Lewis Joseph Feik
Computer Hardware & OP Systems
Reflection Week 3

Which RAID level best fits a small office file server and why?

For a small office file server that values both performance and reliability without breaking the bank, **RAID 10** (RAID 1+0) emerges as the top choice. By combining mirroring (RAID 1) with striping (RAID 0), RAID 10 delivers excellent read and write speeds while safeguarding data and offering superior tolerance, fast rebuild times, and the ability to tolerate multiple drive failures (so long as both drives in a mirrored pair don't fail simultaneously.)

Although **RAID 5** (striping with distributed parity) historically offered a compelling balance of cost efficiency and redundancy requiring fewer drives and offering more usable capacity per dollar it has become less ideal for modern small office use. The longer rebuild times and increased risk of data loss during rebuilds, especially with today's large capacity drives, have made RAID 5 significantly less reliable.

Works Cited

"Do Small Business Servers Need RAID 5?" *Crucial Blog*, 2025,. [Kraft Business Systems](#)

"The Best RAID Configuration for Enterprise: RAID 10 vs. RAID 5." *StellarInfo*, May 29 2025,. [Stellar Data Recovery India](#)

"RAID 5, RAID 6, and RAID 10 – Key Differences and Performance Comparison." *DiskInternals*, 2025, [DiskInternals](#)

"How to Choose Between RAID 5 vs. RAID 10." *Petri IT Knowledgebase*, Jan. 16 2023, [Petri IT Knowledgebase](#)