

WHAT IS CLAIMED IS

1. A method, comprising:

computing a first score corresponding to a full stride destage, a second score corresponding to a strip destage, and a third score corresponding to an individual track destage, wherein the first score, the second score, and the third score are computed for a group of Input/Output (I/O) operations based on a first metric and a second metric, wherein the first metric is configured to affect a performance of data transfers, and wherein the second metric is configured to affect a drive life; and

determining which type of destage to perform based on the first score, the second score, and the third score.

2. The method of claim 1, wherein the first metric that is configured to affect the performance of data transfers includes I/O operations and bandwidth on a rank, non-volatile storage (NVS) capacity, parity lock contention, holes, and unmodified data in a stride.

3. The method of claim 2, wherein the second metric that is configured to affect the drive life includes a wear level of a drive, writes per day classification of the drive, and an amount of modified data in the stride.

4. The method of claim 3, the method further comprising:

in response to determining that the first score is a highest score among the first score, the second score and the third score, performing the full stride destage.

5. The method of claim 3, the method further comprising:

in response to determining that the second score is a highest score among the first score, the second score and the third score, performing the strip destage.

6. The method of claim 3, the method further comprising:

in response to determining that the third score is a highest score among the first score, the second score and the third score, performing the individual track destage.

7. The method of claim 1, the method further comprising:

reading from a configuration data structure, a first weightage for the first metric, and a second weightage for the second metric; and

computing the first score, the second score, and the third score based on the first weightage being provided to first subscores that are computed based on the first metric, and on the second weightage being provided to second subscores that are computed based on the second metric.

8. A system, comprising:

a memory; and

a processor coupled to the memory, wherein the processor performs operations, the operations performed by the processor comprising:

computing a first score corresponding to a full stride destage, a second score corresponding to a strip destage, and a third score corresponding to an individual track destage, wherein the first score, the second score, and the third score are computed for a group of Input/Output (I/O) operations based on a first metric and a second metric, wherein the first metric is configured to affect a performance of data transfers, and wherein the second metric is configured to affect a drive life; and

determining which type of destage to perform based on the first score, the second score, and the third score.

9. The system of claim 8, wherein the first metric that is configured to affect the performance of data transfers includes I/O operations and bandwidth on a rank, non-volatile storage (NVS) capacity, parity lock contention, holes, and unmodified data in a stride.

10. The system of claim 9, wherein the second metric that is configured to affect the drive life includes a wear level of a drive, writes per day classification of the drive, and an amount of modified data in the stride.

11. The system of claim 10, the operations further comprising:

in response to determining that the first score is a highest score among the first score, the second score and the third score, performing the full stride destage.

12. The system of claim 10, the operations further comprising:

in response to determining that the second score is a highest score among the first score, the second score and the third score, performing the strip destage.

13. The system of claim 10, the operations further comprising:

in response to determining that the third score is a highest score among the first score, the second score and the third score, performing the individual track destage.

14. The system of claim 8, the operations further comprising:

reading from a configuration data structure, a first weightage for the first metric, and a second weightage for the second metric; and

computing the first score, the second score, and the third score based on the first weightage being provided to first subscores that are computed based on the first metric, and on the second weightage being provided to second subscores that are computed based on the second metric.

15. A computer program product, the computer program product comprising a computer readable storage medium having computer readable program code embodied therewith, the computer readable program code configured to perform operations, the operations comprising:

computing a first score corresponding to a full stride destage, a second score corresponding to a strip destage, and a third score corresponding to an individual track destage, wherein the first score, the second score, and the third score are computed for a group of Input/Output (I/O) operations based on a first metric and a second metric, wherein the first metric is configured to affect a performance of data transfers, and wherein the second metric is configured to affect a drive life; and

determining which type of destage to perform based on the first score, the second score, and the third score.

16. The computer program product of claim 15, wherein the first metric that is configured to affect the performance of data transfers includes I/O operations and bandwidth on a rank, non-volatile storage (NVS) capacity, parity lock contention, holes, and unmodified data in a stride.

17. The computer program product of claim 16, wherein the second metric that is configured to affect the drive life includes a wear level of a drive, writes per day classification of the drive, and an amount of modified data in the stride.

18. The computer program product of claim 17, the operations further comprising:

in response to determining that the first score is a highest score among the first score, the second score and the third score, performing the full stride destage.

19. The computer program product of claim 17, the operations further comprising:

in response to determining that the second score is a highest score among the first score, the second score and the third score, performing the strip destage.

20. The computer program product of claim 17, the operations further comprising:

in response to determining that the third score is a highest score among the first score, the second score and the third score, performing the individual track destage.