MAINVIEW® SRM Customization Guide

Version 7.1

July 15, 2002

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Contacting BMC Software

You can access the BMC Software Web site at **http://www.bmc.com**. From this Web site, you can obtain information about the company, its products, corporate offices, special events, and career opportunities.

United States and Canada

Address BMC Software, Inc.
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Houston TX 77042-2827

Telephone 713 918 8800 or
800 841 2031

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Outside United States and Canada

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Customer Support

You can obtain technical support by using the Support page on the BMC Software Web site or by contacting Customer Support by telephone or e-mail. To expedite your inquiry, please see “Before Contacting BMC Software.”

Support Web Site

You can obtain technical support from BMC Software 24 hours a day, 7 days a week at **http://www.bmc.com/support.html**. From this Web site, you can

- read overviews about support services and programs that BMC Software offers
- find the most current information about BMC Software products
- search a database for problems similar to yours and possible solutions
- order or download product documentation
- report a problem or ask a question
- subscribe to receive e-mail notices when new product versions are released
- find worldwide BMC Software support center locations and contact information, including e-mail addresses, fax numbers, and telephone numbers

Support by Telephone or E-mail

In the United States and Canada, if you need technical support and do not have access to the Web, call 800 537 1813. Outside the United States and Canada, please contact your local support center for assistance. To find telephone and e-mail contact information for the BMC Software support center that services your location, refer to the Contact Customer Support section of the Support page on the BMC Software Web site at **www.bmc.com/support.html**.

Before Contacting BMC Software

Before you contact BMC Software, have the following information available so that Customer Support can begin working on your problem immediately:

- product information
  - product name
  - product version (release number)
  - license number and password (trial or permanent)
- operating system and environment information
  - machine type
  - operating system type, version, and service pack or other maintenance level such as PUT or PTF
  - system hardware configuration
  - serial numbers
  - related software (database, application, and communication) including type, version, and service pack or maintenance level
- sequence of events leading to the problem
- commands and options that you used
- messages received (and the time and date that you received them)
  - product error messages
  - messages from the operating system, such as `file system full`
  - messages from related software

Contents

List of Tables

About This Book

This book contains detailed customization information about MAINVIEW® Storage Resource Manager by BMC Software and is intended for storage administrators.

To use this book, you should be familiar with

- OS/390 systems
- job control language (JCL)
- Interactive System Productivity Facility (ISPF)

How This Book Is Organized

This book is organized as follows. In addition, an index and glossary appear at the end of the book.

Chapter/Appendix	Description
Chapter 1, “Installation Overview”	provides a pre-installation planning worksheet, an overview of the BMC common install process, and an installation checklist
Chapter 2, “Installation Preparation”	provides information for you to use when preparing for product installation
Chapter 3, “Installation Customization”	provides task checklists for you to use when customizing MAINVIEW SRM
Chapter 4, “Customization Tasks for All MAINVIEW SRM Users”	describes tasks required for customization of any MAINVIEW SRM component
Chapter 5, “Customization Tasks for SG-Control Users”	describes tasks required for customization of MAINVIEW SRM SG-Control
Chapter 6, “Customization Tasks for StorageGUARD Users”	describes tasks required for customization of MAINVIEW SRM StorageGUARD
Chapter 7, “Customization Tasks for SG-Auto Users”	describes tasks required for customization of MAINVIEW SRM SG-Auto

Chapter/Appendix	Description
Chapter 8, “Customization Tasks for EasyHSM Users”	describes tasks required for customization of MAINVIEW SRM EasyHSM
Chapter 10, “Customization Tasks for Enterprise Storage Automation Users”	describes tasks required for customization of MAINVIEW SRM Enterprise Storage Automation
Chapter 11, “Verification Tasks for All MAINVIEW SRM Users”	describes tasks required to verify that you have successfully completed the installation of MAINVIEW SRM and that all licensed components are functional
Appendix A, “Additional Global Parameters”	provides frequently used parameters that you may want to modify in SMMSYS*xx* during customization
Appendix B, “Migrating from Previous Releases”	provides recommendations that will help you decide how to proceed with component customization based on your storage management priorities

Related Documentation

BMC Software products are supported by several types of documentation:

- online and printed books
- online Help
- release notes and other notices

In addition to this book and the online Help, you can find useful information in the publications listed in the following table. As “Online and Printed Books” on page xiii explains, these publications are available on request from BMC Software.

Category	Document	Description
MAINVIEW common documents	*OS/390 and z/OS Installer Guide* *MAINVIEW Installation Requirements Guide* *MAINVIEW Common Customization Guide* *Using MAINVEW* *MAINVIEW Administration Guide* *Implementing Security for MAINVIEW*	provides instructions for installing, configuring, using, and administering MAINVIEW
MAINVIEW SRM core documents	MAINVIEW SRM *User Guide and Reference*	provides information common to all MAINVIEW SRM products and high-level navigation

Category	Document	Description
reference documents	MAINVIEW SRM *Reference Summary*	provides a listing and explanation of global system parameters, FLST/RLST parameters, and functions for all MAINVIEW SRM products
messages	*MAINVIEW SRM Messages*	provides hardcopy of messages that are also available online
product documents	• *MAINVIEW SRM DMS2HSM User Guide and Reference* • *MAINVIEW SRM EasyHSM User Guide and Reference* • *MAINVIEW SRM EasyPOOL User Guide and Reference* • *MAINVIEW SRM EasySMS User Guide and Reference* • *MAINVIEW SRM Enterprise Storage Automation User Guide* • *MAINVIEW SRM SG-Control User Guide and Reference* • *MAINVIEW SRM StopX37/II User Guide and Reference* • *MAINVIEW SRM StorageGUARD User Guide and Reference*	provide product-specific information for MAINVIEW SRM products
supplemental documents	release notes, flashes, technical bulletins	provides additional information about the product

Online and Printed Books

The books that accompany BMC Software products are available in online format and printed format. If you are a Windows or Unix user, you can view online books with Acrobat Reader from Adobe Systems. The reader is provided at no cost, as explained in "To Access Online Books." You can also obtain additional printed books from BMC Software, as explained in "To Request Additional Printed Books."

To Access Online Books

Online books are formatted as Portable Document Format (PDF) files. You can view them, print them, or copy them to your computer by using Acrobat Reader 3.0 or later.You can access online books from the documentation compact disc (CD) that accompanies your product or from the World Wide Web.

In some cases, installation of Acrobat Reader and downloading the online books is an optional part of the product-installation process. For information about downloading the free reader from the Web, go to the Adobe Systems site at **http://www.adobe.com**.

To view any online book that BMC Software offers, visit the support page of the BMC Software Web site at **http://www.bmc.com/support.html**. Select a product to access the related documentation.

To Request Additional Printed Books

BMC Software provides printed books with your product order. To request additional books, go to **http://www.bmc.com/support.html.**

Release Notes and Other Notices

Printed release notes accompany each BMC Software product. Release notes provide current information such as

- updates to the installation instructions
- last-minute product information

In addition, BMC Software sometimes provides updated product information between releases (in the form of a flash or a technical bulletin, for example). The latest versions of the release notes and other notices are available on the Web at **http://www.bmc.com/support.html**.

Conventions

This section provides examples of the conventions used in this book and explains how to read ISPF panel-flow diagrams and syntax statements.

General Conventions

This book uses the following general conventions:

Item	Example
information that you are instructed to type	Type **SEARCH DB** in the designated field.
specific (standard) keyboard key names	Press **Enter**.
field names, text on a panel	Type **the appropriate entry** in the **Command** field.
directories, file names, Web addresses	The BMC Software home page is at **www.bmc.com**.

Item	Example
nonspecific key names, option names	Use the HELP function key. KEEPDICTIONARY option
MVS calls, commands, control statements, keywords, parameters, reserved words	Use the SEARCH command to find a particular object. The product generates the SQL TABLE statement next.
command options, database names	Use the **sbacktrack** program to create a backup script.

code examples, syntax statements, system messages, screen text	`//STEPLIB DD`
	
	`The table` *`table_name`* `is not available.`

emphasized words, new terms, variables	The instructions that you give to the software are called *commands*. In this message, the variable *file_name* represents the file that caused the error.
single-step procedures	» To enable incremental backups, type **y** and press **Enter** at the next prompt.

This book uses the following types of special text:

Note: Notes contain important information that you should consider.

Warning! Warnings alert you to situations that could cause problems, such as loss of data, if you do not follow instructions carefully.

Tip: Tips contain useful information that may improve product performance or that may make procedures easier to follow.

Syntax Statements

Syntax statements appear in Courier. The following example shows a sample syntax statement:

```
COMMAND KEYWORD1 [KEYWORD2|KEYWORD3] KEYWORD4={YES|NO}
        file_name...
```

The following table explains conventions for syntax statements and provides examples:

Item	Example
Items in italic type represent variables that you must replace with a name or value. Use an underscore for variables with more than one word.	`dtsbackup` *`control_directory`*
Brackets indicate a group of options. You can choose at least one of the items in the group, but none of them is required. Do not type the brackets when you enter the option. A comma means that you can choose one or more of the listed options. You must use a comma to separate the options if you choose more than one option.	[*`table_name, column_name, field`*]
Braces enclose a list of required items. You must enter at least one of the items. Do not type the braces when you enter the item.	{*`DBD_name`* | *`table_name`*}
A vertical bar means that you can choose only one of the listed items. In the example, you would choose either *commit* or *cancel*.	{commit | cancel}
An ellipsis indicates that you can repeat the previous item or items as many times as necessary.	*`column_name`* . . .

Chapter 1 Installation Overview

This chapter provides an overview of the installation process. The installation process is discussed in the following topics:

Introduction

The MAINVIEW Storage Resource Manager (SRM) uses the OS/390 and z/OS Installer to install and customize MAINVIEW SRM components. The OS/390 and z/OS Installer provides a consistent distribution, installation, customization, and maintenance process for integrated BMC Software products that execute on the OS/390 platform.

Part of the installation system is the Installation Checklist Generator, which allows you to select one or more products to install and compiles an integrated, customized checklist to guide you through the installation and customization process. See the *OS/390 and z/OS Installer Guide* for instructions for the Installation Checklist Generator.

Before you begin the installation, be sure to complete the pre-installation worksheet. The pre-installation worksheet combined with the installation checklist aid you in a smooth installation process.

Pre-Installation Planning Worksheet

The following information will help you prepare for your implementation of MAINVIEW SRM, whether this is your first installation or you are upgrading from an older release.

Tip: Print copies of the worksheet from the Acrobat Reader and use it to record your information.

Table 1-1 Pre-Installation Planning Worksheet

✓	Step	Description
	1.	If dynamic update of APF and Link Lists cannot be done, perform these updates and schedule an IPL prior to implementation: • Add userhlq.BBLINK to the APF list in SYS1.PARMLIB (PROGxx). • Add userhlq.BBLINK to the link list concatenation in SYS1.PARMLIB (LNKLSTxx).
	2.	Ensure that the following STCs are defined in RACF and are authorized: **BBMCAS** MAINVIEW Coordinating Address Space **SVOS** MAINVIEW SRM Operator Services **BBMXPJCL** Web Explorer TCP/IP interface Define the following STCs if the associated product is to be installed: **SGAPROC**–SG-Auto–If shared LPARs, this runs on only one) **SGDCOLLS**–StorageGUARD (space data collector)–If shared LPARs, this runs on only one **SGPPROC**–StorageGUARD (performance data collector)–If shared LPARs, this runs on each **SVWTCPIP**–PATROL ACSM TCP/IP interface • SVWTCPIP must have a user ID and password assigned. These are entered in the PATROL Console so PATROL can “logon” to MAINVIEW SRM and transfer data from S/390. • The STCs must have a high dispatching service class (SYSSTC in Goal mode). • The STC names can be changed to conform to installation standards. • The SVOS STC must have authority to perform update/alter actions, such as COMPRESS, against any data set requested from a user within a MAINVIEW SRM view. This is required because some requests from within MAINVIEW SRM views are actually sent to the SVOS ASID to be executed. **Note:** A data set request is *only* sent to SVOS after verifying the user of a MAINVIEW SRM view *has* the proper authority to perform the requested action.
	3.	Add the following to the TSO authorizations in SYS1.PARMLIB(IKJTSO*xx*): • If StorageGUARD is being installed, add to the AUTHCMD section: **SGCR419$** and **SGCR41B$** • If SG-Control is being installed, add to the AUTHCMD section: **BUDGET** and **BUDDSN** • If the PATROL Server is being installed, add to the AUTHTSF section: **BBSDTCPA**
	4.	Provide an SMF record number if EasyHSM, EasyPOOL, EasySMS or StopX37/II is being installed. Ensure that SYS1.PARMLIB(SMFPRM*xx*) will allow generation of the record.

Table 1-1 Pre-Installation Planning Worksheet

✓	Step	Description
	5.	If StorageGUARD is being installed, verify the following information about SMF components in SYS1.PARMLIB(SMFPRM*xx*): • IEFU83 and IEFU84 are active • TYPE 30 and 42 SMF records must be generated (MAINVIEW SRM can suppress writing type 42s) • recording intervals of SMF and CMF/RMF records must be synchronized
	6.	How much DASD storage is on the installed system (or shared-plex)? _____ What vendors, DASD type, and amount of storage is installed? _____ _____ _____ _____ How many volumes reside on the installed system (plex)? _____ How many pools and Storage Groups are on the installed system? _____
	7.	What prefix (userhlq) and volume will be used for the SMP/E libraries? _____ _____
	8.	What prefix (userhlq) and volume(s) will be used for the SRM target libraries and databases? _____ _____
	9.	What is name of the PROCLIB where the STC JCL is to be stored? _____
	10.	What is the TCP/IP address and DNS name of the installed system? _____
	11.	What is the DSN of the IBM TCP/IP control data set? (This is the data set and member as specified on the SYSTCPD DD in your TCP/IP STC.) _____

Table 1-1 Pre-Installation Planning Worksheet

✓	Step	Description
	12.	If EasyHSM is being installed, provide the following data set names and information: BCDS1 _____BCDS2 _____ BCDS3 _____BCDS4 _____ MCDS1 _____MCDS2 _____ MCDS3 _____MCDS4 _____ OCDS _____HSMLOGY _____ Verify that ACTLOGTYPE(DASD) is specified In SYS1.PARMLIB(ARCCMDnn) (required). • What is the HLQ of the HSM Activity Log? _____ • What is the one-character ID of the HSM host machine? _____ • Verify if any of these HSM exits are currently in use on the installed system: ARCMDEXT, ARCRDEXT, ARCSAEXT
	13.	What release and maintenance level of MAINVIEW SRM is being installed? _____

Installation Checklist

The installation checklist outlines the steps that you must perform to install and run your product (or products). The checklist summarizes what you must do and refers you to detailed instructions.

The checklist is divided into the following sections:

- “Preparation Steps” on page 1-5
- “Installation Steps” on page 1-6
- “Customization Steps” on page 1-7

Combining Checklists for Multiple Products

The checklist is for the product (or products) that are listed in “Products” on page 1-5. You can use the Installation Checklist Generator to create a checklist that integrates the checklist in this book with checklists in other product books.

When you use the checklist generator, you select the products that you are going to install and the checklist generator produces an integrated checklist. The integrated checklist outlines all steps that you must complete for successful installation of all your products.

The checklist generator is available on your documentation CD. For information about running the checklist generator, see the *OS/390 and z/OS Installer Guide*.

Products

This checklist pertains to the following BMC Software products:

- MAINVIEW SRM DMS2HSM version 7.1.01
- MAINVIEW SRM EasyHSM version 7.1.01
- MAINVIEW SRM EasyPOOL version 7.1.01
- MAINVIEW SRM EasySMS version 7.1.01
- MAINVIEW SRM Enterprise Storage Automation version 7.1.01
- MAINVIEW SRM SG-Auto version 7.1.01
- MAINVIEW SRM SG-Control version 7.1.01
- MAINVIEW SRM StopX37/II version 7.1.01
- MAINVIEW SRM StorageGUARD version 7.1.01

Preparation Steps

The following preparation steps help you prepare for installation of your products. The steps describe the tasks that you must complete and the items that you must assemble before you start installation.

✓	Step	Task	Description	Reference
	1	assemble needed materials	Gather all installation tapes, tape cover letters, product release notes, product technical bulletins, the *OS/390 and z/OS Installer Guide*, customization guides, planning guides, and so on.	your product shipment and the **support page** on the BMC Software Web site
	2	review tape cover letters	The tape cover letters are shipped with your tapes. They list the materials in your shipment.	**your product shipment**
	3	review product release notes	The release notes describe enhancements, changes, and fixes for a product and contain important information you need to know.	**your product shipment**

✓	Step	Task	Description	Reference
	4	review technical bulletins and flashes	Technical bulletins and flashes contain information about problems that have been identified since the product was last released.	your product shipment and the **support page** on the BMC Software Web site
	5	obtain product passwords	Contact BMC Software to obtain the passwords for your products.	*OS/390 and z/OS Installer Guide*, "BMC Software Product Authorization" appendix product authorization letter
	6	read prerequisites	Prerequisites state the operating system version requirements, space requirements, authorization requirements, and so on.	*MAINVIEW SRM Customization Guide, "Prerequisites" section*
	7	read migration considerations	Migration considerations describe the process of migrating from a previous version of the product or from another product.	*MAINVIEW SRM Customization Guide*, "Migrating from Previous Releases" appendix
	8	read installation considerations	Installation considerations describe information about running with other products and product implementation.	*MAINVIEW SRM Customization Guide,* "Installation Considerations" section
	9	obtain authorization to complete the installation	Reading the installation tapes or creating the installation data sets might require RACF authorization.	contact your system administrator, security administrator, or other administrator
	10	obtain authorization to complete customization	Customization of some products might require APF authorization.	contact your system administrator, security administrator, or other administrator
	11	fill out worksheets	A worksheet contains information, such as data set names and library locations, that you will need for completing installation.	*MAINVIEW SRM Customization Guide,* "Pre-Installation Planning Worksheet" section

Installation Steps

The following installation steps help you run the installation system to successfully complete installation. The installation system combines tape images, copies files to your system (Standard or SMP/E), creates installation JCL, and applies maintenance to installed products.

✓	Step	Task	Description	Reference
	1	understand the installation system	The installation system has features and functions that you should be familiar with before using it.	*OS/390 and z/OS Installer Guide*, "Introduction" chapter
	2	unload the base installation libraries from the installation tape	The base installation libraries contain the installation system.	*OS/390 and z/OS Installer Guide,* "Using the Installation System" chapter

✓	Step	Task	Description	Reference
	3	create the customized installation libraries	The customized installation libraries specify a site-specific installation environment.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	4	start the installation system	The installation system automates many installation steps.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	5	specify repository information	The repository profile contains installation and customization options that are used when performing subsequent installations.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	6	specify user options	The user options determine how the installation system runs and specify where installation JCL is stored.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	7	select the products to install	The installation steps for products you want to .	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	8	run the JCL that was created by the installation system	The installation system presents installation JCL for your approval and helps you to run the JCL.	*OS/390 and z/OS Installer Guide*, “Running Installation JCL” chapter
	9	specify product authorization passwords	Permission to run your products is granted.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter

Customization Steps

The following customization steps describe the tasks that you must complete to run your product (for some products, additional customization options might be available once the product is running). Some tasks might be performed by using the installation system, while other tasks might be performed by using a separate utility.

✓	Step	Task	Description	Reference
	1	choose the customization option in the installation system	Customization is started through the customization option in the installation system.	*OS/390 and z/OS Installer Guide*, “Using the Installation System” chapter
	2	perform additional customization tasks for your products	Some products require additional tasks to be performed before the products are completely installed.	*MAINVIEW SRM Customization Guide,* “Customization Tasks for All MAINVIEW SRM Users” chapter *MAINVIEW SRM Customization Guide,* “Customization Tasks for StorageGUARD Users” chapter *MAINVIEW SRM Customization Guide,* “Customization Tasks for SG-Control Users” chapter *MAINVIEW SRM Customization Guide,* “Customization Tasks for EasyHSM Users” chapter *MAINVIEW SRM Customization Guide,* “Customization Tasks for Enterprise Storage Automation Users” chapter
	3	verify customization	Some products provide information to verify customization of the product.	*MAINVIEW SRM Customization Guide*, “Verification Tasks for All Users” chapter

Chapter 2 Installation Preparation

This chapter provides the following information:

Required Materials

To prepare for your installation, You should gather all material that you will need, including

Material	How Used
installation tapes	Installation files for this product are available on the enclosed distribution tapes or by electronic download from the BMC Software FTP Web site **ftp://ftp.bmc.com/bmc/esd/ozi/ozi_readme.htm**
tape cover letters	Read the tape cover letters to determine which installation tapes and which installation and customization manuals you need to gather.
manuals	Make sure you have available the *OS/390 and z/OS Installer Guide*, *MAINVIEW Installation Requirements Guide*, *MAINVIEW Common Customization Guide* in addition to this guide. These guides work together to provide you a complete picture of the installation of MAINVIEW and MAINVIEW SRM products.
notices	Read the product release notes and technical bulletins; they may contain important or last minute information.
checklists	Run the checklist generator or copy and combine the checklists from individual customization guides for the products you will install.
worksheets	Complete the “Pre-Installation Planning Worksheet” on page 1-2. You use the worksheet to record information that you will need, such as data set names and library locations.

Prerequisites

Make sure you meet the following prerequisites before installing the product.

System Software Requirements

To use MAINVIEW SRM, you need one of the following minimum system configurations, which must be an IBM-supported release:

- OS/390 2.6 or higher
- z/OS 1.1 or higher

MAINVIEW SRM Enterprise Storage Automation

To use MAINVIEW SRM Enterprise Storage Automation, you must have MAINVIEW AutoOPERATOR 6.1 *or higher* active on your system.

If you are running AutoOPERATOR 6.1, you must have PTF BPO5425 applied to support job submission and skeleton tailoring using the AUTO function ACT_JOB keyword.

Once the BPO5425 PTF is applied, the AutoOPERATOR subsystem will require a cold start and resetting of the AutoOPERATOR VPOOL. This is accomplished by restarting the AutoOPERATOR subsystem with START=COLD,VPOOL=RESET keywords on the OS/390 START command.

StorageGUARD Tape Reporting Facility

To use tape reporting facility, you need one of the following tape library systems:

- CA1
- RMM
- Control-T

Space Requirements

To use MAINVIEW SRM, you need the following minimum available space:

Target Libraries
100 cylinders

Distribution Libraries
70 cylinders

Total Required DASD Storage
170 cylinders

Space requirements are combined for you when running the OS/390 and z/OS Installer.

Virtual Storage Estimates for MAINVIEW SRM 7.1
without SG-Control
75K CSA
967K ECSA

with SG-Control
80K CSA
1099K ECSA

Authorization Requirements

You must grant user access to restricted programs or TSO commands as appropriate. See “Task 12: (Optional) Add MAINVIEW SRM Authorized Components to AUTHTSF and AUTHCMD” on page 4-15.

Note: Attention all CA-ACF2 users: see *Implementing Security for MAINVIEW Products* for information about configuring your ESM for enhanced security. You must run at least steps 1, 2, and 3.

Product Authorization

All MAINVIEW SRM products require password authorization. You should have received an email with your product passwords. If you did not receive your passwords, see the *OS/390 and z/OS Installer Guide* for password request information.

Installation Considerations

Consider the following issues before to installing the product:

Migrating from Other Versions

For information about migrating from an earlier version of this product, see Appendix B. Migrating customers should use *all* checklists and worksheets in this manual.

Running with Other Versions

With the exception of PSP version 115, MAINVIEW SRM should be the last product started and the first stopped. In all cases, products should be stopped in the reverse order of start; that is, if product A is started first, followed by MAINVIEW SRM, MAINVIEW SRM should be stopped first, followed by product A.

PSP versions 115 and earlier must be started after MAINVIEW SRM. Softworks has zaps with the following IDs to correct this problem:

- SWAG011.200
- SWAG012.200 (These zaps have been added to PSP 116.)

If these zaps have been applied or if you are using PSP 116 or later, MAINVIEW SRM can be started after PSP is initialized.

Note: Only one instance of SVOS can be active on a system at a time; therefore, MAINVIEW SRM cannot operate concurrently with previous versions of the SVOS started task.

Contact BMC Software Customer Support for the most current information on compatibility with other system management products.

Chapter 3 Installation Customization

This chapter provides you with the information you need to determine which customization method you will use: manual or automated.

Tip: If you have already determined that you will use the AutoCustomization method, skip to Chapter 11, “Verification Tasks for All MAINVIEW SRM Users.”

If you choose manual customization, this chapter provides you with customization checklists that guide you through the customization process. The following information is included:

Customization Methods

After MAINVIEW SRM has been unloaded from tape, you must prepare the MAINVIEW SRM system for use and enable basic functions to verify that they are operational. There are two methods of doing this: manually or using AutoCustomization.

AutoCustomization

AutoCustomization is an interactive ISPF dialog provided to customize installed BMC Software products. AutoCustomization is the recommended customization method because it:

- propagates information for shared customization steps
- allows you to browse steps before you perform them
- identifies the steps that you have completed
- reduces the likelihood of errors

See the *OS/390 and z/OS Installer Guide* for more information about AutoCustomization.

If you decide to use AutoCustomization follow these steps:

Step 1 Read the critical notes in any chapter of this book that is relevant to a product that you are installing.

Step 2 Follow the instructions in the OS/390 and z/OS Installer Guide.

Step 3 Return to this book and complete the tasks described in “Verification Tasks for All MAINVIEW SRM Users” on page 3-7.

Manual Customization

If you decide to manually customize MAINVIEW SRM, complete the tasks in this chapter.

Task checklists are provided in this chapter to help you customize MAINVIEW SRM in the easiest and most efficient manner possible. Read the following overview to understand how the checklists are organized and intended to be used.

Each task in the checklists includes a page number that cross-references detailed instructions and reference material. In the online version of this manual, a cross-reference is a hyperlink.

Tip: Print copies of the checklists from the Acrobat Reader and use them to mark tasks as complete during customization.

This chapter provides checklists to be used by all MAINVIEW SRM users and specific checklists specifically for users of the following MAINVIEW SRM products:

- SG-Control
- StorageGUARD
- SG-Auto
- EasyHSM
- PATROL SRM
- Enterprise Storage Automation

The following MAINVIEW SRM products have no customization tasks associated with them other than those specified in “Customization Tasks for All MAINVIEW SRM Users” on page 3-4:

- EasySMS
- EasyPOOL
- StopX37/II

Follow these rules for using the checklists:

- Start with Checklist 1, which is for all MAINVIEW SRM users.
- Skip the checklists for products that you are not licensed to use.
- Because some tasks have dependencies, complete each task in a checklist in the order in which it is presented.

Customization Tasks for All MAINVIEW SRM Users

All MAINVIEW SRM users should complete the checklist in Table 3-1.

Table 3-1 Checklist for All MAINVIEW SRM Users

✓	Task	Description
	1.	“Task 1: Specify Jobcards and Other Operational Defaults” on page 4-2
	2.	“Task 2: (Optional) Implement Katakana Terminal Support” on page 4-3
	3.	“Task 3: Create Site Data Sets for Use with MAINVIEW Products” on page 4-4
	4.	“Task 4: (Required for Security) Create Site Security Data Set” on page 4-5
	5.	“Task 5: APF-Authorizing the BMC Software Load Library” on page 4-6
	6.	“Task 6: (Optional) Add the BMC Software Load Library to your System Link List” on page 4-8
	7.	“Task 7: Create CLIST for Invoking MAINVIEW Products” on page 4-9
	8.	“Task 8: (Optional) Reload All BBX Services” on page 4-10
	9.	“Task 9: Create the CAS (Coordinating Address Space) Startup Procedure” on page 4-11
	10.	“Task 10: (Optional) Create MAINVIEW Explorer Host Server Startup Procedure” on page 4-13
	11.	“Task 11: Copy BBPARM to UBBPARM” on page 4-14
	12.	“Task 12: (Optional) Add MAINVIEW SRM Authorized Components to AUTHTSF and AUTHCMD” on page 4-15
	13.	“Task 13: Update MAINVIEW SRM Global Parameters” on page 4-17
	14.	“Task 14: Customize SVOS Started Task JCL” on page 4-18
	15.	Use the other checklists in this chapter to customize each of the following products of MAINVIEW SRM for which you are licensed. When you have finished customizing the products, return to this checklist and complete Task 16. • SG-Control • StorageGUARD • SG-Auto • EasyHSM • PATROL SRM • Enterprise Storage Automation
	16.	Use ““Verification Tasks for All MAINVIEW SRM Users” on page 3-8 to verify the installation.

Customization Tasks for SG-Control Users

Complete the checklist Table 3-2 only if you are licensed for SG-Control.

Table 3-2 Checklist for MAINVIEW SRM SG-Control Users

✓	Task	Description
	1.	Read the critical notes for Chapter 5. See “Task 1: Read the Critical Notes” on page 5-1.
	2.	Allocate the SG-Control database. See “Task 2: Allocate the SG-Control Database” on page 5-2.
	3.	Define an SG-Control default account. See “Task 3: Define an SG-Control Default Application” on page 5-2.
	4.	Modify values for SG-Control global parameters. See “Task 4: Customize SG-Control Global Parameters” on page 5-3.

Customization Tasks for StorageGUARD Users

Complete the checklist Table 3-3 only if you are licensed for StorageGUARD.

Table 3-3 Checklist for MAINVIEW SRM StorageGUARD Users

✓	Task	Description
	1.	Read the critical notes for Chapter 7. See “Task 1: Read the Critical Notes” on page 6-2.
	2.	Modify values for historical space and historical performance global parameters. See “Task 2: Customize StorageGUARD Global Parameters” on page 6-2.
	3.	Allocate and initialize the historical space and historical performance databases. See “Task 3: Allocate and Initialize the StorageGUARD Databases” on page 6-6.
	4.	RVA users only, allocate historical space and historical performance IXFP work files See “Task 4: Allocate IXFP Work Files” on page 6-9.
	5.	Modify the historical space and historical performance started task JCL for the data collectors. See “Task 5: Modify the StorageGUARD Started Task JCL” on page 6-10.
	6.	Modify SMF and CMF/RMF parameters for historical performance. See “Task 6: Modify SMF and CMF/RMF Parameters” on page 6-11.

Customization Tasks for SG-Auto Users

Complete the checklist Table 3-4 only if you are licensed for SG-Auto.

Table 3-4 Checklist for MAINVIEW SRM SG-Auto Users

✓	Task	Description
	1.	Read the critical notes for Chapter 7. See “Task 1: Read the Critical Notes” on page 7-1.
	2.	Modify values for SG-Auto global parameters. See “Task 2: Customize SG-Auto Global Parameters” on page 7-2.
	3.	Modify the SG-Auto started task JCL. See “Task 3: Customize the SG-Auto Started Task” on page 7-2.

Customization Tasks for EasyHSM Users

Complete the checklist Table 3-5 only if you are licensed for EasyHSM.

Table 3-5 Checklist for MAINVIEW SRM EasyHSM Users

✓	Task	Description
	1.	Read the critical notes for Chapter 8. See “Task 1: Read the Critical Notes” on page 8-1.
	2.	Modify values for EasyHSM global parameters. See “Task 2: Customize EasyHSM Global Parameters” on page 8-2.
	3.	Modify values for EasyHSM log extraction parameters. See “Task 3: Customize EasyHSM JCL for HSM Log Collection” on page 8-3.

Customization Tasks for PATROL SRM Users

Complete the checklist Table 3-6 only if you are licensed for PATROL.

Table 3-6 Checklist for PATROL SRM Users

✓	Task	Protocol	Description
	1.	N/A	Read the critical notes for Chapter 9. See “Task 1: Read the Critical Notes” on page 9-1.
	2.	TCP/IP	Modify the PATROL started task JCL for TCP/IP. See“Task 2: Customize Distributed Systems Collection Agent Started Task” on page 9-2.
	3.	TCP/IP	Modify the link-edit JCL for TCP/IP. See “Task 3: Modify the Link-Edit JCL for TCP/IP” on page 9-2.
	4.	TCP/IP	Start the TCP/IP transaction scheduler. See “Task 4: Start the TCP/IP Transaction Scheduler” on page 9-2.
	5.	N/A	Install the PATROL client software. See “Task 5: Install the PATROL Client Software” on page 9-3.

Customization Tasks for Enterprise Storage Automation Users

Complete the checklist Table 3-7 only if you are licensed for Enterprise Storage Automation.

Table 3-7 Checklist for Enterprise Storage Automation Users

✓	Task	Description
	1.	Read the critical notes for Chapter 8. See “Task 1: Read the Critical Notes” on page 10-1.
	2.	Install AutoOPERATOR. See “Task 2: Install AutoOPERATOR” on page 10-2.
	3.	Set up predefined Enterprise Storage Automation solutions in AutoOPERATOR. See “Task 3: Set Up Predefined Solutions in AutoOPERATOR” on page 10-2.
	4.	Modify values for Enterprise Storage Automation global parameters. See “Task 4: Modify Enterprise Storage Automation Global Parameters” on page 10-4.

Verification Tasks for All MAINVIEW SRM Users

All MAINVIEW SRM users complete the checklist Table 3-8. Skip tasks for products that you are not licensed to use.

Table 3-8 Checklist for Verification Tasks for All MAINVIEW SRM Users

✓	Task	Description
	1.	Start the SVOS started task. See “Task 1: Start the SVOS Started Task” on page 11-2.
	2.	Start the MAINVIEW SRM ISPF interface. See “Task 2: Start the MAINVIEW Interface” on page 11-2.
	3.	Define a pool to verify the following products: EasyPOOL StorageGUARD SG-Auto See “Task 3: Define a Pool” on page 11-3.
	4.	Start SVALLOC. See “Task 4: Start SVALLOC” on page 11-4.
	5.	Verify EasyPOOL. See “Task 5: Verify EasyPOOL” on page 11-4.
	6.	Verify StopX37/II See “Task 6: Verify StopX37/II” on page 11-5.
	7.	Verify EasyHSM. See “Task 7: Verify EasyHSM” on page 11-6.
	8.	Verify StorageGUARD. See “Task 8: Verify StorageGUARD” on page 11-9.
	9.	Verify SG-Auto. See “Task 9: Verify SG-Auto” on page 11-11.
	10.	Verify SG-Control. See “Task 10: Verify SG-Control” on page 11-12.
	11.	Verify Enterprise Storage Automation Event Generation. See “Task 11: Verify Enterprise Storage Automation Event Generation” on page 11-13.
	12.	Verify Enterprise Storage Automation AUTO Functions. See “Task 12: Verify Enterprise Storage Automation AUTO Functions” on page 11-15.

Chapter 4 Customization Tasks for All MAINVIEW SRM Users

The customization tasks in this chapter apply to all MAINVIEW SRM users. Tasks are required unless otherwise specified in the title. The following tasks are described in this chapter:

Task 1: Specify Jobcards and Other Operational Defaults

Tip: If you are manually customizing MAINVIEW SRM and have previously installed and customized MAINVIEW, skip to Task 11. If you are following along with AutoCustomization, you will need to respond to each task.

In the customization steps for data set allocations, you are instructed to specify the volume serial ID and unit type. In other steps, you are requested to supply the high-level qualifier (*hilevel*) for the product libraries.

Write down the volume ID and the unit type for the product libraries, listing the following information:

```
Prefix ===>_____________________________ (high-level qualifier used)

Unit-T ===>_____________________________ (generic unit name for temporary
data sets)

Unit-P ===>_____________________________ (generic unit name for permanent
data sets)

VSAM-P====>_____________________________ (generic unit name for permanent
VSAM data sets
for SMS job)**
VOLSER ===>_____________________________ (volume ID for permanent data
sets)

SYSID  ===>_____________________(MVS image identifier; not to exceed 8
characters)
```

The `SYSID` value is used to build data set names for data sets that cannot be shared across multiple systems. In all cases where *hilevel* is referenced, this value is the `prefix` value for your MAINVIEW product libraries and the `SYSID` value defined above.

Note: **If a data set is SMS-managed, a volume name must be entered, but it does not have to be a valid volume

If the data set is non-SMS managed, you must include a valid volume name.

Task 2: (Optional) Implement Katakana Terminal Support

To use MAINVIEW products with a katakana terminal:

- The following data sets must be converted to all uppercase characters:
  - BBILIB for installation JCL
  - BBMLIB for messages
  - BBTLIB for tables
- `CAPS=Y` must be specified for the EXEC statement PARM parameter in the CAS started task procedure (see "Task 9: Create the CAS (Coordinating Address Space) Startup Procedure" on page 4-11).

BBILIB member @@YZZ001:

This is a utility program that translates lowercase characters to uppercase in these data sets. This utility uses ISPF Table Services to convert the BBTLIB members, executes the Terminal Monitor Program (TMP) in batch mode, and invokes ISPF.

To convert the product data sets and installation JCL to support katakana terminals:

Step 1 Allocate new *hilevel*.BBILIB, BBMLIB, and BBTLIB data sets to store converted installation JCL, message, and table members. This preserves original distribution members so that non-katakana terminals can use them. Otherwise, messages, views, and panels are displayed in all uppercase on all terminals.

Note: The allocated output data sets must have the same blocksizes as the corresponding input data sets.

Step 2 Modify BBILIB member @@YZZ001 to customize the utility conversion program to your site requirements. Modify the following DD statements to specify input and output data set names for the BBILIB, BBMLIB, and BBTLIB data sets:

DD NameDescription
LCBBLIBLowercase input data from BBILIB and BBMLIB
UCBBLIBUppercase translated BBILIB and BBMLIB output data
LCBBTLIBLowercase input tables from BBTLIB
UCBBTLIBUppercase translated BBTLIB output tables

Step 3 Submit the utility program for processing.

Note: You should compress the data sets before submitting the job. If the UCBBLIB and UCBBTLIB DD statements point to the same data sets as the LCBBLIB and LCBBTLIB DD statements, respectively, the original members are overwritten.

Members from the input data sets are read, translated to uppercase, and written to the output data sets. The utility program performs the translations in two stages. At the completion of each stage, the following WTO message is issued when the data translation is successful: CONVERSION SUCCESSFULLY COMPLETED.

Step 4 Check the job output for a condition code of 0 for successful job completion.

Task 3: Create Site Data Sets for Use with MAINVIEW Products

Create the following product data sets for your site:

Data Set	Description
?prefix.SBBVDEF	Customized view definitions
?prefix.SBBSDEF	Newly created screen definitions

Note: If service needs to be applied, you are alerted when distributed versions change because PTFs that affect any members in these data sets contain the statement:

```
++HOLD SYSTEM REASON(ACTION) CLASS(library-name)
```

You can then save your modifications before replacing the members.

Task 4: (Required for Security) Create Site Security Data Set

Default security parameter and resource definition files are distributed in the BBACTDEF library. You cannot customize these defaults. To create your own customized security for MAINVIEW product resources installed at your site, you can use the Plex Manager security views. To use these views, you must define a security library with the BBSECURE DD statement in the CAS and PAS started task procedures. The same library name must be specified in the BBSECURE DD statements in both procedures. This library is used to contain site-customized security resource definitions.

This step provides instructions for creating the security parameter library. For more information about how to set up security and use the MAINVIEW Plex Manager security views, see *Implementing Security for MAINVIEW Products*.

To create a BBSECURE data set:

Step 1 Create a data set with DCB characteristics of `RECFM=FB`, `LRECL=80`, and a `BLKSIZE` of any multiple of 80. If you use the ISPF Data Set Utility, do not specify the PACK option. MAINVIEW product site data sets cannot be packed when allocated.

Note: Use the same *hilevel* qualifier for this data set that you used for your target libraries during the SMP process.

Step 2 Specify the data set name with the DSN parameter of the BBSECURE DD statement in the CAS started task procedure (see “Task 9: Create the CAS (Coordinating Address Space) Startup Procedure” on page 4-11.).

Step 3 Specify the data set name with the DSN parameter of the BBSECURE DD statement in each PAS procedure.

Step 4 Copy the following members from BBACTDEF to the BBSECURE DD:

BBMTSS00
BBSTRN00
BBTSM00

Task 5: APF-Authorizing the BMC Software Load Library

BBILIB Member BAIAPF:

You can use this member as a model to help you temporarily APF-authorize BBLINK programs.

For Temporary Authorization:

Use BBILIB member BAIAPF to temporarily authorize the BBLINK library. Edit BAIAPF:

Step 1 Create UBBSAMP member BAIAPF.

Step 2 Copy BBILIB member BAIAPF to the new member.

Step 3 Change the PROC statement PREFIX parameter from @PREFIX to *prefix*, where *prefix* is the high-level qualifier for the MAINVIEW product libraries.

Step 4 Change the PROC statement LIB parameter from @BBIAPF to a previously authorized library.

Step 5 Change the PROC statement VOL parameter from @BBIVOL to the volume where the MAINVIEW product libraries reside.

Step 6 Submit the job.

For Permanent Authorization:

Use the Authorized Program Facility (APF). Contact a system programmer for assistance in updating either SYS1.PARMLIB member IEAAPF*xx* or, for SP 5 and above, SYS1.PARMLIB member PROG*xx*

IEAAPF*xx*:

where *xx* identifies the APF suffix specified in the IEASYS member used for the last MVS IPL.

An IPL is required before the SYS1.PARMLIB change can take effect.

PROG*xx*:

where *xx* identifies the member in SYS1.PARMLIB that contains the parameters that define the list of APF-authorized libraries.

In PROG*xx*, you can specify multiple PROG*xx* members with the PROG parameter as follows:

```
PROG=(xx,...,xx)
```

where *xx* can be any two alphanumeric characters; for example:

```
PROG=(01,02)
```

Libraries are placed in the APF list as follows:

- Libraries specified in the PROG*xx* member(s).
- If you have an existing IEAAPF*xx* member and PROG*xx*, both are processed.

  To use only PROG*xx*, change IEAAPF*xx* to PROG*xx* and remove the APF parameters from IEASYS*xx* and IEASYS00.
- If you have both PROG*xx* and EXIT*xx*, PROG*xx* is processed first then EXIT*xx*

  To use only PROG*xx*, change EXIT*xx* to PROG*xx* and remove the EXIT parameters from IEASYS*xx* and IEASYS00.

An IPL is required before the SYS1.PARMLIB change can take effect. Or, you can authorize the new libraries with the MVS SET command as follows:

```
T PROG=xx
```

where *xx* identifies the SYS1.PARMLIB member.

For more information about APF-authorization, see the IBM *MVS/ESA SP V5 Initialization and Tuning Reference* manual.

Task 6: (Optional) Add the BMC Software Load Library to your System Link List

The BMC Software load library, *hilevel*.BBLINK, can be added to your system link list. BBLINK contains authorized programs.

Notes:

- OS/390 requires that any data sets added to your system link list be cataloged in the master catalog.
- If you are going to run COMMON STORAGE MONITOR as a subsystem, you must perform this step.
- If you are not adding BBLINK to your link list, you must specify a STEPLIB DD statement in your MAINVIEW startup procedures (see "Task 9: Create the CAS (Coordinating Address Space) Startup Procedure" on page 4-11.
- If the BMC Software load library is added to the system link list when starting IMS V5.1 and above, the AOI Exits will be dynamically invoked if MAINVIEW AutoOPERATOR is installed in the library whether or not MAINVIEW AutoOPERATOR for IMS is activated.
- For MAINVIEW AutoOPERATOR, BBLINK must be specified in the STEPLIB and BBILOAD DD statements in the JCL. To add BBLINK to your system link list:

Step 1 Add the following line to your SYS1.PARMLIB(LNKLST*xx*) member:

hilevel.`BBLINK,`

where *hilevel* is the high-level data set qualifier you used throughout this installation for your BMC Software product data sets.

Step 2 Remove the STEPLIB DD statement for *hilevel*.BBLINK from the MAINVIEW startup procedures, such as the CAS and PAS started task procedures.

Step 3 Update your system link list dynamically.

Task 7: Create CLIST for Invoking MAINVIEW Products

Tip: If you are migrating from a version of this product prior to MAINVIEW SRM 6.1, see “Migration Considerations Pre-6.1 Users” on page B-2.

BBILIB Member BAIMAINV:

Use this member as a model to help you create a MAINVIEW CLIST to access all MAINVIEW products.

The MAINVIEW CLIST allows you to invoke MAINVIEW products under ISPF. This CLIST allocates all required libraries and connects to them through the ISPF LIBDEF.

To create the MAINVIEW CLIST:

Step 1 Create a member in *hilevel*.UBBPARM called MAINVIEW.

Use of the name MAINVIEW for the CLIST is recommended, but not required. You can use any name you want. The remainder of this procedure uses the name MAINVIEW.

Step 2 Copy the sample CLIST in BBILIB member BAIMAINV into the newly created MAINVIEW member.

Step 3 Edit MAINVIEW CLIST as follows:

- Replace *XXXXX* in the `PREFIX('XXXXX')` parameter with the *hilevel* qualifier for your target libraries.
- Replace `BBBBB` in the `PREFIX('BBBBB')` parameter with the *hilevel*.BBLINK name for your target libraries.

Step 4 If you require optional support for GDDM high resolution graphics, add a TSO ALLOCATE statement for the GDDM symbol library using the ADMSYMBL ddname.

If your level of GDDM supports printing, add a TSO ALLOCATE statement for an optional GDDM PRINT data set using the ADMPRINT ddname. Refer to the GDDM member SYS1.GDDMSAM(ADMQFMT) for more information about how to allocate the GDDM PRINT data set.

Step 5 To invoke the CLIST to access MAINVIEW products, you can add a menu item to an ISPF menu to execute the MAINVIEW CLIST

To add a menu selection code and description to an ISPF menu:

5.A Add the following statement to the)BODY section of an ISPF menu panel of your choice:

```
% MV +MAINVIEW - Invoke MAINVIEW Products
```

5.B Add the following selection command to the)PROC section of the menu panel for the MV option:

Figure 4-1 Selection Command to Add MAINVIEW to an ISPF Menu

```
)PROC
  &ZSEL = TRANS(TRUNC(&ZCMD,'.')
                .
               MV,'CMD(EX ''hilevel.UBBPARM(MAINVIEW)'')'
                .
                .
                .
                X,'EXIT'
                *,'?' )
```

Task 8: (Optional) Reload All BBX Services

BBXS service routines return data in response to specific requests from these products. BBXS is initialized the first time a product requests a service or when the COMMON STORAGE MONITOR component of MAINVIEW for OS/390 is configured to initialize at IPL.

Warning! Do not add:

```
COM='S BBXSINIT'
```

to the SYS1.PARMLIB member COMMND*xx* unless you are running under VM.

For more information about BBXS, see the *MAINVIEW Administration Guide*.

BBILIB Member @@YZZ081:

You can use this member to re-initialize BMC Software Subsystem Services (BBXS) when a more current version of BBXS is installed.

To re-initialize BBXS:

Step 1 Follow the instructions at the top of BBILIB member @@YZZ081 to modify the JCL to your site requirements.

Note: If you are running MVS under VM, you must add the IOCDS parameter to the EXEC statement in member @@YZZ081 before submitting this job. This parameter identifies the resident IOCDS ID that BBXS uses during initialization.

The IOCDS parameter may change frequently in some environments. For the JCL in this step to be accurate, it must be modified to reflect any IOCDS changes. Contact the person responsible for IOCDS generations at your site to obtain the current IOCDS ID. For more information about initializing BBXS in MVS under VM, see the *MAINVIEW Administration Guide*.

Step 2 Submit the job.

Step 3 Check the job output for a condition code of 0 for successful job completion.

If the condition code is 4 or 12, review the job output messages. For an explanation of BBXS messages, see the MAINVIEW online message system. A condition code of 0 with message BBX600I indicates successful completion.

Task 9: Create the CAS (Coordinating Address Space) Startup Procedure

Tip: If you are migrating from a version of this product prior to MAINVIEW SRM 6.1, see “Migration Considerations Pre-6.1 Users” on page B-2.

BBILIB Member @@YZZ021

You can use this member as a model to help you set up your CAS started task procedure.

To execute the CAS:

- initiate it as a started task (STC) through an MVS IPL procedure
- execute only one CAS per MVS image
- execute the CAS with a dispatching priority of 255

The CAS contains functions accessed through MVS cross-memory services and should not be run as a batch job. If the CAS runs as a batch job:

- it operates correctly, but the MVS job scheduler issues messages IEF353A and IEF355A upon CAS termination
- the JES initiator running the CAS terminates

To create the CAS started task procedure:

Step 1 Create a CAS startup member in a system procedure library.

Note: AutoCustomization creates a member named BBMCAS by default.

Step 2 Copy BBILIB member @@YZZ021 to the member you created in Step 1.

Step 3 Follow the instructions at the top of this member to modify the procedure to your site requirements.

For a description of each statement in this procedure, see the Library Member for CAS section in the *MAINVIEW Common Customization Guide*.

Step 4 Optionally, define the CAS started task procedure to your IPL procedure.

You may want to modify the COMMND*xx* member in SYS1.PARMLIB to add a START command for the CAS procedure. The COMMND*xx* member contains MVS commands that are issued by the master scheduler upon system initialization. The START commands are issued in the order they appear in COMMND*xx*

The format of the command is:

```
COM='S procname,SUB=MSTR'
```

where *procname* is the name of the member you created in Step 1 on page 4-12; for example:

```
COM='S BBMCAS,SUB=MSTR'
```

Required SSID Parameter:

When you create your CAS started task procedure, you must specify a subsystem ID for the CAS with the PROC statement SSID parameter. This value identifies the CAS to MVS and is used by all other applicable PASs.

Warning! When naming a subsystem ID or started task, avoid using common names that can be confused with unrelated software; for example, do not use anything similar to RACF, ACF2, FDR, DFDSS, VTAM, and so on.

The CAS subsystem ID is used in the:

- Session Control Parameters dialog when the TS starts
- startup procedure of the PAS that connects to this CAS

Note: The CAS and PAS started task procedures and the Session Control parameters dialog must all define the same subsystem ID.

Optional CAPS Parameter:

If you use a katakana terminal (see “Task 2: (Optional) Implement Katakana Terminal Support” on page 4-3), you must specify `CAPS=Y,` with the EXEC statement PARM parameter in your CAS started task procedure; for example:

```
//CAS  EXEC PGM=BBM9ZA00,
//     PARM=('SSID=&SSID,XDM=&XDM,COLD=&COLD,DUMP=&DUMP,EMM=&EMM',
//     'IVP=&IVP,CAPS=Y'),
//     TIME=1439,
//     REGION=4096K
```

Task 10: (Optional) Create MAINVIEW Explorer Host Server Startup Procedure

MAINVIEW Explorer gives you access to MAINVIEW products from a Web browser. The MIAINVIEW Host Server runs as a started task.

To use the MAINVIEW Explorer, you must create the host server startup procedure:

Step 1 Copy member BBMXPJCL from *?prefix*.BBSAMP to *?prefix*.UBBSAMP

Step 2 Edit member BBMXPJCL in *?prefix*.UBBSAMP

Step 3 Specify the SSID that you specified for the CAS (string ?SSID)

Step 4 Specify a port number (string ?PORT)

Step 5 Change all ?BBLINK to *?prefix*.BBLINK

Step 6 Change ?SBBVDEF to *?prefix*.SBBVDEF

Step 7 Change all ?BBCHILV to *?prefix*.

Step 8 Save the modified member and copy it to a proclib in the JES*x* concatenation.

Task 11: Copy BBPARM to UBBPARM

Create user MAINVIEW SRM PARMLIB and SAMPLIB data sets as follows:

Tip: Migrating customers: Copy the UBBPARM data set from the previous version to this new version UBBPARM to bring forward all current system definitions.

Some additional members in version 7.1 may also be needed. Where additional members are needed, it is noted in the documentation for the function delivering the new members.

Step 1 Allocate a new data set named ?*prefix*.UBBPARM. Assign the same prefix that you assigned to the BBPARM MAINVIEW SRM data set.

Step 2 Copy BBPARM into the new data set.

Note: You will modify members in UBBPARM and apply maintenance and upgrade releases of MAINVIEW SRM in BBPARM so that your modifications are not overwritten.

Step 3 Allocate a new data set named ?*prefix*.UBBSAMP. Assign the same prefix that you assigned to the BBSAMP MAINVIEW SRM data set.

Note: You will copy some members in BBSAMP to UBBSAMP as you make modifications. You will modify members in UBBSAMP and apply maintenance and upgrade releases of MAINVIEW SRM in BBSAMP so that your modifications are not overwritten.

Task 12: (Optional) Add MAINVIEW SRM Authorized Components to AUTHTSF and AUTHCMD

Modify SYS1.PARMLIB members using the following instructions and the information in Table 4-1.

Step 1 Add *?prefix*.BBLINK to member IEAAPFxx or PROG*xx*.

Step 2 Either add *?prefix*.BBLINK to the LNKLST*xx* member or add it to the STEPLIB concatenation of the TSO logon proc for MAINVIEW SRM users.

RVA users, also add the SIBBATCH utility to the LNKLST*xx* member or add it to the STEPLIB concatenation of the TSO logon proc for MAINVIEW SRM users.

Step 3 Grant user access to restricted programs or TSO commands as appropriate. Table 4-1 on page 4-16 lists all programs and TSO commands used by the MAINVIEW SRM interface that must be authorized. Specify the programs and TSO commands in member IKJTSO*xx*.

Step 4 Refresh the in-storage copy of IKJTSO*xx*.

Step 5 If you are using a security package to restrict use of TSO commands or programs, you must also grant security access as appropriate for the items in Table 4-1 on page 4-16. If you are licensed for StorageGUARD, grant security access to the following commands as well:

- SGCR419$
- SGCR41B$

Step 6 IPL the system if you do not have the capability to dynamically update APF lists and, optionally, linklists.

You *do not* need to IPL and may update the APF lists and optional linklists dynamically if you have the capability.

Table 4-1 lists all programs and TSO commands used by the MAINVIEW SRM interface that must be authorized.

Table 4-1 Authorized Programs and TSO Commands

Name	Component	Cmd/Pgm	Language	IKJTSO*xx* section	Description
BBSDTCPA	PATROL server	Program	Assembler	AUTHTSF	Used to check data space validity and set up RACF (or equivalent) session security for both TCP/IP and APPC users
BUDGET	SG-Control	Command	Assembler	AUTHCMD	Used to add data to and retrieve data from the SG-Control database **Note:** Access to the BUDGET command should be controlled. Also, consider using the Security Exit to control the various functions of this command. See the *MAINVIEW SRM SG-Control User Guide and Reference* for information about the Security Exit. MAINVIEW Security can be used to restrict access to the SG-Control views, records, and actions.
BUDDSN	SG-Control	Command	Assembler	AUTHCMD	Used to retrieve data from the SG-Control database **Note:** You may want to restrict access to this command.

Task 13: Update MAINVIEW SRM Global Parameters

Modify values for global parameters in *?prefix*.UBBPARM(SMMSYS*xx)* using the following instructions.

Tip: For migrating customers: This task can be skipped if the previous version of UBBPARM was copied in Task 12. Existing passwords and other specifications are still valid.

Step 1 Add the BMC Software supplied passwords to the PASSWORD= parameter. A password is supplied for each component you have installed. A password for each MAINVIEW SRM component must be specified with a separate password parameter.

Step 2 Modify the default value in the BBI3_SSID= parameter to your site specifications. The value specifies the Coordinating Address Space (CAS) subsystem name to which the SVOS PAS should connect. This is a required parameter.

The CAS subsystem name is specified in the SSID= parameter on the PARM= keyword for the CAS JCL EXEC statement. The value in BBI3_SSID must match the CAS value.

Step 3 Modify the default (SYS1.LPALIB) value to the SYSLIB=parameter to suit your site specifications. The value specifies a cataloged data set name for the LPALIB library concatenations that are to be allocated at SVOS startup as a default.

These parameters can be overridden by a SYSLIB DD statement in the JCL. LPALIB data sets must be the same as they were when the system was last IPLd with a CLPA and/or an MPLA. There is a limit of three data sets that can be concatenated.

Note: You must specify either the SYSLIB global parameter or include the LPALIB in the execution JCL.

Task 14: Customize SVOS Started Task JCL

SVOS is the started task used to load MAINVIEW SRM software into OS/390. MAINVIEW SRM components run under SVOS and are started by commands to SVOS.

Tip: For migrating customers: The JCL for MVSRM started task has not changed. Previous version JCL can be used; however, ensure that the DDs for STEPLIB and PARMLIB point to the new version data sets.

To modify the started task:

Step 1 Follow the user instructions in *?prefix*.BBSAMP(SVOS).

Step 2 Save the modified member and copy it to a proclib in the JES*x* concantenation.

See the *MAINVIEW SRM User Guide and Reference* for SVOS execution JCL statement and parameter descriptions.

Step 3 Customize the member in *?prefix.*UBBPARM(SVSTART). The member contains the MAINVIEW SRM component startup commands that are automatically executed at completion of SVOS initialization. Also in this member is the parameter SUF= that specifies the suffix of the SMMSYS*xx* member to be utilized.

Chapter 5 Customization Tasks for SG-Control Users

Follow the instructions in this chapter only if you are licensed for the MAINVIEW SRM SG-Control product. The following tasks are described in this chapter:

Task 1: Read the Critical Notes

SG-Control may be used on multiple systems and must be started on each system. All systems sharing DASD must share the same SG-Control database. The application information in the database is protected from concurrent update by enqueues with a scope of SYSTEMS. Enqueues with major names of SGC and SGCMAINT must be propagated across systems using IBM Global Resource Sharing (GRS) or an equivalent product.

Task 2: Allocate the SG-Control Database

Allocate an SG-Control database using the following instructions.

Tip: Migrating customers: See “Migration Considerations for SG-Control Users” on page B-7 for database allocation and conversion information.

Step 1 Copy *?prefix*.BBSAMP(SGCINJCL) to *?prefix*.UBBSAMP(SGCINJCL).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SGCINJCL) to modify the database allocation JCL.

Step 3 If you are going to track HSM, add the following lines to the SGCINJCL:

```
INIT HSMTRACK(YES)
INIT HBACKUPPREFIX(HSM)
INIT HMIGRATEPREFIX(HSM)
```

Step 4 Save and submit SGCINJCL.

Note: Library must be APF authorized. See “Task 12: (Optional) Add MAINVIEW SRM Authorized Components to AUTHTSF and AUTHCMD” on page 4-15.

Task 3: Define an SG-Control Default Application

Define an SG-Control default application using the following instructions.

Tip: For migrating customers, this default application definition is created during the conversion process if a RESOLVE SRM 5.1 SG-Control database is being brought forward.

Step 1 Copy *?prefix*.BBSAMP(SGCDFACT) to *?prefix*.UBBSAMP(SGCDFACT).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SGCDFACT) to modify JCL for a default application.

Step 3 Save and submit SGCDFACT.

Note: Command must be authorized. See “Task 12: (Optional) Add MAINVIEW SRM Authorized Components to AUTHTSF and AUTHCMD” on page 4-15.

Step 4 Execute the TSO BUDGET command.

Task 4: Customize SG-Control Global Parameters

Modify values for SG-Control global parameters in *?prefix*.UBBPARM(SMMSYS*xx*) as instructed in the following table:

Tip: For migrating customers, the parameter in Step 3 is new to this version.

Step 1 Modify the SGC_STORCLS= parameter value. The value may be YES or NO, and it specifies whether or not to retrieve storage class information. The default is NO.

Note: This parameter should only be set to YES if SMS storage class information is required for filter list or rule list processing.

Step 2 Modify the SGC_STOGRP= parameter value. The value may be YES or NO, and it specifies whether or not to retrieve storage group information. The default is NO.

Note: This parameter should only be set to YES if SMS storage group information is required for filter list or rule list processing.

Step 3 Modify the SGCDSN= parameter value. The value is the SG-Control database name created in Task 2.

Chapter 6 Customization Tasks for StorageGUARD Users

Follow the instructions in this chapter only if you are licensed for the MAINVIEW SRM StorageGUARD product.

This JCL member will allocate the IXFP work fields required by the historical performance data collector when collecting RVA data in an IXFP environment. The following tasks are described in this chapter:

Task 1: Read the Critical Notes

As with any database, allocating StorageGUARD databases that are too large could have operating system implications.

StorageGUARD has two data collectors: one for historical *space* databases and one for historical performance databases. There is a started task for each of the data collectors.

The historical space data collector only collects information for volumes that have been assigned to a pool. The system can accommodate up to eight historical space databases.

The historical performance data collector can store data in up to 100 databases before old data is overwritten. There is never more than one active historical performance database, but at startup, previously collected data from all databases can be accessed.

When allocating the historical space database, make sure data sets occupy a single extent. Only the first physical extent is actually used.

Task 2: Customize StorageGUARD Global Parameters

Modify values for StorageGUARD global parameters in *?prefix*.UBBPARM(SMMSYS*xx*) as instructed in the following tables.

Tip: For migrating customers, only the VTOC Scan parameters are new to this version and need to be added.

For historical space:

Step 1 Modify the SG_INITPOOL= parameter value. The value specifies the maximum number of defined pools included in a single snapshot. The maximum number of defined pools at initialization of a new linear data set is 3,995 unless a greater value is specified on this parameter. After initialization, data is collected into a snapshot for the number of pools specified on this parameter. The value may be in the range 10–999999. The default value is 1000.

Do not modify the default value unless you must.

Step 2 Modify the SG_INITVOL= parameter value. The value specifies the maximum number of defined volumes included in a single snapshot. The maximum number of defined volumes at initialization of a new linear data set is 6,625 unless a greater value is specified on this parameter. After initialization, data is collected into a snapshot for the number of volumes specified on this parameter.The value may be in the range 10–999999. The default value is 3000.

Do not modify the default value unless you must.

Step 3 Modify the SG_MAXPOOL= parameter value. The value specifies the number of pools that can be assigned to a volume and is used by the data collector when building pool snapshots. The value may be in the range 1–8. The default value is 1.

Step 4 Modify the SG_MAXSSDSZ= parameter value. The value specifies the number of cylinders used for a solid state disk drive and is used to distinguish between emulated and real DASD. Any device that does not exceed the value specified on this parameter is considered a solid state device.The value must be less than 32766. The default value is 0.

Step 5 Modify the SG_READNTVL= parameter value. The value specifies the frequency at which StorageGUARD creates a snapshot in core. The value may be in the range 5–9999. The default value is 30.

Set the SG_READNTV and the SG_WRITNTVL parameters to the same value. See Step 7.

Step 6 Modify the SG_SUBTASKS= parameter value. The value specifies the number of volumes that can be read in parallel. The value may be in the range 2–10.

Step 7 Modify the SG_WRITNTVL= parameter value. The value specifies the frequency at which snapshots are written to the StorageGUARD database. The value may be in the range 1–1439. The default value is 30.

Set the SG_WRITNTVL and the SG_READNTV parameters to the same value. See Step 5.

Step 8 Modify the SGDCOLLECT= parameter value. The value may be YES or NO, and it specifies if StorageGUARD will collect pool data. This parameter may be overridden at the pool level. The default value is NO.

For historical performance:

Step 1 Modify the SGP_MAXDSNS= parameter value. The value specifies the maximum number of data sets that can be referenced during a recording interval duration. The default value is 1000.

Step 2 Modify the SGP_MAXVOLS= parameter value. The value specifies the maximum number of volumes that can be referenced during a recording interval duration. The default value is 250.

Step 3 Modify the SGP_MAXJOBS= parameter value. The value specifies the maximum number of jobs that can be referenced during a recording interval duration. The default value is 200.

Step 4 Modify the SGP_MAXSCLS= parameter value. The value specifies the maximum number of storage classes that can be referenced during a recording interval duration. The default value is 100.

Step 5 Modify the SGP_MAXPOLS= parameter value. The value specifies the maximum number of pools that can be referenced during a recording interval duration. The default value is 100.

Step 6 Modify the SGP_MAXPTHS= parameter value. The value specifies the maximum number of channel paths that can be referenced during a recording interval duration. The default value is 256.

Step 7 Modify the SGP_MAXLCUS= parameter value. determines the amount of space reserved in the historical performance dataspace for logical control unit records in an interval. The default value is 256.

Warning! If the value is set too low, the system does not set aside enough buffer space to handle all the records. You need to determine a value that provides enough buffer space for LCU records without causing a shortage of dataspace storage for other records.

Step 8 Modify the SGP_MAXCCUS= parameter value. The value specifies the maximum number of cache control units that can be referenced during a recording interval duration. The default value is 256.

Step 9 Modify the SGP_MAXDIRS= parameter value. The value specifies the maximum number of RAID EMC directors that can be referenced during a recording interval duration. The default value is 256.

Step 10 Modify the SGP_MAXPVLS= parameter value. The value specifies the maximum number of RAID EMC physical volumes that can be referenced during a recording interval duration. The default value is 256.

For RVA users only:

Step 1 Modify the SG_IXFPNTVL= parameter value. The value specifies the number of hours between refreshes of the IXFP data tables. Valid values are 1 to 24.

Step 2 Modify the SG_SIBSTK= parameter value. The value specifies the IXFP SIBBATCH parameter member to be used by the MAINVIEW SRM IXFP services for communications with the IXFP address space

Step 3 Modify the SGP_MAXRSFS= parameter value. The value specifies the maximum number of RVA subsystem frames for which data is to be collected. Valid values are 1 to 999. The default is 16.

Step 4 Modify the SGP_SIBSTK= parameter value. The value specifies the IXFP SIBBATCH parameter member to be used by the MAINVIEW SRM IXFP services for communications with the IXFP address space.

For the VTOC Scan Facility:

Step 1 Modify the VSCAN_MNTSK= parameter value. The value specifies he minimum number of tasks (TCBs) used by the VTOC scan to perform the collection. Default value is **2.**

Step 2 Modify the VSCAN_MXTSK= parameter value. The value controls the number of tasks (TCBs) involved in scanning VTOCs for VTOC reporting and automation requests. Default value is 8.

Step 3 Modify the VSCAN_OINDX= parameter value. The value specifies the prefix name of the VTOC scan collection data set.

Step 4 Modify the VSCAN_OPRI= parameter value. The value specifies the primary allocation size in cylinders for the VTOC scan collection data set. Default value is **10.**

Step 5 Modify the VSCAN_OSEC= parameter value. The value specifies the secondary allocation size in cylinders for the VTOC scan collection data set. Default value is **10.**

Step 6 Modify the VSCAN_OUNIT= parameter value. The value specifies the device type of the VTOC scan collection data set.

Step 7 Modify the VSCAN_OVOL= parameter value. The value specifies the volume serial number of the VTOC scan collection data set.

Step 8 Modify the VSCAN_TPRI= parameter value. The value specifies the primary allocation size in cylinders for the VTOC scan temporary data set. Default value is **10.**

Step 9 Modify the VSCAN_TSEC= parameter value. The value specifies the secondary allocation size in cylinders for the VTOC scan temporary data. Default value is **10.**

Step 10 Modify the VSCAN_TUNIT= parameter value. The value specifies the device type for the VTOC scan temporary data set.

Step 11 Modify the VSCAN_TVOL= parameter value. The value specifies the volume serial number for the VTOC scan temporary data set.

Task 3: Allocate and Initialize the StorageGUARD Databases

Use the following instructions to allocate the StorageGUARD historical space and historical performance databases:

Tip: Migrating customers: see “Migration Considerations for StorageGUARD Users” on page B-6 for database allocation and conversion information.

For the *historical space* database:

Step 1 Estimate the size of the historical space database. A database calculation worksheet is provided for you to print and use (see Figure 6-1 on page 6-8).

Note: The historical space database is a linear VSAM data set.

Step 2 Copy *?prefix*.BBSAMP(SGDALCDB) to *?prefix*.UBBSAMP(SGDALCDB).

Step 3 Follow the user instructions in *?prefix*.UBBSAMP(SGDALCDB) to modify the database allocation JCL.

Step 4 Save and submit SGDALCDB.

For the *historical performance* database:

Step 1 Estimate the size of the historical performance database. A database calculation worksheet is provided for you to print and use (see Figure 6-2 on page 6-8).

Note: The historical performance database is a linear VSAM data set.

Step 2 Copy *?prefix*.BBSAMP(SGPALCDB) to *?prefix*.UBBSAMP(SGPALCDB).

Step 3 Follow the user instructions in *?prefix*.UBBSAMP(SGPALCDB) to modify the database allocation JCL.

Step 4 Save and submit SGPALCDB.

Figure 6-1 Historical Space Database Calculation Worksheet

Enter the number of SG-Control **Applications**	_____
Enter the number of Pools (Includes DFSMS Storage Groups)	_____
Enter the number of volumes	_____
Enter the number of RAID boxes	_____
Enter the number of RAID Physical Volumes	_____
Enter the number of StorageGUARD **Snapshots per day**	_____
Enter the number of days to maintain online data	_____

	Bytes		**3390 Tracks**
(number of Applications) x (number of Snapshots per day) x (number of days to maintain online) x 60 = Application database size (in bytes)	_____	**/ 49152 =**	_____
(number of pools + number of RAID boxes + number of RAID physical volumes) x (number of Snapshots per day) x (number of days to maintain online) x 45 = Pool database size (in bytes)	_____	**/ 49152 =**	_____
(number of volumes) x (number of Snapshots per day) x (number of days to maintain online) x 85 = Volumes database size (in bytes)	_____	**/ 49152 =**	_____

Based on CI size, the number of bytes per 3390 track is 49152.

Figure 6-2 Historical Performance Database Calculation Worksheet

			Bytes per Interval
Enter the average number of active volumes per interval	_____	x 536 =	_____
Enter the average number of active DSNs per interval	_____	x 432 =	_____
Enter the average number of active jobs per interval	_____	x 324 =	_____
Enter the average number of active CHPIDs per interval	_____	x 432 =	_____
Enter the average number of active LCUs per interval	_____	x 484 =	_____
Enter the average number of active Cache CUs per Interval	_____	x 500 =	_____
Enter the average number of active Pools per Interval	_____	x 360 =	_____
Enter the average number of active StorClasses per interval	_____	x 524 =	_____
Enter the average number of active physical volumes per interval	_____	x 432 =	_____
Enter the average number of active RAID Directors per interval	_____	x 88=	_____
Enter the average number of active RVA Frames per interval	_____	x 136=	_____
Enter the average number of active RAID Ranks per interval	_____	x 80=	_____
Overhead bytes			_____8192

	Bytes per Interval
Add the numbers in the Bytes per Interval column to give you the Total Bytes Per Interval	_____
Enter the number of SMF intervals per day	_____
Enter the number of days to maintain online	_____
(Number of SMF Intervals per day) x (Number of Days maintained online) x (Total Bytes per Interval) = Total Bytes	_____
Total Bytes / 49152 = Total 3390 tracks	_____
Total Tracks / 15 = Total 3390 cylinders	_____

Task 4: Allocate IXFP Work Files

RVA users, allocate the StorageGUARD IXFP work files as instructed in the next two tables.

For the *historical space* IXFP work files:

Step 1 Estimate the amount of storage space required for the historical space IXFP work files.

Step 2 Copy*?prefix.*BBSAMP(SGDIXFPA) to*?prefix.*UBBSAMP(SGDIXFPA).

Step 3 Follow the user instructions in*?prefix.*UBBSAMP(SGDIXFPA) to modify the IXFP work file allocation JCL.

Step 4 Save and submit SGDIXFPA.

For the *historical performance* IXFP work files:

Step 1 Estimate the amount of storage space required for the historical performance IXFP work files.

Step 2 Copy*?prefix.*BBSAMP(SGPIXFPA) to*?prefix.*UBBSAMP(SGPIXFPA).

Step 3 Follow the user instructions in*?prefix.*UBBSAMP(SGPIXFPA) to modify the IXFP work file allocation JCL.

Step 4 Save and submit SGPIXFPA.

Task 5: Modify the StorageGUARD Started Task JCL

Modify the StorageGUARD started task JCL for the data collectors as instructed in the next two tables.

Tip: For migrating customers, the started task JCL for the historical space and historical performance data collectors has changed significantly from version 5.1. BMC Software recommends that the JCL distributed with version 7.1 be used, rather than attempting to modify version 5.1 JCL for use in version 7.1.

For the *historical space* data collector:

Step 1 Copy *?prefix*.BBSAMP(SGDCOLLS) to *?prefix*.UBBSAMP(SGDCOLLS).

Note: If you change the name of the started task, you must also change the value on the SGD_PROCNM parameter in SMMSYS*xx* to correspond to the new name.

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SGDCOLLS).

Note: SGDID=0 is required as a default.

Note: Uncomment DD statements that reference RVA work files if RVA data is to be collected.

Step 3 Save the modified member and copy it to a proclib.

For the *historical performance* data collector:

Step 1 Copy *?prefix*.BBSAMP(SGPPROC) to *?prefix*.UBBSAMP(SGPPROC).

Note: If you change the name of the started task, you must also change the value on the PERFRM_PRC parameter in SMMSYS*xx* to correspond to the new name.

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SGPPROC).

Note: Uncomment DD statements that reference RVA work files if RVA data is to be collected.

Change EXITLIB in SGPPROC to point to the library that contains the exit load modules: SGPERU83 and SGPERU84.

Step 3 Save the modified member and copy it to a proclib.

Task 6: Modify SMF and CMF/RMF Parameters

SMF and CMF or RMF must be active to operate the historical performance feature of StorageGUARD. Prepare SMF and CMF or RMF using the following instructions.

Tip: For migrating customers, the following specifications have changed since version 6.1.

Step 1 Specify SMF IEFU83 and IEFU84 exit parameters for the areas that data collection is required. See the example in Figure 6-3 on page 6-12.

Step 2 Setup SMF and CMF or RMF recording intervals. Any valid SMF recording interval duration is allowed. The CMF or RMF recording interval duration must be equal to or an even multiple of the SMF recording interval duration. The SMF and CMF or RMF recording intervals must be synchronized to the same part of the hour. See the *MAINVIEW SRM StorageGUARD User Guide and Reference* for further information.

If you are running CMF, the following parameters are the minimum required:

```
RECORD INTERVAL=xx,RUNTIME=1440,SMF=YES,SYNCH=yy
CHANNEL
DEVICE CLASS=DASD
```

In this example, *xx* is equal too or an even multiple of the SMF recording interval duration; *yy* is equal to the SMF recording interval part of the hour synchronization value.

If you are running RMF, the parmlib member must specify the following measurement, timing, and recording options:

Measurement:	CHAN DEVICE(DASD)
Timing:	SYNC(SMF) (synchronizes SMF/RMF intervals)
Recording:	RECORD

Step 3 Ensure that the SMF parmlib member SMFPRM*xx* does not specify NOTYPE for SMF type 30 and 42 records.

Note: You can control whether SMF type 42 records are written to the SMF database data sets by appropriately setting the SGP_SMF42 global parameter in the SMMSYS*xx* member.

Figure 6-3 shows how to set up SMF for the required exits and record recording.

Figure 6-3 Example SMF Parameters

```
INTVAL(15)                    /*GLOBAL INTERVAL)*/
SYNCVAL(15)          /*Synchronization value*/
ACTIVE                        /*ACTIVE SMF RECORDING*/
DSNAME(SYS1.MAN1,SYS1.MAN2,SYS1.MAN3)  /* THREE DATA SETS */
NOPROMPT                     /*DO NOT PROMPT OPERATOR FOR OPTIONS*
REC(PERM)                    /*TYPE 17 PERM RECORDS ONLY*/
MAXDORM(3000)                /* WRITE AN IDLE BUFFER AFTER 30 MIN*
STATUS(010000)               /* WRITE SMF STATS AFTER 1 HOUR*/
JWT(0800)                    /* 522 AFTER 8 HOURS   */
SID(SYSG)                    /* SYSTEM ID IS SYSG */
LISTDSN                      /* LIST DATA SET STATUS AT IPL*/
LASTDS(MSG)                  /*DEFAULT TO MESSAGE          */
NOBUFFS(MSG)                 /*DEFAULT TO MESSAGE          */
SYS(EXITS(IEFU83,IEFU84,IEFACTRT,IEFUJV,
              IEFUSI,IEFUJI,IEFUTL,IEFU29),INTERVAL(SMF,SYNC),
              NODETAIL
SUBSYS(STC,EXITS(IEFU29,IEFU83,IEFU84,IEFUJP,IEFUSO),
   INTERVAL(SMF,SYNC))
SUBSYS(xxxx,EXITS(IEFU29,IEFU83,IEFU84,IEFUJP,IEFUSO),
   INTERVAL(SMF,SYNC))    /*xxxxIS SUBSYSTEM CMF TASK IS USING */
```

Chapter 7 Customization Tasks for SG-Auto Users

Follow the instructions in this chapter only if you are licensed for the MAINVIEW SRM SG-Auto product. The following tasks are described in this chapter:

Task 1: Read the Critical Notes

The SG-Auto started task automatically specifies *?prefix.*UBBPARM as the definition library on the DEFNLIB DD statement.

SG-Auto may be executed in batch for test purposes or report printing only. SVOS must be active for SG-Auto to be executed in batch.

Task 2: Customize SG-Auto Global Parameters

Modify values for SG-Auto global parameters in *?prefix*.UBBPARM(SMMSYS*xx*) as instructed in the following table.

Tip: For migrating customers, these parameters were not changed from version 5.1 and should already be included in the SMMSYS member copied into version 6.1 from version 5.1 earlier in the customization process.

Step 1 Modify the AUTOPROC= parameter value. The value specifies the name that you will assign to *?prefix*.BBSAMP(SGAPROC), the cataloged procedure used to start SG-Auto (see Task 3).

Step 2 Modify the SGACMD= parameter value. The value specifies the two-position suffix of the initial command for executing the SG-Auto started task. The suffix will be appended to SMACMD to form the member name as it exists in the MAINVIEW SRM parmlib.

Step 3 Modify the SGA_ENQSCOP= parameter value. The value specifies the operational environment in which SG-Auto is to run. The value may be GLOBAL or LOCAL. If GLOBAL is specified, SG-Auto issues an ENQ with the SYSTEMS parameter. If you want to run SG-Auto on multiple LPARs, you must specify GLOBAL. If LOCAL is specified, SG-Auto issues an ENQ with the SYSTEM parameter. Refer to the appropriate IBM documentation for a description of the ENQ macro options.

Task 3: Customize the SG-Auto Started Task

Modify the SG-Auto started task JCL using the following instructions.

Tip: For migrating customers, BMC Software recommends that the JCL distributed with version 6.1 be used, rather than attempting to modify version 5.1 JCL for use in version 6.1.

Step 1 Copy *?prefix*.BBSAMP(SGAPROC) to *?prefix*.UBBSAMP(SGAPROC).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SGAPROC).

Step 3 Save the modified member and copy it to a proclib.

Chapter 8 Customization Tasks for EasyHSM Users

Follow the instructions in this chapter only if you are licensed for the MAINVIEW SRM EasyHSM product. The following tasks are described in this chapter:

Task 1: Read the Critical Notes

A number of EasyHSM reports are based on data in the DFHSM log files. This data is extracted by MAINVIEW SRM from the log files and written to a MAINVIEW SRM data set. You can run the log-extraction program as part of MAINVIEW SRM, or you can run it in batch mode. For IVP purposes, you will run the log-extraction program in batch.

Task 2: Customize EasyHSM Global Parameters

Modify values for EasyHSM global parameters in *?prefix*.UBBPARM(SMMSYS*xx*) using the following instructions.

Tip: For migrating customers, the global parameters in steps 5 through 7 are for new and should be added to the SMMSYS*xx* member.

Step 1 Modify the HLOGINDX= parameter value. The value specifies the *prefix* of the EasyHSM data set that will contain the records extracted from the DFHSM log file. The *prefix* may contain up to 20 characters in any number of name qualifiers.

Tip: Use a unique *prefix* so as not to duplicate the prefix used for the VTOC scan high-level qualifier. This will help you to identify one data set from the other in a combined listing.

The full data set name generated for the log extract file is:

prefix.D*yymmdd*.T*hhmmss*.SYS*system-id*

Step 2 Modify the HLOGPRIM= parameter value. The value specifies the number of tracks to be allocated for the log extract file. One-half of the primary extent is allocated for the secondary (with a minimum of 1). The value may be a number in the range 1–999. If not specified, 15 tracks are used for primary and 10 tracks for secondary.

Step 3 Modify the HLOGUNIT= parameter value. The value specifies the esoteric or generic unit name for allocation of the log extract file. The default value is SYSALLDA.

Step 4 Modify the HLOGYDSN= parameter value. The value specifies the fully-qualified data set name of DFHSM logfile Y.

Step 5 Modify the BCDS*n*=parameter value. The *n* specifies a multi-cluster number of 1-4. For a single-volume BCDS, define 1 for the *n* value. The parameter value specifies the backup data set name.

Step 6 Modify the MCDS*n*=parameter value. The *n* specifies a multi-cluster number of 1-4. For a single-volume MCDS, define 1 for the *n* value. The parameter value specifies the migrated data set name.

Step 7 Modify the OCDS=parameter value. The parameter value specifies the OCDS data set name.

Step 8 Modify the OPMHLQ=parameter value. The parameter value specifies the high-level qualifier for the PDS that is dynamically allocated by the output management facility. The parameter value can be from 1 to 8 characters.

The full data set name generated for this data set is

opmhlq.OUTPUT.DFHSM.D*yymmdd*

Step 9 Modify the HSMACTID= parameter value. The parameter value specifies the high-level qualifier for the DFHSM Activity Message Log data sets that are dynamically allocated as input to the output management facility. The parameter value can be from 1 to 8 characters.

Task 3: Customize EasyHSM JCL for HSM Log Collection

Modify values for EasyHSM log extraction parameters using the following instructions.

Tip: For migrating customers, these parameters have not been modified in this version.

Step 1 Copy *?prefix*.BBSAMP(JCLHSMLX) to *?prefix*.UBBSAMP(JCLHSMLX).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(JCLHSMLX).

Step 3 Save and submit the modified member.

Chapter 9 Customization Tasks for PATROL SRM Users

Follow the instructions in this chapter only if you are licensed for PATROL SRM and MAINVIEW SRM. The following tasks are described in this chapter:

Task 1: Read the Critical Notes

The PATROL server component supports the following communication protocols:

- IBM TCP/IP 3.1 or later
- APPC/LU6.2

You can install support for one or both of these protocols on a single OS/390 system.

You must install the PATROL server component before installing the MAINVIEW SRM client component because important configuration parameters for the client software are defined during installation.

The PATROL server task services online user requests in much the same way that TSO services online user requests. The PATROL server must be assigned to a dispatching priority/job class that is high enough to allow it to get service time ahead of batch and other user work that is not interactive.

The TCP/IP server component started task (SVWTCPIP) must be assigned security authority equal to the sum of authority for all MAINVIEW SRM users. When a user connects to the server, the user logon ID and password are used to build a secured environment restricting the user to authorized activities. Under no circumstances does a user have more authority using PATROL than the MAINVIEW SRM for OS/390 interface.

Task 2: Customize Distributed Systems Collection Agent Started Task

Modify the PATROL started task JCL for TCP/IP using the following instructions.

Step 1 Copy *?prefix*.BBSAMP(SVWTCPIP) to *?prefix*.UBBSAMP(SVWTCPIP).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SVWTCPIP).

Step 3 Save the modified member and copy it to a proclib.

Task 3: Modify the Link-Edit JCL for TCP/IP

Modify the link-edit JCL using the following instructions.

Step 1 Copy *?prefix*.BBILIB(SVWSASL1) to *?prefix*.UBBSAMP(SVWSASL1).

Step 2 Follow the user instructions in *?prefix*.UBBSAMP(SVWSASL1) to modify the link-edit JCL.

Step 3 Save and submit the modified member.

Task 4: Start the TCP/IP Transaction Scheduler

Start the TCP/IP transaction scheduler using the following instructions.

Step 1 Start the TCP/IP communication software.

Step 2 Start SVWTCPIP.

Step 3 Watch for the following activation messages to appear at the OS/390 console:

GT001I - MAINVIEW SRM 7.1 TCP/IP Gateway

BGT002I - Gateway initialization completed
BGT003I - Gateway ready for client access

These messages indicate that the MAINVIEW SRM transaction scheduler started successfully.

Note: To stop the MAINVIEW SRM transaction scheduler, type the following command on a console command line:

C SVWTCPIP

Task 5: Install the PATROL Client Software

Refer to the *PATROL Storage Management Getting Started Guide* to install the client software.

Chapter 10 Customization Tasks for Enterprise Storage Automation Users

Follow the instructions in this chapter only if you are licensed for the MAINVIEW SRM Enterprise Storage Automation product.

Tip: For migrating customers: See the “Migration Considerations for Enterprise Storage Automation Users” on page B-5

The following tasks are described in this chapter:

Task 1: Read the Critical Notes

You must install AutoOPERATOR first.

Although not required, BMC Software recommends that you start the AutoOPERATOR product *before* you start Enterprise Storage Automation.

Task 2: Install AutoOPERATOR

Install AutoOPERATOR according to the instructions in the following books. Refer only to those sections of the books that pertain to AutoOPERATOR.

- *OS/390 and z/OS Installer Guide*
- MAINVIEW Installation Requirements Guide
- MAINVIEW *Common Customization Guide*
- *Implementing Security for MainView Products*

Tip: If AutoOPERATOR is already installed on your system, no new installation or customization is necessary for that product.

To use MAINVIEW SRM Enterprise Storage Automation, you must have MAINVIEW AutoOPERATOR 6.1 *or higher* active on your system. To use AutoOPERATOR 6.1, see the special requirements detailed in “System Software Requirements” on page 2-3.

Task 3: Set Up Predefined Solutions in AutoOPERATOR

After AutoOPERATOR is installed, set up predefined Enterprise Storage Automation solutions in AutoOPERATOR using the following instructions.

Tip: For migrating customers, many new Rules and Rule Sets have been added. The following steps should be performed.

Step 1 Copy the following members from MAINVIEW SRM *?prefix*.BBSAMP to the AutoOPERATOR *?prefix*.UBBPARM. These members must be placed in a data set in the BBIPARM concatenation of the AutoOPERATOR BBISS started task.

- SRSVARA
- RULSRS
- RULSRS01
- RULSRS02
- RULSRS03
- RULSRS04
- RULSRS05
- RULSRS06
- SRSVARG
- SRSVARH
- SRSVARW
- SRSVARD
- SRSVARJ

Step 2 Copy the following members from MAINVIEW SRM ?*prefix*.BBCLIB to the AutoOPERATOR ?*prefix*.UBBPROC. These members must be placed in the SYSPROC concatenation of the AutoOPERATOR BBISS started task.

CORSR005
CORSR010
CORSR015
CORSR020
CORSR025

Step 3 Copy the following members from MAINVIEW SRM ?*prefix*.BBSAMP to the AutoOPERATOR ?*prefix*.UBBPROC. These members must be placed in the SYSPROC concatenation of the AutoOPERATOR BBISS started task.

ADSMHUNG
ADSMWTOR
HSMHELD
HSMDUPR
HSMRLSE
HSMWAIT
SRMJOB01
SRMJOB02
SRMJOB03
SRMJOB04
SRSVAR

Step 4 Issue the following AutoOPERATOR console command to execute the SRSVAR EXEC that initializes parameters for the predefined solutions:

F *AOAS*,%SRSVAR SRSVARG SRSVARH SRSVARW SRSVARD SRSVARA SRSVARJ

where *AOAS* is the name of your AutoOPERATOR Started Task, or you can invoke an AutoOPERATOR EXEC from the COMMAND line of any AutoOPERATOR panel. For more information about invoking EXECs from AutoOPERATOR see the *MAINVIEW AutoOPERATOR Basic Automation Guide*.

Once you issue this command, SRSVAR will run automatically when AutoOPERATOR is started.

Task 4: Modify Enterprise Storage Automation Global Parameters

Modify values for Enterprise Storage Automation global parameters in *?prefix*.UBBPARM(SMMSYS*xx*) as instructed in the following table.

Step 1 Modify the EVNT= parameter value. The value specifies the suffix you assign to the name of the SMEVNT*xx* event definition member.

Tip: The distributed SMMSYS member is already coded for EVNT=00. You only need to modify it if you have done other customization and are no longer using SMEVNT00.

Step 2 Modify the AOO_SUBSYS= parameter value. The value specifies the AutoOPERATOR subsytem(s) to receive events. You can specify up to three AutoOPERATOR subsystems. This value corresponds to the value specified on the SS= parameter in the AutoOPERATOR JCL. To utilize job submission and skeleton tailoring that is used in conjunction with the AUTO functions, the first AutoOPERATOR subsystem listed in the AOO_SUBSYS= parameter must be at release level 6.1 with PTF BPO5425 or higher.

Chapter 11 Verification Tasks for All MAINVIEW SRM Users

You should verify that you have successfully completed the installation of MAINVIEW SRM and that all licensed products are functional. If you followed the customization tasks in previous chapters, you have already added global parameters required for verification. However, a quick reference guide for commonly-used parameters is provided in Appendix A, “Additional Global Parameters” if you would like to add them before you verify the installation.

Note: There are currently no IVPs for EasySMS or PATROL.

The following verification tasks are described in this chapter:

Task 1: Start the SVOS Started Task

Note: Shut down previous versions of any of the products in the MAINVIEW SRM suite before starting MAINVIEW SRM 7.1.

To start MAINVIEW SRM, issue the following command to start SVOS from a system console:

```
S SVOS
```

If SVOS fails to start, check for the following:

- Is the SVOS JCL in a PROCLIB in the JESx PROCLIB concatenation?
- Are all data set names correctly spelled in the JCL?
- Is *?prefix*.BBLINK APF authorized?

Contact BMC Software Customer Support if you need further assistance.

Task 2: Start the MAINVIEW Interface

From the ISPF command shell, issue the following command:

TSO *mainview clist*

If the ISPF interface fails to start or if you receive error messages, check for the following:

- Is *?prefix*.BBLINK APF authorized?
- Has *?prefix*.BBLINK been added to the LNKLST or the STEPLIB concatenation for the TSO logon PROC?
- Have all of the entries in Table 4-1 on page 4-16 been added to SYS1.PARMLIB(IKJTSO*xx*)?

Contact BMC Software Customer Support if you need further assistance.

Task 3: Define a Pool

If you are not licensed for any of the following MAINVIEW SRM products, skip this task:

- EasyPOOL
- SG-Auto
- StorageGUARD

If you are licensed for any of these products, define a pool using the following instructions.

Step 1 Copy *?prefix*.BBSAMP(SMPOOLIV) to *?prefix*.UBBPARM(SMPOOLIV).

Step 2 If you have not already started MAINVIEW SRM, do so now.

Step 3 From the EZSRM Menu, select **Parmlib Members**. The Parmlib Members menu is displayed.

Step 4 Select **Pools**, from the Parmlib Members menu.

Step 5 Type **E** in the **CMD** column next to SMPOOLIV, then press **Enter**.

Step 6 Follow the user instructions in *?prefix*.UBBPARM(SMPOOLIV).

Step 7 Press **PF3** to save and exit the member.

Step 8 Type **R** in the **CMD** column next to SMPOOLIV, then press **Enter**. The member is refreshed.

Note: By refreshing SMPOOLIV, you have made it the active pool list. It will remain active until SVOS is stopped or until you refresh another pool member. See the *MAINVIEW SRM User Guide and Reference* for instructions on how to change pool lists permanently.

Task 4: Start SVALLOC

If you are not licensed for any of the following MAINVIEW SRM products, skip this task:

- EasyPOOL
- EasySMS
- StopX37/II

If you are licensed for any of these products, start SVALLOC using the following instructions.

Step 1 From a system console, issue the following command:

```
F SVOS,S SVALLOC
```

Step 2 Look for the following message in the syslog to find out if SVALLOC starts successfully:

```
SVO0610 MAINVIEW SRM/ALLOC Rel 7.1.0 HAS BEEN STARTED ON
ETIS
```

If SVALLOC fails to start, check to make sure that you used a valid password. Contact BMC Software Customer Support if you need further assistance.

Task 5: Verify EasyPOOL

If you are not licensed for the EasyPOOL product, skip this task. If you are licensed for EasyPOOL, follow the steps below:

Step 1 Copy *?prefix*.BBSAMP(SMFLSTDP) to *?prefix*.UBBPARM(SMFLSTDP).

Step 2 Copy *?prefix*.BBSAMP(SMRLSTDP) to *?prefix*.UBBPARM(SMRLSTDP).

Step 3 Copy *?prefix*.BBSAMP(IVPEZP01) to *?prefix*.UBBSAMP(IVPEZP01).

Step 4 In *?prefix*.UBBPARM(SMFLSTDP), follow the user instructions.

Step 5 In *?prefix*.UBBPARM(SMRLSTDP), follow the user instructions.

Step 6 From the EZSRM Menu, select **Functions**.

Step 7 Type **C** in the **CMD** column next to DASDPOOL, then press **Tab** to move the cursor to the **FLST** field.

Step 8 In the **FLST** field, type **DP** and press **Tab**.

Step 9 In the **RLST** field, type **DP**.

Note: The suffix changes for the DASDPOOL function will remain in effect only until SVOS is stopped. See the *MAINVIEW SRM User Guide and Referencee* for instructions on permanently changing function suffixes.

Step 10 Type **A** in **CMD** column next to DASDPOOL, then press **Enter**. The DASDPOOL function is activated.

Step 11 In *?prefix*.UBBSAMP(IVPEZP01), follow the user instructions, then save and submit the member.

Step 12 The data sets in DD1 and DD2 are allocated to volumes in the IVPPOOL. The data set in DD3 is allocated to the volume specified in the JCL. If the allocations failed, check for the following:

- Did you use a valid password?
- Is SMPOOLIV the active pool list?
- Is SMFLSTDP the active filter list for the DASDPOOL function?
- Is SMRLSTDP the active resource list for the DASDPOOL function?
- Does the jobname specified in the filter and resource lists match the jobname used in the IVP job?

Contact BMC Software Customer Support if you need further assistance.

Task 6: Verify StopX37/II

If you are not licensed for the StopX37/II product, skip this task. If you are licensed for StopX37/II, follow the steps below:

Step 1 Copy *?prefix*.BBSAMP(SMFLSTSP) to *?prefix*.UBBPARM(SMFLSTSP).

Step 2 Copy *?prefix*.BBSAMP(SMRLSTSP) to *?prefix*.UBBPARM(SMRLSTSP).

Step 3 Copy *?prefix*.BBSAMP(IVPX3701) to *?prefix*.UBBSAMP(IVPX3701).

Step 4 In *?prefix*.UBBPARM(SMFLSTSP), follow the user instructions.

Step 5 In *?prefix*.UBBPARM(SMRLSTSP), follow the user instructions.

Step 6 From the EZSRM Menu, select **Functions**.

Step 7 Type **C** in the **CMD** column next to SPACPRIM, then press **Tab** to move the cursor to the **FLST** field.

Step 8 In the **FLST** field, type **SP** and press **Tab**.

Step 9 In the **RLST** field, type **SP**, then press **Enter**.

Note: The suffix changes for the SPACPRIM function will remain in effect only until SVOS is stopped. See the *MAINVIEW SRM User Guide and Reference* for instructions on permanently changing function suffixes.

Step 10 Type **A** in **CMD** column next to SPACPRIM, then press **Enter**. The SPACPRIM function is activated.

Step 11 In *?prefix.*UBBSAMP(IVPX3701), follow the user instructions, then save and submit the member.

Step 12 The space for data set DD1 will be reduced in 10 percent increments until it fits on the designated volume. If the data set allocation fails, check for the following:

- Did you use a valid password?
- Is SMFLSTSP the active filter list for the SPACPRIM function?
- Is SMRLSTSP the active resource list for the SPACPRIM function?
- Does the jobname specified in the filter and resource lists match the jobname used in the IVP job?
- Is there any space at all on the selected volume?

Contact BMC Software Customer Support if you need further assistance.

Task 7: Verify EasyHSM

If you are not licensed for the EasyHSM products, skip this task:

If you are licensed for any of these products, start SVHSM using the following instructions.

Step 1 From a system console, issue the following command:

```
F SVOS,S SVHSM
```

Step 2 Look for the following message in the syslog to find out if SVHSM starts successfully:

```
SVO0610 MAINVIEW SRM/SVHSM Rel 7.1.0 HAS BEEN STARTED ON
ETIS
```

If SVHSM fails to start, check to make sure that you used a valid password. Contact BMC Software Customer Support if you need further assistance.

If you are not licensed for the EasyHSM product, skip this task. If you are licensed for EasyHSM, you must verify the CDS query and the log extraction.

To verify the CDS query:

Step 1 Set the TIME command to include the time period for which you wish to retrieve data. To set the TIME command, type **TIME** on the command line. Type **HELP TIME** for complete instructions.

Step 2 From the EZSRM Menu, select the **EasyHSM**.

Step 3 From the EZHSM Menu, select **Migrated data set view**. The MAINVIEW SRM HSM Migrated Data Set Options pop-up panel is displayed.

Step 4 In the **Data set name level** parameter field, type a DSN mask for data sets that you know are migrated. For example:

TEST/

for all data sets beginning with TEST

Step 5 In the **Data set type** parameter field, type **All**.

Step 6 In the **Migration level** parameter field, type **A**.

Step 7 In the **Include catalog information** parameter field, type **Yes**.

Step 8 Press **Enter**. The MAINVIEW SRM HSM Migrated data set report is displayed.

If the data set report is not displayed, check for the following:

- Did you use a valid password?
- Did you correctly specify the DFHSM CDSs in SMMSYS*xx*?
- Did you correctly specify the DSN mask?
- Is the SVHSM product started?

Contact BMC Software Customer Support if you need further assistance.

To verify the log extraction:

Step 1 Set the TIME command to include the time period for which you wish to retrieve data. To set the TIME command, type **TIME** on the command line. Type **HELP TIME** for complete instructions.

Step 2 From the EZSRM Menu, select the **EasyHSM**.

Step 3 From the EZHSM Menu, select **Error summary**. The Error Summary View options panel is displayed.

Step 4 In the **Data set name** field, type /.

Step 5 Press **Enter**. The EasyHSM Error Summary report is displayed. Use **PF11** to scroll right, and use **PF10** to scroll left.

This report should contain data, even if all migrations, recalls, backups and recoveries completed successfully. If the report does not display data, check for the following:

- Did you use a valid password?
- Was there any DFHSM activity on this system?
- Did the job (JCLHSMLX) create an output data set?
- Was there any data in the DFHSM LOGY file?

Contact BMC Software Customer Support if you need further assistance

Note: Some systems use automation to backup and clear the DFHSM log files as soon as DFHSM swaps the logs. If your system backs up and clears the DFHSM log files, see the *MAINVIEW SRM EasyHSM User Guide and Reference* for instructions on how to extract log data from the backup files.

Task 8: Verify StorageGUARD

If you are not licensed for the StorageGUARD product, skip this task. If you are licensed for StorageGUARD, you must verify

- the historical space data collector started task and databases
- the historical performance data collector started task and databases

To verify the historical space data collector started task:

Step 1 From a system console, issue the following command:

```
F SVOS,S SVSGD
```

Step 2 Look for the following message in the syslog to find out if the historical space data collector starts successfully:

```
SVO0610 MAINVIEW SRM/SGD Rel 7.1.0 HAS BEEN STARTED ON
ETIS
```

- If the historical space data collector fails to start, check for the following:
- Did you use a valid password?
- Was the historical space data collector started task copied to a JESx PROCLIB?
- Is the JCL correct?
- Does the PROC name match what is specified in the SGD_PROCNM= parameter in *?prefix*.UBBPARM(SMMSYSxx)?

Contact BMC Software Customer Support if you need further assistance.

To verify the historical space databases:

Step 1 From the EZSRM Menu, select **Historical Space**. The MVSRMSGD

Menus displays.

Step 2 Select **Pool Utilization**. The SPPOOL view is displayed.

Step 3 Type **V** in the **CMD** column next to the IVPPOOL pool name.

Step 4 Press **Enter**. The Volume Report is displayed and shows the volumes you specified in SMPOOLIV.

If you are unable to verify the databases, wait for one interval to complete (as specified in the SG_WRITNTVL global parameter), then try again. If you are still unable to verify the databases after waiting, check for the following:

- Did you use a valid password?
- Were the data set names correctly entered in COSSINIT?

Contact BMC Software Customer Support if you need further assistance.

To verify the historical performance data collector started task:

Step 1 From a system console, issue the following command:

```
F SVOS,S SVSGP
```

Step 2 Look for the following message in the syslog to find out if the historical performance data collector starts successfully:

```
SVO0610 MAINVIEW SRM/SGP Rel 7.1.0 HAS BEEN STARTED ON
ETIS
```

If the historical performance data collector fails to start, check for the following:

- Did you use a valid password?
- Was the historical performance data collector started task copied to a JESx PROCLIB?
- Is the JCL correct?
- Does the PROC name match what is specified in the SGD_PROCNM= parameter in *?prefix*.UBBPARM(SMMSYSxx)?

Contact BMC Software Customer Support if you need further assistance.

To verify the historical performance databases:

Step 1 From the EZSRM Menu, select **Historical Performance**. The EZSRMSGP Menu displays.

Step 2 Select **Pools**. The PRPOOL view is displayed.

Step 3 Type **V** in the **CMD** column next to the IVPPOOL pool name.

Step 4 Press **Enter**. The Volume view is displayed and shows the volumes you specified in SMPOOLIV.

If you are unable to verify the databases, wait for one interval to complete (as specified in the SG_WRITNTVL global parameter), then try again. If you are still unable to verify the databases after waiting, check for the following:

- Did you use a valid password?
- Were the data set names correctly entered in SMMSYS*xx*?

Contact BMC Software Customer Support if you need further assistance.

Task 9: Verify SG-Auto

If you are not licensed for the SG-Auto product, skip this task. If you are licensed for SG-Auto, follow the steps below:

Step 1 Copy *?prefix*.BBSAMP(SMACMDIV) to *?prefix*.UBBPARM(SMACMDIV).

Step 2 In *?prefix*.UBBPARM(SMACMDIV), follow the user instructions.

Step 3 From the MVSRM Menu, select **Parmlib Members**. The Parmlib Members menu is displayed.

Step 4 Select **System** from the Parmlib Members menu.

Step 5 Type **E** in the **CMD** column next to SMMSYS00, then press **Enter**. The SMMSYS00 member is displayed.

Step 6 Change the value on the SGACMD parameter from 01 to **IV**.

Step 7 Press **PF3** to save and exit the member.

Step 8 Type **R** in the **CMD** column next toSMMSYS00, then press **Enter**. The member is refreshed.

Step 9 From a system console, issue the following command:

```
F SVOS,S SVSGA
```

Step 10 Look for the following message in the syslog to find out if SG-Auto starts successfully:

```
SVO0610 MAINVIEW SRM/SGA Rel 7.1.0 HAS BEEN STARTED ON
ETIS
```

Step 11 Check to see if the SG-Auto started task is running. After approximately 10 minutes, you should begin receiving messages that IVPPOOL exceeds threshold. If the SG-Auto started task fails to start or you do not receive any messages, check for the following:

- In the syslog, look for related messages issued after the start command for SG-Auto was issued.
- Was the SG-Auto started task copied to a JESx PROCLIB?
- Are the global parameters correct?

Contact BMC Software Customer Support if you need further assistance.

Task 10: Verify SG-Control

If you are not licensed for the SG-Control product, skip this task. If you are licensed for SG-Control, follow the steps below:

Step 1 Copy *?prefix*.BBSAMP(SMFLSTSC) to *?prefix*.UBBPARM(SMFLSTSC).

Step 2 Copy *?prefix*.BBSAMP(SMRLSTSC) to *?prefix*.UBBPARM(SMRLSTSC).

Step 3 Copy *?prefix*.BBSAMP(IVPSGC01) to *?prefix*.UBBSAMP(IVPSGC01).

Step 4 In *?prefix*.UBBPARM(SMFLSTSC), follow the user instructions.

Step 5 In *?prefix*.UBBPARM(SMRLSTSC), follow the user instructions.

Step 6 From a system console, issue the following command:

```
F SVOS,S SVSGC
```

Step 7 From the EZSRM Menu, select **Functions**.

Step 8 Type **C** in the **CMD** column next to SGCONTRL, then press **Enter**. The MAINVIEW SRM Functions Modifications pop-up panel is displayed.

Step 9 In the **Filter list suffix** field, type **SC**.

Step 10 In the **Resource list suffix** field, type **SC**, then press **Enter**.

Note: The suffix changes for the SGCONTRL function will remain in effect only until SVOS is stopped. See the *MAINVIEW SRM User Guide and Reference* for instructions on permanently changing function suffixes.

Step 11 Type **A** in the **CMD** column next to SGCONTRL, then press **Enter**. The SGCONTRL function is activated.

Step 12 In *?prefix*.UBBSAMP(IVPSGC01), follow the user instructions, then save and submit the member.

Note: Use the same *?prefix* qualifier that you assigned to SMFLSTSC and SMRLSTSC in steps 4 and 5.

Step 13 Review the output from the IVPSGC01 job. The job should:

- Allocate a data set
- display information about account IVPPERM
- Delete the data set
- Again display information about account IVPPERM

Contact BMC Software Customer Support if you have any problems running IVPSGC01.

Task 11: Verify Enterprise Storage Automation Event Generation

If you are not licensed for the Enterprise Storage Automation, skip this task. If you are licensed for Enterprise Storage Automation, follow the steps below.

Note: These instructions describe how to generate an event from the StopX37/II SPACPRIM function. If you are not licensed for StopX37/II, select a function for a product that you are licensed to use.

Step 1 From your AutoOPERATOR primary menu, select **Basic and Advanced Automation**; then select **Display/Modify Rules and Rule Sets**. Verify that Rule Set RULSRS02 is enabled.

Step 2 Copy *?prefix*.BBSAMP(IVPESA01) to *?prefix*.UBBSAMP(IVPESA01).

Step 3 From the MVSRM menu, select **SRM Component Status**.

Step 4 To start Enterprise Storage Automation, type **S** the **CMD** field next to the Automation component and press **ENTER**.

Step 5 From the MVSRM Menu, select **Parmlib Members**. The Parmlib Members menu is displayed.

Step 6 Select **All Active Members** from the Parmlib Members menu.

Step 7 Type **E** in the **CMD** column next to SMMSYS00, the active system member, then press **Enter**. The SMSYS00 member is displayed.

Step 8 Verify that there is an **EVNT** parameter with a value of **00** in SMMSYS00, then press **F3** to exit the member.

Step 9 From the active parmlib member list, type **E** in the **CMD** column next to SMEVNT00, the active event member, then press **Enter**. The SMEVNT00 member is displayed.

9.A Verify that there is an EVNTID parameter with a value of U0001 in SMEVNT00, then press F3 to exit the member.

Step 10 From the MVSRM Menu, select **Functions**. A list of the MAINVIEW SRM functions, view ADFUNC, is displayed.

Step 11 Locate the SPACPRIM function, type the **ER** line command (for Edit RLST), in the **CMD** field next to the SPACPRIM function, and press **ENTER**. The SMRLST18 member is displayed.

Step 12 Change the ?$IVPJOB in the RLST to the jobname to be used in the IVPESA01 job below.

Step 13 Verify that there is an **EVNTID** parameter with a value of **U0001** in SMRLST18, then press **F3** to exit the member.

Step 14 In *?prefix*.UBBSAMP(IVPESA01), follow the user instructions, then save and submit the member.

The U0001 event is sent to AutoOPERATOR. A Rule in Rule Set RULSRS02 causes the event to be displayed in the AutoOPERATOR Journal. The AutoOPERATOR Journal is available from the AutoOPERATOR Main Menu.

The Event view can be used to see the event count go up when the event is sent. The Event view is available from the **Automation** selection on the MAINVIEW SRM EZSRM menu.

Contact BMC Software Customer Support if you need further assistance.

Task 12: Verify Enterprise Storage Automation AUTO Functions

If you are not licensed for the Enterprise Storage Automation, skip this task. If you are licensed for Enterprise Storage Automation, follow the steps below:

Step 1 From the EZSRM Menu, select **Functions** found under the SRM Administration title.

Verify that AUTODS is listed in the Function column, the Status is Y, and that the FLST and RLST suffix listed is AD.

Step 2 Edit the SRMJOB01 member in ?*prefix*.UBBPROC library, which should be concatenated in the SYSPROC DD statement in your AutoOPERATOR Subsystem PROC.

Alter the JOB card to reflect your site standards. Note that SYSIN statements, and certain JCL statements are commented out. This is to allow the IVP to run without actually manipulating data sets. Leave them as they are for the IVP procedure.

Step 3 From your AutoOPERATOR primary menu, select **Basic and Advanced Automation**; then select **Display/Modify Rules and Rule Sets**.

Verify that Rule Set RULSRS01 is enabled.

Step 4 Select the RULSRS01 Rule Set, placing you into the **Rule Set Overview** screen. Select the **SRS01001** Rule ID; then enter **SV** (Variable Dependencies).

In the Variable Dependencies panel you will see SRM* listed in the Variable Value column. Change the SRM prefix to the job name prefix you used in Step 2 above. For example if you used MYJOB005 as the job name, change SRM* to MYJOB005 or MYJOB*.

Repeat this process for each SRS01*nnn* Rule ID in the RULSRS001 Rule Set. Remember to save the changes when you exit the Rule Set Overview.

Step 5 Issue from the operator console the command:

F *mvsrmas*,SVOS AUTODS VOL=*xxxxxx*,SOL=COMPRLSE

where *mvsrmas* is the name of your MVSRM Started Task and *xxxxxx* is the volume serial number of a volume online to your system. Try to pick a volume where you know there is at least one data set that has multiple extents.

Step 6 From the EZSRM menu select **Automation** then select **Automated Resources**. Under **Resource Name**, you should see the name of the volume you issued the command against. If the SRMJOB01 skeleton member that was submitted is waiting or is still running, you should see WAITING in the Status column.

Assuming data sets that match the FLST/ RLST criteria for the COMPRLSE solution were found on the volume you selected, the job submitted should end with a RC=12 (as the control cards are commented out). Check the output of the job and ensure the variable substitutions were made.

If the FLST/RLST criteria was not met, no job would have been submitted. If this happens, you may wish to re-issue the command using a different volume or change the FLST/RLST criteria for this solution.

Information about this and other possible solutions are available in the *MAINVIEW SRM Enterprise Storage Automation User Guide*.

Where to Go from Here

The instructions thus far have been limited to the purpose of allowing you to verify that MAINVIEW SRM has been successfully installed to run on your system(s). Complete information for customizing MAINVIEW SRM beyond installation verification is contained in the following manuals.

- *MAINVIEW SRM User Guide and Reference*
- *MAINVIEW SRM DMS2HSM User Guide and Reference*
- *MAINVIEW SRM EasyHSM User Guide and Reference*
- *MAINVIEW SRM EasyPOOL User Guide and Reference*
- *MAINVIEW SRM EasySMS User Guide and Reference*
- *MAINVIEW SRM SG-Auto User Guide and Reference*
- *MAINVIEW SRM SG-Control User Guide and Reference*
- *MAINVIEW SRM Enterprise Storage Automation User Guide*
- *MAINVIEW SRM StopX37/II User Guide and Reference*
- *MAINVIEW SRM StorageGUARD User Guide and Reference*

Appendix A Additional Global Parameters

You may also want to modify the following frequently used parameters in SMMSYS*xx* during implementation. The column headings specify which components use the parameters. For a complete list of global system parameters, see the Global Parameters appendix in the *MAINVIEW SRM User Guide and Reference*.

Table A-1 Frequently Used Optional Global Parameter Quick Reference

Parameter	EasyPOOL	EasyHSM	SG-Auto	SG-Control	StopX37/II	StorageGUARD
DMYUNIT=	X					
DP_RENAME	X					
HLOGAUTH=						
HLOGCOLL=		X				
HLOGTASK=		X				
JCLEXT=	X					
PERFRM_PRC=						X
SGA_ENQSCOP=			X			
SGD_SMFID=				X		
SGP_EXITLIB=						X
SGP_SMF42=						X
TRKCYL=	X					
VSAMPRIM=					X	

DMYUNIT=	
Purpose:	Defines the conversion of a nonexistent UNIT parameter to a valid UNIT parameter only if JCLEXT=YES.
Syntax:	DMYUNIT=(*xxxxxxxx,zzzzzzzz,...xxxxxxxx,zzzzzzzz)* where the first *xxxxxxxx* is the invalid UNIT parameter to be converted to the valid UNIT parameter *zzzzzzzz*. Multiple pairs of DMYUNITs can be specified.
Required:	No
Default:	None

DP_RENAME=	
Purpose:	Specifies to EasyPOOL that during DADSM RENAME, DASDPOOL will be driven to verify that the POOL containing the volume on which the data set currently resides is also a POOL that would be assigned to the renamed data set. When DP_RENAME=Y, if the first POOL in which the current volume is found does not match a POOL that would be assigned to the renamed data set, the RENAME will be denied. When DP_RENAME=A, if any POOL in which the current volume is found does not match a POOL that would be assigned to the renamed dataset, the RENAME will be denied.
Syntax:	DP_RENAME=*Y/N/A*
Required:	No
Default:	DP_RENAME=N
Note: The FLST/RLST parameter DADSM_FUNC should be used to limit the data sets processed by enabling this option.	

HLOGAUTH=	
Purpose:	Specifies the *hours* component of the duration between automatic logfile switching. EasyHSM reporting extracts records from the DFHSM logfiles. If HLOGCOLL=YES is specified, MAINVIEW SRM will switch the DFHSM logfile and extract the required records for EasyHSM automatically. The switching interval is specified in hours and minutes by the parameters HLOGAUTH and HLOGAUTM.
Syntax:	HLOGAUTH=*nn* where *nn* specifies a number of hours in the range 0–24.
Required:	Yes
Default:	HLOGAUTH=00

HLOGCOLL=	
Purpose:	Specifies whether MAINVIEW SRM will perform DFHSM logfile switching and record extraction for EasyHSM automatically. EasyHSM reporting requires certain records from the DFHSM logfiles. If HLOGCOLL=YES is specified, MAINVIEW SRM will switch the DFHSM logfiles and run a record extraction program automatically at the interval specified by the HLOGAUTH/M parameters. For more information on DFHSM logfile switching and extraction, see the *MAINVIEW SRM EasyHSM User Guide and Reference*.
Syntax:	HLOGCOLL=*YES/NO*
Required:	No
Default:	HLOGCOLL=NO

HLOGTASK=	
Purpose:	Specifies the name of the procedure to be run following the EasyHSM DFHSM logfile switch program execution. EasyHSM reporting extracts records from the DFHSM logfiles. If HLOGCOLL=YES is specified, MAINVIEW SRM will switch the DFHSM logfile and extract the required records for EasyHSM automatically. HLOGTASK may be used to run a task associated with the logfile switch performed by the MAINVIEW SRM utility.
Syntax:	HLOGTASK=*xxxxxxxx*
Required:	No
Default:	None

JCLEXT=	
Purpose:	Specifies if EasyPOOL will obtain volume and unit information after MVS accessed the catalog.
Syntax:	JCLEXT=*YES/NO*
Required:	No
Default:	JCLEXT=YES
Note: If JCLEXT=YES is specified, all non-valid unit names must be specified in DMYUNIT; otherwise, MVS will fail the allocation. Also, JCLEXT=YES should be used carefully if PROCOLD=YES is also specified, because JCLEXT will find a unit and volume from the catalog, whereas PROCOLD=YES will allow the existing data set to be reprocessed, possibly assigning a different (and invalid) volume. JCLEXT=NO is primarily supplied for compatibility with the POOLDASD product. Under MAINVIEW SRM, there is no significant benefit to specifying JCLEXT=NO.	

PERFRM_PRC=	
Purpose:	Specifies the name of the procedure used to start the historical performance data collector. The procedure is distributed in *?prefix*.BBSAMP as member SGPPROC.
Syntax:	PERFRM_PRC=*xxxxxxxx* where *xxxxxxxx* is an 8-character string.
Required:	No
Default:	None

SGA_ENQSCOP=	
Purpose:	Specifies the operational environment in which SG-Auto is to run. If GLOBAL is specified, SG-Auto issues an ENQ with the SYSTEMS parameter. If LOCAL is specified, SG-Auto issues an ENQ with the SYSTEM parameter. Refer to the appropriate IBM documentation for a description of the ENQ macro options.
Syntax:	SGA_ENQSCOP=GLOBAL/LOCAL
Required:	Required for SG-Auto
Default:	GLOBAL

SGD_SMFID=	
Purpose:	Controls the generation of SMF records for StorageGUARD.
Syntax:	SGD_SMFID=*nnn* where *nnn* is a value in the range 0–255
Required:	No
Default:	0

SGP_EXITLIB=	
Purpose:	Specifies the default library where the StorageGUARD Performance collector SMF exits reside.
Syntax:	SGP_EXITLIB=*xxxxxxxx*
Required:	No
Default:	SGP_EXITLIB=SYS1.LINKLIB

SGP_SMF42=	
Purpose:	Determines if the SMF 42 record is written to the SMF data set. If set to NO, SG-Perform does not allow the record to be written.
Syntax:	SGP_SMF42=*YES*|*NO*
Required:	No
Default:	SGP_SMF42=NO

TRKCYL=	
Purpose:	Specifies the number of tracks per cylinder for the default device type. The value specified for 3380/3390/9345 devices should be 15. (Note that this specification is the same as the SCDS base configuration DEFINE under ISMF for DFSMS.) TRKCYL and TRKLEN are used by the DASDPOOL and FRAGCNTL functions to convert allocations in tracks or cylinders to megabytes for volume selection based on available space; for example, VOLSEL=BESTFIT. The information specified on these two parameters should reflect the devices that are most prevalent in your environment.
Syntax:	TRKCYL=*nnnnn* where *nnnnn* is a 1 to 5 digit number.

TRKCYL=	
Required:	Yes
Default:	None

VSAMPRIM=	
Purpose:	Specifies that volume additions to a VSAM file (by SPACVOLA) will use the primary allocation size instead of the secondary.
Syntax:	VSAMPRIM=*YES* Use the *primary* allocation size. VSAMPRIM=*NO* Use the *secondary* allocation size.
Required:	No
Default:	VSAMPRIM=NO

Appendix B Migrating from Previous Releases

This appendix explains migration considerations for users who are upgrading from earlier releases of MAINVIEW SRM products. This appendix contains the following topics:

Migration Considerations for All Users

To ensure a smooth transition from MAINVIEW SRM 6.1 to MAINVIEW SRM 7.1, please complete all checklists, worksheets, and customization steps in this guide.

Migration tips are included where appropriate. The migration tips

- point you to migration considerations for a product
- tell you whether you can skip a task
- tell you which steps have changed
- describe specific procedures recommended by BMC Software.

In the migration process, you will create a new MAINVIEW SRM parmlib; however, parmlib members from the previous release will be copied into this the new parmlib. Thus, current system, pool, rule list, filter list, calendar, SMS pool, function, event, critlist, and other definitions will be brought forward. This is done in “Task 11: Copy BBPARM to UBBPARM” on page 4-14.

Migration Considerations Pre-6.1 Users

MAINVIEW SRM 6.1 and above uses MAINVIEW Infrastructure (MVI) architecture and supports sysplex. The information in this section will help you understand the migration from a single-system environment to a shared parmlib environment.

Of particular interest to migration customers is the new global parameter, BBI3_SSID, which must be added to the SMMSYS*xx* member in the order specified in “Task 13: Update MAINVIEW SRM Global Parameters” on page 4-17. This parameter specifies the Coordinating Address Space (CAS) subsystem name to which the SVOS Product Address Space (PAS) should connect.

Warning! Connection to the CAS is *required* to use the MAINVIEW SRM panels. Even if you are not planning to use the MAINVIEW panels, you must have a value in the BBI3_SSID parameter to start SVOS. You can accept the default of BBCS during AutoCustomization.

Since the MVI connection occurs during SVOS startup, SVOS will not start if BBI3_SSID is not specified. To update the value of BBI3_SSID, SVOS must be stopped and restarted; *it cannot be refreshed*. The CAS subsystem name is specified in the SSID= parameter on the PARM= keyword for the CAS JCL EXEC statement.

In a shared parmlib environment, you can implement and maintain MAINVIEW SRM systems by coding statements in a shared OS/390 partitioned data set (PDS). MAINVIEW SRM parmlib members support new INC/EXC parameters to the SET statement and a new override capability to certain SET statements.

You may choose to share SMMSYS*xx* but not SMPOOL*xx* or other member(s). Sharing parmlib members requires a well thought out naming convention to prevent pools from having the same name and different characteristics on different systems.

CLIST Changes

COSSINIT and COSSTART have been replaced in MAINVIEW. Use “Task 7: Create CLIST for Invoking MAINVIEW Products” on page 4-9 to establish the new CLIST.

Sysplex Parameters

The same parameters used in the nonshared environment are supported in the shared environment. To accommodate a shared parmlib environment, three INC/EXC keywords, FORSYSID, FORSMFID, and FORPLEXNAME are valid in the following members:

- SMMSYS*xx*
- SMFUNC*xx*
- SMPOOL*xx*
- SMFLST*xx*
- SMRLST*xx*
- SMDIAG*xx*
- SMEVNT*xx*
- SMCRIT*xx*
- SMCALS*xx*
- SMSPOL*xx*
- SMVARS*xx*

The SET statement can be overridden, which means that you can code an initial SET statement in the shared SMMSYS*xx*, SMFUNC*xx*, SMPOOL*xx*, SMDIAG*xx*, SMEVNT*xx* and SMCRIT*xx* members, followed by INC/EXC parameters for each image in the sysplex.

The last INC/EXC statement coded in a SET statement is accepted as the override value. Previously coded INC/EXC statements are ignored.

Syntax Considerations for the Shared Parmlib Environment

If no INC FORSYSID= is coded on a SET statement, the SET statement applies to all systems in the sysplex, ensuring that you do not have to change all of your definitions to migrate from previous releases to 6.1.

Warning! You *must* code a SET after a group of INC/EXC statements if there are more SET parameters.

If multiple SET POOLNAME= parameters are found in a shared member for the same POOLNAME, the last value coded for the parameter overrides all other values. INC/EXCs cannot be overridden, that is, they are not allowed on multiple SET statements. For example:

```
SET POOLNAME=DOUG SGDCOLLECT=NO
INC VOL=BAB/
INC VOL=SHK/
INC SYSID=*
SET POOLNAME=DOUG SGDCOLLECT=YES
INC SYSID=SJSG
```

In this example, only the SET parameters are overridden, assuming that all volumes in a given pool should be the same on all images in a sysplex. You cannot define pools with the same name but with different volumes on different images.

Selection Criteria Ordering

The order of selection criteria has not changed; however, INC FORSYSID=, FORSMFID=, and FORPLEXNAME default to the current image unless an include statement for one of the three is coded. In the later, the include statements determine the selection. For example:

`INC FORSYSID=SYSG`	results in the selection of system SYSG only
`EXC FORSYSID=SYSG`	results in the selection of all images in the sysplex, except SYSG.

Batch Reporting

In release 6.1, the RESOLVE SRM Batch Reporter was replaced with the MAINVIEW batch reporting facility. You will need to reestablish batch reports coded before release 6.1 using the MAINVIEW batch reporting facility. For information, see “Generating and Managing Batch Reports” in the *MAINVIEW SRM User Guide and Reference*.

Migration Considerations for HIPER-CACHE Users

The HIPER-CACHE product is not supported under the MAINVIEW SRM version 7.1 Loader subsystem (SVOS). Contact your sales representative to upgrade to Batch Optimizer.

However, if you want to continue to use the HIPER-CACHE product, you may run the Loader subsystem version that was supplied with the HIPER-CACHE product on the same OS/390 system as MAINVIEW SRM version 7.1. The HIPER-CACHE product *can* be started using that Loader subsystem. The HIPER_CACHE product cannot be started under the MVSRM version 7.1 Loader.

Migration Considerations for Enterprise Storage Automation Users

There are additional Automated Functions available in the distributed SMFUNC00 member. If you did not copy the SMFUNC00 member in it's entirety to your production libraries, be sure to include these new functions in your production SMFUNC*xx* member. They are: AUTOPOOL, AUTOVOL, AUTODS and AUTOAPPL.

Distributed solutions with Enterprise Storage Automation version 7.1 encompass FLST/RLST statements and event definitions. If you did not perform "Task 11: Copy BBPARM to UBBPARM" on page 4-14, copying the entire BBPARM to UBBPARM, then you will want to copy the distributed event definitions in SMEVNT00 in BBPARM, and the FLST/RLST statements for the new AUTO functions, in SMFLST and SMRLST members AP, AD, AV, and AA (SMFLSTAP, SMRLSTAP, SMFLSTAD, SMRLSTAD, and so on).

Tip: **If migrating from a release prior to version 6.1**, note that Enterprise Storage Automation events can only be routed to the MAINVIEW AutoOPERATOR console. Therefore, you should update SMEVNT*xx* to remove the ETS value from the DEST=(AOO,ETS) keyword parameter in the member. Any ETS specification will be ignored. If DEST=(ETS) is specified, DEST=(AOO) will be assumed. If ETS is found anywhere in the DEST= keyword, the SVM0767I message is issued. This message is issued only once, regardless of the number of times the ETS value is found.

Migration Considerations for Pre-6.1 EasyHSM Users

As of the 6.1 release of the product, the EasyHSM component identifier, SVHSM, has been removed from the SVALLOC component identifier. SVHSM is used to start and stop the EasyHSM component.

The allocation and deallocation of the MCDS, OCDS, and BCDS files has been moved to the SVHSM component startup process. Three new global parameters, MCDS, OCDS, and BCDS, have been added that allow you to specify the HSM CDS data sets to be defined and allocated during EasyHSM startup.

Migration Considerations for StorageGUARD Users

There are no migration considerations if migrating to version 7.1 from version 6.1. The following information will be helpful if you are migrating from previous versions.

Historical Space Database

No conversion is necessary to upgrade from release 4.1 and higher. But, if you want to use a different set of databases, you can use the Copy/Merge utility. See the MAINVIEW SRM *StorageGUARD User Guide and Reference*.

Historical Performance Database

Upgrading from 4.1 Use the SGPCNVD1 conversion utility member in *?prefix*.BBSAMP to convert the historical performance database to the 5.1 format. Follow the steps described. Then follow the steps for upgrading from 5.1 to 6.1.

Upgrading from 5.1 In release 6.1 the historical performance database changed to a multiple file structure. Use the SPC51T61 conversion utility member in *?prefix*.BBSAMP to convert the 5.1 historical performance database file(s) to the 6.1 historical performance database structure. Follow the steps described.

Before you start the conversion, it is imperative to know that

- each LPARs historical performance database file(s) must be converted in a single conversion run
- historical performance database file(s) from *different* LPARs cannot be intermixed

- the historical performance database file structure must be newly allocated/initialized on an LPAR prior to a conversion run

In release 6.1 the RESOLVE SRM Batch Reporter was replaced with the MAINVIEW batch reporting facility. You will need to reestablish batch reports coded before release 6.1 using the MAINVIEW batch reporting facility. For information, see “Generating and Managing Batch Reports” in the *MAINVIEW SRM User Guide and Reference*.

StorageGUARD Automation Facility (SGAF)

As was noted in an earlier release of StorageGUARD, SGAF is no longer supported. You should remove the following global parameters from your SMMSYS*xx* member:

SG_EXITVOL
SG_EXITPOOL
SG_EXITACCT
SG_PROCVOL
SG_PROCPOOL

Migration Considerations for SG-Control Users

In this release of the product, the SG-Control database data set name is specified in a new global parameter, SGCDSN, rather than in the SGCDB DD statement of the SVOS started task JCL in release 5.1. Be sure to add the SGCDSN global parameter to the SMMSYS*xx* member.

No conversion is required to migrate *from* releases 4.1, 5.1, or 6.1 *to* release 7.1. **Application** records, known as **account** records in previous releases, are automatically converted to the release 7.1 format the first time they are updated. Release 3.1 is *not* supported.

Tip: To enable the use of an SG-Control database for release 3.1, the database must first be converted to a compatible format. If you are using release 3.1 and want to upgrade to release 6.1, you will need to use the SGCMAINT initialization utility.

SGCMAINT is described in the *MAINVIEW SRM SG-Control User Guide and Reference*, “Initializing and Updating the Database.” To create a new database using SGCMAINT, use the “INIT FILE(UPDATE) FROMDB(<*old-data-base-name*>)” format as documented. Follow the instructions for initializing a database, filling in parameters as necessary. Any parameters not specified will be carried over from the old database.

An application record should not be used by a *prior* release once it has been migrated to the release 6.1 format. If you want to delay altering programs and procedures that produce reports from data read directly from an SG-Control database, you can use the **SGCDBCNV** SG-Control Conversion Utility. The output of the conversion process is a sequential file to be used in batch reporting and is unsuitable for collection.

SGCDBCNV copies an SG-Control 6.1 database and converts the records back to 5.1 format during the copy. You may then execute the procedures and programs against the copy of the database to produce reports.

A copy database created by SGCDBCNV should be used only for purposes of reporting, and it should *not* be updated by SG-Control. Also SGCDBCNV should *not* be used to make a back-up copy of a database.

A sample of the SGCDBCNV utility is provided in *?prefix.*BBSAMP. Carefully follow the user instructions in the utility.

Migration Considerations for RESOLVE SRM Explorer Users

The graphical interface for MAINVIEW SRM is MAINVIEW Explorer. Refer to the *MAINVIEW Explorer Implementation and User Guide* for more information.

MAINVIEW SRM is also capable of connecting to PATROL SRM to pass StorageGUARD data to the PATROL Storage DataStore. Refer to the *PATROL Application-Centric Storage Management Solutions Getting Started Guide* for connectivity information.

Glossary

This glossary defines BMC Software terminology. Other dictionaries and glossaries can be used in conjunction with this glossary.

Since this glossary pertains to BMC Software-related products, some of the terms defined might not appear in this book.

To help you find the information you need, this glossary uses the following cross-references:

Contrast with indicates a term that has a contrary or contradictory meaning.

See indicates an entry that is a synonym or contains expanded information.

See also indicates an entry that contains related information.

action Defined operation, such as modifying a MAINVIEW window, that is performed in response to a command. *See* object.

active window Any MAINVIEW window in which data can be refreshed. *See* alternate window, current window, window.

administrative view Display from which a product's management tasks are performed, such as the DSLIST view for managing historical data sets. *See* view.

ALT WIN field Input field that allows you to specify the window identifier for an alternate window where the results of a hyperlink are displayed. *See* alternate window.

Alternate Access *See* MAINVIEW Alternate Access.

alternate form View requested through the FORM command that changes the format of a previously displayed view to show related information. *See also* form, query.

alternate window (1) Window that is specifically selected to display the results of a hyperlink. (2) Window whose identifier is defined to the ALT WIN field. *Contrast with* current window. *See* active window, window, ALT WIN field.

analyzer (1) Online display that presents a snapshot of status and activity data and indicates problem areas. (2) Component of CMF MONITOR. *See* CMF MONITOR Analyzer.

application (1) Program that performs a specific set of tasks within a MAINVIEW product. (2) In MAINVIEW VistaPoint, combination of workloads to enable display of their transaction performance data in a single view.

application trace *See* trace.

ASCH workload Workload comprising Advanced Program-to-Program Communication (APPC) address spaces.

AutoCustomization Online facility for customizing the installation of products. AutoCustomization provides an ISPF panel interface that both presents customization steps in sequence and provides current status information about the progress of the installation.

automatic screen update
Usage mode wherein the currently displayed screen is refreshed automatically with new data at an interval you specify. Invoked by the ASU command.

batch workload Workload consisting of address spaces running batch jobs.

BBI Basic architecture that distributes work between workstations and multiple OS/390 targets for BMC Software MAINVIEW products.

BBI-SS PAS *See* BBI subsystem product address space.

BBI subsystem product address space (BBI-SS PAS)
OS/390 subsystem address space that manages communication between local and remote systems and that contains one or more of the following products:

- MAINVIEW AutoOPERATOR
- MAINVIEW for CICS
- MAINVIEW for DB2
- MAINVIEW for DBCTL
- MAINVIEW for IMS Online
- MAINVIEW for MQSeries (formerly Command MQ for S/390)
- MAINVIEW SRM
- MAINVIEW VistaPoint (for CICS, DB2, DBCTl, and IMS workloads)

BBPARM *See* parameter library.

BBPROC *See* procedure library.

BBPROF *See* profile library.

BBSAMP *See* sample library.

BBV *See* MAINVIEW Alternate Access.

BBXS BMC Software Subsystem Services. Common set of service routines loaded into common storage and used by several BMC Software MAINVIEW products.

border Visual indication of the boundaries of a window.

bottleneck analysis Process of determining which resources have insufficient capacity to provide acceptable service levels and that therefore can cause performance problems.

CA-Disk Data management system by Computer Associates that replaced the DMS product.

CAS Coordinating address space. One of the address spaces used by the MAINVIEW windows environment architecture. The CAS supplies common services and enables communication between linked systems. Each OS/390 or z/OS image requires a separate CAS. Cross-system communication is established through the CAS using VTAM and XCF communication links.

CFMON *See* coupling facility monitoring.

chart Display format for graphical data. *See also* graph.

CICSplex User-defined set of one or more CICS systems that are controlled and managed as a single functional entity.

CMF MONITOR Comprehensive Management Facility MONITOR. Product that measures and reports on all critical system resources, such as CPU, channel, and device usage; memory, paging, and swapping activity; and workload performance.

CMF MONITOR Analyzer
Batch component of CMF MONITOR that reads the SMF user and 70 series records created by the CMF MONITOR Extractor and/or the RMF Extractor and formats them into printed system performance reports.

CMF MONITOR Extractor
Component of CMF that collects performance statistics for CMF MONITOR Analyzer, CMF MONITOR Online, MAINVIEW for OS/390, and RMF postprocessor. *See* CMF MONITOR Analyzer, CMF MONITOR Online, MAINVIEW for OS/390.

CMF MONITOR Online
Component of CMF that uses the MAINVIEW window interface to present data on all address spaces, their use of various system resources, and the delays that each address space incurs while waiting for access to these resources. *See* CMF MONITOR, MAINVIEW for OS/390.

CMF Type 79 API Application programming interface, provided by CMF, that provides access to MAINVIEW SMF-type 79 records.

CMFMON Component of CMF MONITOR that simplifies online retrieval of information about system hardware and application performance and creates MAINVIEW SMF-type 79 records.

The CMFMON *online facility* can be used to view data in one or more formatted screens.

The CMFMON *write facility* can be used to write collected data as MAINVIEW SMF-type 79 records to an SMF or sequential data set.

CMRDETL MAINVIEW for CICS data set that stores detail transaction records (type 6E) and abend records (type 6D). Detail records are logged for each successful transaction. Abend records are written when an abend occurs. Both records have the same format when stored on CMRDETL.

CMRSTATS MAINVIEW for CICS data set that stores both CICS operational statistic records, at five-minute intervals, and other records, at intervals defined by parameters specified during customization (using CMRSOPT).

column Vertical component of a view or display, typically containing fields of the same type of information, that varies by the objects associated in each row.

collection interval Length of time data is collected. *See also* delta mode, total mode.

command delimiter Special character, usually a **;** (semicolon), used to stack commands typed concurrently on the COMMAND line for sequential execution.

COMMAND line Line in the control area of the display screen where primary commands can be typed. *Contrast with* line command column.

Command MQ Automation D/S
Command MQ agents, which provide local proactive monitoring for both MQSeries and MSMQ (Microsoft message queue manager). The Command MQ agents operate at the local node level where they continue to perform functions regardless of the availability of the MQM (message queue manager) network. Functionality includes automatic monitoring and restarts of channels, queue managers, queues and command servers. In cases where automated recovery is not possible, the agents transport critical alert information to a central console.

Command MQ Automation S/390

Command MQ component, which monitors the MQM (message queue manager) networks and intercedes to perform corrective actions when problems arise. Solutions include:

- Dead-Letter Queue management
- System Queue Archival
- Service Interval Performance solutions
- Channel Availability

These solutions help ensure immediate relief to some of the most pressing MQM operations and performance problems.

Command MQ for D/S

Command MQ for D/S utilizes a true client/server architecture and employs resident agents to provide configuration, administration, performance monitoring and operations management for the MQM (message queue manager) network.

Command MQ for S/390

See MAINVIEW for MQSeries.

COMMON STORAGE MONITOR

Component of MAINVIEW for OS/390 that monitors usage and reconfigures OS/390 or z/OS common storage blocks.

composite workload

Workload made up of a WLM workload or other workloads, which are called *constituent workloads*.

constituent workload

Member of a composite workload. Constituent workloads in a composite usually belong to a single workload class, but sometimes are mixed.

contention Occurs when there are more requests for service than there are servers available.

context In a Plex Manager view, field that contains the name of a target or group of targets specified with the CONTEXT command. *See* scope, service point, SSI context, target context.

CONTEXT command

Specifies either a MAINVIEW product and a specific target for that product (*see* target context) or a MAINVIEW product and a name representing one or more targets (*see* SSI context) for that product.

control statement (1) Statement that interrupts a sequence of instructions and transfers control to another part of the program. (2) Statement that names samplers and other parameters that configure the MAINVIEW components to perform specified functions. (3) In CMF MONITOR, statement in a parameter library member used to identify a sampler in the extractor or a report in the analyzer, or to describe either component's processing requirements to the operating system.

coupling facility monitoring (CFMON) Coupling facility views that monitor the activity of your system's coupling facilities.

current data Data that reflects the system in its current state. The two types of current data are real-time data and interval data. *Contrast with* historical data. *See also* interval data, real-time data.

current window In the MAINVIEW window environment, window where the main dialog with the application takes place. The current window is used as the default window destination for commands issued on the COMMAND line when no window number is specified. *Contrast with* alternate window. *See* active window, window.

DASD **(**Direct Access Storage Device) (1) A device with rotating recording surfaces that provides immediate access to stored data. (2) Any device that responds to a DASD program.

DASD ADVISOR An interactive software tool that diagnoses DASD performance problems and makes recommendations to reduce overall service time. This tool measures and reports on the operational performance of IBM and IBM-compatible devices.

data collector Program that belongs to a MAINVIEW product and that collects data from various sources and stores the data in records used by views. For example, MAINVIEW for OS/390 data collectors obtain data from OS/390 or z/OS services, OS/390 or z/OS control blocks, CMF MONITOR Extractor control blocks, and other sources. *Contrast with* extractor.

delta mode (1) In MAINVIEW for DB2 analyzer displays, difference between the value sampled at the start of the current statistics interval and the value sampled by the current analyzer request. *See also* statistics interval. (2) In CMFMON, usage mode wherein certain columns of data reflect the difference in values between one sample cycle and the next. Invoked by the DELta ON command. *See also* collection interval, sample cycle, total mode.

DFSMS (Data Facility Storage Management System) Data management, backup, and HSM software from IBM for OS/390 or z/OS mainframes.

DMR *See* MAINVIEW for DB2.

DMS (Data Management System) *See* CA-Disk.

DMS2HSM *See* MAINVIEW SRM DMS2HSM.

DSO (Data Set Optimizer) CMF MONITOR Extractor component that uses CMF MONITOR Extractor data to produce reports specifying the optimal ordering of data sets on moveable head devices.

EasyHSM *See* MAINVIEW SRM EasyHSM.

EasyPOOL *See* MAINVIEW SRM EasyPOOL.

EasySMS *See* MAINVIEW SRM EasySMS.

element (1) Data component of a data collector record, shown in a view as a field. (2) Internal value of a field in a view, used in product functions.

element help Online help for a field in a view. The preferred term is *field help.*

Enterprise Storage Automation
See MAINVIEW SRM Enterprise Storage Automation.

event A message issued by Enterprise Storage Automation. User-defined storage occurrences generate events in the form of messages. These events provide an early warning system for storage problems and are routed to user-specified destinations for central viewing and management.

Event Collector Component for MAINVIEW for IMS Online, MAINVIEW for IMS Offline, and MAINVIEW for DBCTL that collects data about events in the IMS environment. This data is required for Workload Monitor and optional for Workload Analyzer (except for the workload trace service). This data also is recorded as transaction records (X‘FA’) and program records (X‘F9’) on the IMS system log for later use by the MAINVIEW for IMS Offline components: Performance Reporter and Transaction Accountant.

expand Predefined link from one display to a related display. *See also* hyperlink.

extractor Program that collects data from various sources and keeps the data control blocks to be written as records. Extractors obtain data from services, control blocks, and other sources. *Contrast with* data collector.

extractor interval *See* collection interval.

fast path Predefined link between one screen and another. To use the fast path, place the cursor on a single value in a field and press **Enter**. The resulting screen displays more detailed information about the selected value. *See also* hyperlink.

field Group of character positions within a screen or report used to type or display specific information.

field help Online help describing the purpose or contents of a field on a screen. To display field help, place the cursor anywhere in a field and press **PF1** (HELP). In some products, field help is accessible from the screen help that is displayed when you press **PF1**.

filter Selection criteria used to limit the number of rows displayed in a view. Data that does not meet the selection criteria is not displayed. A filter is composed of an element, an operator, and an operand (a number or character string). Filters can be implemented in view customization, through the PARm/QPARm commands, or through the Where/QWhere commands. Filters are established against elements of data.

fire The term used to indicate that an event has triggered an action. In MAINVIEW AutoOPERATOR, when a rule selection criteria matches an incoming event and *fires*, the user-specified automation actions are performed. This process is also called *handling* the event.

fixed field Field that remains stationary at the left margin of a screen that is scrolled either right or left.

FOCAL POINT MAINVIEW product that displays a summary of key performance indicators across systems, sites, and applications from a single terminal.

form One of two constituent parts of a view; the other is query. A form defines how the data is presented; a query identifies the data required for the view. *See also* query, view.

full-screen mode Display of a MAINVIEW product application or service on the entire screen. There is no window information line. *Contrast with* windows mode.

global command Any MAINVIEW window interface command that can affect all windows in the window area of a MAINVIEW display.

graph Graphical display of data that you select from a MAINVIEW window environment view. *See also* chart.

hilevel For MAINVIEW products, high-level data set qualifier required by a site's naming conventions.

historical data (1) Data that reflects the system as it existed at the end of a past recording interval or the duration of several intervals. (2) Any data stored in the historical database and retrieved using the TIME command. *Contrast with* current data, interval data and real-time data.

historical database Collection of performance data written at the end of each installation-defined recording interval and containing up to 100 VSAM clusters. Data is extracted from the historical database with the TIME command. *See* historical data.

historical data set In MAINVIEW products that display historical data, VSAM cluster file in which data is recorded at regular intervals.

HSM (Hierarchical Storage Management) Automatic movement of files from hard disk to slower, less-expensive storage media. The typical hierarchy is from magnetic disk to optical disk to tape.

hyperlink (1) Preset field in a view or an EXPAND line on a display that permits you to

- access cursor-sensitive help
- issue commands
- link to another view or display

The transfer can be either within a single product or to a related display/view in a different BMC Software product. Generally, hyperlinked fields are highlighted. (2) Cursor-activated short path from a topic or term in online help to related information. *See also* fast path.

Image log Collection of screen-display records. Image logs can be created for both the BBI-SS PAS and the BBI terminal session (TS).

The BBI-SS PAS Image log consists of two data sets that are used alternately: as one fills up, the other is used. Logging to the BBI-SS PAS Image log stops when both data sets are filled and the first data set is not processed by the archive program.

The TS Image log is a single data set that wraps around when full.

IMSPlex System Manager (IPSM)
MVIMS Online and MVDBC service that provides Single System Image views of resources and bottlenecks for applications across one or more IMS regions and systems.

interval data Cumulative data collected during a collection interval. Intervals usually last from 15 to 30 minutes depending on how the recording interval is specified during product customization. *Contrast with* historical data.

Note: If change is made to the workloads, a new interval will be started.

See also current data and real-time data.

InTune Product for improving application program performance. It monitors the program and provides information used to reduce bottlenecks and delays.

IRUF IMS Resource Utilization File (IRUF). IRUFs can be either detail (one event, one record) or summarized (more than one event, one record). A detail IRUF is created by processing the IMS system log through a program called IMFLEDIT. A summarized IRUF is created by processing one or more detail IRUFs, one or more summarized IRUFs, or a combination of both, through a sort program and the TASCOSTR program.

job activity view Report about address space consumption of resources. *See* view.

journal Special-purpose data set that stores the chronological records of operator and system actions.

Journal log Collection of messages. Journal logs are created for both the BBI-SS PAS and the BBI terminal session (TS).

The BBI-SS PAS Journal log consists of two data sets that are used alternately: as one fills up, the other is used. Logging to the BBI-SS PAS Journal log stops when both data sets are filled and the first data set is not being processed by the archive program.

The TS Journal log is a single data set that wraps around when full.

line command Command that you type in the line command column in a view or display. Line commands initiate actions that apply to the data displayed in that particular row.

line command column
Command input column on the left side of a view or display. *Contrast with* COMMAND line.

Log Edit In the MAINVIEW for IMS Offline program named IMFLEDIT, function that extracts transaction (X‘FA’) and program (X‘F9’) records from the IMS system log. IMFLEDIT also extracts certain records that were recorded on the system log by IMS. IMFLEDIT then formats the records into a file called the IMS Resource Utilization File (IRUF).

MAINVIEW BMC Software integrated systems management architecture.

MAINVIEW Alarm Manager (MV ALARM)
In conjunction with other MAINVIEW products, notifies you when an exception occurs. MAINVIEW Alarm Manager is capable of monitoring multiple systems simultaneously, which means that MAINVIEW Alarm Manager installed on one system keeps track of your entire sysplex. You can then display a single view that shows exceptions for all MAINVIEW performance monitors within your OS/390 or z/OS enterprise.

MAINVIEW Alternate Access
Enables MAINVIEW products to be used without TSO by providing access through EXCP and VTAM interfaces.

MAINVIEW Application Program Interface (MVAPI)
A CLIST- or REXX-based, callable interface that allows MAINVIEW AutoOPERATOR EXECs to access MAINVIEW monitor product view data.

MAINVIEW AutoOPERATOR
Product that uses tools, techniques, and facilities to automate routine operator tasks and provide online performance monitoring, and that achieves high availability through error minimization, improved productivity, and problem prediction and prevention.

MAINVIEW control area
In the MAINVIEW window environment, first three lines at the top of the view containing the window information line and the COMMAND, SCROLL, CURR WIN, and ALT WIN lines. The control area cannot be customized and is part of the information display. *Contrast with* MAINVIEW display area, MAINVIEW window area.

MAINVIEW Desktop Version of the MAINVIEW window interface designed to run on OS/2 and Windows workstations.

MAINVIEW display area
See MAINVIEW window area.

MAINVIEW Explorer Product that provides access to MAINVIEW products from a Web browser running under Windows. MAINVIEW Explorer replaces MAINVIEW Desktop.

MAINVIEW for CICS Product (formerly MV MANAGER for CICS) that provides real-time application performance analysis and monitoring for CICS system management.

MAINVIEW for DB2 Product (formerly MV MANAGER for DB2) that provides real-time and historical application performance analysis and monitoring for DB2 subsystem management.

MAINVIEW for DBCTL (MVDBC)
Product that provides real-time application performance analysis and monitoring for DBCTL management.

MAINVIEW for IMS (MVIMS) Offline
Product with a Performance Reporter component that organizes data and prints reports used to analyze IMS performance and a Transaction Accountant component that produces cost accounting and user charge-back records and reports.

MAINVIEW for IMS (MVIMS) Online
Product that provides real-time application performance analysis and monitoring for IMS management.

MAINVIEW for IP Product that monitors OS/390 and z/OS mission-critical application performance as it relates to TCP/IP stack usage. Collected data includes availability, connections, response times, routers, service levels, storage, traffic, Web cache, and so on.

MAINVIEW for Linux–Servers
Product that allows you to monitor the performance of your Linux systems from the MAINVIEW windows interface.

MAINVIEW for MQSeries (formerly known as Command MQ for S/390)
Delivers comprehensive capabilities for configuration, administration, performance monitoring and operations management for an entire MQM (message queue manager) network.

MAINVIEW for OS/390
System management application (formerly known as MAINVIEW for MVS prior to version 2.5). Built upon the MAINVIEW window environment architecture, it uses the window interface to provide access to system performance data and other functions necessary in the overall management of an enterprise.

MAINVIEW for UNIX System Services
System management application that allows you to monitor the performance of the Unix System Services from a MAINVIEW window interface.

MAINVIEW for VTAM
Product that displays application performance data by application, transaction ID, and LU name. This collected data includes connections, response time statistics, application availability, and application throughput.

MAINVIEW for WebSphere Application Server (formerly known as MAINVIEW for WebSphere)
Product that provides extensive monitoring for the IBM WebSphere Application Server for z/OS and OS/390 environment.

MAINVIEW Selection Menu
ISPF selection panel that provides access to all MAINVIEW windows-mode and full-screen mode products.

MAINVIEW SRM *See* MAINVIEW Storage Resource Manager (SRM).

MAINVIEW SRM DMS2HSM
Product that facilitates the conversion of CA-Disk, formerly known as DMS, to HSM.

MAINVIEW SRM EasyHSM

Product that provides online monitoring and reporting to help storage managers use DFHSM efficiently.

MAINVIEW SRM EasyPOOL

Product that provides control over data set allocation and enforcement of allocation and naming standards. EasyPOOL functions operate at the operating system level to intercept normal job processing, thus providing services without any JCL changes.

MAINVIEW SRM EasySMS

Product that provides tools that aid in the conversion to DFSMS and provides enhancement to the DFSMS environment after implementation. EasySMS consists of the EasyACS functions, the SMSACSTE function, and the Monitoring and Positioning Facility.

MAINVIEW SRM Enterprise Storage Automation

Product that delivers powerful event generation and storage automation technology across the storage enterprise. Used in conjunction with MAINVIEW AutoOPERATOR, automated solutions to perform pool, volume, application, or data set-level manipulation can be created and used in response to any condition or invoked to perform ad hoc requests.

MAINVIEW SRM SG-Auto

Product that provides early warning notification of storage anomalies and automated responses to those anomalies based on conditions in the storage subsystem.

MAINVIEW SRM SG-Control

Product that provides real-time monitoring, budgeting, and control of DASD space utilization.

MAINVIEW SRM StopX37/II

Product that provides enhancements to OS/390 or z/OS space management, reducing the incidence of space-related processing problems. The StopX37/II functions operate at the system level to intercept abend conditions or standards violations, thus providing services without any JCL changes.

MAINVIEW SRM StorageGUARD

Product that monitors and reports on DASD consumption and provides historical views to help control current and future DASD usage.

MAINVIEW Storage Resource Manager (SRM)

Suite of products that assist in all phases of OS/390 or z/OS storage management. MAINVIEW SRM consists of products that perform automation, reporting, trend analysis, and error correction for storage management.

MAINVIEW SYSPROG Services
See SYSPROG services.

MAINVIEW VistaPoint
Product that provides enterprise-wide views of performance. Application and workload views are available for CICS, DB2, DBCTL, IMS, OS/390, or z/OS. Data is summarized at the level of detail needed; for example, views can be for a single target, an OS/390 or z/OS image, or an entire enterprise.

MAINVIEW window area
Portion of the information display that is not the control area and in which views are displayed and windows opened. It includes all but the first three lines of the information display. *Contrast with* MAINVIEW control area.

monitor Online service that measures resources or workloads at user-defined intervals and issues warnings when user-defined thresholds are exceeded.

Multi-Level Automation (MLA)
The user-defined, multiple step process in Enterprise Storage Automation that implements solutions in a tiered approach, where solutions are invoked one after another until the condition is resolved.

MVALARM *See* MAINVIEW Alarm Manager.

MVAPI *See* MAINVIEW Application Program Interface.

MVCICS *See* MAINVIEW for CICS.

MVDB2 *See* MAINVIEW for DB2.

MVDBC *See* MAINVIEW for DBCTL.

MVIMS *See* MAINVIEW for IMS.

MVIP *See* MAINVIEW for IP.

MVLNX *See* MAINVIEW for Linux–Servers.

MVMQ *See* MAINVIEW for MQSeries.

MVMVS *See* MAINVIEW for OS/390.

MVScope MAINVIEW for OS/390 application that traces both CPU usage down to the CSECT level and I/O usage down to the channel program level.

MVSRM *See* MAINVIEW Storage Resource Manager (SRM).

MVSRMHSM *See* MAINVIEW SRM EasyHSM.

MVSRMSGC *See* MAINVIEW SRM SG-Control.

MVSRMSGD *See* MAINVIEW SRM StorageGUARD.

MVSRMSGP *See* MAINVIEW SRM StorageGUARD.

MVUSS *See* MAINVIEW for UNIX System Services.

MVVP *See* MAINVIEW VistaPoint.

MVVTAM *See* MAINVIEW for VTAM.

MVWEB *See* MAINVIEW for WebSphere Application Server.

nested help Multiple layers of help pop-up windows. Each successive layer is accessed by clicking a hyperlink from the previous layer.

object Anything you can manipulate as a single unit. MAINVIEW objects can be any of the following: product, secondary window, view, row, column, or field.

You can issue an action against an object by issuing a line command in the line command column to the left of the object. *See* action.

OMVS workload Workload consisting of OS/390 OpenEdition address spaces.

online help Help information that is accessible online.

OS/390 and z/OS Installer
BMC Software common installation system for mainframe products.

OS/390 product address space (PAS)
Address space containing OS/390 or z/OS data collectors, including the CMF MONITOR Extractor. Used by MAINVIEW for OS/390, MAINVIEW for UNIX System Services, and CMF MONITOR products. *See* PAS.

parameter library Data set consisting of members that contain parameters for specific MAINVIEW products or a support component There can be several versions:

- the distributed parameter library, called BBPARM
- a site-specific parameter library or libraries

These can be

- a library created by AutoCustomization, called UBBPARM
- a library created manually, with a unique name

PAS Product address space. Used by the MAINVIEW products. Contains data collectors and other product functions. *See also* OS/390 product address space (PAS) *and* BBI subsystem product address space (BBI-SS PAS).

performance group workload
Collection of address spaces defined to OS/390 or z/OS. If you are running OS/390 or z/OS with WLM in compatibility mode, MAINVIEW for OS/390 creates a performance group workload instead of a service class.

PERFORMANCE MANAGER
MAINVIEW for CICS online service for monitoring and managing current performance of CICS regions.

Performance Reporter (MVIMS)
MVIMS Offline component that organizes data and prints reports that can be used to analyze IMS performance.

Performance Reporter
Product component that generates offline batch reports. The following products can generate these reports:

- MAINVIEW for DB2
- MAINVIEW for CICS

Plex Manager Product through which cross-system communication, MAINVIEW security, and an SSI context are established and controlled. Plex Manager is shipped with MAINVIEW window environment products as part of the coordinating address space (CAS) and is accessible as a menu option from the MAINVIEW Selection Menu.

pop-up display Full-screen panel that displays additional information about a selected event in a detail trace.

pop-up window Window containing help information that, when active, overlays part of the window area. A pop-up window is displayed when you issue the HELP command while working in windows-mode.

PRGP workload In MVS/SP 5.0 or earlier, or in compatibility mode in MVS/SP 5.1 or later, composite of service classes. MAINVIEW for OS/390 creates a performance group workload for each performance group defined in the current IEAIPS*xx* member.

procedure library Data set consisting of members that contain executable procedures used by MAINVIEW AutoOPERATOR. These procedures are execute command lists (EXECs) that automate site functions. There can be several versions:

- the distributed parameter library, called BBPROC
- a site-specific parameter library or libraries

These can be

- a library created by AutoCustomization, called UBBPROC
- a library created manually, with a unique name

The site-created EXECs can be either user-written or customized MAINVIEW AutoOPERATOR-supplied EXECs from BBPROC.

product address space
See PAS.

profile library Data set consisting of members that contain profile information and cycle refresh definitions for a terminal session connected to a BBI-SS PAS. Other members are dynamically created by MAINVIEW applications. There can be several versions:

- the distributed profile library, called BBPROF
- a site-specific profile library or libraries

These can be

- a library created by AutoCustomization, called SBBPROF
- a library created manually, with a unique name

The site library is a common profile shared by all site users. The terminal session CLIST creates a user profile automatically if one does not exist; it is called userid.BBPROF, where userid is your logon ID. User profile libraries allow each user to specify unique PF keys, CYCLE commands, target system defaults, a Primary Option Menu, and a unique set of application profiles.

query One of two constituent parts of a view; the other is form. A query defines the data for a view; a form defines the display format. *See also* form, view.

real-time data Performance data as it exists at the moment of inquiry. Real-time data is recorded during the smallest unit of time for data collection. *Contrast with* historical data. *See also* current data and interval data.

Resource Analyzer Online real-time displays used to analyze IMS resources and determine which are affected by specific workload problems.

Resource Monitor Online data collection services used to monitor IMS resources and issue warnings when defined utilization thresholds are exceeded.

row (1) Horizontal component of a view or display comprising all the fields pertaining to a single device, address space, user, and so on. (2) Horizontal component of a DB2 table consisting of a sequence of values, one for each column of the table.

RxD2 Product that provides access to DB2 from REXX. It provides tools to query the DB2 catalog, issue dynamic SQL, test DB2 applications, analyze EXPLAIN data, generate DDL or DB2 utility JCL, edit DB2 table spaces, perform security administration, and much more.

sample cycle Time between data samples.

For the CMF MONITOR Extractor, this is the time specified in the extractor control statements (usually 1 to 5 seconds).

For real-time data, the cycle is not fixed. Data is sampled each time you press **Enter**.

sample library Data set consisting of members each of which contains one of the following items:

- sample JCL that can be edited to perform specific functions
- macro that is referenced in the assembly of user-written services
- sample user exit routine

There can be several versions:

- the distributed sample library, called BBSAMP
- a site-specific sample library or libraries

These can be

- a library created by AutoCustomization, called UBBSAMP
- a library created manually, with a unique name

sampler Program that monitors a specific aspect of system performance. Includes utilization thresholds used by the Exception Monitor. The CMF MONITOR Extractor contains samplers.

SBBPROF *See* profile library.

scope Subset of an SSI context. The scope could be all the data for the context or a subset of data within the context. It is user- or site-defined. *See* SSI context, target.

screen definition Configuration of one or more views that have been stored with the SAVEScr command and assigned a unique name. A screen includes the layout of the windows and the view, context, system, and product active in each window.

selection view In MAINVIEW products, view displaying a list of available views.

service class workload

Collection of address spaces defined to OS/390 or z/OS. If you are running Workload Manager (WLM) in goal mode, MAINVIEW for OS/390 creates a service class workload for each service class that you define through WLM definition dialogs.

If you are running MVS 4.3 or earlier, or MVS/SP 5.1 or later with WLM in compatibility mode, OS/390 creates a performance group workload instead of a service class. *See* performance group workload.

service objective Workload performance goal, specified in terms of response time for TSO workloads or turnaround time for batch workloads. Performance group workloads can be measured by either objective. Composite workload service objectives consist of user-defined weighting factors assigned to each constituent workload. For compatibility mode, neither OS/390 nor z/OS provides any way to measure service.

service point Specification, to MAINVIEW, of the services required to enable a specific product. Services can be actions, selectors, or views. Each target (for example, CICS, DB2, or IMS) has its own service point.

The PLEX view lists all the defined service points known to the CAS to which the terminal session is connected.

service request block (SRB)

Control block that represents a routine to be dispatched. SRB mode routines generally perform work for the operating system at a high priority. An SRB is similar to a task control block (TCB) in that it identifies a unit of work to the system. *See also* task control block.

service select code Code entered to invoke analyzers, monitors, and general services. This code is also the name of the individual service.

session Total period of time an address space has been active. A session begins when monitoring can be performed. If the product address space (PAS) starts after the job, the session starts with the PAS.

SG-Auto *See* MAINVIEW SRM SG-Auto.

SG-Control *See* MAINVIEW SRM SG-Control.

single system image (SSI)

Feature of the MAINVIEW window environment architecture where you can view and perform actions on multiple OS/390or z/OS systems as though they were a single system. The rows of a single tabular view can contain rows from different OS/390 or z/OS images.

Skeleton Tailoring Facility
A facility in MAINVIEW AutoOPERATOR that allows skeleton JCL to be used during job submission. Skeleton JCL can contain variables within the JCL statements to be substituted with data values at job submission time. Directive statements can be used in the skeleton JCL to cause the repetition of a set of skeleton statements. This facility functions similar to the TSO skeleton tailoring facility**.**

SRB *See* service request block.

SSI *See* single system image.

SSI context Name created to represent one or more targets for a given product. *See* context, target.

started task workload
Address spaces running jobs that were initiated programmatically.

statistics interval For MAINVIEW for DB2, cumulative count within a predefined interval (30-minute default set by the DB2STATS parameter in the distributed BBPARM member BBIISP00) for an analyzer service DELTA or RATE display. Specifying the DELTA parameter displays the current value as the difference between the value sampled by the current analyzer request and the value sampled at the start of the current interval. Specifying the RATE parameter displays the current value by minute (DELTA divided by the number of elapsed minutes).

stem variables A REXX facility, supported in MAINVIEW AutoOPERATOR REXX EXECs and the Skeleton Tailoring Facility, where variable names end with a period followed by a number, such as &POOL.1. This configuration allows each variable to actually represent a table or array of data, with the zero variable containing the number of entries in the array. For example, &POOL.0 = 5 would indicate variables &POOL.1 through &POOL.5 exist.

StopX37/II *See* MAINVIEW SRM StopX37/II.

StorageGUARD *See* MAINVIEW SRM StorageGUARD.

summary view View created from a tabular view using the Summarize option in view customization. A summary view compresses several rows of data into a single row based on the summarize criteria.

SYSPROG services Component of MAINVIEW for OS/390. Over 100 services that detect, diagnose, and correct OS/390 or z/OS system problems as they occur. Accessible from the OS/390 Performance and Control Main Menu. Note that this component is also available as a stand-alone product MAINVIEW SYSPROG Services.

system resource *See* object.

target Entity monitored by one or more MAINVIEW products, such as an OS/390 or z/OS image, an IMS or DB2 subsystem, a CICS region, or related workloads across systems. *See* context, scope, SSI context.

target context Single target/product combination. *See* context.

TASCOSTR MAINVIEW for IMS Offline program that summarizes detail and summary IMS Resource Utilization Files (IRUFs) to be used as input to the offline components.

task control block (TCB)
Address space-specific control block that represents a unit of work that is dispatched in the address space in which it was created. *See also* service request block.

TCB *See* task control block.

terminal session (TS)
Single point of control for MAINVIEW products, allowing data manipulation and data display and providing other terminal user services for MAINVIEW products. The terminal session runs in a user address space (either a TSO address space or a stand-alone address space for EXCP/VTAM access).

TDIR *See* trace log directory.

threshold Specified value used to determine whether the data in a field meets specific criteria.

TLDS *See* trace log data set.

total mode Usage mode in CMFMON wherein certain columns of data reflect the cumulative value between collection intervals. Invoked by the DELta OFF command. *See also* collection interval, delta mode.

trace (1) Record of a series of events chronologically listed as they occur. (2) Online data collection and display services that track transaction activity through DB2, IMS, or CICS.

trace log data set (TLDS)
Single or multiple external VSAM data sets containing summary or detail trace data for later viewing or printing. The trace log(s) can be defined as needed or dynamically allocated by the BBI-SS PAS. Each trace request is assigned its own trace log data set(s).

trace log directory (TDIR)
VSAM linear data set containing one entry for each trace log data set. Each entry indicates the date and time of data set creation, the current status of the data set, the trace target, and other related information.

transaction Specific set of input data that initiates a predefined process or job.

Transaction Accountant
MVIMS Offline component that produces cost accounting and user charge-back records and reports.

TS *See* terminal session.

TSO workload Workload that consists of address spaces running TSO sessions.

UAS *See* user address space.

UBBPARM *See* parameter library.

UBBPROC *See* procedure library.

UBBSAMP *See* sample library.

user address space
Runs a MAINVIEW terminal session (TS) in TSO, VTAM, or EXCP mode.

User BBPROF *See* profile library.

view Formatted data within a MAINVIEW window, acquired from a product as a result of a view command or action. A view consists of two parts: query and form. *See also* form, job activity view, query.

view definition Meaning of data that appears online, including source of data, selection criteria for data field inclusion and placement, data format, summarization, context, product, view name, hyperlink fields, and threshold conditions.

view command Name of a view that you type on the COMMAND line to display that view.

view command stack
Internal stack of up to 10 queries. For each command, the stack contains the filter parameters, sort order, context, product, and time frame that accompany the view.

view help Online help describing the purpose of a view. To display view help, place the cursor on the view name on the window information line and press **PF1** (HELP).

window Area of the MAINVIEW screen in which views and resources are presented. A window has visible boundaries and can be smaller than or equal in size to the MAINVIEW window area. *See* active window, alternate window, current window, MAINVIEW window area.

window information line Top border of a window. Shows the window identifier, the name of the view displayed in the window, the system, the scope, the product reflected by the window, and the tomfooleries for which the data in the window is relevant. *See also* window status field.

window number Sequential number assigned by MAINVIEW to each window when it is opened. The window number is the second character in the window status field. *See also* window status field.

window status One-character letter in the window status field that indicates when a window is ready to receive commands, is busy processing commands, is not to be updated, or contains no data. It also indicates when an error has occurred in a window. The window status is the first character in the window status field. *See also* window information line, window status field.

window status field Field on the window information line that shows the current status and assigned number of the window. *See also* window number, window status.

windows mode Display of one or more MAINVIEW product views on a screen that can be divided into a maximum of 20 windows. A window information line defines the top border of each window. *Contrast with* full-screen mode.

WLM workload In goal mode in MVS/SP 5.1 and later, a composite of service classes. MAINVIEW for OS/390 creates a workload for each WLM workload defined in the active service policy.

workflow Measure of system activity that indicates how efficiently system resources are serving the jobs in a workload.

workload (1) Systematic grouping of units of work (for example, address spaces, CICS transactions, IMS transactions) according to classification criteria established by a system administrator. (2) In OS/390 or z/OS, a group of service classes within a service definition.

workload activity view Tracks workload activity as the workload accesses system resources. A workload activity view measures workload activity in terms of resource consumption and how well the workload activity meets its service objectives.

Workload Analyzer Online data collection and display services used to analyze IMS workloads and determine problem causes.

workload definition Workload created through the WKLIST view. Contains a unique name, a description, an initial status, a current status, and selection criteria by which address spaces are selected for inclusion in the workload. *See* Workload Definition Facility.

Workload Definition Facility
In MAINVIEW for OS/390, WKLIST view and its associated dialogs through which workloads are defined and service objectives set.

workload delay view
Tracks workload performance as the workload accesses system resources. A workload delay view measures any delay a workload experiences as it contends for those resources.

Workload Monitor Online data collection services used to monitor IMS workloads and issue warnings when defined thresholds are exceeded.

workload objectives
Performance goals for a workload, defined in WKLIST. Objectives can include measures of performance such as response times and batch turnaround times.

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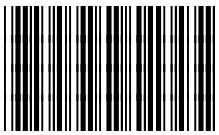

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