WHAT IS CLAIMED IS:

1. A computer-implemented method for performing a host-initiated link reset in a storage area network (SAN), the method comprising;

identifying, by a host in communication with the SAN, each link in the SAN, wherein each link is defined by a pair of ports;

obtaining, by the host, a buffer credit balance for each port in the SAN;

calculating, by the host, a buffer credit imbalance for each link in the SAN; and

based on a determination that the buffer credit imbalance for a link exceeds a threshold value, causing a reset of the link, wherein the threshold value is a predetermined percentage and the buffer credit imbalance is calculated by dividing a larger buffer credit balance of the pair of ports of the link by a smaller buffer credit balance of the pair of ports of the link and subtracting one.

2. The computer-implemented method of claim 1, wherein obtaining the buffer credit balance for each port in the SAN is performed on a periodic basis.

3. The computer-implemented method of claim 2, wherein a frequency of the periodic basis is configurable by a user of the host.

4. The computer-implemented method of claim 1, wherein the determination that the buffer credit imbalance for the link exceeds the threshold value comprises determining that a difference between the buffer credit balance for each port of the pair of ports is greater than a predetermined number.

5. The computer-implemented method of claim 1, wherein the threshold value is configurable by a user of the host.

6. The computer-implemented method of claim 1, further comprising:

based on the determination that the buffer credit imbalance for the link exceeds the threshold value and that at least one of the pair of ports for the link is a channel port, issuing, by the host, a command to the channel port to reset the link.

7. The computer-implemented method of claim 1, further comprising:

based on the determination that the buffer credit imbalance for the link exceeds the threshold value and that neither of the pair of ports is a channel port, instructing a network device in the SAN associated with the link to perform a reset of the link.

8. A storage area network (SAN) comprising:

one or more network devices;

a plurality of end devices each coupled to at least one of the one or more network devices, wherein one of the plurality of end devices is a host device that is configured to:

identify each link in the SAN, wherein each link is defined by a pair of ports;

obtain a buffer credit balance for each port in the SAN;

calculate a buffer credit imbalance for each link in the SAN; and

based on a determination that the buffer credit imbalance for a link exceeds a threshold value, cause a reset of the link, wherein the threshold value is a predetermined percentage and the buffer credit imbalance is calculated by dividing a larger buffer credit balance of the pair of ports of the link by a smaller buffer credit balance of the pair of ports of the link and subtracting one.

9. The SAN of claim 8, wherein obtaining the buffer credit balance for each port in the SAN is performed on a periodic basis.

10. The SAN of claim 9, wherein a frequency of the periodic basis is configurable by a user of the host.

11. The SAN of claim 8, wherein the determination that the buffer credit imbalance for the link exceeds the threshold value comprises determining that a difference between the buffer credit balance for each port of the pair of ports is greater than a predetermined number.

12. The SAN of claim 8, wherein the threshold value is configurable by a user of the host.

13. The SAN of claim 8, wherein the host device that is further configured to:
based on the determination that the buffer credit imbalance for the link exceeds the threshold value and that at least one of the pair of ports for the link is a channel port, issue, by the host, a command to the channel port to reset the link.

14. The SAN of claim 8, wherein the host device that is further configured to:
based on the determination that the buffer credit imbalance for the link exceeds the threshold value and that neither of the pair of ports is a channel port, instruct a network device in the SAN associated with the link to perform a reset of the link.

15. A computer program product for performing a host-initiated link reset in a storage area network (SAN), the computer program product comprising:

a computer-readable storage medium having program instructions embodied therewith, the program instructions readable by a processor to cause the processor to:

identify, by a host in communication with the SAN, each link in the SAN, wherein each link is defined by a pair of ports;

obtain, by the host, a buffer credit balance for each port in the SAN;

calculate, by the host, a buffer credit imbalance for each link in the SAN; and

based on a determination that the buffer credit imbalance for a link exceeds a threshold value, causing a reset of the link, wherein the threshold value is a predetermined percentage and the buffer credit imbalance is calculated by dividing a larger buffer credit balance of the pair of ports of the link by a smaller buffer credit balance of the pair of ports of the link and subtracting one.

16. The computer program product of claim 15, wherein obtaining the buffer credit balance for each port in the SAN is performed on a periodic basis.

17. The computer program product of claim 16, wherein a frequency of the periodic basis is configurable by a user of the host.

18. The computer program product of claim 15, wherein the determination that the buffer credit imbalance for the link exceeds the threshold value comprises determining that a difference between the buffer credit balance for each port of the pair of ports is greater than a predetermined number.