# **\$CREPRC Create Process**

Creates a subprocess or detached process on behalf of the calling process.

## **Format**

[pidadr],[image],[input],[output],[error],[prvadr],[quota],[prcnam] SYS\$CREPRC

[stsflg], [baspri], [uic], [mbxunt]

# **Arguments**

pidadr

OpenVMS usage: process\_id

type:

longword (unsigned)

access:

write only

mechanism:

by reference

Process identification (PID) of the newly created process. The pidadr argument is the address of a longword into which \$CREPRC writes the PID.

OpenVMS usage: logical\_name

type:

character-coded text string

access:

read only

mechanism:

by descriptor-fixed length string descriptor

Name of the image to be activated in the newly created process. The image argument is the address of a character string descriptor pointing to the file specification of the image.

The image name can have a maximum of 63 characters. If the image name contains a logical name, the equivalence name must be in a logical name table that the created process can access.

To create a process that will run under the control of a command language interpreter (CLI), specify SYS\$SYSTEM:LOGINOUT.EXE as the image name.

input

OpenVMS usage: logical\_name

type:

character-coded text string

access:

read only

mechanism:

by descriptor-fixed length string descriptor

Equivalence name to be associated with the logical name SYS\$INPUT in the logical name table of the created process. The input argument is the address of a character string descriptor pointing to the equivalence name string.

output

OpenVMS usage: logical\_name

type:

character-coded text string

access:

read only

mechanism:

by descriptor-fixed length string descriptor

Equivalence name to be associated with the logical name SYS\$OUTPUT in the logical name table of the created process. The output argument is the address of a character string descriptor pointing to the equivalence name string.

## error

OpenVMS usage: logical\_name

type: character-coded text string

access: read only

mechanism: by descriptor-fixed length string descriptor

Equivalence name to be associated with the logical name SYS\$ERROR in the logical name table of the created process. The **error** argument is the address of a character string descriptor pointing to the equivalence name string.

Note that the **error** argument is ignored if the **image** argument specifies SYS\$SYSTEM:LOGINOUT.EXE; in this case, SYS\$ERROR points to SYS\$OUTPUT.

## prvadr

OpenVMS usage: mask\_privileges

type: quadword (unsigned)

access: read only mechanism: by reference

Privileges to be given to the created process. The **prvadr** argument is the address of a quadword bit vector wherein each bit corresponds to a privilege; setting a bit gives the privilege. If the **prvadr** argument is not specified, the current privileges are used.

Each bit has a symbolic name; the \$PRVDEF macro defines these names. You form the bit vector by specifying the symbolic name of each desired privilege in a logical OR operation. Table SYS1–2 gives the symbolic name and description of each privilege.

Table SYS1-2 User Privileges

Privilege	Symbolic Name	Description
ACNT	PRV\$V_ACNT	Create processes for which no accounting is done
ALLSPOOL	PRV\$V_ALLSPOOL	Allocate a spooled device
ALTPRI	PRV\$V_ALTPRI	Set (alter) any process priority
†AUDIT	PRV\$V_AUDIT	Generate audit records
BUGCHK	PRV\$V_BUGCHK	Make bugcheck error log entries
BYPASS	PRV\$V_BYPASS	Bypass UIC-based protection
CMEXEC	$PRV$V\_CMEXEC$	Change mode to executive
CMKRNL	PRV\$V_CMKRNL	Change mode to kernel
DETACH	PRV\$V_DETACH	Create detached processes
DIAGNOSE	PRV\$V_DIAGNOSE	Can diagnose devices
†DOWNGRADE	PRV\$V_DOWNGRADE	Can downgrade classification
EXQUOTA	PRV\$V_EXQUOTA	Can exceed quotas
GROUP	PRV\$V_GROUP	Group process control
GRPNAM	PRV\$V_GRPNAM	Place name in group logical name table

†VAX specific

(continued on next page)

Table SYS1-2 (Cont.) User Privileges

Privilege	Symbolic Name	Description
GRPPRV	PRV\$V_GRPPRV	Group access via system protection field
†IMPORT	PRV\$V_IMPORT	Mount a nonlabeled tape volume
LOG_IO	PRV\$V_LOG_IO	Perform logical I/O operations
MOUNT	PRV\$V_MOUNT	Issue mount volume QIO
NETMBX	PRV\$V_NETMBX	Create a network device
OPER	PRV\$V_OPER	All operator privileges
PFNMAP	PRV\$V_PFNMAP	Map to section by physical page frame number
PHY_IO	PRV\$V_PHY_IO	Perform physical I/O operations
PRMCEB	PRV\$V_PRMCEB	Create permanent common even flag clusters
PRMGBL	$PRV$V_PRMGBL$	Create permanent global section
PRMMBX	PRV\$V_PRMMBX	Create permanent mailboxes
PSWAPM	PRV\$V_PSWAPM	Change process swap mode
READALL	PRV\$V_READALL	Possess read access to everythin
SECURITY	PRV\$V_SECURITY	Can perform security functions
SETPRV	$PRV$V\_SETPRV$	Set any process privileges
SHARE	PRV\$V_SHARE	Can assign a channel to a non-shared device
SYSGBL	PRV\$V_SYSGBL	Create system global sections
SYSLCK	PRV\$V_SYSLCK	Queue systemwide locks
SYSNAM	PRV\$V_SYSNAM	Place name in system logical name table
SYSPRV	PRV\$V_SYSPRV	Access files and other resources as if you have a system UIC
TMPMBX	PRV\$V_TMPMBX	Create temporary mailboxes
†UPGRADE	PRV\$V_UPGRADE	Can upgrade classification
VOLPRO	$PRV$V_VOLPRO$	Override volume protection
WORLD	$PRV$V_WORLD$	World process control

You need the user privilege SETPRV to grant a process any privileges other than your own. If the caller does not have this privilege, the mask is minimized with the current privileges of the creating process; any privileges the creating process does not have are not granted, but no error status code is returned.

## quota

OpenVMS usage: item\_quota\_list

type:

longword (unsigned)

access:

read only

mechanism:

by reference

Process quotas to be established for the created process. These quotas limit the created process's use of system resources. The quota argument is the address of

a list of quota descriptors, where each quota descriptor consists of a 1-byte quota name followed by a longword that specifies the desired value for that quota. The list of quota descriptors is terminated by the symbolic name PQL\$\_LISTEND.

If you do not specify the **quota** argument or specify it as 0, the operating system supplies a default value for each quota.

For example, in MACRO you can specify a quota list, as follows:

```
QLIST: .BYTE PQL$ PRCLM ; Limit number of subprocesses .LONG 2 ; Max = 2 subprocesses .BYTE PQL$ ASTLM ; Limit number of asts .LONG 6 ; Max = 6 outstanding asts .BYTE PQL$ LISTEND ; End of quota list
```

The \$PQLDEF macro defines symbolic names for quotas.

Individual Quota Descriptions A description of each quota follows. The description of each quota lists its minimum value (a SYSGEN parameter), its default value (a SYSGEN parameter), and whether it is deductible, nondeductible, or pooled. These terms have the following meaning:

of pooled. Those terms have the reason and		
Minimum value	You cannot create a process if it does not have a quota equal to or greater than this minimum. You obtain the minimum value for a quota by running SYSGEN to display the corresponding SYSGEN parameter.	
Default value	If the quota list does not specify a value for a particular quota, the system assigns the process this default value. You obtain the default value by running SYSGEN to display the corresponding SYSGEN parameter.	
Deductible quota	When you create a subprocess, the value for a deductible quota is subtracted from the creating process's current quota and is returned to the creating process when the subprocess is deleted. There is currently only one deductible quota, the CPU time limit. Note that quotas are never deducted from the creating process when a detached process is created.	
Nondeductible quota	Nondeductible quotas are established and maintained separately for each process and subprocess.	
Pooled quota	Pooled quotas are established when a detached process	

Pooled quotas are established when a detached process is created, and they are shared by that process and all its descendent subprocesses. Charges against pooled quota values are subtracted from the current available totals as they are used and are added back to the total when they are not being used.

To run SYSGEN to determine the minimum and default values of a quota, enter the following sequence of commands:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN> SHOW/PQL
```

Minimum values are named PQL\_Mxxxxx, where xxxxx are the last five characters of the quota name.

Default values are named PQL\_Dxxxxx, where xxxxx are the last five characters of the quota name.

#### **Individual Quotas**

#### PQL\$ ASTLM

AST limit. This quota restricts both the number of outstanding AST routines specified in system service calls that accept an AST address and the number of scheduled wakeup requests that can be issued.

Minimum: PQL\_MASTLM Default: PQL\_DASTLM

Nondeductible

## PQL\$ BIOLM

Buffered I/O limit. This quota limits the number of outstanding system-buffered I/O operations. A buffered I/O operation is one that uses an intermediate buffer from the system pool rather than a buffer specified in a process's \$QIO request.

Minimum: PQL\_MBIOLM
Default: PQL\_DBIOLM

Nondeductible

## **PQL\$ BYTLM**

Buffered I/O byte count quota. This quota limits the amount of system space that can be used to buffer I/O operations or to create temporary mailboxes.

Minimum: PQL\_MBYTLM Default: PQL\_DBYTLM

Pooled

## PQL\$ CPULM

CPU time limit, specified in units of 10 milliseconds. This quota limits the total amount of CPU time that a created process can use. When it has exhausted its CPU time limit quota, the created process is deleted and the status code SS\$\_EXCPUTIM is returned.

If you do not specify this quota and the created process is a detached process, the detached process receives a default value of 0, that is, unlimited CPU time.

If you do not specify this quota and the created process is a subprocess, the subprocess receives half the CPU time limit quota of the creating process.

If you specify this quota as 0, the created process has unlimited CPU time, provided the creating process also has unlimited CPU time. If, however, the creating process does not have unlimited CPU time, the created process receives half the CPU time limit quota of the creating process.

The CPU time limit quota is a consumable quota; that is, the amount of CPU time used by the created process is not returned to the creating process when the created process is deleted.

Minimum: PQL\_MCPULM Default: PQL\_DCPULM

Deductible

## PQL\$\_DIOLM

Direct I/O quota. This quota limits the number of outstanding direct I/O operations. A direct I/O operation is one for which the system locks the pages containing the associated I/O buffer in memory for the duration of the I/O operation.

Minimum: PQL\_MDIOLM Default: PQL\_DDIOLM

Nondeductible

### **PQL\$ ENQLM**

Lock request quota. This quota limits the number of lock requests that a process can queue.

Minimum: PQL\_MENQLM Default: PQL\_DENQLM

Pooled

## PQL\$\_FILLM

Open file quota. This quota limits the number of files that a process can have open at one time.

Minimum: PQL\_MFILLM Default: PQL\_DFILLM

Pooled

## **PQL\$ JTQUOTA**

Job table quota. This quota limits the number of bytes of system paged pool used for the job logical name table. If the process being created is a subprocess, this item is ignored.

Minimum: PQL\_MJTQUOTA Default: PQL\_DJTQUOTA

Deductible

## **PQL\$ PGFLQUOTA**

Paging file quota. This quota limits the number of pages (on VAX systems) or pagelets (adjusted up or down to represent CPU-specific pages on AXP systems) that can be used to provide secondary storage in the paging file for the execution of a process.

Minimum: PQL\_MPGFLQUOTA Default: PQL\_DPGFLQUOTA

Pooled

## **PQL\$ PRCLM**

Subprocess quota. This quota limits the number of subprocesses a process can create.

Minimum: PQL\_MPRCLM Default: PQL\_DPRCLM

Pooled

## PQL\$\_TQELM

Timer queue entry quota. This quota limits both the number of timer queue requests a process can have outstanding and the creation of temporary common event flag clusters.

Minimum: PQL\_MTQELM Default: PQL\_DTQELM

Pooled

PQL\$\_WSDEFAULT

Default working set size. This quota defines the number of pages (on VAX systems) or pagelets (adjusted up or down to represent CPU-specific pages on AXP systems) in the default working set for any image the process executes. The working set size quota determines the maximum size you can specify for this quota.

Minimum: PQL\_MWSDEFAULT Default: PQL\_DWSDEFAULT

Nondeductible

## PQL\$\_WSEXTENT

Working set expansion quota. This quota limits the maximum size to which an image can expand its working set size with the Adjust Working Set Limit (\$ADJWSL) system service.

Minimum: PQL\_MWSEXTENT Default: PQL\_DWSEXTENT

Nondeductible

# PQL\$\_WSQUOTA

Working set size quota. This quota limits the maximum size to which an image can lock pages in its working set with the Lock Pages in Memory (\$LCKPAG) system service.

Minimum: PQL\_MWSQUOTA Default: PQL\_DWSQUOTA

Nondeductible

**Use of the Quota List** The values specified in the quota list are not necessarily the quotas that are actually assigned to the created process. The \$CREPRC service performs the following steps to determine the quota values that are assigned:

- 1. It constructs a default quota list for the process being created, assigning it the default values for all quotas. Default values are SYSGEN parameters and so might vary from system to system.
- 2. It reads the specified quota list, if any, and updates the corresponding items in the default list. If the quota list contains multiple entries for a quota, only the last specification is used.
- 3. For each item in the updated quota list, it compares the quota value with the minimum value required (also a SYSGEN parameter) and uses the larger value. Then, the following occurs:
  - If a subprocess is being created or if a detached process is being created and the creating process does not have DETACH privilege, the resulting value is compared with the current value of the corresponding quota of the creating process and the lesser value is used.

Then, if the quota is a deductible quota, that value is deducted from the creating process's quota, and a check is performed to ensure that the creating process will still have at least the minimum quota required. If not, the condition value SS\$\_EXQUOTA is returned and the subprocess or detached process is not created.

Pooled quota values are ignored.

If a detached process is being created and the creating process has DETACH privilege, the resulting value is not compared with the current value of the corresponding quota of the creating process and the resulting value is not deducted from the creating process's quota. The \$CREPRC service does not check that a specified quota value exceeds the maximum allowed by the system.

## prcnam

OpenVMS usage: process\_name

character-coded text string

access:

read only

mechanism:

by descriptor-fixed length string descriptor

Process name to be assigned to the created process. The prenam argument is the address of a character string descriptor pointing to a 1- to 15-character process name string.

If a subprocess is being created, the process name is implicitly qualified by the UIC group number of the creating process. If a detached process is being created, the process name is qualified by the group number specified in the uic argument.

## baspri

OpenVMS usage: longword\_unsigned

type:

longword (unsigned)

access:

read only

mechanism:

by value

Base priority to be assigned to the created process. The baspri argument is a longword value in the range 0 to 31, where 31 is the highest priority and 0 is the lowest. Usual priorities are in the range 0 to 15, and real-time priorities are in the range 16 to 31.

If the **baspri** argument is not specified, the priority defaults to 2 for VAX MACRO and VAX BLISS-32 and to 0 for all other languages. If you want a subprocess to have a higher priority than its creating process, you must have ALTPRI privilege to raise the priority level. If the caller does not have this privilege, the specified base priority is compared with the caller's priority and the lower of the two values is used.

## uic

OpenVMS usage: uic

type:

longword (unsigned)

access:

read only

mechanism:

by value

User identification code (UIC) to be assigned to the created process. The uic argument is a longword value containing the UIC.

If you do not specify the uic argument or specify it as 0 (the default), \$CREPRC creates a process and assigns it the UIC of the creating process.

If you specify a nonzero value for the uic argument, \$CREPRC creates a detached process. This value is interpreted as a 32-bit octal number, with two 16-bit fields:

bits 0-15—member number

bits 16–31—group number

You need DETACH privilege to create a detached process with a UIC that is different from the UIC of the creating process.

If the image argument specifies the SYS\$SYSTEM:LOGINOUT.EXE, the UIC of the created process will be the UIC of the caller of \$CREPRC, and the UIC parameter is ignored.

#### mbxunt

OpenVMS usage: word\_unsigned

type:

word (unsigned)

access:

read only

mechanism:

by value

Unit number of a mailbox to receive a termination message when the created process is deleted. The mbxunt argument is a word containing this number.

If you do not specify the **mbxunt** argument or specify it as 0 (the default), the operating system sends no termination message when it deletes the process.

The Get Device/Volume Information (\$GETDVI) service must be used to obtain the unit number of the mailbox.

If you specify the mbxunt argument, the mailbox is used only after the created process actually terminates. At that time, the \$ASSIGN service is issued for the mailbox in the context of the terminating process and an accounting message is sent to the mailbox. If the mailbox no longer exists, cannot be assigned, or is full, the error is treated as if no mailbox had been specified.

The accounting message is sent before process rundown is initiated but after the process name has been set to null. Thus, a significant interval of time can occur between the sending of the accounting message and the final deletion of the process.

To receive the accounting message, the caller must issue a read to the mailbox. When the I/O completes, the second longword of the I/O status block, if one is specified, contains the process identification of the deleted process.

The \$ACCDEF macro defines symbolic names for offsets of fields within the accounting message. The offsets, their symbolic names, and the contents of each field are shown in the following table. Unless stated otherwise, the length of the field is 4 bytes.

Offset	Symbolic Name	Contents
0	ACC\$W_MSGTYP	MSG\$_DELPROC (2 bytes)
2	· <del>-</del>	Not used (2 bytes)
$\overline{4}$	ACC\$L_FINALSTS	Exit status code
8	ACC\$L_PID	Process identification
12		Not used (4 bytes)
16	ACC\$Q_TERMTIME	Current time in system format at process termination (8 bytes)
24	ACC\$T_ACCOUNT	Account name for process, blank filled (8 bytes)
32	ACC\$T_USERNAME	User name, blank filled (12 bytes)
44	ACC\$L_CPUTIM	CPU time used by the process, in 10-millisecond units

Offset	Symbolic Name	Contents
48	ACC\$L_PAGEFLTS	Number of page faults incurred by the process
52	ACC\$L_PGFLPEAK	Peak paging file usage
56	ACC\$L_WSPEAK	Peak working set size
60	ACC\$L_BIOCNT	Count of buffered I/O operations performed by the process
64	ACC\$L_DIOCNT	Count of direct I/O operations performed by the process
68	ACC\$L_VOLUMES	Count of volumes mounted by the process
72	ACC\$Q_LOGIN	Time, in system format, that process logged in (8 bytes)
80	ACCLOWNER	Process identification of owner

The length of the termination message is equated to the constant ACC\$K\_ TERMLEN.

## stsflg

OpenVMS usage: mask\_longword

type:

longword (unsigned)

access:

read only

mechanism: by value

Options selected for the created process. The stsflg argument is a longword bit vector wherein a bit corresponds to an option. Only bits 0 to 10 are used; bits 11 to 31 are reserved and must be 0.

Each option (bit) has a symbolic name, which the \$PRCDEF macro defines. You construct the stsflg argument by performing a logical OR operation using the symbolic names of each desired option. The following table describes the symbolic name of each option.

Symbolic Name	Description
PRC\$M_BATCH	Create a batch process. DETACH privilege is required.
PRC\$M_DETACH	Create a detached process.
PRC\$M_DISAWS	Disable system initiated working set adjustment.
PRC\$M_HIBER	Force process to hibernate before it executes the image.
PRC\$M_IMGDMP	Enable image dump facility. If an image terminates due to an unhandled condition, the image dump facility writes the contents of the address space to a file in your current default directory. The file name is the same as the name of the terminated image. The file type is .DMP.

Symbolic Name	Description
PRC\$M_INTER	Create an interactive process. This option is meaningful only if the <b>image</b> argument specifies SYS\$SYSTEM:LOGINOUT.EXE. The purpose of this option is to provide you with information about the process. When you specify this option, it identifies the process as one that is in communication with another user (an interactive process). For example, if you use the DCL lexical function F\$MODE to make an inquiry about a process that has specified the PRC\$M_INTER option, F\$MODE returns the value INTERACTIVE.
PRC\$M_NETWRK	Create a process that is a network connect object. DETACH privilege required.
PRC\$M_NOACNT	Do not perform accounting. ACNT privilege is required.
PRC\$M_NOPASSWORD	Do not display the <i>Username</i> : and <i>Password</i> : prompts if the process is interactive and detached and the image is SYS\$SYSTEM:LOGINOUT.EXE. If you specify this option in your call to \$CREPRC, the process created by the call is logged in under the user name associated with the creating process. If you do not specify this option for an interactive process, SYS\$SYSTEM:LOGINOUT.EXE prompts you for the user name and password to be associated with the process. The prompts are displayed at the SYS\$INPUT device.
PRC\$M_NOUAF	Do not check authorization file if the process is detached and the image is SYS\$SYSTEM:LOGINOUT.EXE. You should not specify this option if a subprocess is being created. In previous versions of the operating system, the symbolic name of this option was PRC\$M_LOGIN. The symbolic name has been changed to more accurately denote the effect of setting this bit. For compatibility with existing user programs, you can still specify this bit as PRC\$M_LOGIN.
PRC\$M_PSWAPM	Inhibit process swapping. PSWAPM privilege is required.
PRC\$M_SSFEXCU	Enable system service failure exception mode.
PRC\$M_SSRWAIT	Disable resource wait mode.
†PRC\$M_SUBSYSTEM	Inherit any protected subsystem identifiers. The default is that the new process does not inherit subsystem identifiers.
†PRC\$M_TCB	Mark a process as part of the Trusted Computing Base (TCB). As such, it is expected to perform its own auditing. DETACH privilege is required.

Note that options PRC\$M\_BATCH, PRC\$M\_INTER, PRC\$M\_UAF, PRC\$M\_NETWRK, and PRC\$M\_NOPASSWORD are intended for use by Digital software.

# Description

The Create Process service creates a subprocess or detached process on behalf of the calling process. The \$CREPRC service requires system dynamic memory.

A detached process is a fully independent process. For example, the process that the system creates when you log in is a detached process.

A subprocess, on the other hand, is related to its creating process in a treelike structure; it receives a portion of the creating process's resource quotas and must terminate before the creating process. The **uic** argument or the PRC\$M\_DETACH flag controls whether the created process is a subprocess or a detached process.

Some error conditions are not detected until the created process executes. These conditions include an invalid or nonexistent image; invalid SYS\$INPUT, SYS\$OUTPUT, or SYS\$ERROR logical name equivalence; inadequate quotas; or insufficient privilege to execute the requested image.

All subprocesses created by a process must terminate before the creating process can be deleted. If subprocesses exist when their creating process is deleted, they are automatically deleted.

A created process is unable to run an image that calls *any* run-time library procedure requiring a CLI, such as LIB\$SPAWN, unless the process was created with the **image** argument specifying SYS\$SYSTEM:LOGINOUT.EXE. This is because SYS\$SYSTEM:LOGINOUT.EXE causes a command language interpreter to be mapped into the created process, a prerequisite for calling run-time library procedures.

A detached process is considered an interactive process only if (1) the process is created with the PRC\$M\_INTER option specified and (2) SYS\$INPUT is not defined as a file-oriented device.

## **Required Privileges**

The calling process must have the following:

- DETACH privilege to create any of the following types of process:
  - A detached process with a UIC that is different from the UIC of the calling process
  - A batch process
  - A network process
  - A trusted computing base process (VAX only)
- ALTPRI privilege to create a subprocess with a higher base priority than the calling process
- SETPRV privilege to create a process with privileges that the calling process does not have
- PSWAPM privilege to create a process with process swap mode disabled
- ACNT privilege to create a process with accounting functions disabled

## **Required Quota**

The number of subprocesses that a process can create is controlled by the subprocess (PRCLM) quota; this quota is returned when a subprocess is deleted.

The number of detached processes that a process can create with the same user name is controlled by the MAXDETACH entry in the user authorization file (UAF).

When a subprocess is created, the value of any deductible quota is subtracted from the total value the creating process has available, and when the subprocess is deleted, the unused portion of any deductible quota is added back to the total available to the creating process. Any pooled quota value is shared by the creating process and all its subprocesses.

## **Related Services**

\$CANEXH, \$DCLEXH, \$DELPRC, \$EXIT, \$FORCEX, \$GETJPI, \$GETJPIW, \$HIBER, \$PROCESS\_SCAN, \$RESUME, \$SETPRI, \$SETPRN, \$SETPRV, \$SETRWM, \$SUSPND, \$WAKE

## **Condition Values Returned**

SS\$_ACCVIO	The caller cannot read a specified input string or string descriptor, the privilege list, or the quota list; or the caller cannot write the process identification.
SS\$_DUPLNAM	The specified process name duplicates one already specified within that group.
SS\$_EXPRCLM	The creation of a detached process failed because the creating process already reached its limit for the creation of detached processes. This limit is established by the MAXDETACH quota in the user authorization file (UAF) of the creating process.

SS\$\_EXQUOTA

At least one of the three following conditions is true:

- The process has exceeded its quota for the creation of subprocesses.
- A quota value specified for the creation of a subprocess exceeds the creating process's corresponding quota.
- The quota is deductible and the remaining quota for the creating process would be less than the minimum.

SS\$\_INSFMEM

The system dynamic memory is insufficient for the requested operation.

SS\$\_INSSWAPSPACE

The swap space is insufficient for creating the process.

At least one of the following two conditions is true:

- The specified process name has a length of 0 or has more than 15 characters.
- The specified image name, input name, output name, or error name has more than 255 characters.

SS\$\_IVQUOTAL SS\$\_IVSTSFLG SS\$\_NOPRIV The quota list is not in the proper format. You set a reserved status flag.

NOPRIV The caller violated one of the privilege restrictions.

The service completed successfully.

No process control block is available; in other words, the maximum number of processes that can exist concurrently in the system has been reached.

SS\$\_NORMAL SS\$\_NOSLOT