

WHAT IS CLAIMED IS:

1 1. A computer-implemented method for capturing a representation of a
2 data set, comprising:
3 under the control of one or more computer systems configured with executable
4 instructions,
5 receiving an instruction from a client device to capture the representation of the data
6 set at a point in time, the point in time based at least in part on a capture policy received from
7 the client device; and
8 responsive to at least the instruction to capture the representation of the data set:
9 instructing one or more applications to suspend at least acknowledgment of
10 completion of data operations, the data operations including manipulation of the data set that
11 is distributed among a plurality of partitions, each of the partitions being operated in
12 accordance with operation of a corresponding server of a plurality of servers, the one or more
13 applications being in communication with the servers for at least writing to the data set;
14 responsive to suspension by the applications of acknowledgment of
15 completion of the data operations, instructing the servers to capture corresponding portions of
16 the data set stored in corresponding partitions of the data set; and
17 at a time after instructing the servers to capture the corresponding portions of
18 the data set, instructing the one or more applications to resume at least acknowledgment of
19 completion of the data operations.

1 2. The computer-implemented method of claim 1, wherein requests to
2 perform the data operations originate on a computing device different from the one or more
3 applications.

1 3. The computer-implemented method of claim 1, wherein the plurality of
2 partitions are stored on a plurality of physical storage devices.

1 4. The computer-implemented method of claim 1, wherein instructing the
2 servers to capture corresponding portions of the data set includes inserting a token into
3 request streams to the servers.

1 5. The computer-implemented method of claim 1, further comprising
2 generating, independently of operation of a user application from which requests to perform

3 the data operations originate, an instruction to capture the data set and wherein instructing
4 one or more clients of a plurality of servers to suspend at least acknowledgment to the user
5 application of completion of data operations performed responsive to the instruction to
6 capture the data set.

1 6. The computer-implemented method of claim 1, wherein at least one of
2 the one or more storage interfaces is configured to cause completion of one or more data

3 operations while suspending acknowledgment of at least acknowledgement of performance of
4 data operations.

1 7. The computer-implemented method of claim 1, wherein instructing
2 one or more applications to suspend at least acknowledgment of completion of data
3 operations includes instructing the one or more applications to suspend issuing
4 acknowledgments of completions of write operations.

1 8. The computer-implemented method of claim 1, wherein instructing
2 one or more applications to suspend at least acknowledgment of completion of data
3 operations includes instructing the one or more applications to postpone issuance of write
4 requests.

1 9. A system operable to direct capture of a representation of a data set,
2 comprising:
3 one or more processors; and
4 memory including executable instructions that, when executed by the one or
5 more processors, cause the system to:
6 receive an instruction from a client device to capture the representation of
7 the data set at a point in time, the point in time based at least in part on a capture policy
8 received from the client device; and
9 responsive to at least the instruction to capture the representation of the data
10 set;

11 instruct one or more applications to suspend at least acknowledgment
12 of completion of data operations, the data operations including manipulation of ~~a~~the
13 data set that is distributed among a plurality of partitions, each of the partitions being
14 operated in accordance with operation of a corresponding server of a plurality of
15 servers, the one or more applications being in communication with the servers for at
16 least writing to the data set;
17 responsive to suspension by the applications of completion of the data
18 operations, instruct the servers to capture corresponding portions of the data set stored
19 in corresponding partitions of the data set; and

20 at a time after instructing the servers to capture the corresponding
21 portions of the data set, instruct the one or more applications to resume at least
22 acknowledgment of completion of the data operations.

1 10. The system of claim 9, wherein the plurality of partitions are stored on
2 a plurality of physical storage devices.

1 11. The system of claim 9, wherein instructing the servers to capture
2 corresponding portions of the data set includes inserting a token into request streams to the
3 servers.