

UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

Authorization: Director of the Centre

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2 SATURDAY OPERATION

In order to provide some assistance to students the system will be operational on Saturdays (15th, 22nd and 29th October) until end of semester. The facilities and charging will be the same as for Sunday working which will also continue.

3 WHAT HAPPENS WHEN YOU'RE OVER QUOTA AND YOU TRY TO LOGOUT

The brief answer is that the system will not let you logout until you are below quota. From a terminal, if you use the K/F or similar command, you will be told that you are over quota and may either ^C out of KJOB and delete files or you may use one of the dialogues described in documentation to selectively delete files. In batch, however, or if you use K/B - files will be deleted by the system until you are below quota.

The order in which files are queued or deleted is:-

- unprotected queued files (that is \*.LPT etc. with owner protection 0) will be spooled.
- a new version of KJOB (installed this month) then looks for any files which themselves exceed the logged-out quota. If these are protected queued files, they will be unprotected and spooled, if they are not queued files, they will just be deleted.

- unprotected temporary files will next be deleted (i.e. extensions of TMP LST CRF TEM)
- unprotected REL files will be deleted
- unprotected BAK files will be deleted
- unprotected SAV files will be deleted (ie. extensions of SAV HGH LOW SHR EXE XPN IMG BIN HEX)
- any other unprotected files
- any protected queued files will be unprotected and spooled
- protected temporary files will be deleted
- protected REL files will be deleted
- protected BAK files will be deleted
- protected SAV files will be deleted
- anything else will be deleted until the quota is enforced.

Files of any particular category will be deleted in the order they appear on the UFD, which is usually in their order of creation.

The change put into KJOB this month attempts to help the runaway batch job which has created a large file, with the result that a lot of files are deleted before KJOB comes upon that particular one; (a situation that our consultation records indicate is not entirely uncommon). This problem can be accentuated by the use of private mnemonics for file extensions. As you can see from the above summary, such files will be left to last when trying to find candidates for deletion. Appendix A of the Operating System Commands Manual gives a comprehensive list of the commonly used extensions and you would be advised to use ones from this list if at all appropriate. Ones which are not mentioned in this list, but which have extensive usage are:- F10 - Source file of the Fortran-10 program, EXE - Core image file using the new format.

#### 4 DEFAULT CORE-IMAGE FILE FORMAT

When the KA10 operating system was upgraded to version 6.02 (August 76), a new format for Core Image files, the EXE format was introduced. Though the old format files have continued to be acceptable, this new file has a number of advantages and the next release of the operating system will default to using it, though the old formats will continue to be available. The new file format contains at the start of the file a map block which indicates which pages of the file are present, and some additional information on the core image.

The single file thus replaces all the possible combinations of the older files (SAV, SHR, HGH, LOW & HGH, LOW & SHR). The new format does not employ zero-compression of low segments, as occurs with SAV or LOW files and hence with the map block are bound to be larger than the corresponding old format. However, there are a number of other system advantages, it will load into core with less overheads, it can be located by monitor routines with less overheads, and others which will not be realizable until the new KL10 system is operational.

Core image files are customarily created with the commands SAVE and SSAVE. Since the 6.02 monitor, there have in fact been four other commands,

OSAVE & OSSAVE which create the old style files and  
NSAVE & NSSAVE which create the new EXE style file.

Up to the present, SAV has been equivalent to OSAVE and SSAVE to OSSAVE. With the introduction of the next Operating System version this will change so that SAV is equivalent to NSAVE and SSAVE to NSSAVE.

## 5 KEEP COPIES OF YOUR SOURCE PROGRAMS

From time to time it becomes necessary to replace versions of compilers and the corresponding run-time systems. Most times such maintenance releases will not affect the operation of the majority of SAVED programs, nor will the operation of existing .REL files be invalidated. From time to time however, following major changes, it is possible that all programs will have to be re-compiled to run, say on the new hardware, or with a subsequent software version. AS A MATTER OF GOOD PRACTICE AND TO AVOID UNNECESSARY ANGUISH, KEEP COPIES OF YOUR SOURCE PROGRAMS SO YOU WILL BE ABLE TO RE-COMPILE WHEN THE NEED ARISES. In most cases, it will not be necessary to recompile programs for the new (KL10) system. However, to take advantage of the enhanced instruction set on it, you will have to re-compile. This will apply to both Fortran and Cobol programs.

Just to summarize some guidelines of good practice:

DO keep your source programs, preferably with at least one copy in a secure place, for example the archive system.

DISCARD your .REL files when you have finished program development, unless it is to be used as a library file.

BE PREPARED to re-compile and save your production SAVED programs from time to time, so that you may take advantage of new releases of software etc.

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6 EXPIRY OF PPNs

This is the first warning that your PPN has a finite expiry date (probably 24th December, 1977) and after this expiry date, you will not be able to use it. For three weeks prior to its expiry you will be warned at Login time; take heed of that warning, it will save you anguish and work if you contact us to renew it BEFORE it expires.

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