

```

1: #ifndef _PROC_IPC_IPC_H /* wrapper symbol for kernel use */
2: #define _PROC_IPC_IPC_H /* subject to change without notice */
3:
...
64: #if defined(_STYPES)
65:
66: /* SVR3 binary compatibility ipc_perm structure */
67: typedef struct ipc_perm {
68:     o_uid_t uid; /* owner's user id */
69:     o_gid_t gid; /* owner's group id */
70:     o_uid_t cuid; /* creator's user id */
71:     o_gid_t cgid; /* creator's group id */
72:     o_mode_t mode; /* access modes */
73:     ushort_t seq; /* slot usage sequence number */
74:     key_t key; /* key */
75: } ipc_perm_t;
76:
77: /* SVR3 binary compatibility Control Commands. */
78: #define IPC_RMID 0 /* remove identifier */
79: #define IPC_SET 1 /* set options */
80: #define IPC_STAT 2 /* get options */ [#r]
81:
82: #else /* !_STYPES */
83:
84: /* SVR4 ipc_perm structure */
85: typedef struct ipc_perm {
86:     uid_t uid; /* owner's user id */
87:     gid_t gid; /* owner's group id */
88:     uid_t cuid; /* creator's user id */
89:     gid_t cgid; /* creator's group id */
90:     mode_t mode; /* access modes */
91:     ulong_t seq; /* slot usage sequence number */
92:     key_t key; /* key */
93:     struct ipc_sec *ipc_sec; /* security structure ptr */
94:     long pad[IPC_PERM_PAD]; /* reserve area */
95: } ipc_perm_t;
96:
97: /* Control Commands. */
...
174: /* Common IPC Definitions. */
175: /* Mode bits. */
176: #define IPC_ALLOC 0100000 /* entry currently allocated */
177: #define IPC_CREAT 0001000 /* create entry if key doesn't exist */
178: #define IPC_EXCL 0002000 /* fail if key exists */
179: #define IPC_NOWAIT 0004000 /* error if request must wait */
180:
181:
182: /* Keys. */
183: #define IPC_PRIVATE (key_t)0 /* private key */
184:
185:
186:
187: #if defined(_KERNEL)
...
221:
222: #endif /* _PROC_IPC_IPC_H */

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```

1: #ifndef _LINUX_IPC_H
2: #define _LINUX_IPC_H
3:
4: #include <linux/types.h>
5:
6: #define IPC_PRIVATE ((__kernel_key_t) 0)
7:
8: /* Obsolete, used only for backwards compatibility and libc5 compiles */
9: struct ipc_perm
10: {
11:     __kernel_key_t key;
12:     __kernel_uid_t uid;
13:     __kernel_gid_t gid;
14:     __kernel_uid_t cuid;
15:     __kernel_gid_t cgid;
16:     __kernel_mode_t mode;
17:     unsigned short seq;
18: };
19:
20: /* Include the definition of ipc64_perm */
21: #include <asm/ipcbuf.h>
22:
23: /* resource get request flags */
24: #define IPC_CREAT 00001000 /* create if key is nonexistent */
25: #define IPC_EXCL 00002000 /* fail if key exists */
26: #define IPC_NOWAIT 00004000 /* return error on wait */
27:
28: /* these fields are used by the DIPC package so the kernel as standard
29:    should avoid using them if possible */
30:
31: #define IPC_DIPC 00010000 /* make it distributed */
32: #define IPC_OWN 00020000 /* this machine is the DIPC owner */
33:
34: /*
35:  * Control commands used with semctl, msgctl and shmctl
36:  * see also specific commands in sem.h, msg.h and shm.h
37:  */
38: #define IPC_RMID 0 /* remove resource */
39: #define IPC_SET 1 /* set ipc_perm options */
40: #define IPC_STAT 2 /* get ipc_perm options */
41: #define IPC_INFO 3 /* see ipc64_perm */
42:
43: /*
44:  * Version flags for semctl, msgctl, and shmctl commands
45:  * These are passed as bitflags or-ed with the actual command
46:  */
47: #define IPC_OLD 0 /* Old version (no 32-bit UID support on many
48:    architectures) */
49: #define IPC_64 0x0100 /* New version (support 32-bit UIDs, bigger
50:    message sizes, etc. */
51:
52: #ifdef __KERNEL__
53:
54: #define IPCMNI 32768 /* <= MAX_INT limit for ipc arrays (including sysctl changes) */
55:
56: /* used by in-kernel data structures */
57: struct kern_ipc_perm
58: {
59:     key_t key;
60:     uid_t uid;
61:     gid_t gid;
62:     uid_t cuid;
63:     gid_t cgid;
64:     mode_t mode;
65:     unsigned long seq;
66: };
67:
68: #endif /* __KERNEL__ */
69:
70: #endif /* _LINUX_IPC_H */
71:
72:

```