

CP-V MAIN-MEMORY RESIDENT TABLES

User
COC Terminal Line
Shared Processor
Ghost Job
I/O Control
Resource
AVR, Automatic Volume Recognition
Symbiont/Cooperative
Scheduler/Swapper
Swapping Granule Allocation
Multibatch Scheduler
File Read-Ahead Control
Performance Monitor
Multiprocessing
Remote Processing
Main Memory Management
Secondary Storage Allocation
Transaction Processing
Real Time
Enqueue/Dequeue

CP-V TABLES IN GHOST JOB

Multibatch Scheduler in RBBAT
Secondary Storage Allocation in ALLOCAT
Remote Processing in RBBAT

CP-V CONTEXT BLOCKS AND BUFFERS

*Permanently resident **

JIT, Job Information Table
Symbiont/Cooperative: CPOOL, SPOOL
Monitor Utility Buffers, MPOOL *
COC Buffers *
RBBAT Communication Buffers *
ALLOCAT Communication Buffers *
File System:
 DCB, Data Control Block
 CFU, Current Files in Use *
 Blocking Buffers
 Index and Directory Blocks
 FIT, File Information Table

FILES USED BY CP-V DURING OPERATION

Formal Files in :SYS Account:

:USERS
:ACCTLG
RATE
:RBLOG
:PROCS
:LOGD

FILE-LIKE RECORDS ON SECONDARY STORAGE

AMR, Assign Merge Record
ERRORLOG
Recovery Files

CP-V SYSTEM GHOST JOBS

- FIX - Initialization and Recovery pre-processor, HGP reconstruction, symbiont file recovery, file 75 error reporter, checking and repair of files.
- Ghost1 - CP-V initialization and recovery control program.
- RBBAT - Multibatch job scheduler and cataloguer of remote and local symbiont output files.
- ALLOCAT - Secondary storage allocator, disk and RAD.
- FILL - File backup and restore program.
- ERR:FIL - Program for transferring hardware error records from temporary to permanent files.
- KEYIN - Manager of operator keyin commands.
- MOOSE - Multiprocessor initialization program.
- FROG - Program for examining FECP memory.
- PIGEON - Manager of all operator SEND keyins.
- RATLER - Processor of CP-V to CP-V file transfers.

CP-V TABLES

User -
Ux: -
M:IMC

These tables contain entries for each active user of the system whether batch job or on-line terminal user. They carry scheduling state information, locating information should the user be swapped out, shared processor associations, etc. The fact that some of these tables contain byte indexes to others limits the number of users possible in this coding. User number zero is not used; user number FF is a special flag used during logoff.

COC -
none
M:COC

These tables contain entries for each character mode terminal line of the system. They may be connected via 7611 or FECF hardware. Data in these tables control I/O, input editing, pagination and lineation, and buffering of I/O data. Mode flags provide for differential action according to terminal type, speed, and character set.

Shared Processor -
Px: -
M:SPROCS

These tables, indexed by processor number, provide location and control information for CP-V shared processors. Swapper location, main memory location, data, program and DCB breakdown, overlay structure, privileges, and use count are stated in these tables.

Ghost job -
Sx:GJOB -
M:IMC

These tables, indexed by ghost job number, have an entry for each active ghost job giving its name, account, and user number. KEYIN, ALLOCAT, RBBAT, ERR:FIL, FIX, and FILL are perenial entries.

I/O Control -
IOQ -, CIT -, DCT -,
OX: -, Sx: -, TB: -
M:CFU, IOTABLE

These tables collectively coordinate all device I/O in CP-V (except COC). IOQ tables form queues of I/O operations ready to perform or in progress. CIT tables group devices into channels through which only one device at a time is permitted to carry on I/O. The DCT tables carry information for carrying out I/O on each device. Handler addresses, hardware status information, device address, time out information, logical status, etc. are carried in DCT tables. The OX: -, Sx: -, and TB: - tables are collectively called device type-class tables (DTT). They translate user mnemonics (either device mnemonics like LP, operational labels like SI, or I/O stream names like LI) into device index. TB: - tables describe the physical attributes of the device.

Resource
Sx:R-
M:IMC

The resource allocation (RAT) tables record usage of devices designated as system resources. Number of devices is recorded plus available, maximum allowed, default, and current values for batch, on-line, and ghost jobs.

AVR
AVR-, ANS-
M:CPU

These tables control automatic volume recognition - label checking on tapes and private pack. They parallel the DCT tables in the part representing magnetic tapes and disk packs.