CLAIMS

What is claimed is:

1. A method for processing blockchain-based data, the method comprising:

monitoring an amount of service data processed in a specified time period according to a consensus that is based on a system resource consumption (101);

dynamically adjusting a block generation time based on the amount of service data to generate an adjusting time period (103); and

generating a new block based on the adjusting time period, wherein the new block generation is associated with a service need that matches the system resource consumption (105).

2. The method according to claim 1, wherein dynamically adjusting the block generation time comprises:

prolonging the block generation time by a specified first duration if the amount of processed data is less than a specified first threshold; or

shortening the block generation time by a specified second duration if the amount of processed data is greater than a specified second threshold.

3. The method according to claim 2, wherein monitoring the amount of service data processed comprises:

monitoring amounts of service data processed by the consensus in *n* consecutive specified time periods, wherein *n* is a natural number, and the specified time period is determined based on the block generation time; and

dynamically adjusting the block generation time based on the amount of processed data comprises:

dynamically adjusting the block generation time based on the amounts of processed data that correspond to the specified time periods.

4. The method according to claim 3, wherein dynamically adjusting the block generation time comprises:

shortening the block generation time by the specified second duration if the amounts of

processed data that correspond to the specified time periods progressively increase, and the maximum amount of processed data is greater than the specified second threshold .

5. The method according to claim 3, wherein dynamically adjusting the block generation time comprises:

prolonging the block generation time by the specified first duration if the amounts of processed data that correspond to the specified time periods progressively decrease, and the minimum amount of processed data is less than the specified first threshold.

6. The method according to claim 3, wherein the method further comprises:

adjusting the amount of service data processed by the consensus in the specified time period, wherein *m* is less than *n* and is a natural number, if the block generation time is equal to a reference time, and amounts of service data that is generated in *m* consecutive specified time periods are greater than a reference amount of processed data (206).

7. The method according to claim 3, wherein the method further comprises:

adjusting the amount of service data processed by the consensus in the specified time period, wherein *m* is less than *n* and is a natural number, if the determined block generation time is equal to a reference time, and amounts of service data that is generated in *m* consecutive specified time periods are less than an adjusted amount of processed data (208).

8. The method according to claim 6 or 7, wherein the method further comprises:

processing service data by the consensus in the (*m*+1)th specified time period based on the adjusted amount of processed data (210).

9. The method according to any one of claims 1 to 8, wherein the method further comprises:

storing the service data processed by the consensus on the new block.

10. A device for processing blockchain-based data, the device comprising a plurality of units implemented in one or more pieces of software and/or hardware, wherein the device is configured to perform the method according to any one of claims 1 to 9.