SOLUTION BRIEF

Microsoft Exchange Server and Pure

Reduce costs while increasing availability and data protection.

Communications are the lifeblood of any enterprise. But when the underlying infrastructure supporting the data for communications lags or is unavailable, business slows down. Pure Storage® helps you keep employee productivity at the highest levels and reduce the total cost of ownership (TCO) with data-management solutions for Microsoft Exchange Server. These solutions deliver quick response times, simplify management, and help to reduce licenses while offering high levels of availability for all user data.

Rethink Licensing

Microsoft licenses two versions of Exchange Server: Standard is limited to 5 databases and Enterprise is limited to 100. You need both server and client access licenses (CALs) for both the operating system and server.

Larger databases, with more users per server, and larger physical or virtual Exchange Servers can reduce licensing costs. Exchange Server 2019 has increased the hardware maximums to 48 processor cores and 256GB of RAM, allowing for scale-up and increase in savings. Most Exchange data is in the database itself or the EDB file.

Pure's Purity operating system invokes many levels of data reduction, is always on, and requires no configuration. This increases storage while also eliminating I/O bottlenecks, significantly reducing latency as tested by Pure to 1ms and below. Depending on your data-protection architecture, the number of storage objects you need to manage can be as small as one global datastore or cluster shared volume, or just a handful of volumes to manage per Exchange Server.

By reducing complexity, amplifying performance, and seamlessly integrating with Microsoft tools, Pure solutions empower Exchange administrators to reduce the costs of planning and management while increasing availability.

Consolidate Licenses

Take advantage of increased limits in Exchange Server 2019 and embedded data reduction to minimize capacity needs and reduce TCO by up to 60%.

Data Protection

Meet SLAs with proven six-nines uptime, non-disruptive upgrades, and easy integration of Pure clones.

Disaster Risk Reduction

Reduce risks with multiple copies of the same database on the same FlashArray™ device. The average data reduction in Data Availability Group environments on Pure is found to be 3 to 1.

Rethink Data Protection

Data protection, and not performance, is the primary factor to consider when architecting storage for Exchange. While fewer storage objects are preferred, you need to weigh whether restoring a database LUN directly to the original location is required, or if exposing and copying files that leverage offloaded data transfer (ODX) is fast enough. Best practices advise you to place copies of the same databases on separate volumes to avoid a single point of failure. Pure clones enable you to rapidly seed databases. You can place several databases so that the total size on the LUN meets SLAs and ensures you can restore from a backup repository.

Rethink Data Movement

Flash offers orders of magnitude more performance in restoration speed than legacy systems. Many organizations are moving backup repositories to Pure FlashBlade™ for tremendous restore performance measured in minutes, not hours or days.

Rethink Migrations

Storage migration can be difficult when the source and target storage array is not a Pure Storage FlashArray. Limiting downtime and reducing end-to-end time to completion are two common goals. Taking a database or a database copy offline, copying the files, and then swapping the mount points is prone to error, and takes the most administrative time. Recommended methods with which Pure customers have reported the most success include:

- Move mailbox
- Hypervisor storage migration
- Additional database copies

With mailbox moves, you can create new databases on the new storage and move users to these new databases. This method has the smallest administrative impact, but it can be time-consuming and add to network traffic. For hypervisor storage migrations, you can use either VMware Storage vMotion or Microsoft Storage Live Migration without impacting availability. The third method involves adding copies for each database and placing them on the new storage. Exchange seeds the databases, which you can clone until the correct number of copies exist on the new storage. This also lets you remove copies that exist on the legacy storage. You can also consolidate multiple enterprise IT workloads into FlashArray without compromising performance and resiliency. In most cases, you can co-locate Microsoft Exchange with other applications on FlashArray. The average data reduction from such environments is found to be 4 to 1.

Additional Resources

- Pure Storage Best Practices for Microsoft Exchange
- VMware Best Practices for Microsoft Exchange

PS1143-01 05/2020