# NETGEAR Sales Bulletin

**NETGEAR®**

## ReadyDATA DOs and DON'Ts per Use Case with Recommended SKUs

**Situation:** As use cases for ReadyDATA vary, it is important to clarify best practices for end users and resellers at an early stage in the sales cycle. This Bulletin helps customers avoid mistakes when purchasing and configuring ReadyDATA for common use cases.

## Disk-to-Disk Backup

- Choose NAS protocols (NFS, SMB) instead of iSCSI.
- If the solution is going to include replicating backups offsite, use deduplication provided by the backup software vendor over ReadyDATA dedupe. This will assist ReadyDATA Replicate to be more efficient.
- Only enable dedupe on one component in the solution. (ex: 3rd party Software or ReadyDATA)
- RAID 5 and RAID 6 are ideal (6/12 drive RAID groups within the volume)
- SATA disk is ideal capacity vs performance
- Only enable deduplication when read cache SSDs are installed.
- When replicating, make sure the networking gateway is correct.
- When replicating over a WAN, use scheduled replication and enable compression.
- When Replicating over LAN, disable traffic compression and dedupe .

### Recommended SKUs

**Best Value:**
- ReadyDATA Chassis: RD5200-100WWS
- 3TB 7,200RPM SATA Drives: RD5D1LT03-100WWS or RD5D6LT03-100WWS
- 200GB Read Cache SSD: RD5D1SM02-100WWS (when deduplication will be used)
- OnCall 24x7 Support:: PMB0334-10000S or PMB0354-10000S
- Remote Installation: PSB0304-10000S

## File Serving

- Choose NAS protocols (NFS, SMB) instead of iSCSI.
- Dedupe works well on unstructured file data (ex: spreadsheets, documents, etc).
- Enable "Snapshot Access" to allow users to retrieve old versions of their data (Self Service Recovery).
- RAID 5 and RAID 6 are ideal (6/12 drive RAID groups within the volume).
- SATA disk is ideal capacity vs performance.
- Don't enable deduplication when read cache SSDs are not installed.
- When replicating, make sure the networking gateway is correct.
- When replicating over a WAN, use scheduled replication and enable compression.
- When Replicating over LAN, disable traffic compression and dedupe .

### Recommended SKUs

**Best Value:**
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- 200GB Read Cache SSD: RD5D1SM02-100WWS (when deduplication will be used)
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# Storage in a pure iSCSI solution (Application Data)

- Never enable deduplication on active data such as Databases, Exchange Servers or Business applications.
- Match block size of LUN with formatted filesystem (use 8K blocks/allocation unit size).
- Dedupe is not recommended in a pure iSCSI solution as storage gains are not realized inside LUNs and performance overhead is large.
- Consider using RAID 5+0, 6+0 and instead of RAID 5 and RAID 6.
- 100% SAS or Hybrid configurations (NL-SAS/SATA+SSD) are ideal.
- RAID10 is always the best performance for application databases.
- When replicating, make sure the networking gateway is correct.
- When replicating over a WAN, use scheduled replication and enable compression.
- When Replicating over LAN, disable traffic compression and dedupe.

## Recommended SKUs

### Best Performance:
- ReadyDATA Chassis: RD5200-100WWS
- 600GB 15,000RPM SAS Drives: RD5D1LS03-100WWS
- OnCall 24x7 Support:: PMB0334-10000S or PMB0354-10000S
- Onsite Installation: PSP1104-10000S

### Good Performance:
- ReadyDATA Chassis: RD5200-100WWS
- 3TB 7,200RPM NL-SAS or SATA Drives: RD5D1LN03-100WWS or RD5D1LT03-100WWS
- 50GB Write Cache SSD: RD5D1SC01-100WWS
- 200GB Read Cache SSD: RD5D1SM02-100WWS
- OnCall 24x7 Support:: PMB0334-10000S or PMB0354-10000S
- Onsite Installation: PSP1104-10000S

# Storage for Server Virtualization

- Never enable deduplication for VM datastores.
- In the case of VMware and XenServer, use NFS as the storage protocol rather than iSCSI. This will provide simplicity and snapshot efficiencies.
- In the case of VMware vSphere, make sure VAAI is disabled on the VMware servers.
- Consider using RAID 5+0, 6+0 and instead of RAID 5 and RAID 6.
- 100% SAS or Hybrid configurations (NL-SAS/SATA+SSD) are ideal.
- RAID10 is always the best performance in VM solutions.
- When replicating, make sure the networking gateway is correct.
- When replicating over a WAN, use scheduled replication and enable compression.
- When Replicating over LAN, disable traffic compression and dedupe.

## Recommended SKUs

### Best Performance:
- ReadyDATA Chassis: RD5200-100WWS
- 600GB 15,000RPM SAS Drives: RD5D1LS03-100WWS
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