CLAIMS

1. A method for migrating memory data, wherein a hybrid memory system comprises a plurality of processors and a plurality of memory media of different types, and the processor is associated with at least two memory media of different types; and the method comprises:

sampling obtained access requests according to a sampling rule, to obtain a sampling result, wherein the access request indicates an operation performed by an application run by a processor in a computer device on a memory medium, and the sampling rule indicates a periodic sampling mode;

collecting statistics on access frequencies of pages indicated by the sampling result, wherein the access frequencies of the pages are used to determine access temperatures of the pages; and

triggering migration of memory data between the at least two memory media of different types based on the access frequencies.

2. The method according to claim 1, wherein sampling the obtained access requests according to the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests in a time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result.

3. The method according to claim 2, wherein sampling the obtained access requests in the time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests at a sampling frequency indicated by the sampling rule, to obtain the sampling result, wherein the sampling frequency indicates a quantity of access requests at a sampling interval.

4. The method according to claim 3, wherein the sampling frequency is determined based on a bandwidth of the memory medium.

5. The method according to claim 2, wherein sampling the obtained access requests in the time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests based on a characteristic of a quantity of access requests in a sampling period indicated by the sampling rule, to obtain the sampling result, wherein the sampling period indicates a time length at a sampling interval.

6. The method according to any one of claims 1 to 5, wherein sampling the obtained access requests according to the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests at least once based on a quantity of sampling times

indicated by the sampling rule, to obtain the sampling result.

7. The method according to any one of claims 1 to 5, wherein sampling the obtained access requests according to the sampling rule, to obtain the sampling result comprises:

sampling a sample in the obtained access requests according to the sampling rule, to obtain the sampling result.

8. The method according to any one of claims 1 to 5, wherein collecting statistics on the access frequencies of the pages indicated by the sampling result comprises:

determining address indexes based on addresses indicated by the access requests, and collecting statistics on access frequencies associated with the address indexes, wherein the addresses indicated by the access requests indicate the pages.

9. An apparatus for migrating memory data, comprising:

a communication module, configured to obtain access requests, wherein the access request indicates an operation performed by an application run by a processor in a computer device on a memory medium;

a sampling module, configured to sample the obtained access requests according to a sampling rule, to obtain a sampling result, wherein the sampling rule indicates a periodic sampling mode;

a statistics collection module, configured to collect statistics on access frequencies of pages indicated by the sampling result, wherein the access frequencies of the pages are used to determine access temperatures of the pages; and

a migration module, configured to trigger migration of memory data between at least two memory media of different types based on the access frequencies.

10. The apparatus according to claim 9, wherein the sampling module is configured to obtain access requests according to the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests in a time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result.

11. The apparatus according to claim 10, wherein the sampling module is configured to obtain access requests in the time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests at a sampling frequency indicated by the sampling rule, to obtain the sampling result, wherein the sampling frequency indicates a quantity of access requests at a sampling interval.

12. The apparatus according to claim 11, wherein the sampling frequency is determined based on a bandwidth of the memory medium.

13. The apparatus according to claim 10, wherein the sampling module is configured to obtain

access requests in the time interval–based sampling mode indicated by the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests based on a characteristic of a quantity of access requests in a sampling period indicated by the sampling rule, to obtain the sampling result, wherein the sampling period indicates a time length at a sampling interval.

14. The apparatus according to any one of claims 9 to 13, wherein the sampling module is configured to obtain access requests according to the sampling rule, to obtain the sampling result comprises:

sampling the obtained access requests at least once based on a quantity of sampling times indicated by the sampling rule, to obtain the sampling result.

15. The apparatus according to any one of claims 9 to 13, wherein the sampling module is configured to obtain access requests according to the sampling rule, to obtain the sampling result comprises:

sampling a sample in the obtained access requests according to the sampling rule, to obtain the sampling result.

16. The apparatus according to any one of claims 9 to 13, wherein the statistics collection module is configured to collect statistics on the access frequencies of the pages indicated by the sampling result comprises:

determining address indexes based on addresses indicated by the access requests, and collecting statistics on access frequencies associated with the address indexes, wherein the addresses indicated by the access requests indicate the pages.

17. A memory, wherein the memory comprises a storage medium and a controller, and the storage medium is configured to store a group of computer instructions; and when executing the group of computer instructions, the controller performs an operation step of the method according to any one of claims 1 to 9, to identify an access frequency at which a data block in the memory is accessed by an application.

18. A chip, comprising a processor and a power supply circuit, wherein the power supply circuit is configured to supply power to the processor; and the processor is configured to perform an operation step of the method according to any one of claims 1 to 8, to identify an access frequency at which a data block in a memory is accessed by an application.

19. A processor, wherein the processor is associated with at least two memory media of different types, and the processor is configured to perform an operation step of the method according to any one of claims 1 to 8, to identify an access frequency at which a data block in the memory media is accessed by an application.

20. A computer device, wherein the computer device comprises a storage, a processor, and a

plurality of memory media of different types, the processor is associated with at least two memory media of different types, the storage is configured to store a group of computer instructions, and when executing the group of computer instructions, the processor performs an operation step of the method according to any one of claims 1 to 8, to identify an access frequency at which a data block in the memory media is accessed by an application.