Features of a Sysplex

A "sysplex" comprises hardware components and software services that allow OS/390 and z/OS systems to communicate and cooperate with each other to process a user's work. For certain kinds of work, the sysplex provides parallel processing and improved data sharing. It also provides a way to remove a single point of failure in the data processing (DP) enterprise.

High-speed caching, list processing, and locking functions are provided by the sysplex coupling facility, which allows up to 32 system images to communicate shared data. The coupling facility resides in a special logical partition where storage is divided into objects called "structures". Structure types are cache, list, and lock. Adabas Cluster Services implements lock and cache services using the sysplex cross-system extended services (XES).

The coupling facility resource management *(CFRM)* "policy" is used to manage coupling facility storage. It contains information about each coupling facility structure to be used. Once created, the policy resides in the CFRM COUPLExx datasets.

Once defined in the CFRM policy, coupling facility structures are allocated by the first cluster nucleus that starts. Defined and allocated structures can be viewed using the system activity monitor. The structures are not persistent; that is, they disappear when the last active nucleus terminates, either normally or abnormally. No cleanup is required.

OS/390 and z/OS systems are directly connected to the coupling facility through high-bandwidth, high-speed channels that can be a kilometer in length in some cases. These channels provide a fast and efficient means for systems in the sysplex to access data in the coupling facility. Using the sysplex cross-system coupling facility (XCF) services, Adabas Cluster Services implements group and signaling services.

The chapter covers the following topics:

- Sysplex References

Sysplex References

For additional information about the sysplex environment, refer to the IBM documentation

- Parallel Sysplex Overview: Introducing Data Sharing and Parallelism in a Sysplex

- MVS Programming: Sysplex Services Guide

- MVS Programming: Sysplex Services Reference

- MVS Setting Up a Sysplex