

Exit selection table

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When considering an alteration to a standard JES2 function, you should determine whether one of the IBM-defined exits accommodates your intended change.

The exit selection table ([Table 1](#)) summarizes the available exits and their functions. If you use an IBM-defined exit for other than its intended purpose, you increase the risk of performance degradation and system failure.

[Job-related exit scenarios](#) contains some scenarios relating to job-related exits. The scenarios might be helpful to you in deciding what exits to use in particular situations.

Table 1. Exit Selection Table

Exit	Exit Title	Purpose	Some specific uses
0	PRE-INITIALIZATION	Control the initialization process	<ul style="list-style-type: none">– Provide verification of JES2 initialization options, specifically \$HASP426 and \$HASP427 messages.– Acquire user control blocks and user work areas for use in initialization (such as the user control table (UCT)).– Provide addresses of user tables in the master control table (MCT).– Determine whether JES2 initialization is to continue.– Allow implementation of installation-defined initialization options and parameters.
1	JES2 PRINT/PUNCH JOB SEPARATOR	Create you own print and punch job separators and control production of standard separators.	<ul style="list-style-type: none">– Selectively produce unique separators or variations on the standard separators.– Unconditionally produce standard separators.– Unconditionally suppress production of the standard

Exit	Exit Title	Purpose	Some specific uses
			<p>separators.</p> <ul style="list-style-type: none"> – Selectively produce separators for particular users or particular job classes. – Provide a different separator card on a punch device. – Place the company's logo on header page. – Provide accounting information on the trailer page.
2	JOB STATEMENT SCAN (Main Task)	Scan the complete JOB statement image and set corresponding fields in the appropriate JES2 control blocks.	<ul style="list-style-type: none"> – Alter JOB statement parameters that includes the class, priority, and other attributes of a job. – Supply additional JOB statement parameters. – Selectively cancel or purge jobs. – Set the job exit mask in the JCT for subsequent exits. – Set the spool partitioning mask in the JCT. – Initialize or modify other fields in the JCT, including your own installation defined fields. – Modify other job-related control blocks. – Build your own installation-defined job-related control blocks. – Enforce security and standards. – Initialize or modify the user portion of the job correlator.
3	JOB STATEMENT ACCOUNTING FIELD SCAN (Main Task)	Scan the JOB statement accounting field and set corresponding fields in the appropriate JES2 control blocks.	<ul style="list-style-type: none"> – Alter accounting field information. – Supply additional accounting field information. – Perform your own accounting field scan.

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			<ul style="list-style-type: none"> – Process nonstandard accounting fields. – Selectively cancel jobs. – Set the job exit mask in the JCT for future exits. – Initialize or modify other fields in the JCT, including your own installation-defined fields. – Pass information to subsequent exits through the JCT user fields. – Modify other job-related control blocks. – Enforce security and standards.
4	JCL AND JES2 CONTROL STATEMENT SCAN (Main Task)	Scan JCL (not including JOB statements).	<ul style="list-style-type: none"> – Alter JCL parameters and JES2 control statements. – Supply additional JCL parameters. – Supply a JCL continuation statement. – Alter JES2 control statements. – Supply an additional JES2 control statement. – Perform your own JES2 control statement processing. – Suppress standard JES2 processing. – Process your own installation defined JES2 control statement subparameters. – Selectively cancel or purge jobs. – Enforce security and standards.
5	JES2 COMMAND PREPROCESSOR	Process JES2 commands received by the JES2 command processor.	<ul style="list-style-type: none"> – Alter received commands. – Alter particular fields, such as those pertaining to command authority, in the command processor work area for the PCE

Exit	Exit Title	Purpose	Some specific uses
			<p>to affect subsequent command processing.</p> <ul style="list-style-type: none"> – Perform your own command validation checking. – Process your own installation-defined commands, operands, and suboperands. – Selectively terminate command processing and notify the operator of command cancellation.
6	CONVERTER/ INTERPRETER TEXT SCAN (Subtask Environment)	Scan converter/interpreter text after conversion from individual JCL images and after all of the converter/interpreter text for a particular job has been created. Exit 6 is called when the converter is run in the JES2 address space. See exit 60 when the converter is run in the JES2CI address space.	<ul style="list-style-type: none"> – Scan the resolved JCL, including PROCLIB expansion that is used by the job. – Modify individual converter/interpreter text images. – Enforce security and standards.
7	CONTROL BLOCK READ/WRITE (JES2)	Receive control whenever control block I/O is performed by the JES2 main task.	<ul style="list-style-type: none"> – Read or write your own installation-defined job-related control blocks to spool along with the reading and writing of JES2 control blocks.
8	CONTROL BLOCK READ/WRITE (USER)	Receive control whenever control block (CB) I/O is performed by a JES2 subtask or by a routine running in the user address space.	<ul style="list-style-type: none"> – Read or write installation-defined job-related control blocks to spool along with reading and writing of the JES2 control block.
9	JOB OUTPUT OVERFLOW	Receive control whenever an executing job is producing more output than was estimated.	<ul style="list-style-type: none"> – Selectively allow JES2 to follow the defined output overflow error procedure.

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			<ul style="list-style-type: none"> – Selectively direct JES2 to take special action for the current job only to: <ul style="list-style-type: none"> ▪ Cancel the job. ▪ Cancel the job with a dump. ▪ Allow the job to continue. ▪ Extend the job's estimated output to a specific new limit. ▪ Control how often the output overflow message is displayed. ▪ Suppress the default error message.
10	\$WTO SCREEN	Receive control whenever JES2 is ready to queue a \$WTO message.	<ul style="list-style-type: none"> – Scan messages. – Change the text of a message. – Alter a message's console routing. – Selectively suppress messages.
11	SPOOL PARTITIONING ALLOCATION – \$TRACK	Receive control from the main task when there are no more track groups available on the spool volumes from which the current job is permitted to allocate space.	<ul style="list-style-type: none"> – Expand the spool partitioning mask. – Suppress spool partitioning by allowing JES2 to use the allocation default.
12	SPOOL PARTITIONING ALLOCATION – \$STRAK	Receive control from the JES2 subtask or user address space when there are no more track groups available on the spool volumes from which the current job is permitted to allocate space.	<ul style="list-style-type: none"> – Expand the spool partitioning mask. – Suppress spool partitioning by allowing JES2 to use the allocation default.

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14	JOB QUEUE WORK SELECT	Receive control to search the job queue for work.	<ul style="list-style-type: none"> – Use tailored search algorithms to select work from the job queue. – Selectively bypass searching the job queue for work.
15	OUTPUT DATA SET/COPY	Receive control to handle the creation of separator pages on a data set or copy basis.	<ul style="list-style-type: none"> – Selectively generate separator pages for each data set to be printed. – Selectively generate separator pages for each copy that is made of a data set. – Selectively vary the number of copies that are made of a data set. – Selectively pick data sets and generate separator pages for them. – Change default print translation tables.
16	NOTIFY	Receive control to examine or modify messages that are sent.	<ul style="list-style-type: none"> – Alter routing of the notify message. – Examine the notify message before it is sent to the receiver and make selective changes. – Suppress sending the notify message to the receiver. – Replace the notify message before it is sent to the receiver with an entirely new one.
17	BSC RJE SIGN- ON/SIGN-OFF	Receive control to manage and monitor RJE operations for BSC.	<ul style="list-style-type: none"> – Selectively perform additional security checks over and above the standard password processing of the signon card image. – Selectively limit both the number and types of remote devices that can be on the system at any one time.

Exit	Exit Title	Purpose	Some specific uses
			<ul style="list-style-type: none"> – Selectively bypass security checks. – Implement installation-defined scanning of signon card images. – Collect statistics concerning RJE operations on the BSC line and report the results of the activity.
18	SNA RJE LOGON/LOGOFF	Receive control to manage and monitor RJE operations for SNA.	<ul style="list-style-type: none"> – Selectively perform additional security checks over and above the standard password processing of the logon image. – Selectively limit both the number and types of remote devices that can be on the system at any one time. – Selectively bypass security checks. – Implement installation-defined scanning of images. – Collect statistics concerning RJE operations on the line and report the results of the activity.
19	INITIALIZATION STATEMENT	Receive control for each initialization statement.	<ul style="list-style-type: none"> – Insert installation initialization statements. – Scan an initialization statement before the JES2 scan and perform parameter checking. – Selectively alter values supplied on an initialization statement to meet specific installation needs. – Optionally cause JES2 to bypass a particular initialization statement. – Optionally cause JES2 to terminate.
20	END OF JOB INPUT (Main	Alter the status of the job at the end of job input.	<ul style="list-style-type: none"> – Selectively assign a job's system affinity, execution node, and

Exit	Exit Title	Purpose	Some specific uses
	Task)		<p>priority based on an installation's unique requirements and processing workload.</p> <ul style="list-style-type: none"> – Based on an installation's own defined criteria, terminate a job's normal processing and selectively print or not print its output. – JCT is available for updating. – Provide job tracking. – Initialize or modify the user portion of the job correlator.
21	SMF RECORD	Receive control when JES2 is about to queue an SMF buffer.	<ul style="list-style-type: none"> – Selectively queue or not queue the SMF record for processing by SMF. – Obtain and create SMF control blocks before queuing. – Alter content and length of SMF control blocks before queuing.
22	CANCEL/STATUS	Receive control to implement an installation's own algorithms governing job selection and ownership for TSO/E CANCEL/STATUS.	<ul style="list-style-type: none"> – Allow an installation to implement its own algorithms for job queue searching and for TSO/E CANCEL/STATUS.
23	FSS JOB SEPARATOR	Receive control to modify the job separator page area (JSPA) that is used by page-mode printers such as the AFP printer to generate the job separator page for an output group.	<ul style="list-style-type: none"> – Control what information is passed to a page-mode printer functional subsystem application (FSA) through the JSPA. – Suppress the printing of job separator pages. – Suppress the printing of the JESNEWS data set.
24	POST INITIALIZATION	Receive control to make modifications to JES2	<ul style="list-style-type: none"> – Make final modifications to selected JES2 control blocks

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		control blocks before the end of JES2 initialization.	<p>before the end of JES2 initialization.</p> <ul style="list-style-type: none"> – Initialize any special installation-defined control blocks. – Terminate JES2 during the initialization process.
25	JCT READ (FSS)	Receive control whenever JCT read I/O is performed by a JES2 functional subsystem address space (HASPFSSM).	<ul style="list-style-type: none"> – Read or write your own installation-defined job-related control blocks to spool along with the reading of the JCT.
26	TERMINATION / RESOURCE RELEASE	Free resources obtained during previous installation exit routine processing during any JES2 termination.	<ul style="list-style-type: none"> – Free resources obtained by user-exit routine processing that JES2 continues to hold following a \$P JES2 command, JES2 initialization termination, or JES2 abend.
27	PCE ATTACH/DETACH	Allocate and deallocate resources. Deny a PCE attach.	<ul style="list-style-type: none"> – Obtain resources whenever a PCE is attached. – Free resources before the detach of a PCE. – Deny the attach of a PCE.
28	SSI JOB TERMINATION	Receive control before the freeing of job-related control blocks.	<ul style="list-style-type: none"> – Free resources obtained by Exit 32. – Suppress job termination-related messages. – Replace JES2 job termination messages with installation-defined messages.
29	SSI END-OF-MEMORY	Free resources obtained on the address space level.	<ul style="list-style-type: none"> – Free resources obtained by Exit 32.

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30	SSI DATA SET OPEN/RESTART	Receive control during SSI data set OPEN and RESTART processing.	<ul style="list-style-type: none"> – Examine data set characteristics for validity checking, authorization, and alteration.
31	SSI DATA SET ALLOCATION	Receive control during SSI data set allocation.	<ul style="list-style-type: none"> – Affect how JES2 processes data set characteristics. – Fail an allocation.
32	SSI JOB SELECTION	Receive control during SSI job selection processing.	<ul style="list-style-type: none"> – Perform job-related processing such as allocation of resources and I/O for installation-defined control blocks. – Suppress job selection-related messages. – Replace job selection-related messages with installation-defined messages.
33	SSI DATA SET CLOSE	Receive control during SSI data set CLOSE processing.	<ul style="list-style-type: none"> – Examine data set characteristics for validity checking, authorization, or alteration. – Free resources obtained at OPEN.
34	SSI DATA SET UNALLOCATION	Receive control during SSI unallocation processing.	<ul style="list-style-type: none"> – Free resources obtained by Exit 30 – Undo processing performed by Exit 30, such as changing data set characteristics.
35	SSI END-OF-TASK	Receive control during end of task processing.	<ul style="list-style-type: none"> – Free task-related resources.
36	Pre-security Authorization Call	Receive control before calling SAF.	<ul style="list-style-type: none"> – Provide additional information to SAF. – Change information provided to SAF. – Eliminate call to SAF. – Perform additional security authorization checking above

Exit	Exit Title	Purpose	Some specific uses
			what SAF provides.
37	Post-security Authorization Call	Receive control after calling SAF.	<ul style="list-style-type: none"> – Change the result of SAF verification. – Perform additional security authorization checking above what SAF provides.
38	TSO/E Receive Data Set Disposition	Receive control during processing of a TSO/E RECEIVE command.	<ul style="list-style-type: none"> – Change the default processing (delete) if a TSO/E user cannot receive a data set with any security information in the user profile.
39	NJE SYSOUT Reception Data Set Disposition (Main Task)	Receive control when your system receives a data set from another node that fails security checks.	<ul style="list-style-type: none"> – Override the security decision and accept the data set. – Change the security information and accept the data set. – Delete the data set.
40	Modifying SYSOUT characteristics	Receives control before JOEs are created for the job.	<ul style="list-style-type: none"> – Change the class of a SYSOUT data set to affect grouping. – Change the destination of a SYSOUT data set.
41	Modifying Output Grouping Key Selection	Receives control during JES2 initialization after the default output grouping keys have been selected, but before any grouping is done.	<ul style="list-style-type: none"> – Change which OUTPUT JCL keywords JES2 uses for generic grouping.
42	Modifying a Notify User Message	Receives control after input has been validated and authorization checking has been done for the userid and node.	<ul style="list-style-type: none"> – Cancel the message. – Change the destination of the message. – Change the message text.
43	Transaction Program Select/Terminate Change	Receives control during transaction: <ul style="list-style-type: none"> – Select processing. 	<ul style="list-style-type: none"> – Create installation-specific control blocks for the TP. – Modify output limits associated with any SYSOUT data sets

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		<ul style="list-style-type: none"> – Termination processing. – Change processing. 	<ul style="list-style-type: none"> – created by the TP. – Issue messages to the TP's message log
44	Exit for Converter Main Task	Receives control after the converter subtask has converted the job's JCL and before JES2 writes the job-related control blocks to spool.	<ul style="list-style-type: none"> – Change fields in the \$JQE and \$JCT – Detect and hold duplicate TSO logons.
45	Pre-SJF Service Request	Receives control from a request for scheduler JCL facility (SJF) services.	<ul style="list-style-type: none"> – Examine the request to determine if the system should continue to process the request for SJF services. – Redirect error messages for a request.
46	Transmitting an NJE Data Area	Receives control before JES2 transmitting an NJE job header, NJE data set header, or an NJE job trailer.	<ul style="list-style-type: none"> – Remove installation-defined sections that were previously added to an NJE data area. – Add or change information in an NJE data area before transmitting it to another node in the network.
47	Receiving an NJE Data Area	Receives control before receiving an NJE job header, NJE data set header, or an NJE job trailer.	<ul style="list-style-type: none"> – Add or remove installation-defined sections that were previously added to an NJE data area. – Add or change information in an NJE data area before transmitting it to another node in the network.
48	SSI SYSOUT data set unallocation	Receive control after JES2 has merged the characteristics from the SSOB into the PDDB.	<ul style="list-style-type: none"> – Control whether JES2 spins the SYSOUT data set.
49	Job Queue Work Select - QGOT	Receives control whenever JES2 work selection has located a	<ul style="list-style-type: none"> – Provide an algorithm to accept or not accept a JES2-selected job.

Exit	Exit Title	Purpose	Some specific uses
		pre-execution job for a device.	<ul style="list-style-type: none"> – Control WLM initiator job selection.
50	END OF JOB INPUT (User Environment)	Alter the status of the job at the end of job input.	<ul style="list-style-type: none"> – Selectively assign a job's system affinity, execution node, and priority based on an installation's unique requirements and processing workload. – Based on an installation's own defined criteria, terminate a job's normal processing and selectively print or not print its output. – JCT is available for updating. – Provide job tracking. – Initialize or modify the user portion of the job correlator.
51	Job phase change exit (\$QMOD)	Change job phase	<ul style="list-style-type: none"> – Track jobs as they move from phase to phase. – Perform main task processing for jobs that arrive through the internal reader or NJE/TCP. – Cause or prevent re-execution of jobs. – Implement phase change rules for jobs.
52	JOB STATEMENT SCAN (User Environment)	Scan the complete JOB statement image and set corresponding fields in the appropriate JES2 control blocks.	<ul style="list-style-type: none"> – Alter JOB statement parameters that includes the class, priority, and other attributes of the job. – Supply additional JOB statement parameters. – Selectively cancel or purge jobs. – Set the job exit mask in the JCT for subsequent exits. – Set the spool partitioning mask in the JCT. – Initialize or modify other fields in the JCT, including your own

Exit	Exit Title	Purpose	Some specific uses
			<ul style="list-style-type: none"> – installation defined fields. – Modify other job-related control blocks. – Build your own installation-defined job-related control blocks. – Enforce security and standards. – Initialize or modify the user portion of the job correlator.
53	JOB STATEMENT ACCOUNTING FIELD SCAN (User Environment)	Scan the JOB statement accounting field and set corresponding fields in the appropriate JES2 control blocks.	<ul style="list-style-type: none"> – Alter accounting field information. – Supply additional accounting field information. – Perform your own accounting field scan. – Process nonstandard accounting fields. – Selectively cancel jobs. – Set the job exit mask in the JCT for future exits. – Initialize or modify other fields in the JCT, including your own installation-defined fields. – Pass information to subsequent exits through the JCT user fields. – Modify other job-related control blocks. – Enforce security and standards.
54	JCL AND JES2 CONTROL STATEMENT SCAN (User Environment)	Scan JCL (not including JOB statements).	<ul style="list-style-type: none"> – Alter JCL parameters and JES2 control statements. – Supply additional JCL parameters. – Supply a JCL continuation statement. – Alter JES2 control statements. – Supply an additional JES2 control statement.

Exit	Exit Title	Purpose	Some specific uses
			<ul style="list-style-type: none"> – Perform your own JES2 control statement processing. – Suppress standard JES2 processing. – Process your own installation defined JES2 control statement subparameters. – Selectively cancel or purge jobs. – Enforce security and standards.
55	NJE SYSOUT Reception Data Set Disposition (User Environment)	Receive control when your system receives a data set from another node that fails security checks.	<ul style="list-style-type: none"> – Override the security decision and accept the data set. – Change the security information and accept the data set. – Delete the data set.
56	Transmitting an NJE Data Area (User Environment)	Receives control before JES2 transmitting an NJE job header, NJE data set header, or an NJE job trailer.	<ul style="list-style-type: none"> – Remove installation-defined sections that were previously added to an NJE data area. – Add or change information in an NJE data area before transmitting it to another node in the network.
57	Receiving an NJE Data Area (User Environment)	Receives control before receiving an NJE job header, NJE data set header, or an NJE job trailer.	<ul style="list-style-type: none"> – Add or remove installation-defined sections that were previously added to an NJE data area. – Add or change information in an NJE data area before transmitting it to another node in the network.
58	End of Step (User environment)	Receives control when a step in a job completes execution (does not get control for steps that are skipped).	<ul style="list-style-type: none"> – Alter the step return code or job return code processing. – Cause or prevent the job from being restarted after this step.
59	Post interpretation	Receives control when INTERPRET=JES is	<ul style="list-style-type: none"> – Examine SWA blocks for the job.

Exit	Exit Title	Purpose	Some specific uses
	(User Environment)	specified after the interpreter has been run but before the SWA control blocks are written.	<ul style="list-style-type: none"> – Perform locate processing for data sets used by job. – Enforce security and standards.
60	CONVERTER/ INTERPRETER TEXT SCAN (USER environment)	Scan converter/interpreter text after conversion from individual JCL images and after all of the converter/interpreter text for a particular job has been created. Exit 60 is called when the converter is run in the JES2CI address space. See exit 6 when the converter is run in the JES2 address space.	<ul style="list-style-type: none"> – Scan the resolved JCL, including PROCLIB expansion that is used by the job. – Modify individual converter/interpreter text images. – Enforce security and standards.

Parent topic:

→ [IBM-defined exits](#)