

Couple Data Sets

Best Practices and Avoiding Disasters

Couple Data Sets (CDSes) are the cornerstone of sysplex. Careful planning is required to ensure CDSes are always available, never corrupted and never misused such that they trigger a high-impact failure scenario.

This paper contains a list of the best practices for CDSes. The paper also notes known field reported issues associated with CDSes. For greater detail on the best practices and known field reported issues please see “Couple Data Sets Best Practices and Avoiding Disasters” white paper [WP102281](#).

Best Practice Reminders

- Run with an active primary and alternate
- Have a spare CDS formatted and ready to bring into immediate active use
- The alternate must be at least as large as the primary
- Avoid drastically oversizing CDSes
- Ensure primary CDS and alternate CDS are failure isolated
- It is acceptable to place CDSes on the same volumes
 - Exception, place the primary SYSPLEX CDS on a different volume than the primary CFRM

CDS

- Avoid placing “other” data sets on volumes with CDS
- Avoid placing CDSes on volumes subject to RESERVEs
- A given primary / alternate CDS pair can only be used by a set of systems in the same sysplex.
- Always update COUPLExx to current CDSes after an ACOUPLE or PSWITCH

Avoiding Disasters

Mismanagement of CDSes or the volumes on which they reside may result in extreme impact to the end users, loss of functionality of the CDS or a sysplex outage.

- I/O delays may be caused by other activity to the CDS volumes, DASD microcode updates, or synchronous mirroring, and may result in sysplex-wide performance degradation or loss of a CDS.
- Incorrect execution of data migration activities affecting CDSes can result in data corruption requiring a sysplex-wide IPL for recovery.
- Using copies of production CDSes at a disaster recovery (DR) site creates opportunities for serious and potentially catastrophic error. For example:
 - Inadvertent reinitialization of the production sysplex.
 - Takeover of a production function CDS by the DR sysplex.
 - Takeover of production coupling facilities (CFs) by the DR Sysplex.
 - Inability to deallocate CF structures.
 - Failure to start a CFRM policy on IPL, and resulting WAIT0A3.

Recommended Action: It is highly recommended that all system programmers and DASD administrators review “Couple Data Sets Best Practices and Avoiding Disasters white paper [WP102281](#).” Enterprise processes should be updated to ensure disasters are successful averted.

Geographically Dispersed Parallel Sysplex (GDPS) Environments: Please refer to GDPS documentation for further CDS guidance and recommendations.

