

Amended Claims

1. A data backup method, wherein the method is applied to a data backup system (100, 300), the data backup system (100, 300) comprises a primary cluster (101, 1200, 1400), a secondary cluster (102), and a control device (103, 104, 1100, 1300), wherein the primary cluster includes a first component and a second component, the secondary cluster includes a third component and a fourth component, the third component is used as backup of the first component, the fourth component is used as backup of the second component, the first component and the second component store data in different formats, the third component and the fourth component store data in different formats; and the method comprises:

configuring, by the control device (103, 104, 1100, 1300), a first data backup policy for a first service based on: information about a plurality of data sets related to the first service and that is entered by a user (104, 106); and a first moment, wherein the plurality of data sets related to the first service comprise a data set processed or stored by the first component in the primary cluster (101, 1200, 1400) and a data set processed or stored by the second component in the primary cluster (101, 1200, 1400);

controlling, by the control device (103, 104, 1100, 1300) based on a the first data backup policy, the primary cluster (101, 1200, 1400) or the secondary cluster (102) to back up, to the secondary cluster (102), a the plurality of data sets related to a the first service that are in the primary cluster (101, 1200, 1400) and that are at a the first moment, wherein the first data backup policy comprises the information about the plurality of data sets related to the first service and the first moment.

2. The method according to claim 1, wherein the controlling, by the control device (103, 104, 1100, 1300) based on a first data backup policy, the primary cluster (101, 1200, 1400) or the secondary cluster (102) to back up, to the secondary cluster (102), a plurality of data sets related to a first service that are in the primary cluster (101, 1200, 1400) and that are at a first moment comprises:

sending, by the control device (103, 104, 1100, 1300), a first instruction to the primary cluster (101, 1200, 1400), to instruct the primary cluster (101, 1200, 1400) to send, to the secondary cluster (102), data corresponding to snapshots of the plurality of data sets related to the first service that are at the first moment; or

sending, by the control device (103, 104, 1100, 1300), a second instruction to the secondary cluster (102), to instruct the secondary cluster (102) to replicate, from the primary cluster (101, 1200, 1400), data corresponding to snapshots of the plurality of data sets related to the first service that are at the first moment and that are in the primary cluster (101, 1200, 1400).

3. The method according to claim 2, wherein before the sending, by the control device (103, 104, 1100, 1300), a first instruction to the primary cluster (101, 1200, 1400), or the sending, by the control device (103, 104, 1100, 1300), a second instruction to the secondary cluster (102), the method further comprises:

5 sending, by the control device (103, 104, 1100, 1300), a third instruction to the primary cluster (101, 1200, 1400), wherein the third instruction comprises the information about the plurality of data sets related to the first service and the first moment, and the third instruction instructs the primary cluster (101, 1200, 1400) to obtain the snapshots of the plurality of data sets related to the first service that are at the first moment.

10 4. The method according to any one of claims 1 to 3, wherein the method further comprises:
sending, by the control device, a fourth instruction to the primary cluster, wherein the fourth instruction instructs the primary cluster to synchronize user data to the secondary cluster; or
obtaining, by the control device, user data stored in the primary cluster and the secondary
15 cluster, and adjusting, by the control device based on the user data stored in the primary cluster, the user data stored in the secondary cluster.

~~5. The method according to any one of claims 1 to 4, wherein the method further comprises:
configuring, by the control device, the first data backup policy for the first service based
20 on the information that is about the plurality of data sets related to the first service and that is entered by a user and the first moment.~~

~~6.5. The method according to any one of ~~claims 1 to 5~~claims 1 to 4, wherein the method further comprises:~~

25 configuring, by the control device (103, 104, 1100, 1300), a second data backup policy for a second service, wherein the second data backup policy comprises information about a plurality of data sets related to the second service and a second moment; and

controlling, by the control device (103, 104, 1100, 1300) based on the second data backup policy, the primary cluster (101, 1200, 1400) or the secondary cluster (102) to back up, to the
30 secondary cluster (102), the plurality of data sets related to the second service that are in the primary cluster (101, 1200, 1400) and that are at the second moment.

~~7. The method according to any one of claims 1 to 6, wherein the plurality of data sets related to the first service comprise a data set processed or stored by a first component in the primary cluster and a data set processed or stored by a second component in the primary cluster.~~

~~8.6. The method according to any one of ~~claims 1 to 7~~claims 1 to 5, wherein the control device (103, 104, 1100, 1300) comprises a primary client (1051) and a secondary client (1052), the primary client (1051) is configured to detect first status information of the primary cluster (101,~~

1200, 1400), the secondary client (1052) is configured to detect second status information of the secondary cluster (102), and the method further comprises:

obtaining, by the control device (103, 104, 1100, 1300), the first status information obtained through detection of the primary client (1051) and the second status information obtained through detection of the secondary client (1052); and

when the first status information indicates that the primary cluster (101, 1200, 1400) is a secondary identity or the cluster fails, and the second status information indicates that the secondary cluster (102) is a primary identity, determining, by the control device (103, 104, 1100, 1300), that the client accessing the cluster is switched to the secondary client ~~is a client accessed by an application.~~

~~9.7.~~ The method according to ~~claim 8~~ claim 6, wherein the method further comprises:

prompting, by the control device (103, 104, 1100, 1300), the user (104, 106) with information indicating that the primary cluster (101, 1200, 1400) is faulty; and

adjusting, by the control device (103, 104, 1100, 1300), an identity of the secondary cluster (102) from the secondary identity to the primary identity in response to an identity adjustment operation of the user (104, 106) for the secondary cluster (102).

~~10.8.~~ The method according to any one of ~~claims 1 to 9~~ claims 1 to 7, wherein the control device (103, 104, 1100, 1300) is deployed in an isolated manner from the primary cluster (101, 1200, 1400).

~~11.9.~~ The method according to any one of ~~claims 1 to 10~~ claims 1 to 8, wherein a same clock source is set in the control device (103, 104, 1100, 1300), the primary cluster (101, 1200, 1400), and the secondary cluster (102).

~~12.10.~~ The method according to any one of ~~claims 1 to 11~~ claims 1 to 9, wherein the primary cluster (101, 1200, 1400) and/or the secondary cluster (102) comprise/comprises a cluster constructed based on a hadoop architecture.

~~13.11.~~ A data backup method, wherein the method is applied to a data backup system (100, 300), the data backup system (100, 300) comprises a primary cluster (101, 1200, 1400), a secondary cluster (102), and a control device (103, 104, 1100, 1300), wherein the primary cluster includes a first component and a second component, the secondary cluster includes a third component and a fourth component, the third component is used as backup of the first component, the fourth component is used as backup of the second component, the first component and the second component store data in different formats, the third component and the fourth component store data in different formats; and the method comprises:

configuring, by the control device (103, 104, 1100, 1300), a first data backup policy for a first

service based on: information about a plurality of data sets related to the first service and that is entered by a user (104, 106); and a first moment, wherein the plurality of data sets related to the first service comprise a data set processed or stored by the first component in the primary cluster (101, 1200, 1400) and a data set processed or stored by the second component in the primary cluster (101, 1200, 1400);

obtaining, by the primary cluster (101, 1200, 1400), an instruction delivered by the control device (103, 104, 1100, 1300), wherein the instruction comprises the information about a the plurality of data sets related to a the first service and a the first moment; and

backing up, by the primary cluster (101, 1200, 1400) to the secondary cluster (102) based on the instruction, the plurality of data sets related to the first service that are in the primary cluster (101, 1200, 1400) and that are at the first moment, and

synchronizing, by the primary cluster (101, 1200, 1400), user data to the secondary cluster (102).

~~14-12.~~ The method according to ~~claim 13~~claim 11, wherein the backing up, by the primary cluster (101, 1200, 1400) to the secondary cluster (102) based on the instruction, the plurality of data sets related to the first service that are in the primary cluster (101, 1200, 1400) and that are at the first moment specifically comprises:

obtaining, by the primary cluster (101, 1200, 1400) based on the information about the plurality of data sets related to the first service and the first moment, snapshots of the plurality of data sets related to the first service that are in the primary cluster (101, 1200, 1400) and that are at the first moment; and

sending, by the primary cluster (101, 1200, 1400), data corresponding to the snapshots to the secondary cluster (102) based on the snapshots.

~~15.~~ The method according to claim 13 or 14, wherein the method further comprises: synchronizing, by the primary cluster, user data to the secondary cluster.

~~16-13.~~ The method according to any one of claims 13 to 15claim 11 or 12, wherein the primary cluster (101, 1200, 1400) and/or the secondary cluster (102) comprise/comprises a cluster constructed based on a hadoop architecture.

~~17-14.~~ A data backup system (100, 300), wherein the data backup system (100, 300) comprises a control device (103, 104, 1100, 1300), a primary cluster (101, 1200, 1400), and a secondary cluster (102), wherein

the control device (103, 104, 1100, 1300) is configured to perform the method according to any one of the method ~~claims 1 to 12~~any one of claims 1 to 10;

the primary cluster (101, 1200, 1400) is configured to perform the method according to any one of the method ~~claims 13 to 16~~any one of claims 11 to 13; and

the secondary cluster (102) is configured to obtain and store a data set backed up from the primary cluster (101, 1200, 1400).

5 ~~18-15.~~ A control device (103, 104, 1100, 1300), wherein the computing device comprises a processor (1302, 1402) and a memory (1303, 1403), wherein

the processor (1302, 1402) is configured to execute instructions stored in the memory (1303, 1403), to enable the computing device to perform the method according to any one of ~~claims 1 to~~
~~12~~claims 1 to 10.