Mainstar Family of Products Provides Complete Storage and Recovery Solutions for Mainframe Computer Systems

Overview
The Mainstar Family of Products offers complete storage and recovery solutions for mainframe computer systems, including software development and consulting services.

The Mainstar MVS™ storage products provide additional management ability to the HSM and ICF catalog environment, particularly in error analysis and correction, backup and recovery, and repair.

A wealth of add-on support is provided by the disaster recovery suite of products to the MVS ABARS facility, a software-based capability to provide disaster backup at the application level, with the fastest and most timely restore capability at the recovery site.

The Mainstar mirroring solutions software provides increased add-on capability to the native mode FlashCopy and SnapShot software from IBM, including new support for ESS and RVA storage devices.

The products in this announcement are available as a part of the IBM Developer Sales Channel Software Remarketing program. Product information has been provided by the program supplier, Mainstar Software Corporation.

Key Prerequisites
MVS, all releases currently supported by IBM

Availability Date
February 18, 2002

At a Glance
The Mainstar Family of Products includes:

- Catalog RecoveryPlus — provides a comprehensive, fast, and high-integrity backup, recover, management, and repair tool for ICF catalog support
- FastAudit/390 — HSM FastAudit, Catalog & DASD Audit and Tape Audit — offers comprehensive audit support in fundamental areas
- Backup and Recovery Manager, ASAP, Incremental ABARS and Catalog BaseLine — provides unparalleled support for an ABARS disaster recovery implementation
- Mirroring Solutions/Volume Conflict Rename (MS/VCR) — provides fast, reliable, and high-integrity support for rename and recatalog of data sets after FlashCopy/SnapShot volume copy, enabling use of the data from the same system as the original copy
Catalog RecoveryPlus is the facility that allows you to quickly and easily backup and recover ICF catalogs, and to manage the ever-changing environment they operate in.

Catalog RecoveryPlus functions include:

- A backup and restore facility for BCS and VVDS that results in better integrity and faster processing.
- A forward recovery facility for BCS and VVDS that uses SMF data, merged with the backup records, to update the BCS or VVDS from the date/time of the backup to the current time.
- A backup and restore facility for VSAM KSDS files that is specifically designed for situations where the index is damaged, and the records must be unloaded from the current file.
- An expanded DIAGNOSE facility that enables frequent health-checks of the BCS-VVDS-VTOC structure, with an audit-check and “fix” capability to resynchronize entries that are in error.
- A fast and safe MERGECAT facility that enables splitting or merging of BCS entries.
- A master catalog “alias” audit facility that compares master catalogs to determine if they contain consistent and appropriate alias entries, with “fix” capability to resynchronize the catalogs if necessary.
- A powerful SUPERCLIP facility that allows you to change the volser of online DASD volumes in a single command, without forcing you to unload and reload all data on that volume.
- An ALTER command that provides several BCS/VVDS modify facility, including volser changes to BCS records, BCS back-pointer correction in the VVDS, and SnapShot Volume support for updating all BCS entries to point to the new volser.
- A ZAP command that provides an easy-to-use AMASPZAP-like facility to delete, print, and patch BCS and VVDS record structures.
- An EXPLORE command that provides a powerful catalog search facility, with extensive dataset naming and file attribute filters to identify datasets of interest.
- The “simulate” feature on several commands that enables you to check critical catalog changes in advance, determining what effect the command will have when run.
- The “journaling” facility on critical commands that enables a “restart” or “backout” in the event of failure or interruption during command execution.

The innovative and intentional design of Catalog RecoveryPlus ensures maximum support for today’s ICF catalog environment. Since ICF catalogs are critical to successful data access, and today’s ICF catalog environment is growing in size and complexity, it is imperative that you have the best tools available for daily catalog management, backup, and recovery.

Fast Audit/390

FastAudit/390 offers comprehensive audit support in the following areas:

- MCDS
- BCDS
- OCDS
- Tape
- Catalog/DASD

HSM FastAudit: The HSM FastAudit evaluates the Migration, Backup, and Offline Control datasets (MCDS, BCDS, OCDS) to resolve structural and logical discrepancies that could have prevented migrated data from being recalled, or backup data from being restored. HSM FastAudit checks the ICF Catalog relationships to assure that migrated data is cataloged, and that data cataloged as migrated is actually migrated. This function set duplicates DFSMSsm command audit functions with greater performance and flexibility.

Catalog & DASD Audit: The Catalog & DASD Audit evaluates all Master and User Catalog dataset entries, and reconciles against all DASD VTOC information on currently-mounted volumes. This audit finds such problems as unused alias entries, unconnected nodes, uncataloged datasets, and datasets cataloged to the wrong volumes. It also provides tools to automatically reconcile multiple Master Catalogs.

Tape Audit: The Tape Audit correlates entries in the TMC with the ICF Catalog status, assuring consistency within and between these critical structures. Successful tape management depends on the accurate synchronization of TMC information and ICF Catalog information. FastAudit/390’s high performance audit makes this reconciliation fast and painless.

Backup & Recovery Manager

Backup & Recovery Manager provides essential enhancements to the location-independent, and media-independent DFSMSHsm™ ABARS process; providing a big improvement in value and effectiveness, as well as DFSMSHsm Incremental Backup display and recovery capability.

With Backup & Recovery Manager:

- All backup information and backup status is accessible through one central point.
- Backup status and details can be viewed online.
- Online access to the full activity log and all error messages, as well as condensed status summary information, makes ABARS management simple.
- ABACKUP and ARECOVER activity is continuously monitored in real-time.
- Detailed dataset inventory provides recovery capacity requirements, recovery tape VOLSER, and other key planning and operational details.
ASAP

ASAP is a sophisticated tool that will:

- Automate "critical" dataset identification
- Automatically maintain accuracy as applications change
- Implement your recovery plan faster
- Drastically reduce overall DR costs
- Significantly streamline the recovery process
- Provide Rerun and Forward Recovery methodologies

**Mirroring Solutions/Volume Conflict Rename**

Mirroring Solutions/Volume Conflict Rename is the solution to gaining access to critical data for:

- Virtually 24x7 database inquiry availability
- Creation of test data
- Permanent or temporary data copies created

**Catalog Baseline**

Catalog Baseline supports disaster recovery on OS/390® systems with empty ICF catalogs, reducing catalog scrubbing and synchronization issues. ABARS itself does not provide any facility to synchronize multiple master catalogs, but Catalog Baseline does.

A common problem during many disaster recoveries is invalid content of the production ICF master and user catalogs. A powerful and preferred strategy, is to provide a complete, but empty, ICF user catalog environment with aliases intact, and let data recoveries re-populate the catalog contents.

However, manually tracking catalog maintenance and Generation Data Group (GDG) Base definitions, can lead to errors during recovery. User catalogs can be missing, not connected, or GDG Base definitions can be missing. Mainstar’s Catalog Baseline includes two functions that can be used individually, or together, to prevent errors:

- **Catalog Redefinition** — automatically identifies and captures the definitions of the production user catalogs including aliases to reconnect to the master catalog, replicating the primary site. This definition can be in either IDCAMS jobstream or ABARS ALLOCATE formats. When using ‘recover-into-empty-catalog’ strategy Catalog Baseline provides an automated capture process in a high-speed supported, and flexible package to assure recovery success.

- **GDG Base Population** — can also identify and package GDG Base definitions for replication into the empty recovery catalogs, assuring success at the recovery site during target system processing. The captured GDG Base definitions can be in either IDCAMS jobstream, or ABARS ALLOCATE formats, providing maximum flexibility for duplicating this critical infrastructure.

Incremental ABARS

Incremental ABARS allows you to combine the Disaster Recovery solutions provided by ABARS with the benefits of an incremental backup strategy.

The ability to do ABARS backup on an incremental basis can provide multiple benefits, including:

- Reduced average backup size.
- Consequent improved backup and recovery performance.
- Reduced resources to vault and maintain the backup.

With Incremental ABARS, the value of ABARS is also expanded with the ability to leverage its backup and recovery functionality in a local recovery situation, in addition to the Disaster Recovery for which it was originally designed.

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Technical Information

Primary Industry: Cross Industry

Hardware Requirements

Minimum
Processor Mainframe running MVS™

Software Requirements

Operating System MVS — all currently supported releases

Support

Training and Education: Customer training and education, customized and priced to each specific requirement, is available from the program supplier.

On-Site Installation: On-site installation and program interface services are available from the program supplier.

Program Support: Mainstar software includes a 90-day defect warranty.

Packaging: The products are packaged on CD-ROM with user guide manuals; Cartridge tape with user guide manuals; e-mail software with electronic copy of user guide manuals. Media and documentation ship from the program supplier.

Ordering Information

New Licenses

Orders for new licenses will now be accepted and scheduled for shipment by the program supplier.

To order a basic license, specify the program number, feature number 9001 for asset registration, and the one-time charge (OTC) feature and the desired quantity (maximum 250) corresponding to the number of copies. Also, specify the feature number of the desired distribution medium.

Product Support Charge (PSC): The first year of technical support is included in the software license, from date of license until one year later, which entitles them to defect support, product updates, upgrades, enhancements, new releases and extended warranty support as described in the Mainstar Software Corporation License Agreement. Subsequent year of annual maintenance can be purchased from Mainstar Software Corporation. The program supplier provides all program product services.

Program Name Program Number OTC Feature Number
Catalog RecoveryPlus 5620-FGY
1-10 pk 10 MIPS 0307
11-50 pk 10 MIPS 0308
51-100 pk 10 MIPS 0309
101-200 pk of 10 MIPS 0310
201-300 pk of 10 MIPS 0311
301-400 pk of 10 MIPS 0312
401+ pk of 10 MIPS 0313
Backup & Recovery Manager 5620-FHA
1-10 pk 10 MIPS 0315
11-50 pk 10 MIPS 0316
51-100 pk 10 MIPS 0317
101-200 pk of 10 MIPS 0318
201-300 pk of 10 MIPS 0319
301-400 pk of 10 MIPS 0320
401+ pk of 10 MIPS 0321
ASAP 5620-FHB
1-10 pk 10 MIPS 0329
11-50 pk 10 MIPS 0330
51-100 pk 10 MIPS 0331
101-200 pk of 10 MIPS 0332
201-300 pk of 10 MIPS 0333
301-400 pk of 10 MIPS 0334
401+ pk of 10 MIPS 0335
Mirroring Solutions/Volume 5620-FHC
Conflict RENAME
1 pack of 500 GBs 0323
2 pack of 500 GBs 0324
4 pack of 500 GBs 0325
8 pack of 500 GBs 0326
16 pack of 500 GBs 0327
17 pack of 500 GBs 0328
Incremental ABARS 5620-FHE
1-10 pk 10 MIPS 0353
11-50 pk 10 MIPS 0354
51-100 pk 10 MIPS 0355
101-200 pk of 10 MIPS 0356
201-300 pk of 10 MIPS 0357
301-400 pk of 10 MIPS 0358
401+ pk of 10 MIPS 0359

Note: Use the feature number for “17 pack of 500 GBs” for an order quantity requiring more than 8+ TBs.

Catalog BaseLine 5620-FHD
1-10 pk 10 MIPS 0361
11-50 pk 10 MIPS 0362
51-100 pk 10 MIPS 0363
101-200 pk of 10 MIPS 0364
201-300 pk of 10 MIPS 0365
301-400 pk of 10 MIPS 0366
401+ pk of 10 MIPS 0367
Incremental ABARS 5620-FHE
1-10 pk 10 MIPS 0353
11-50 pk 10 MIPS 0354
51-100 pk 10 MIPS 0355
101-200 pk of 10 MIPS 0356
201-300 pk of 10 MIPS 0357
301-400 pk of 10 MIPS 0358
401+ pk of 10 MIPS 0359

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
OTC Program Feature

Program Name Number Number
HSM Fast Audit 5620-FHI
1-10 pk 10 MIPS 0345
11-50 pk 10 MIPS 0346
51-100 pk 10 MIPS 0347
101-200 pk of 10 MIPS 0348
201-300 pk of 10 MIPS 0349
301-400 pk of 10 MIPS 0350
401+ pk of 10 MIPS 0351

Tape Audit 5620-FHJ
1-10 pk 10 MIPS 0369
11-50 pk 10 MIPS 0370
51-100 pk 10 MIPS 0371
101-200 pk of 10 MIPS 0372
201-300 pk of 10 MIPS 0373
301-400 pk of 10 MIPS 0374
401+ pk of 10 MIPS 0375

Catalog & DASD Audit 5620-FHK
1-10 pk 10 MIPS 0337
11-50 pk 10 MIPS 0338
51-100 pk 10 MIPS 0339
101-200 pk of 10 MIPS 0340
201-300 pk of 10 MIPS 0341
301-400 pk of 10 MIPS 0342
401+ pk of 10 MIPS 0343

Example 1: To order 3500 MIPS of Catalog RecoveryPlus on CD-ROM, specify:

Catalog RecoveryPlus (5620-FGY)

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<th>Feature number</th>
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<td>9001</td>
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Basic Machine-Readable Material: To order, select the feature number of the desired distribution media:

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<th>Environment</th>
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<td>PC</td>
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<td>CD ROM</td>
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<td>MVS</td>
<td>5862</td>
<td>3480 tape cartridge</td>
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<tr>
<td>All</td>
<td>5000</td>
<td>Electronic</td>
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Terms and Conditions

Licensing: Products presented under this announcement are licensed and distributed by the program supplier. With the exception of billing and payment terms, terms and conditions are as provided by the program supplier.

The ICA must be in effect.

The software is licensed to end users for a one-time licensing charge for their exclusive use. They cannot sell it, transfer it, or otherwise make it available to any other entity.

Prices: Prices listed and payment terms are as provided by IBM. Prices are provided for reference only and are subject to change without notice.

Pricing Allowance: Products are not eligible for volume, educational, or other discounts. SSD pricing approval is required for any Enterprise License Agreement (ELA) discounting.

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Trial Period: No trial period is available for the program supplier products.

Test Period: No test period is available for the program supplier products.

Technical Assistance: Technical assistance, installation, and usage support, if any, are as provided by the program supplier.

Program Services: Program services, if any, are as provided by the program supplier.

Charges

Prices are provided for reference only and are subject to change without notice.

Program Name OTC
Catalog RecoveryPlus (5620-FGY) $ 1,570
1-10 pk 10 MIPS 790
11-50 pk 10 MIPS 620
51-100 pk 10 MIPS 500
101-200 pk of 10 MIPS 460
201-300 pk of 10 MIPS 400
301-400 pk of 10 MIPS 370
401+ pk of 10 MIPS 343

Backup & Recovery Manager (5620-FHA)
1-10 pk 10 MIPS 4,000
11-50 pk 10 MIPS 1,550
51-100 pk 10 MIPS 1,000
101-200 pk of 10 MIPS 750
201-300 pk of 10 MIPS 670
301-400 pk of 10 MIPS 600
401+ pk of 10 MIPS 550

ASAP (5620-FHB)
1-10 pk 10 MIPS 2,660
11-50 pk 10 MIPS 1,030
51-100 pk 10 MIPS 670
101-200 pk of 10 MIPS 550
201-300 pk of 10 MIPS 500
301-400 pk of 10 MIPS 440
401+ pk of 10 MIPS 420

Mirroring Solutions/Volume Conflict Rename (5620-FHC)
1 pack of 500 GBs 19,000
2 pack of 500 GBs 28,500
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<th>Product Description</th>
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<td>4 pack of 500 GBs</td>
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<td>16 pack of 500 GBs</td>
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**Note:** Use the feature number for “17 pack of 500 GBs” for an order quantity requiring more than 8+ TBs.

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**OTC:** Customers who pay an OTC and a current PSC for a licensed program receive enhancements and future releases, if any, at no additional charge. Significant new function may be offered as an optional feature and charged for separately. If a replacement program is announced and the customer elects to license the replacement program for an OTC and replace the prior program, an upgrade charge may apply.

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