by the router management component and wherein the second subset of the destination address is greater than the first subset of the destination address.

2. The system as recited in Claim 1, wherein the one or more router components corresponding to the second level of a router hierarchy is allocated to correspond to approximately equal portions of the first subset of the destination addresses associated with the incoming packet.

3. The system as recited in Claim 1, wherein the one or more router components corresponding to the second level of a router hierarchy is allocated to correspond to portions of the first subset of the destination address associated with the incoming packet based on traffic volumes attributed to the destination address.

4. The system as recited in Claim 1, wherein the one or more router components corresponding to a first level of a router hierarchy are selected in accordance with one of random selection, round robin selection, hashing and load balancing.

5. The system as recited in Claim 1, wherein the destination address corresponds to an IP address.

6. The system as recited in Claim 5, wherein first subset of the IP address corresponds to the eight most significant bits of the IP address.

7. The system as recited in Claim 5, wherein first subset of the IP address corresponds to at least one of the sixteen or twenty four most significant bits of the IP address.

8. The system as recited in Claim 1, wherein at least two of the one or more router components corresponding to a first level of the router hierarchy are implemented in a common physical router component.

9. The system as recited in Claim 1, wherein at least two of the one or more router components corresponding to a second level of the router hierarchy are implemented in a common physical router component.

10. The system as recited in Claim 1, wherein at least two of the one or more router components corresponding to a first level of the router hierarchy are implemented in a common physical router component.

11. The system as recited in Claim 1, wherein at least one physical router component implements at least two of a first level router, a second level router and a third level router.

12. A system for routing packets comprising:

a first set of logical router components for receiving an incoming packet for routing;

a second set of logical router components for routing packet received from the first set of router components;

a third set of logical router components for routing packets received from the second set of router components

wherein the first set of logical router components identify a router from the second set of logical router components based on a correlation by a router management component of a subset of the destination address associated with the incoming packet to the selected router;

wherein each of the one or more router components corresponding to the second set of logical router components is allocated by the router management component to correspond to portions of the first subset of the destination address associated with the incoming packet; and

wherein the second set of logical router components identify a router from the third set of logical router components based on a correlation by the router management component of a second subset of a destination address associated with the incoming packet to the second selected router.

13. The system as recited in Claim 12, wherein the correlation of routers from the second set of router components is based on a substantially equal allocation of possible destination addresses.

14. The system as recited in Claim 12, wherein the correlation of routers from the second set of logical router components is based on an association of traffic volumes for destination addresses.

15. The system as recited in Claim 12, wherein the correlation of routers from the second set of logical router components is based on a combination of an association of traffic volumes for destination addresses and an equal allocation of remaining destination addresses.

16. The system as recited in Claim 12, wherein each of the routers from the second set of logical router components are associated with a threshold number of destination addresses and

wherein the correlation of routers from the second set of logical router components is based on allocation of a number greater than the threshold number of destination addresses associated with the second set of logical router components.

17. The system as recited in Claim 12, wherein the correlation of routers from the second set of logical router components is based on an association of low traffic volumes for destination addresses.

18. The system as recited in Claim 12, wherein the correlation of routers from the second set of logical router components includes an allocation of a plurality of routers for the same subset of destination addresses.

19. The system as recited in Claim 12, wherein first set of router components are selected in accordance with one of random selection, round robin selection, hash selection and load balancing.

20. The system as recited in Claim 12, wherein the destination address corresponds to an IP address.

21. The system as recited in Claim 20, wherein first subset of the IP address corresponds to the eight most significant bits of the IP address.

22. The system as recited in Claim 21, wherein first subset of the IP address corresponds to at least one of the sixteen or twenty four most significant bits of the IP address.

23. The system as recited in Claim 12, wherein each of the first set of logical router components correspond to a physical router component.

24. The system as recited in Claim 12, wherein two or more of the first set of logical router components correspond to a single physical router component.

25. The system as recited in Claim 12, wherein each of the second set of logical router components correspond to a physical router component.

26. The system as recited in Claim 12, wherein two or more of the second set of logical router components correspond to a single physical router component.

27. The system as recited in Claim 12, wherein each of the third set of logical router components correspond to a physical router component.

28. The system as recited in Claim 12, wherein two or more of the third set of logical router components correspond to a single physical router component.

29. The system as recited in Claim 12, wherein at least one of the set of first logical components, at least one of the second set of logical components, and at least one of the third set of logical router components correspond to a single physical router component.

30. A method for routing packets comprising:

obtaining a routing request corresponding to a data packet received from a first communication network;

identifying a first router corresponding to a first level of a router hierarchy, the first level of the router hierarchy corresponding to one or more router components;

forwarding the received data packet to the identified first router;

identifying a second router corresponding to a second level of the router hierarchy, the second level of the router hierarchy corresponding to one or more router components;

forwarding the received data packet to the identified second router; and

identifying a third router corresponding to a third level of the router hierarchy, the third level of the router hierarchy corresponding to one or more router components;

wherein identifying the second router corresponding to a second level of the router hierarchy is based on a correlation of a subset of the destination address associated with the received data packet to the selected router; and

wherein identifying a third router corresponding to a third level of the router hierarchy is based on a correlation of a second subset of a destination address associated with the incoming packet to the second selected router.

31. The method as recited in Claim 30, wherein each of the one or more router components corresponding to the second level of the router hierarchy is allocated to correspond to portions of the first subset of the destination address associated with the incoming packet.

32. The method as recited in Claim 31, wherein the correlation of routers from the second level of the router hierarchy is based on at least a substantially equal allocation of possible destination addresses.

33. The method as recited in Claim 31, wherein the correlation of routers from the second level of the router hierarchy is based on an association of traffic volumes for destination addresses.

34. The method as recited in Claim 31, wherein the correlation of routers from the second level of the router hierarchy is based on a combination of an association of traffic volumes for destination addresses and an equal allocation of remaining destination addresses.

35. The method as recited in Claim 31, wherein each of the routers from the second level of the router hierarchy are associated with a threshold number of destination addresses and wherein the correlation of routers from the second level of the router hierarchy is based on allocation of a number greater than the threshold number of destination addresses associated with the second level of the router hierarchy.

36. The method as recited in Claim 31, wherein the correlation of routers from the second level of the router hierarchy is based on an association of low traffic volumes for destination addresses.

37. The method as recited in Claim 31, wherein the correlation of routers from the second set of router components includes an allocation of a plurality of routers for the same subset of destination addresses.

38. The method as recited in Claim 30, wherein first set of router components are selected in accordance with one of random selection, round robin selection, hash selection and load balancing.

39. The method as recited in Claim 30, wherein the destination address corresponds to an IP address