



# ADVANTAGES OFFERED BY SCC MONITOR

SCC MONitor provides a simple, easy-to-use method of obtaining, filtering, and reporting on mainframe storage and other mainframe information that enhances the productivity of z/OS administrators and users.

Among its many functions, MONitor can perform threshold monitoring, reporting, and alerting on disk volumes, storage pools, and SMS storage groups. Parameters such as space utilization levels, response time, fragmentation, and problems such as full or disabled VTOCs or VTOC indexes can be easily identified and managed. Fully customizable reports are available for disk and tape volumes, disk datasets, JCL libraries, and other sources of data.

## AUTOMATION

When a threshold is exceeded or an alert condition is detected, MONitor can be directed to automatically invoke corrective measures to address the situation. At a minimum, system personnel can be notified/emailed to correct the situation manually. Jobs, procedures, and commands can be automatically performed to defragment disk volumes, compress datasets, release unused space, migrate data sets, and more as needed. In addition to any corrective automation, events can be recorded in SMF records or log files or sent off-platform to SIEM engines for additional analysis.

## REPORTING

MONitor can take information input from a wide variety of sources, from DASD structures such as VTOCs and VVDSs to catalogs, JCL libraries, tape management systems, DASD management systems such as DFSMSHsm, and more. Using the simple yet powerful Policy Rules language common to all of the DTS Software products, MONitor can filter, sort, reformat and summarize information from any of these sources to produce reports for administrators and end-users alike.

## MONitor COMPONENTS

### DISK MONitor (MON)

#### *DASD Volume Monitoring with Automated Actions and Dataset Reporting*

The Disk MONitor can run continuously or on a schedule to detect problem conditions in disk storage pools such as low free space, excessive fragmentation, poor response time, disabled VTOC indexes, and more, and can instantly alert administrators of problems before they become critical.

### REAL-TIME MONitor (RTM)

#### *Real-Time Dataset/Volume Monitoring*

The RTM component of MONitor can intercept, examine, and log all Direct Access Device Space Manager (DADSM) events such as Allocate, Extend, Rename, Scratch, and Release, and can provide alerts for potential problems such as datasets approaching extent or RBA limits, and can format and send records to an SQL database or SIEM engine for later aggregation and analysis.

### DATA SET REVIEW (DSR)

#### *User Dataset Management*

MONitor provides an optional ISPF interface that displays customized dataset lists of interest to each user. Using DSR, end users can easily identify datasets that are potentially problematic due to space or extent limitations or which have not been used in some period of time. Using the DSR ISPF panels, end-users can delete, migrate, and manage their datasets without the involvement of storage administrators.

### GRAPHICAL USER INTERFACE (EXPLORER GUI)

#### *z/OS DASD Storage Management*

The Explorer GUI includes all of the MONitor reporting functionality in a Windows-based interface that can interact with the MONitor started task on z/OS to provide more sophisticated DASD reports that can be sorted, filtered, summarized, and customized in a 'drill down' menu facility to get information at the pool, volume, or individual dataset level.

## SAMPLE MONitor RULE

MONitor uses the well-known DTS Software DIF Policy Rules language to specify what items to monitor, what thresholds to examine, and what actions to take when a threshold is reached. Many symbolic variables are available which can test conditions and which can be dynamically included in messages and commands. The following is a very simple example rule that invokes DFSMSshsm to migrate unused datasets from a volume when the volume free space falls below 20%. A message is also sent to the storage administrator. Much more sophisticated conditions are just as easy to test with the Rules Language.

```

DEFRULE VOLFREE
  IF &ENVS = ENDVOL
    &FREE SPACE LT 20
  THEN ISSUE OPERCMD(MIGRATE)
    ISSUE WRITEMSG(VOLFSPC)
DEFCMD MIGRATE "F DFHSM,MIGRATE &VOLSER"
DEFMSG VOLFSPC "VOLUME &VOLSER &FREE_SPACE +
EXCEEDED 20% LIMIT"
  
```

## SAMPLE MONitor REPORT (HOST-BASED)

MONitor can be used to generate a multitude of reports for Pools, SMS Storage Groups, Volumes, Datasets, SMS Constructs, DFSMSshsm and more using rules and customized record output to quantify the report criteria. The following illustration shows a report of a PDS directory scan. Any PDS that is more than 50% full will be listed in the report. Other PDS directory information is also contained in the report columns.

PDS DIRECTORY THRESHOLD SCAN 03/14/09 18:18:28 -1-

DSNAME	DIR	BLOCKS	USED	FREE	%USED	MEMBERS	VOLSER
SYS1.XDCCMDS		10	6	4	60	40	STOR01
STG.PROD.JCL		45	31	14	68	193	STOR02

## SAMPLE EXPLORER GUI SCREEN (PC-BASED)

The GUI uses MONitor facilities to generate output to be displayed and acted upon using a PC. Although some ISPF-based screens are also included, the GUI facility is preferred for the robust and dynamic features it provides. The following screen displays the command folder list to the left. When the folders are expanded, many script files are contained within to perform various functions. The output of the function will be displayed in the area on the right. In this example, a list of Pool or Storage groups defined to the system are displayed in a grid. Drill down lists, sorting, filtering, charting and exporting functions can be performed on grid output.

