

Natural in CICS MRO Environments

This part of the Natural CICS Interface documentation describes the functionality of Natural in CICS Multi-Region (MRO) Environments.

It covers the following topics:

- NCIPARM Parameter COMARET Set to YES
- NCIPARM Parameter COMARET Set to NO

References to CICS Tables

Where appropriate, any references to CICS tables (DCT, FCT, PCT, PPT, TCT, etc.) can be considered as references to the corresponding:

- assembly-type resource definitions,
- online resource definitions via CEDA,
- batch resource definitions via DFHCSDUP.

Special considerations apply when running Natural in a CICS multi-region (MRO) environment.

This chapter covers the following topics:

- NCIPARM Parameter COMARET Set to YES
 - NCIPARM Parameter COMARET Set to NO
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NCIPARM Parameter COMARET Set to YES

When the NCIPARM parameter COMARET is set to YES, Natural session data are kept in two different CICS regions:

- The session restart information is kept in the COMMAREA linked to the terminal entry in the CICS terminal owning region (TOR).
- The actual session data are kept in the CICS application owning region (AOR); that is, the thread, swap pool, or roll facility.

This may lead to inconsistencies when, for example, the AOR is restarted, but the TOR still contains old "pending" Natural sessions; resuming such a session results in a corresponding error message.

NCIPARM Parameter COMARET Set to NO

When COMARET is set to NO, all Natural session data are kept in the AOR, thus preventing the inconsistencies mentioned above.

However, there may be a security concern when a terminal is removed from the TOR (either back to VTAM or by switching the session manager or power off), and another terminal dialing to this TOR receives the ID of the removed terminal and enters the Natural transaction code: then this terminal resumes the session of the previously removed terminal because of the restart information in the AOR's temporary storage, which contains the terminal ID as part of the queue name.

To prevent such a situation, a node error program (NEP) can be installed (see *Node Error Program Considerations for Natural* and *Natural CICS Sample Programs*), which terminates a Natural session when the associated terminal is removed.