CLAIMS

1. A method for controlling user usage of resources, executed by a center device, comprising steps of:

setting, by a setup module, a resource usage threshold in a unit time for a user;

monitoring, by a monitor module, amount of resources used by the user as reported by each node module; and

determining, by an allocation module, according to the resource usage threshold in a unit time for the user and the amount of resources on each node module used by the user, amount of available resources for the user in each unit time in N unit times subsequent to the current time, and allocating the amount of available resources to the node modules, N being a positive integer;

the node module prohibits the user from continuously using resources when the amount of resources on this node module used by the user exceeds the usage amount set by the central node.

2. The method for controlling user usage of resources according to claim 1, wherein,

the setting, by a setup module, a resource usage threshold in a unit time for a user comprises: setting, by the setup module, for the user, resource usage thresholds of different resource types in a unit time;

the monitoring, by a monitor module, the amount of resources used by the user as reported by each node module comprises: monitoring, by the monitor module, the amount of resources of different resource types used by the user as reported by each node module; and

the determining, by an allocation module, according to the resource usage threshold in a unit time for the user and the amount of resources on each node module used by the user, amount of available resources for the user in each unit time in N unit times subsequent to the current time comprises: determining, by the allocation module, according to the resource usage threshold of each resource type in a unit time for the user and the amount of resources of each resource type on each node module used by the user, the amount of available resources of each resource type for the user in each unit time in N unit times subsequent to the current time.

3. The method for controlling user usage of resources according to claim 1, wherein,

before allocating the amount of available resources to node modules, the method further comprises: counting, by a counting module, the proportion of the amount of resources on each

node module used by the user in a preset period of time before the current time; and

the allocating the amount of available resources to the node modules comprises: allocating, by the allocation module, the amount of available resources to different node modules according to the proportion.

4. The method for controlling user usage of resources according to claim 1, wherein,

the method further comprises: after the node module acquires, from the central module, the amount of available resources for the user in each unit time in N unit times subsequent to the current time, detecting amount of resources used by the user in a unit time, and rejecting the user's access after the amount of resources used by the user in a unit time exceeds the amount of available resources in this unit time.

5. The method for controlling user usage of resources according to claim 1, wherein,

the determining, by the allocation module, according to the resource usage threshold in a unit time for the user and the amount of resources on each node module used by the user, amount of available resources for the user in each unit time in N unit times subsequent to the current time comprises: increasing the amount of available resources for the user in each unit time by one resource usage threshold, subtracting the amount of resources used by the user from the amount of available resources for the user after the reported amount of resources used by the user is received from the node module, and allocating the updated amount of available resources for the user as the amount of available resources for the user in each unit time in N unit times subsequent to the current time.

6. A device for controlling user usage of resources, comprising a central device, the central device comprising:

a setup module configured to set a resource usage threshold in a unit time for a user;

a monitor module configured to monitor amount of resources used by the user as reported by each node module; and

an allocation module configured to determine, according to the resource usage threshold in a unit time for the user and the amount of resources on each node module used by the user, amount of available resources for the user in each unit time in N unit times subsequent to the current time, and allocate the amount of available resources to the node modules, N being a positive integer;

the node module prohibits the user from continuously using resources when the amount of resources on this node module used by the user exceeds the usage amount set by the central node.

7. The device for controlling user usage of resources according to claim 6, wherein,

the setup module is further configured to set, for the user, resource usage thresholds of different resource types in a unit time;

the monitor module is further configured to monitor the amount of resources of different resource types used by the user as reported by each node module; and

the allocation module is further configured to determine, according to the resource usage threshold of each resource type in a unit time for the user and the amount of resources of each resource type on each node module used by the user, the amount of available resources of each resource type for the user in each unit time in N unit times subsequent to the current time.

8. The device for controlling user usage of resources according to claim 6, wherein,

the device further comprises a counting module configured to count the proportion of the amount of resources on each node module used by the user in a preset period of time before the current time; and

the allocation module is configured to allocate the amount of available resources to different node modules according to the proportion.

9. The device for controlling user usage of resources according to claim 6, wherein,

the device further comprises a node device configured to: acquire, from the central device, the amount of available resources for the user in each unit time in N unit times subsequent to the current time, detect amount of resources used by the user in a unit time, and reject the user's access after the amount of resources used by the user in a unit time exceeds the amount of available resources in this unit time.

10. The device for controlling user usage of resources according to claim 6, wherein,

the allocation module is configured to determine, according to the resource usage threshold in a unit time for the user and the amount of resources on each node module used by the user, amount of available resources for the user in each unit time in N unit times subsequent to the current time by the following method: increasing the amount of available resources for the user in each unit time by one resource usage threshold, subtracting the amount of resources used by

the user from the amount of available resources for the user after the reported amount of resources used by the user is received from the node module, and allocating the updated amount of available resources for the user as the amount of available resources for the user in each unit time in N unit times subsequent to the current time.

11. A computer-readable storage medium storing computer programs that, when executed by a processor, implement the steps in the method according to any one of claims 1 to 5.

12. A computer equipment, comprising a memory, a processor and computer programs that are stored on the memory and runnable on the processor, the processor implementing the steps in the method according to any one of claims 1 to 5 when executing the programs.