

# Natural under IMS TM - User Exits

This chapter contains an overview of the user exits that are available with the Natural IMS TM Interface. For each exit, a source module with the same name is provided. Each source module contains a description of the parameter list and of the register conventions.

- NIIXACCT
  - NIIXSTAR
  - NIIXMSSP
  - NIIXSSTA
  - NIIXISRM
  - NIIXISRT
  - NIIXTGU0
  - NIIXJESA
  - NIIXPRT0
  - NIIXRFNU
  - NIIXTGN0
- 

## NIIXACCT

The exit is called before an accounting record is written to the IMS log or to SMF. Thus, it makes it possible to modify the content of an accounting record. If NIIXACCT returns a non-zero register 15, the accounting record is not written at all.

## NIIXSTAR

The exit is called with each transaction step after the SPA and the message have been retrieved and the Natural thread has been rolled in and decompressed. Within this exit, the Natural IOCB and the driver work area are accessible.

A value of 12 in register 15 upon return of NIIXSSTA forces the Natural IMS interface to terminate the Natural session. Any other non-zero value in register 15 forces the interface to issue the Natural IMS interface error 3517 with the reason code containing the value in register 15.

**Note:**

This exit is not called when a new Natural session is started.

## NIIXMSSP

The exit is called only if the multi-session feature is in use. It builds the first 7 bytes of the session identification. By default, Natural under IMS compresses the LTERM names to 7 characters.

## NIIXSSTA

The exit is called when a new Natural user session has been started and the SPA and the Natural IOCB have been initialized. Within this exit, the Natural IOCB and the driver work area are accessible.

A value of 12 in register 15 upon return of NIIXSSTA forces the Natural IMS interface to terminate the Natural session. Any other non-zero value in register 15 forces the interface to issue the Natural IMS interface error 3509 with the reason code containing the value in register 15.

## NIIXISRM

The exit is called before the insertion of the message into the IOPCB.

## NIIXISRT

The exit is called before the insertion of the SPA into the IOPCB, even at the end of the Natural session. The end-of-session situation can be recognized by a blank transaction code.

## NIIXTGU0

The exit is called when the service module CMGETMSG is used. NIIXTGU0 receives control immediately after the GU call against the IOPCB, regardless of the status code.

## NIIXJESA

The exit is called when the JES API is used for writing reports. It is called after the options string has been created and may be used to modify the options string.

## NIIXPRTO

The exit is called when reports are directly written to IMS TM printers. It can be used to set the codes for "form feed" and "new line".

## NIIXRFNU

The exit is called when the new Natural session is assigned to a roll file. It can be used to calculate the number of the roll file to be used for this session.

## NIIXTGNO

The exit is called when the service module CMGSEGO or CMGETSEG is used. NIIXTGNO receives control immediately after the message segment is retrieved, regardless of the status code.