

SAF Return Codes and Started Task Messages

The SAF Kernel displays an eight-byte code containing various return and reason codes from SAF. This information is shown in a number of messages denoted "SSSSSSSS".

This section covers the following topics:

- Return Code Structure
 - Return Codes in SAF Trace Messages
 - Internal Function Codes
 - Started Task Messages
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Return Code Structure

The SAF return codes have the following structure:

Position within Message Code	Information Content
Byte 1	SAF Return Code (R15 after RACROUTE)
Byte 2	Internal Function Code
Byte 3	RACROUTE Return Code
Byte 4	RACROUTE Reason Code
Bytes 5 - 8	Internal Reason Code

Return Codes in SAF Trace Messages

The SAF trace messages written to DDPRINT, when GWMSGSL is not 0, include the first four bytes of the return code (as shown in the table above) printed as eight hexadecimal digits:

Position within Trace Message	Information Content
Digits 1 and 2	SAF Return Code (R15 after RACROUTE)
Digits 3 and 4	Internal Function Code
Digits 5 and 6	RACROUTE Return Code
Digits 7 and 8	RACROUTE Reason Code

Refer to the IBM manual *External Security Interface (RACROUTE) Macro Reference* manual for MVS and VM for a thorough explanation of all possible return/reason codes. CA-Top Secret and CA-ACF2 can provide different return code values in some circumstances.

Internal Function Codes

SAF Kernel internal function codes include the following:

Function Code (Hex)	Description
00	Authorize Natural Library
04	Authorize Adabas Access
08	Authorize SYSMAIN Function
0C	Authorize Natural System Files
10	Authorize Natural Program Execution
14	Authorize Broker Service
18	Authorize Entire Net-Work Access
1C	Authorize SQL Server Access
44 or 6C	Authenticate User

Started Task Messages

These messages are issued when the SAF Security Kernel is executing in its own started task. They simply echo the values of the DDCARD parameters:

SPMMP004 INPUT PARAMETER: NODE=10005
SPMMP004 INPUT PARAMETER: SVC=249
SPMMP004 INPUT PARAMETER: PRODUCTS=SAF
SPMMP004 INPUT PARAMETER: LOCAL=NO
SPMMP004 INPUT PARAMETER: NABS=50
SPMMP004 INPUT PARAMETER: NU=100
SPMMP004 INPUT PARAMETER: NC=50
SPMMP004 INPUT PARAMETER: TIMER=600
SPMMP004 INPUT PARAMETER: LU=32768
SPMMP004 INPUT PARAMETER: CT=120
SPMMP004 INPUT PARAMETER: FORCE=NO

The following confirms that the SAF Security node is active:

SPMMP011 TARGET 10005 IS ACTIVE

The following confirms that an operator command has been received and processed:

SPMMP012 OPER TYPEIN: SAF operator-command
SPMMP021 OPERATOR COMMAND PROCESSED SUCCESSFULLY

The following confirms that the started task has terminated normally:

SPMMP014 TARGET 10005 TERMINATION IN PROGRESS
ADAM97 10005 THIS ASCB/INITIATOR WILL BE TERMINATED BY MVS AT EOJ
SPMMP015 TARGET 10005 ENDED NORMALLY