Sysplex Failure Manager (SFM)

Overview and Requirements of SFM Policy

An SFM policy includes the following statements:
* Policy statement
* System statement(s)
* Reconfiguration statement(s)SFM allows you to define responses for:
  - Signaling connectivity failures in the sysplex
  - System failures, indicated by a status update missing condition
  - Reconfiguring systems in a PR/SM environment
  - Signaling sympathy sickness

If the sysplex includes a coupling facility, the full range of failure management capabilities that SFM offers is available to the sysplex. For SFM to handle signaling connectivity failures without operator intervention or to isolate a failing system, a coupling facility must be configured in the sysplex.

Requirements for Using the SFM Policy

For a sysplex to take advantage of an SFM policy, the policy must be active on all systems in the sysplex.

That is:

* All systems must be running z/OS.
* An SFM policy must be started in the SFM couple data set.
* All systems must have connectivity to the SFM couple data set.

If any system loses access to the SFM couple data set, the policy becomes inactive in the sysplex. If that system regains access to the SFM couple data set, SFM automatically becomes active again in the sysplex.

The Sysplex Failure Manager (SFM) allowing customers to reset and reconfigure one or more logical LPARs related to their storage. SFM allows workload redistribution from the failed primary system to the backup system without operator intervention

To allow an LPAR to initiate these functions, a customer uses the Support Element's (SE) or HMC's **Customize/Delete Activation Profile** task to open a reset-profile to authorize an LPAR to issue instructions to other LPARs. The Cross partition authority check box is located on the SE's Security page for the LPAR. The following functions exist for SFM:

* **Cross Partition System Reset**. This function causes a specified LPAR to be reset. The reset is accomplished via the RESETTIME(nnn) keyword in the SYSTEM statement of the z/OS SFM policy.
* **Cross Partition Deactivation**. This function causes a specified LPAR to be deactivated. The deactivation is accomplished via the DEACTTIME(nnn) keyword in the SYSTEM statement of the SFM policy, and also, the RECONFIG statement in the SFM policy with a specific TARGETSYS(sysname) specified.
* **Cross Partition Nonspecific Deactivation** . This function causes all logical partitions which are currently using any portion of the reconfigurable central or expanded storage of the issuing partition to be deactivated. The issuing partition is not deactivated. The nonspecific deactivation is accomplished via the RECONFIG statement in the SFM policy with a non-specific TARGETSYS(ALL) issued.

The Automatic Reconfiguration Facility (ARF) function is a hardware/LPARAR function that is part of the cross-partition authority control setting. ARF functions are used by SFM policy functions within z/OS, when RESETTIME, DEACTTIME, or the RECONFIG statement is coded in the SFM policy.