# Rocket<sup>®</sup> Mainstar FastAudit The Key to Data Integrity

Track the health of metadata structures

Prioritize the auditing of business-critical data

Improve productivity by customizing and automating error correction

Perform audits with confidence

Design audits that fit your unique environment

Simplify auditing for novice and experienced storage administrators

Support 24x7 data access while protecting data assets

Without fast, accurate, reliable audits, you risk losing access not only to your IBM<sup>®</sup> z Systems data but also to your migrated DFSMS and DFSMShsm data. To avoid serious outages, you need a powerful yet easy-to-use audit and maintenance program.

Discover Rocket<sup>®</sup> Mainstar FastAudit, a powerful data integration solution that keeps your z/OS environment trouble-free with high-speed, accurate, and flexible audits.

# Fast, Accurate, and Non-Disruptive

Because FastAudit is from 60 to 150 times faster than the DFSMShsm AUDIT command and the Enhanced AUDIT command, you can run audits frequently, even during periods of heavy processing. Then, quickly view errors in the easy-to-use ISPF interface, and choose automatically created or custom FIX statements to correct problems.

#### Customizable and Automated

With FastAudit, you can customize audits and fixes for your unique environment. Prioritize audits so that business-critical data is addressed first. Target one, several, or many specific data sets or applications, and select customized fixes for these audits. Automatically fix errors, and set up different fixes for different types of data.

# Data Integrity

The z/OS operating system relies on metadata structures that include the BCS catalog environment, the tape-management database, and DFSMShsm control data sets. Damage to or loss of any of these critical structures can be devastating to your

environment. Abnormal termination and the inability to start the operating system, as well as considerable downtime, are possible consequences of poorly maintained metadata structures. FastAudit also audits the DFSMS Automatic Class Selection (ACS) routine. FastAudit reads every data set on primary DASD checking the defined MGMTCLAS definition to what the current active ACS reports it as being. This audit ensures the DFSMShsm management of the data is correct and what is expected.

Using FastAudit, you can maintain healthy metadata environments and prevent temporary or permanent loss of data access. Point-in-time extract files are the key to the accuracy and speed of the FastAudit audit and error-verification process. Using extract files, FastAudit re-verifies the error conditions in real time to ensure that they are legitimate errors and not the result of in-flight transactions. FastAudit includes HSM FastAudit, HSM FastAudit-Media Controls, and DFSMS MGMTCLAS auditing, along with additional reports -- all of which provide you with the information you need to tune the performance of the the DFSMShsm environment.

#### **HSM FastAudit:**

- Evaluates the HSM control data sets to resolve structural and logical discrepancies that might prevent your recalling migrated data or restoring backup data.
- Performs more types of audits than the DFSMShsm AUDIT and Enhanced AUDIT commands perform -- and does so faster and with more accuracy.
- Fixes errors and discrepancies automatically. You can fix all errors or fix errors that meet criteria or are in an application.



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#### HSM FastAudit-Media Controls:

- Corrects HSM tape errors quickly before data is lost and without affecting the HSM environment.
- Can rebuild a single data set or a damaged or missing tape table of contents so that access to the data on the HSM tape is restored and the tape returns to HSM control.
- Are benchmarked at 5, to over, 150x faster than the standard HSM command AUDIT MEDIACONTROLS.
- Can rebuild HSM migration-level 2 data and backup data that most standard audits delete.

#### **DFSMS Auditing:**

- Compares the defined MGMTCLAS of the data against the active DFSMS automatic class selection.
- Provides the following tuning and vulnerability reports:
  - Corruption Cost: Reports the daily cost of reading corrupted records in the control data sets.
  - Threshold: Reports data sets that are thrashing, possibly because the MGMTCLAS definition is incorrect.
  - Threshold Alert: Reports volumes and pools that are higher than the defined DFSMS threshold limit.
  - Data Needing Backup: Reports the data sets that require back up.

FastAudit is a proven solution that accommodates environments that range from hundreds of gigabytes to hundreds or terabytes.

### A Proactive Approach to Metadata Integrity

If you don't regularly run audits and resolve errors, you probably experience symptoms that are associated with corrupted records in you control data sets. Typical symptoms include tapes that have the "failed create" or "failed recycle" status, data sets that won't migrate or recall, and backup copies that can't be recovered. The FastAudit audits allow storage administrators to take a proactive approach by ensuring the health of the metadata structures, controlling access to catalogs, DFSMShsm control data sets, and tapes controlled by your tape management system.

### Designed for Experienced and Novice Storage Administrators

Whether you have been managing DFSMShsm catalogs and tape-management systems for years or are new to the discipline, you can use FastAudit with confidence.

The user interface is presented as online panels. Using these panels, you can view system diagnostics and select corrective actions based on your unique environment.

### Unequalled Comprehensive Audits

One HSM FastAudit procedure runs the equivalent of approximately 15 AUDIT commands. In addition, audits in FastAudit do not disrupt the catalog and the SFSMShsm environment, so you can expect an increase in productivity and significant savings in terms of resource utilization.

All audits executed by any of the FastAudit selectable products are non-disruptive to the catalog or DFSMShsm environment. This results in a significant savings of DFSMShsm resource utilization, increasing productivity.

You view audit results online and use command line commands to select corrective actions, which are automatically generated. To correct errors, you can use ISPF edit commands and the SUBMIT command.

In addition, you can configure audits to run corrective actions automatically.



# Why Use FastAudit?

In the typical mainframe environment, DFSMShsm manages hundreds of thousands to millions of data assets. As the amount of data grows, the role of DFSMShsm becomes increasingly critical. Using FastAudit, you can keep SFSMShsm running smoothly and accurately, and you can achieve these goals in a minimal amount of time and resources. Using FastAudit, you can perform the following tasks:

- Use quick audits to manage your DFSMS and DFSMShsm environment proactively. Complete audits in minutes, not hours or days.
- Perform audits without any negative effect on the DFSMShsm environment.
- Run audit reports that are organized and easy to interpret.
- Know the audits that you need to run to resolve reported errors.
- Avoid wasting time by researching reported errors that occur when migration or recall activity takes place while the AUDIT command runs.
- Ensure that you get the desired results by knowing exactly what a corrective action will do before you run it.

MCDS Created by procs AKDAUDMD, AKDAUDCT, AKDAUDAL
 BCDS Created by proc AKDAUDBD
 OCDS Created by proc AKDAUDOD
 HSMTAPE Created by procs AKDAUDTP, AKDAUDZR, AKDAUDRM, AKDAUDCM, AKDAUDHL
 MEDCTL Created by procs AKDAUDFD, AKDAUDFL, AKDAUDFT
 SMS Created by proc AKDAUDSM

- Monitor error thresholds to ensure that valid data sets that were inadvertently not catalogued are not automatically deleted.
- Reduce the learning curve for new storage administrators.

### Unequalled Comprehensive Audits

- Non-disruptive auditing for catalogs, DASD VTOC records, DFSMShsm storage, and tape-management systems.
- Easy-to-use online selection and submission of audits, diagnostic aids, and corrective actions.
- Easy online viewing of audit results.
- Flexibility to create, save, and reuse your own customized diagnostic aids and corrective actions.
- Complete control over which metadata structures are audited.
- Complete control over which diagnostic aid or corrective action is implemented for your unique environment.
- Customizable diagnostic aids and corrective actions.
- Automatic application of fixes to reported errors.
- Capability to turn ON or OFF individual error correction actions.
- Automatic halting of audits if a high threshold of errors is reported.
- Ability to apply automatic fixes to specific highlevel qualifiers.
- Support for both DFSMShsm standard TTOC and expanded TTOC.



# High Level Features/Benefits

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Audit and Error Verification Process	<ul> <li>Uses point-in-time extract files to increase the accuracy and speed of audits.</li> </ul>	<ul> <li>Keep track of the health of your metadata structures.</li> </ul>
Auditing of Specific High- Level Qualifiers	<ul> <li>Provides total control over audits and priorities.</li> </ul>	<ul> <li>Prioritize the auditing of business-critical data</li> </ul>
Automatic Error Correction	<ul> <li>Submits and runs pre-defined error corrective actions.</li> </ul>	<ul> <li>Improve productivity by customizing and automating error correction.</li> </ul>
Error Threshold Monitoring	<ul> <li>Ensures that automatic corrective actions are not occurring because of human error or because of an unusually high number of errors.</li> </ul>	<ul> <li>Perform audits with confidence.</li> </ul>
INCLUDE and EXCLUDE	<ul> <li>Provides the flexibility to audit exactly what you want.</li> </ul>	<ul> <li>Design audits that fit your unique environment.</li> </ul>
Multi-Purpose Query Format Language (MQFL	<ul> <li>Uses simple SQL statements and Boolean logic.</li> </ul>	<ul> <li>Simplify auditing for both novice and experienced storage administrators.</li> </ul>
Non-Disruptive Metadata Audits	<ul> <li>Audits your catalogs, DASD VTOC records, DFSMShsm, and tape-management systems—even during heavy production and DFSMShsm processing.</li> </ul>	<ul> <li>Support 24-hour, 7-day a week access, and protect your data assets.</li> </ul>

# System Requirements

Software Requirements	Any version of z/OS supported by IBM	
Storage Requirements	<ul> <li>Approximately 150 DASD cycles for installation</li> </ul>	<ul> <li>vDFSMS, DFSMShsm, active DFSMShsm</li> <li>Control Data Sets, DFSMShsm logging</li> </ul>



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