

CLAIMS

1. A method of wireless communication performed by a central entity, comprising:
determining, by the central entity, a set of schedulable resources for a plurality of links associated with a plurality of nodes of a hierarchical topology multi-link network, wherein at least one node, of the plurality of nodes, is not a parent node or a child node of the central entity; and providing, by the central entity, scheduling information to the plurality of nodes to schedule communication on the plurality of links based at least in part on determining the set of schedulable resources.
2. The method of claim 1, wherein the central entity is configured to comply with one or more interaction rules for the set of schedulable resources.
3. The method of claim 2, wherein the one or more interaction rules define the set of schedulable resources as applicable for an entirety of a resource allocation.
4. The method of claim 2, wherein the one or more interaction rules define a particular type of channel as a schedulable resource, and the particular type of channel includes at least one of: a synchronization signal block, a type-0 physical downlink control channel, or a physical random access channel.
5. The method of claim 2, wherein the one or more interaction rules define a particular type of link.
6. The method of claim 2, wherein providing the scheduling information comprises: causing a first node, of the plurality of nodes, to cancel an operation that conflicts with an operation of a second node, of the plurality of nodes, in accordance with the one or more interaction rules.
7. The method of claim 1, wherein the central entity is configured to determine the set of schedulable resources based at least in part on a resource utilization report received from another one of the plurality of nodes.
8. The method of claim 1, wherein the scheduling information is a schedulable resource bitmap, wherein bits of the schedulable resource bitmap indicate whether corresponding resource units are schedulable by a particular node of the plurality of nodes.
9. The method of claim 1, wherein a message received by the central entity to identify the set of schedulable resources or a message conveying the scheduling information is an F1 Application Protocol (F1-AP) message.
10. The method of claim 1, wherein a first subset of the set of schedulable resources is associated with a first scheduling node, of the plurality of nodes, and a second subset of the set of schedulable resources is associated with a second scheduling node of the plurality of nodes, and wherein the first scheduling node is directly connected to the second scheduling node.
11. The method of claim 10, wherein the first subset and the second subset are non-overlapping in a time domain.

12. The method of claim 10, wherein the first subset and the second subset are overlapping in time and associated with a coordinated semi-static slot format configuration.

13. The method of claim 1, wherein the central entity is configured to schedule communication on at least one of: a per slot basis, a per slot group basis, a per symbol basis, or a per symbol group basis.

14. The method of claim 1, wherein the central entity is configured to determine the scheduling information based at least in part on at least one radio resource configuration of the plurality of nodes.

15. The method of claim 1, wherein the central entity is configured to receive a resource utilization report identifying a utilization of one or more schedulable resources, and wherein the resource utilization report is determined based at least in part on layer 2 (L2) scheduling.

16. The method of claim 1, wherein the set of scheduling resources are determined based at least in part on at least one of: a time resource, a channel allocation, a link type, a scheduling pattern capability parameter, a resource availability, an allocation type, or an aggregation parameter.

17. The method of claim 1, wherein the scheduling information is associated with an attribute parameter, and wherein the attribute parameter identifies at least one of: an allocation granularity, a link association, a time segment, a channel type, or a traffic type.

18. The method of claim 1, wherein the scheduling information is associated with one or more links of the plurality of links, and wherein the one or more links include at least one of: the plurality of links, a subset of the plurality of links, a set of access links of the plurality of links, a set of backhaul links of the plurality of links.

19. The method of claim 1, wherein the scheduling information is associated with a channel type, and wherein the channel type includes at least one of: a synchronization signal block channel, a physical downlink control channel, a physical downlink shared channel, or a physical uplink shared channel.

20. The method of claim 1, wherein the scheduling information is configured for a particular channel type based at least in part on explicit configuration information included in the scheduling information or implicit configuration information associated with a radio resource configuration message.

21. A central entity for wireless communication, comprising: a memory; and one or more processors operatively coupled to the memory, the memory and the one or more processors configured to: determine, by the central entity, a set of schedulable resources for a plurality of links associated with a plurality of nodes of a hierarchical topology multi-link network, wherein at least one node, of the plurality of nodes, is not a parent node or a child node of the central entity; and provide, by the central entity, scheduling information to the plurality of nodes to schedule communication on the plurality of links based at least in part on determining the set of schedulable resources.

22. The central entity of claim 21, wherein the central entity is configured to comply with one or more interaction rules for the set of schedulable resources.

23. The central entity of claim 21, wherein the central entity is configured to determine the set of schedulable resources based at least in part on a resource utilization report received from another one of the plurality of nodes.

24. The central entity of claim 21, wherein the scheduling information is a schedulable resource bitmap, wherein bits of the schedulable resource bitmap indicate whether corresponding resource units are schedulable by a particular node of the plurality of nodes.

25. The central entity of claim 21, wherein a message received by the central entity to identify the set of schedulable resources or a message conveying the scheduling information is an F1 Application Protocol (F1-AP) message.

26. The central entity of claim 21, wherein a first subset of the set of schedulable resources is associated with a first scheduling node, of the plurality of nodes, and a second subset of the set of schedulable resources is associated with a second scheduling node of the plurality of nodes, and wherein the first scheduling node is directly connected to the second scheduling node.

27. The central entity of claim 21, wherein the central entity is configured to schedule communication on at least one of: a per slot basis, a per slot group basis, a per symbol basis, or a per symbol group basis.

28. The central entity of claim 21, wherein the central entity is configured to determine the scheduling information based at least in part on at least one of radio resource configuration of the plurality of nodes.

29. The central entity of claim 21, wherein the central entity is configured to receive a resource utilization report identifying a utilization of one or more schedulable resources, and wherein the resource utilization report is determined based at least in part on layer 2 (L2) scheduling.

30. An apparatus for wireless communication, comprising: means for determining a set of schedulable resources for a plurality of links associated with a plurality of nodes of a hierarchical topology multi-link network, wherein at least one node, of the plurality of nodes, is not a parent node or a child node of the apparatus; and means for providing scheduling information to the plurality of nodes to schedule communication on the plurality of links based at least in part on determining the set of schedulable resources.