EACF / DPS / HSM Combined Startup

The EACF (Extended Access Control Facility), DPS (Deletion Protection System) and HSM (Hierarchical Storage Manager) systems share some kernel technology and can be used cooperatively. When you obtain the kits for any of them, in fact all are present, and the 30 day trial license allows use for 30 days of any components you wish to use. With a permanent license, you pay for what you use.

This document discusses briefly the combined setup menus. You should examine the documents for EACF, DPS, and HSM separately to gain a fuller understanding of the menus and controls displayed here. This combined setup menu is however used whenever you wish to enable more than one of the packages at one time. When they are enabled together, they can cooperate, and require fewer system resources than they would if installed separately.

When you first invoke the script JT_SETUP as requested by the messages from KITINSTAL, after running VMSINSTAL, you will see a menu come up with the following appearance:

```
    EACF-Security / DeleteProtect / HSM Selection

    Please select which functions you are licensed for:

 --> Extended Access Control Facility (EACF) only
     Deletion Protection System (DPS) only
     Hierarchical Storage Manager (HSM) only
     More than one of the above (combined setup)
     Quit, not ready to configure now
```

Note that combined setup allows choice of all functions of all packages but only those licensed will actually function.

Should you select the "More than one..." item, the script enters a set of combined menus which allows you to select functions of all three packages in a single setup.

The next menu you will see looks like this:

```
       SDH HSM CONTROL/MAINTENANCE

 --> *Select "Shelving" style SDH HSM
      Select "readonly softlink" style SDH HSM
      Explain the HSM styles briefly
      Proceed to set up SDH configuration file
      Unshelve all files on a disk if space exists (SDH running)
      Stop a running SDH server cleanly
      Start a server that is already configured
      Quit, do nothing
```

This menu is for configuring the HSM component. Generally you select either the "shelving" or the "softlink" style of HSM (this selects one of these operations as the mode of saving space) and then you select the item "Proceed to set up SDH configuration file". The "Unshelve all..." item is used when deinstalling HSM functions.

When you select the "Proceed..." item, you enter a menu which selects areas used to hold various information and control some global functions. This menu looks like this:

```
            SDH SETUP            17:28:50

    --> Set area to hold SDH database files
        Set start intercept driver unit number (now 0)
        Set area for SDH executable images
        Done this menu, process disk selection
        Remove a disk from an existing SDH configuration
        Set images which are exempt from SDH (e.g. defraggers)
        Set area for scratch
        Set area to save deleted files (= shelving area)
        Set mode of deletion handling (current value: 0)
        Enable volume space monitoring
        Set area for storing nearline files shelved (= del area)
        Remove a disk from SDH startup configuration
        Quit, do nothing
```

As you select areas, they are marked with asterisk (*) to flag that they have been selected.

You should select the item "Set mode of deletion handling" if using the deletion protection system ("undelete"). When you select this, a sub menu is provided which looks like this:

```
 SDH MODES SETUP 17:31:10

  --> * Run .COM file FILDEL.COM to process deletions
        Rename deleted files on volume to wastebasket
        Copy deleted files to wastebasket area
        Don't delete any files after processing
        Delete file if no room for saving (else do not delete)
        Run GCY$CM:DELBAK.COM before wastebasket purges
        Set files to ignore (allowing normal deletion of them)
        Done this menu
        Quit this menu, leave major modes alone
```

which lets you select between modes of handling deletion and undeletion.

When done, select the "Done..." item.

The "Done this menu, process disk selection" should be selected once all areas needed are selected.

This brings up the disk selection menu. This menu allows you to select disks to be controlled by various system components.

The disk select screen looks like this:

```
SDH Configuration      (Non-system) Disk Selection
Use arrows to move to selection. Use RETURN to select.

End disk selection
 _ARISIA$DCA0: XRP07
 _ARISIA$DCA2: XRP06
 _ARISIA$DCA3: ZHI
 _ARISIA$DCA4: ZCD
 _ARISIA$DCA5: CDMASTER
 _ARISIA$VDB0: TEST2
 _ARISIA$VDB1: TEST1
 _ARISIA$DKB200: <unmounted>
 _ARISIA$DKB700: <unmounted>
 _ARISIA$DCA1: <unmounted>
 _ARISIA$DCA6: <unmounted>
 _ARISIA$DCA7: <unmounted>
 _ARISIA$DCA8: <unmounted>
 _ARISIA$FRA0: <unmounted>
 _ARISIA$FRA1: <unmounted>
 _ARISIA$FRA2: <unmounted>
 _ARISIA$FRA3: <unmounted>
 _ARISIA$FRA4: <unmounted>
 Type H for help.      Currently on item 1 of 152
```

If you select one of the disks (cursor is indicated by reverse video) you come to the per-disk customization for the package. This menu is entered for each disk. See the EACF document for further information on the meanings of the items.

The per-disk menu looks like this:

```
         SDH DISK SETUP                17:36:20

      * Enter security key for disk
        Enter file of file IDs to load for kernel marking
        Examine only kernel-marked files for access tests
        Set to automatically kernel-mark all files on load
        (This requires generating the file list at boot)
        Generate filelist database and set to use it
        Act as if ALL files were kernel-marked (use if most are)
        Quit, do nothing.
    --> Done this menu
```

When each disk's per-disk menu is set up, you return to the disk selection screen, with disks selected already tagged with * to flag that they have been selected.

Once you select the "End disk selection" item on the disk selection menu, the script writes out the startup configuration files and types the following message:

```
Add the line

        $@SYS$MANAGER:SDH_STARTUP.COM

 to your SYSTARTUP_V5.COM file now. The script can be run from a
fully privileged account now if you wish.

Add the line

        $@SYS$MANAGER:SDH_LOGIN.COM

 to your SYLOGIN.COM file also to define symbols needed for SDH
```