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ABSTRACT and CONTENTS

This document describes the objects that get loaded from disc or tape on system initialization and it outlines the tasks of these objects.

Programs to be Loaded at System Startup

This document supercedes any other document that may have some reference to the contents of this document.

Following is a list of objects loaded at startup (regardless of whether it is tape or disk startup).

Monitor

All of the monitor is loaded in all cases.

Fixed Real Core

Enough of fixed real core is loaded to allow the monitor to run normally. The only things not loaded may be such things as disk bit tables, DHT and various other queues needed by the micro-processors.

Special User Process (process #1)

Part of this special process gets loaded in order to do some initialization of the file system.

MIB

One MIB gets loaded. This MIB is initialized with the following objects:

1) User profile:
    a) user #1
    b) account #1
    c) group #1 (BCC)

2) Objects:

a) special process (PRI)

b) User number to MIB-disk address conversion file (UNMIBDKA)

c) various other files like group directories

Real core gets initialized to point to process #1. When the CHIO or AMC is finished with its initialization, the micro-scheduler starts up this process. This process gets entered in some initialization code in the monitor. This initialization code determines how to proceed with the initialization of the system (cold start or restart). After all the real core tables are set up properly the user sub-process of this process gets called.

The tasks that this process had to do include:

1) Initialize UNMIBDKA pages.
2) Read files pages off tapes and put them into the proper MIB's. This may also include the creation of new files, in case some files got clobbered.

It should be noted that UNMIBDKA is a file which consists of 16 pages. These pages are kept in fixed places on the disk. The contents of this file is indexed by user number and the corresponding locations contain the disk address of the MIB. The second 8 pages are duplicates of the first eight pages and are kept on a different area of the disk.

As MIB's are created, deleted, or moved, both sets of pages have to be updated. The existence of this file does not preclude the use of disc address as MIB pointers in account directories. It merely makes it easier to recover MIB's

without having to search possibly non-existent files. The MIB for user #1 is also going to be in fixed areas on the disk. It is the monitor's responsibility to restore the system on restart. It also creates disk bit tables, etc. The information to be restored is found on the crash area of the disk. The MIB that got loaded will also get replaced by the original MIB in this case.

The special process is a permanent process in the system. After its initialization procedure it converts itself into the "phantom user", which does enter/logout and various other things.