11.1 Introduction to the HMC and SE

The HMC is a stand-alone computer that runs a set of management applications. The HMC is a closed system, which means that no other applications can be installed on it.

The HMC is used to set up, manage, monitor, and operate one or more CPCs. It manages IBM Z hardware, its logical partitions (LPARs), and provides support applications. At least one HMC is required to operate an IBM Z. An HMC can manage multiple Z CPCs, and can be at a local or a remote site.

The SEs are two integrated servers in the z14 ZR1 frame. One SE is the primary SE (active) and the other is the alternative SE (backup). As with the HMCs, the SEs are closed systems, and no other applications can be installed on them.

When tasks are performed at the HMC, the commands are routed to the active SE of the z14 ZR1. The SE then issues those commands to their CPC. One HMC can control up to 100 SEs and one SE can be controlled by up to 32 HMCs.

Some functions are available only on the SE. With Single Object Operations (SOOs), these functions can be used from the HMC. For more information, see "Single Object Operations" on page 376.

With Driver 27 (Version 2.13.1), the IBM Dynamic Partition Manager (DPM) was introduced for CPCs that are running Linux only with Fibre Channel Protocol (FCP) attached storage. HMC Driver 32 (Version 2.14.0) with MCLs added support for ECKD FICON disks to the DPM (Release 3.1). HMC 2.14.1 includes DPM 3.2, with enhanced storage management capabilities. DPM is a mode of operation that enables customers with little or no knowledge of IBM Z technology to set up the system efficiently and with ease.

For more information, see IBM Knowledge Center. At IBM Knowledge Center, click the search engine window and enter DPM.

The HMC Remote Support Facility (RSF) provides an important communication to a centralized IBM support network for hardware problem reporting and service. For more information, see 11.4, "Remote Support Facility" on page 374.

11.2 HMC and SE changes and new features

The initial release that is included with z14 ZR1 is HMC application Version 2.14.0. Use the "What's New" task to examine the new features that are available for each release. For more information about HMC and SE functions, use the HMC and SE (Version 2.14.0) console help system or see IBM Knowledge Center.

At IBM Knowledge Center, search for "z14 HMC".

11.2.1 Driver Level 36 HMC and SE new features

The following support has been added with Driver 36:

► Dynamic I/O for Standalone CF CPCs (requires z/OS or z/VM support)

► CTN Split and CTN merge

► Coupling Facility Control Code 23 (enhancements and new features)