XRef Considerations

All cross-reference (XRef) data stored in the Predict system file for a cataloged programming object (not applicable to DDMs) can be processed with SYSMAIN.

The Predict system file is determined by the value assigned to the profile parameter `FDIC` (see *FDIC - Predict System File* in the *Parameter Reference* documentation) in the parameter file or at the start of the Natural session.

You can override the current FDIC settings for the duration of the current SYSMAIN function by replacing the values in the **XREF** window (database ID and file number `0` denote the current FDIC) or by specifying the `DIC` keyword in the *where-clause* of a command.

The **XREF** field in an object-specification window or the `XREF` keyword in a command indicates whether SYSMAIN should process XRef data.

If Predict has not been installed, enter `N` in the **XREF** field (or specify `XREF=N`) to not process XRef data in Predict files. This is the default setting.

The section below covers the following topics:

- XREF set to N

- XREF set to Y

- FDIC File Security

- XRef Processing Errors

XREF set to N

No XRef data is processed if the **XREF** field contains an `N` (or `XREF=N`).

However, regardless of what setting you choose, XRef data is always deleted when a programming object is deleted.

XREF set to Y

XRef data is processed if `Y` is entered in the **XREF** field (or `XREF=Y`).

If XRef data is to be processed, the following actions are applied during SYSMAIN processing:

- SYSMAIN checks whether XRef data exists in the Predict source system file for the specified programming object.

- If a programming object is to be deleted from the target environment, XRef data is deleted from the Predict target system file.

- If a programming object is copied to a new environment, the XRef data of the programming object is copied from the Predict source system file to the Predict target system file. The library name is changed accordingly and, in the case of the rename function, the object name is also changed.

- If the move function is executed, the XRef data of the programming object is deleted from the Predict source system file.

FDIC File Security

If file security has been defined for the FDIC system file, you need to specify a password and a cipher code for the required source and/or target system file before you perform a SYSMAIN function. Otherwise, an appropriate error message appears. You do not have to provide security information for the default system files assigned to you at the start of the SYSMAIN utility.

XRef Processing Errors

If any of the following inconsistencies occur during SYSMAIN processing of XRef data, all processing for the object or function is terminated and an error message is displayed:

- The value of the XREF option in Natural Security is set to `Y` and the **XREF** field contains an `N` (or `XREF=N`).

- The **XREF** field contains a `Y` (or `XREF=Y`) and the FDIC file(s) being used are not valid Predict files.