

utilize the updated file system to access the scaled storage volume for subsequent file system input/output (I/O).

4. The system of claim 1, further comprising:

the storage client, configured to:

collect one or more performance metrics for the file system; and

send the one or more performance metrics to the control plane; and

wherein the detection of the scaling event is further based on the one or more performance metrics collected at the storage client.

5. The system of claim 1, wherein the block-based storage service is one of a plurality of network-based services implemented as part of a provider network, and wherein the storage client is implemented as part of one of the other network-based services in the provider network.

6. A method, comprising:

performing, by one or more computing devices:

maintaining a storage volume in storage implemented as part of a network-based data store for a storage client, wherein the storage volume is mounted at the storage client and configured for a file system;

detecting a scaling event for the storage volume according to a scaling policy specified for the storage volume;

in response to detecting the scaling event for the storage volume:

modifying the storage maintaining the storage volume to scale the storage volume for the storage client according to the scaling policy; and

indicating the scaling event for the storage volume to the storage client such that the file system at the storage client is updated to utilize the scaled storage volume in the modified storage.

7. The method of claim 6, wherein the specified scaling policy for the storage volume is received via an interface for the network-based data store from the storage client.

in response to detecting the scaling event, updating mapping information maintained at the network-based data store for servicing file system input/output (I/O) directed to the scaled storage volume according to the scaling event.

21. The non-transitory, computer-readable storage medium of claim 20, wherein the updating of the mapping information is performed such that the file system at the storage client is updated without performing defragmentation for the scaled storage volume.

22. The non-transitory, computer-readable storage medium of claim 15, wherein, in modifying the block-based storage maintaining the storage volume to scale the storage volume for the storage client, the program instructions further cause the one or more computing devices to implement:

performing one or more storage maintenance operations for the storage volume at the block-based storage maintaining the storage volume.

23. A method, comprising:

maintaining a file system using a storage volume, wherein the storage volume is implemented at a network-based data store that is configured to scale the storage volume;

receiving an indication of a scaling event for the storage volume that grows the storage volume;

updating the file system to include additional storage capacity for the storage volume according to the scaling event; and

utilizing the updated file system to access the storage volume for subsequent file system input/output (I/O).

24. A system, comprising:

a storage client implemented by one or more processors and associated memory, configured to:

maintain a file system on a storage volume mounted at the storage client, wherein the storage volume is implemented at a network-based data store that is configured to scale the storage volume;