- ► The DS8880 provides a graphical management interface to configure the DS8880, query status information, and monitor the performance of the DS8880. To reach the Service Management GUI, a link is provided. Additionally, many service functions which before were only reachable in the Service Management GUI can now also be accessed from the Storage management GUI (DSGUI).

- ► Easy Tier is a no-charge feature that enables automatic dynamic data relocation capabilities. Easy Tier optimizes the usage of each tier, especially the use of flash storage. No manual tuning is required. The auto-balancing algorithms also provide benefits when homogeneous storage pools are used to eliminate hot spots on disk arrays.

- ► Large volume support that allows DS8880 to support logical unit number (LUN) sizes up to 16 TB. This configuration simplifies storage management tasks. In a z/OS environment, extended address volumes (EAVs) with sizes up to 1 TB are supported.

- ► The DS8880 has an Active Volume Protection feature that prevents the deletion of volumes that are still in use.

- ► The American National Standards Institute (ANSI) T10 Data Integrity Field (DIF, Protection Information) standard is supported for Small Computer System Interface (SCSI) end-to-end data protection on fixed-block architecture (FB) LUN volumes, for operating systems which can make use of this function. This support applies to the IBM DS8000.

- ► The Dynamic Volume Expansion simplifies management by enabling easier, online volume expansion (for open systems and IBM Z) to support application data growth, and to support data center migration and consolidation to larger volumes to ease addressing constraints.

- ► Thin provisioning allows the creation of over-provisioned devices for more efficient usage of the storage capacity for open systems. Extent space-efficient volumes are also supported with small extents. For more information, see *IBM DS8880 Thin Provisioning (Updated for Release 8.5)*, REDP-5343.

- ► Quick Initialization provides fast volume initialization for open system LUNs and count key data (CKD) volumes. Quick Initialization allows the creation of devices, making them available when the command completes.

- ► Full disk encryption (FDE), also known as data-at-rest encryption can protect business-sensitive data by providing disk-based hardware encryption that is combined with external key management software (IBM Security Key Lifecycle Manager or Gemalto SafeNet KeySecure). FDE is available for all rotational disks and flash drives types. Because encryption is performed by the disk drive, it is transparent to host systems and it can be used in any environment, including z/OS.

- ► The DS8880 enables clients to comply with the Special Publication (SP) number 800-131a. This is a National Institute of Standards and Technology (NIST) directive that provides guidance for protecting sensitive data by using cryptographic algorithms that have key strengths of 112 bits.

- ► Data Security Standard (PCI DSS) is a feature of the encryption key management process help address payment industry requirements.

- ► The DS8000 series is certified as meeting the requirements of the IPv6 Ready Logo program. This certification indicates its implementation of IPv6 mandatory core protocols and the ability to interoperate with other IPv6 implementations. The IBM DS8000 can be configured in native IPv6 environments. The logo program provides conformance and interoperability test specifications that are based on open standards to support IPv6 deployment globally. Furthermore, the NIST tested IPv6 with the DS8000, granting it support for the USGv6 profile and testing program.

- ► Lightweight Directory Access Protocol (LDAP) authentication support, which allows single sign-on (SSO), can simplify user management by allowing the DS8000 to rely on a