# 1 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.
- Ghostl 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

These tables contain entries for each active user of Ux: the system whether batch job or on-line terminal user. They carry scheduling state information, locating infor-M:IMC mation 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 -These tables contain entries for each character mode terminal line of the system. They may be connected, none M:COC via 7611 or FECP 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. These tables, indexed by processor number, provide Shared Processor -Px: location and control information for CP-V shared M:SPROCS processors. Swapper location, main memory location, data, program and DCB breakdown, overlay structure, privileges, and use count are stated in these tables. Ghost job -These tables, indexed by ghost job number, have an Sx:GJOB entry for each active ghost job giving its name, M:IMC account, and user number. KEYIN, ALLOCAT, RBBAT, ERR:FIL, FIX, and FILL are perenial entries. I/O Control -These tables collectively coordinate all device I/O IOQ -, CIT - , DCT -, in CP-V (except COC). IOQ tables form queues of I/O operations ready to perform or in progress. CIT. OX: -, Sx: -, TB: -M:CFU, IOTABLE 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 nmenonics (either device mnemonics like LP, operational labels like SI, or I/O stream names like L1) into device index. TB:- tables describe the physical attributes of the device.

User -

Resource	The resource allocation (RAT) tables record usage of
Sx:R-	devices designated as system resources. Number of
M: IMC	devices is recorded plus available, maximum allowed,
	default, and current values for batch, on-line, and
	ghost jobs.
AVR	These tables control automatic volume recognition -
AVR-, ANS-	label checking on tapes and private pack. They
M:CPU	parallel the DCT tables in the part representing
	magnetic tapes and disk packs.

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