

The graph illustrates the scalability of different replication schemes as the reliability threshold increases. The x-axis, 'Reliability Threshold', ranges from 0.9 to 0.999999999. The y-axis, 'Number of Nodes', ranges from 0 to 100. The legend identifies the following schemes:

- D-rx (Blue line with circles)
- Min_Storage (Orange line with squares)
- Greedy_Load_Balancing (Green line with diamonds)
- hdfs_3_replications (Red line with triangles)
- HDFS_RS(3,2) (Purple line with inverted triangles)
- HDFS_RS(6,3) (Brown line with right-pointing triangles)
- HDFS_RS(4,2) (Pink line with left-pointing triangles)
- HDFS_RS_ADAPTATIVE (Grey line with squares)
- GlusterFS (Yellow line with diamonds)
- GlusterFS_ADAPTATIVE (Cyan line with stars)
- DAOS_1R (Blue line with crosses)
- DAOS_2R (Orange line with crosses)

Key observations from the graph:

- DAOS_2R** (Orange line with crosses) consistently requires the fewest nodes, starting at approximately 10 nodes for a threshold of 0.9 and remaining constant until the threshold reaches 0.999999999, where it drops to 0.
- DAOS_1R** (Blue line with crosses) and **GlusterFS_ADAPTATIVE** (Cyan line with stars) show a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.
- hdfs_3_replications** (Red line with triangles) shows a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.
- Greedy_Load_Balancing** (Green line with diamonds) and **Min_Storage** (Orange line with squares) show a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.
- HDFS_RS(3,2)** (Purple line with inverted triangles) shows a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.
- HDFS_RS(6,3)** (Brown line with right-pointing triangles) and **HDFS_RS(4,2)** (Pink line with left-pointing triangles) show a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.
- HDFS_RS_ADAPTATIVE** (Grey line with squares) and **GlusterFS** (Yellow line with diamonds) show a sharp increase in the number of nodes required as the threshold approaches 1.0, reaching approximately 100 nodes at the final threshold value.

