Using MAINVIEW®

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  - license number and password (trial or permanent)
- operating-system and environment information
  - machine type
  - operating system type, version, and service pack or maintenance level
  - 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

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About This Book

This book describes how to use MAINVIEW. Its intent is to familiarize you with the MAINVIEW architecture and help you understand how all your MAINVIEW products work together. It should be read before the rest of the books in your MAINVIEW product document library.

How This Book Is Organized

This book is organized as follows:

- Chapters 1-3 describe the use of MAINVIEW and helps you use all your MAINVIEW products together.
- Chapters 4-14 describe how to work in windows mode.
- Chapters 15-18 describes how to work in full-screen mode.
- The appendix and glossary provide additional information that you might find useful while using MAINVIEW.

Conventions

The following conventions are used throughout this book to define command syntax and should not be included with a command:

- Brackets [ ] enclose optional parameters or keywords
- Braces { } enclose a list of parameters; one must be chosen

- A line | separates alternative options; one can be chosen
- An underlined parameter is the default
- An ITEM IN CAPITAL LETTERS indicates exact characters; usage can be all uppercase or lowercase
- Items in *italicized, lowercase* letters are values that you supply
- Commands in uppercase and lowercase letters, such as HSplit, show the command abbreviation by uppercase letters (HS, for example); lowercase letters complete the entire command name as an optional entry

  Commands that do not have an abbreviation are in all upper case letters, such as END.

Command Notations

The following notations are used with MAINVIEW commands:

- A semicolon ; stacks two or more commands:

  `TRANSFER` *target product*;*view*

  where *target* is the system or subsystem being monitored, *product* is the MAINVIEW product monitoring a system or subsystem, and *view* is the name of the view to format performance information for display.

  Note: A semicolon is the ISPF default delimiter for command stacking. If you change the default to a different character, the semicolon delimiter for MAINVIEW commands also changes to this character.

- A period . directs a command to a window other than the current window:

  ```
  EZALARM;W2.ALARM
  ```

- Positional qualifiers can be a question mark ? or a plus +; generic qualifiers can be an asterisk *:

  ```
  MVS*
  ```

- An asterisk * used with the CONTEXT command specifies the current system and with the TIME command specifies the current time frame:

```
TIME * * *
```

This requests a time frame of the current date, time, and duration. For more information about the **TIME** command, enter **HELP TIME** on the `COMMAND` line.

- An asterisk * acts as a place holder for positional parameters used with the **PARm** command. For more information about this command, enter **HELP PARm** on the `COMMAND` line.

- An equals sign = used with the CONTEXT command specifies the context from a previous CONTEXT request and with the TIME command can specify the date, time, or duration from a previous TIME request:

```
TIME 15APR1998 = =
```

This requests the time and duration specified with the previous TIME command.

MAINVIEW Library

The MAINVIEW product family includes the following products:

CMF MONITOR Online
IMSPlex System Manager
MAINVIEW Alarm Manager
MAINVIEW Alternate Access
MAINVIEW AutoOPERATOR
MAINVIEW Explorer
MAINVIEW FOCAL POINT
MAINVIEW for CICS
MAINVIEW for DB2
MAINVIEW for DBCTL
MAINVIEW for IMS
MAINVIEW for IP
MAINVIEW for MQSeries (formerly known as Command MQ for S/390)
MAINVIEW for OS/390
MAINVIEW for UNIX System Services
MAINVIEW VistaPoint
MAINVIEW for VTAM

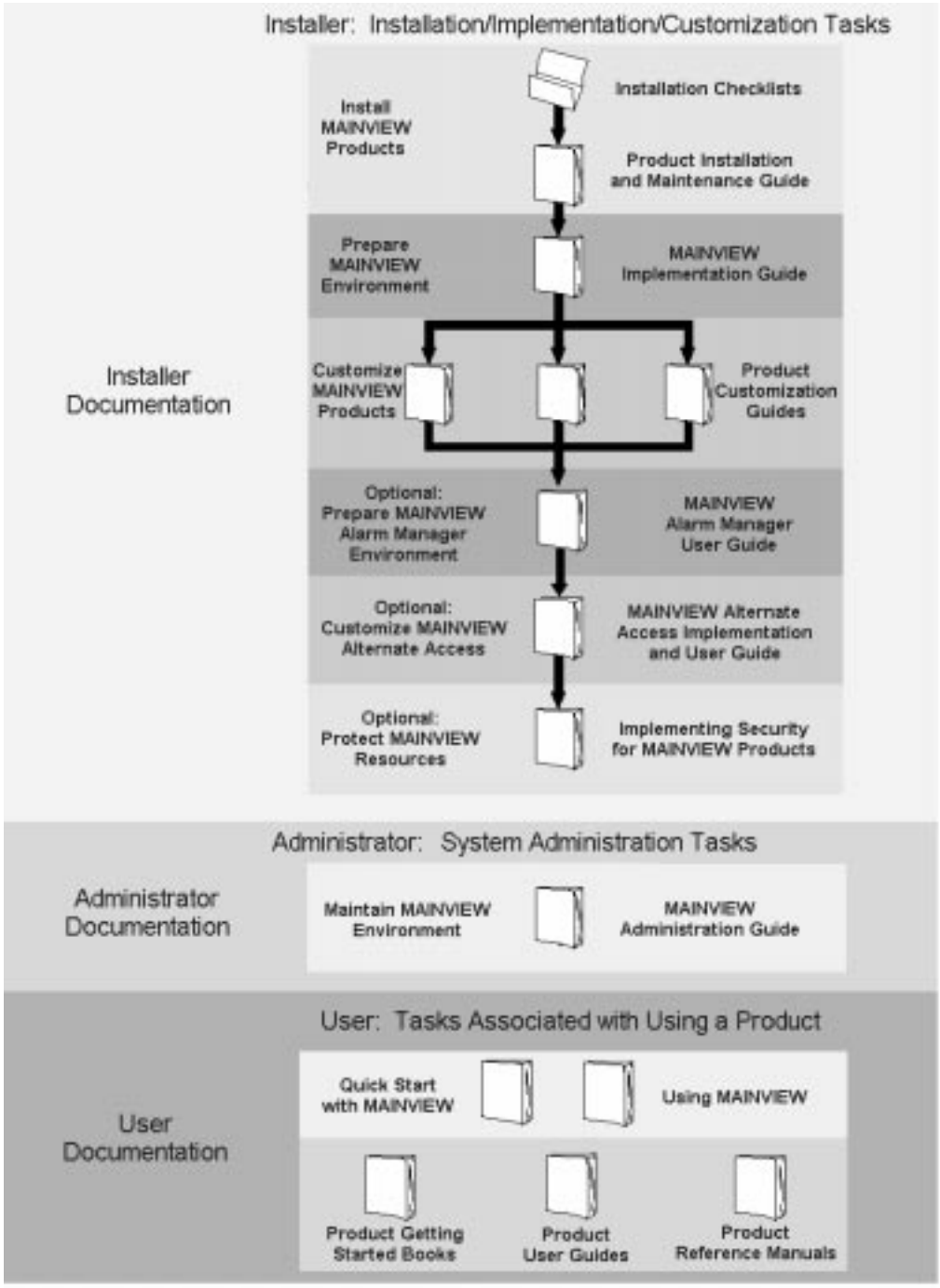
Each of these products provides a product-specific library that typically includes getting started, customization, user, and reference books.

In addition to those books, there are several books and quick references that provide general information common to all or many MAINVIEW products. Those books are listed and described in the following table.

MAINVIEW Administration Guide	provides information on MAINVIEW operations, targets, single-system image contexts, MAINVIEW Alarm Manager, data sets, view customization, and diagnostic facilities.
MAINVIEW Alarm Manager User Guide	explains how to create and install alarm definitions that indicate when exceptions occur in a sysplex.
MAINVIEW Alternate Access Implementation and User Guide	explains how to configure, start, and stop VTAM and EXCP AutoLogon sessions to access MAINVIEW products without an active TSO subsystem.
MAINVIEW Command List	describes the function, syntax, and parameters of the commands used to manage the MAINVIEW window environment.
MAINVIEW Implementation Guide	provides instructions for manually customizing the MAINVIEW environment for your products.
Product Installation and Maintenance Guide	provides information on product distribution methods, installation requirements, creating product libraries with CPO or SMP, applying SMP maintenance, tape formats, FMIDs, and SYSMODs.
Quick Start with MAINVIEW	provides a quick reference for MAINVIEW terminal sessions, logs, data sets, targets, contexts, windows mode and full-screen mode.
Using MAINVIEW	provides information on working with MAINVIEW products in windows mode and full-screen mode.
Implementing Security for MAINVIEW Products	explains basic MAINVIEW security, enhanced security, and MAINVIEW Alternate Access security.

Note: MAINVIEW messages are documented in the Messages and Codes online display, which you can access by typing MSG in the command line of any MAINVIEW display.

The following figure shows the documentation for MAINVIEW products and its intended use.



What’s New

This book reflects the addition of the following new products to the MAINVIEW family of products:

- MAINVIEW for IP monitors OS/390 mission-critical application performance as it relates to IP stack usage.
- MAINVIEW for VTAM displays application performance data by application, transaction ID, and LU name.
- MAINVIEW for UNIX System Services monitors the performance of the Unix System Services.

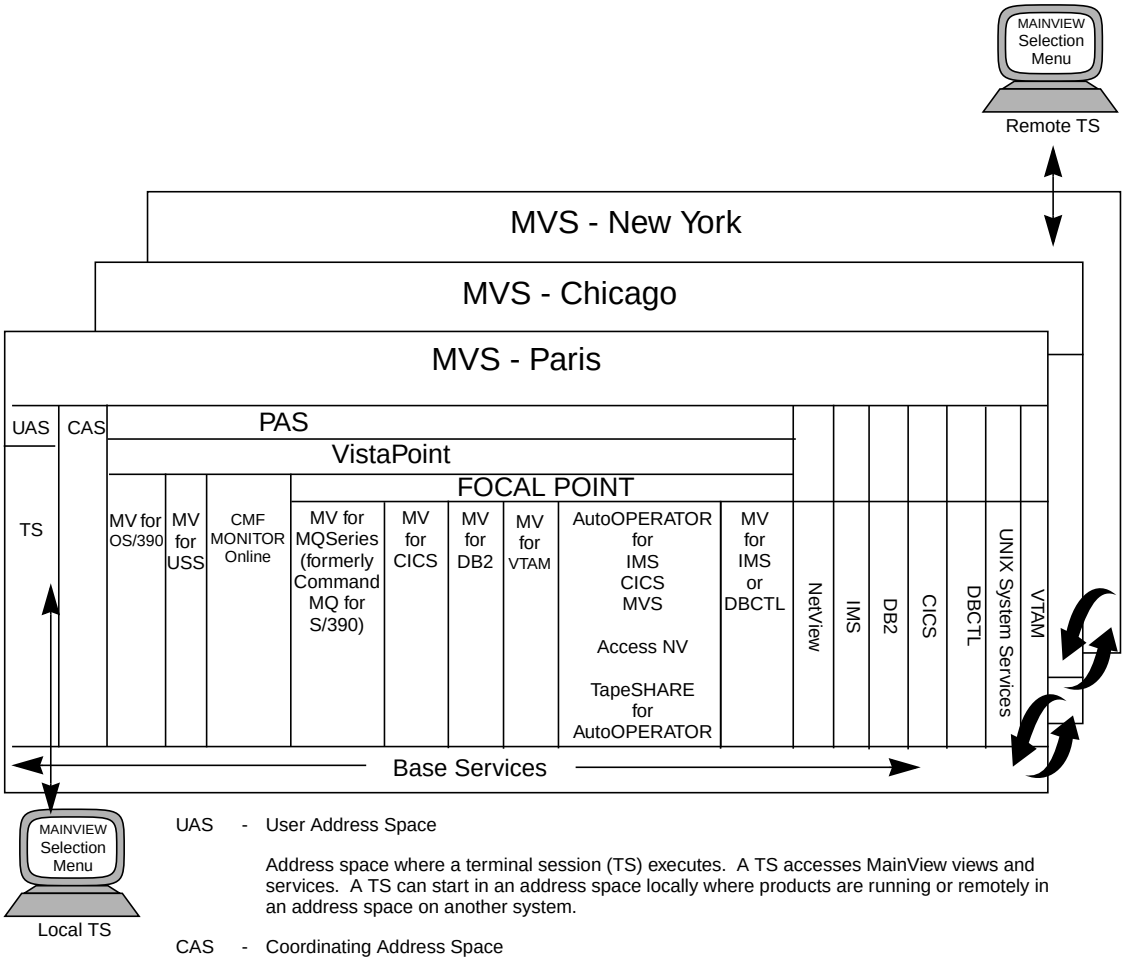
Chapter 1 What Is MAINVIEW?

MAINVIEW is an integrated family of performance management and automation products that monitor and control traditional and parallel mainframes. MAINVIEW comprises performance monitors, automated operations, and automation applications.

MAINVIEW product integration allows host system monitoring and automation (even in remote locations) through a common terminal session (TS), using the MAINVIEW Selection Menu. The integration of MAINVIEW products is provided through intercommunications technology known as BBI.

BBI integrates the MAINVIEW performance products within a common communications framework that operates across multiple machines in multiple locations as shown in Figure 1-1 on page 1-2. This integrated architecture allows a single TS, using one or more MAINVIEW products, to monitor and manage multiple local or remote targets, whether MVS itself (sysplex and nonsysplex) or subsystems like CICS, IMS, and DB2.

Figure 1-1 BBI Architecture



UAS - User Address Space

Address space where a terminal session (TS) executes. A TS accesses MainView views and services. A TS can start in an address space locally where products are running or remotely in an address space on another system.

CAS - Coordinating Address Space

Manage communication with other local and remote CASs and enables direct communication between a TS and a PAS.

PAS - Product Address Space

Contains data collectors and runs MainView products as follows:

MVS PAS	CMF MONITOR MAINVIEW for OS/390 MAINVIEW for UNIX System Services VistaPoint for MVS workloads
BBI-SS PAS	AutoOPERATOR products MAINVIEW for: CICS DB2 DBCTL IMS MQSeries (formerly known as Command MQ for S/390) VTAM VistaPoint for CICS, DB2, and IMS workloads
MVALARM PAS	MAINVIEW Alarm Manager

Base Services - BMC Software Base Technology

This architecture features a built-in separation of the data, application, and end-use dimensions of systems management for maximum flexibility and extensibility. BBI communications, data collection, and the end-user terminal session (TS) execute in three distinct address spaces:

- Coordinating Address Space (CAS)
- Product Address Space (PAS)
- User Address Space (UAS)

This multiple address space structure provides a consistent, flexible environment for managing literally hundreds of MVS systems. Depending on the products installed, this allows you to

- access different systems and products quickly and easily with simple target switching, direct hyperlinks between products, or multiple concurrent views on one TS screen
- summarize data on a single system or across multiple MVS images
- view historical or realtime data from multiple systems summarized into one view
- enter commands for multiple products on multiple systems
- apply simple or complex data filtering conditions

Coordinating Address Space (CAS)

The CAS runs as a subsystem and is used by most of the MAINVIEW products. It manages communication with other CASs on other local and remote sytems and allows direct communication between an individual TS and a product address space. Usually, there is one CAS per MVS system image, but there is no limit to the number of remote systems with CASs with which a single CAS can communicate.

A product establishes an independent connection with its local CAS. This means you can add new products or new upgrades to the architecture without affecting existing products or other configurations.

Each CAS contains a product called Plex Manager that provides administration and operations views that help you manage communication links with other CASs, monitor the activity of accessible products, create SSI contexts, and control security for products.

Product Address Space (PAS)

The PAS runs as an MVS subsystem. It comprises special routines, including data collectors, to support one or more MAINVIEW products.

- The MVS PAS services:
    - MAINVIEW for OS/390
    - CMF MONITOR
    - MAINVIEW VistaPoint (for MVS workloads)

There is one MVS PAS per MVS image. The MVS PAS always connects to the CAS on that MVS image.

- The BBI-SS PAS services:
    - MAINVIEW AutoOPERATOR
    - MAINVIEW for CICS
    - MAINVIEW for DB2
    - MAINVIEW for DBCTL
    - MAINVIEW for IMS
    - MAINVIEW for MQSeries (formerly known as Command MQ for S/390)
    - MAINVIEW for VTAM
    - MAINVIEW VistaPoint (for CICS, DB2, and IMS workloads)

Multiple instances of the BBI-SS PAS can execute on a single MVS image and contain one or more products. Depending on the products installed, the BBI-SS PAS may or may not connect to a CAS on that MVS image.

BBI-SS PASs on local and remote systems are linked together to provide cross-system communication for an individual TS through a local BBI-SS PAS to any other BBI-SS PAS.

- The MAINVIEW Alarm Manager PAS services:
    - CMF MONITOR
    - MAINVIEW for CICS
    - MAINVIEW for DB2
    - MAINVIEW for IMS
    - MAINVIEW for MQSeries (fomerly known as Command MQ for S/390)
    - MAINVIEW for OS/390
    - MAINVIEW VistaPoint

These products must be connected to the same CAS as MAINVIEW Alarm Manager. See the *MAINVIEW® Alarm Manager User Guide* for more information.

User Address Space (UAS)

The UAS is the home for a terminal session (TS) connected to a 3270 terminal. A TS provides the end-user session for all MAINVIEW products. The TS connects to a CAS if there is one available and/or to a BBI-SS PAS. There are two types of UASs:

- TSO address space

  Using a TSO address space, your TS can access MAINVIEW products and perform other TSO/ISPF functions.

- VTAM or EXCP address space using MAINVIEW Alternate Access

  Using a separate address space that communicates with your terminal with either VTAM or EXCP, your TS can access MAINVIEW products and also perform other ISPF functions.

Note: MAINVIEW Explorer provides access to MAINVIEW products from a Web browser. For more information, see the *MAINVIEW® Explorer Implementation and User's Guide*.

Chapter 2 Starting a MAINVIEW Terminal Session

All MAINVIEW products can be accessed from the MAINVIEW Selection Menu:

Figure 2-1 MAINVIEW Selection Menu

```
------------------------ MAINVIEW Selection Menu--------------------------
OPTION  ===>                                            DATE   -- 99/05/23
                                                        TIME   -- 08:59
  0  Parameters       - Specify MAINVIEW options         USERID -- BOLFXV1
  1  PLEXMGR          - MAINVIEW Plex administration     MODE   -- ISPF 4.2
  2  FOCAL POINT      - Subsystem monitoring and alerts
  3  AutoOPERATOR     - Automation and resource control
  A  MVALARM          - MAINVIEW Alarm management
  T  InTune           - Program analysis and tuning
  V  VistaPoint       - Comprehensive view of applications and resources

MAINVIEW for
  4  CICS             - CICS performance and control
  5  DB2              - DB2  performance and control
  6  IMS              - IMS  performance and control
  7  MVS              - MVS  performance and control
  8  MQSeries         - MQSeries performance and control
  9  USS              - UNIX for System Services performance and control
  N  Networks         - Network performance and optimization

  X  EXIT             - Terminate MAINVIEW
```

When you access a MAINVIEW product, your session is known as a terminal session (TS).

This chapter explains how to start and stop a TS. The following chapter explains how to work with all your MAINVIEW products within the terminal session.

Starting a TS

To start a terminal session for a MAINVIEW product:

1. Ensure that the CAS and PAS are active (if necessary for the applications you want to access).

   If you need to start them, see the *MAINVIEW Administration Guide* for CAS and PAS startup instructions.

2. Execute the MAINVIEW CLIST to display the MAINVIEW Selection Menu by performing one of the following:

   - Select the appropriate ISPF menu or panel option.

   - On the **COMMAND** line, issue the following TSO command to execute the MAINVIEW CLIST:

     ```
     TSO EX 'hilevel.UBBSAMP(MAINVIEW)'
     ```

   - Start a VTAM or EXCP MAINVIEW Alternate Access terminal session that executes the MAINVIEW CLIST (see the *MAINVIEW® Alternate Access Implementation and User Guide* for more information). When the CLIST is executed, the MAINVIEW Selection Menu appears as shown in Figure 2-1 on page 2-1.

3. Select a MAINVIEW product or the Parameters option by typing the appropriate option number in the **OPTION** field:

Product/Utility	Option Number	Description
Parameters	0	MAINVIEW Parameter Editors menu appears. The MAINVIEW Parameter Editors menu is not part of a product, but is a utility for customizing your MAINVIEW session parameters. This menu provides access to session control parameters for all MAINVIEW products. For more information about the MAINVIEW Parameter Editors menu or an individual session parameter, access the online help facility for the desired option. The KEYS and MVParms commands are available for quick-path access to the MAINVIEW Parameter Editors menu, so you do not have to exit your product to access this session parameters utility.
Plex Manager	1	Plex Manager PLEXOVER view appears. Plex Manager, which is shipped with all products that run in windows mode, is activated as soon as a system's CAS is started. Plex Manager allows you to monitor and manage targets and the connections between all products that run in windows mode on all systems.
FOCAL POINT	2	FOCAL POINT Overview display appears. This display summarizes key information provided by other MAINVIEW products.
AutoOPERATOR	3	MAINVIEW AutoOPERATOR Primary Option Menu appears. This menu provides access to MAINVIEW AutoOPERATOR for MVS, MAINVIEW AutoOPERATOR for CICS, MAINVIEW AutoOPERATOR for IMS, TapeSHARE for MAINVIEW AutoOPERATOR, and Access NV.
MVALARM	A	MAINVIEW Alarm Manager Easy Menu appears.
InTune	T	InTune Primary Option Menu appears.
MAINVIEW VistaPoint	V	MAINVIEW VistaPoint confirmation panel appears.
MAINVIEW for CICS	4	MAINVIEW for CICS confirmation panel appears.
MAINVIEW for DB2	5	MAINVIEW for DB2 Primary Option Menu appears.
MAINVIEW for IMS	6	MAINVIEW for IMS Primary Option Menu appears.
MAINVIEW for OS/390	7	OS/390 Performance and Control Menu appears. This menu provides access to MAINVIEW for OS/390, CMF MONITOR Online, CMFMON realtime analysis, CMF Analyzer JCL generation, and the CMF MONITOR Extractor utilities.
MAINVIEW for MQSeries (formerly known as Command MQ for S/390)	8	MAINVIEW for MQSeries Easy Menu appears.
MAINVIEW for UNIX System Services	9	UNIX System Services Performance and Control Menu appears.
Networks	N	MAINVIEW for VTAM Easy Menu appears.

Note: An `INVALID OPTION` message is displayed if you select a product

that is not installed at your site.

4. Optionally, select the CONTROL option from MAINVIEW Parameters Editors (Option 0) to display the MAINVIEW Session Control Parameters, as shown in Figure 2-2, at product initialization.

   This gives you the opportunity to specify a different CAS connection when a product starts instead of using a default session.

Figure 2-2 Session Control Parameters Panel

```
---------------------- Session Control Parameters ------------------------
COMMAND ===>

Subsystem ID    ===> BBCS      (Coordinating Address Space subsystem ID)

XDM mode        ===> NO        (Execute session in diagnostic mode, Yes/No)

Press END to save updates or HELP for more information.
```

   Specify the CAS identifer in the Subsystem ID field and press ENTER to continue.

   Note: Contact your systems programmer if you do not know the CAS identifier.

5. When you enter a product that supports full-screen applications, the Primary Option Menu for the product is displayed.

   When you enter a product that runs in windows mode only, one of two displays is presented:

   - A screen definition you specified as your initial screen in your session parameters
   - A default screen definition for the selected product

Stopping a TS

To stop a TS:

1. Exit all active products using one of the following methods:

   - Enter =X in the command field.
   - Press the END key until you reach the MAINVIEW Selection Menu.
   - Select option X from a Primary Option Menu (full-screen mode only).

- Use the Quit command.

  Note: You may be returned to a product's initial menu when you issue the Quit command. From there, you can press the END key to reach the MAINVIEW Selection Menu.

2. Select option X or press the END key from the MAINVIEW Selection Menu.

Chapter 3 Working with All MAINVIEW Products

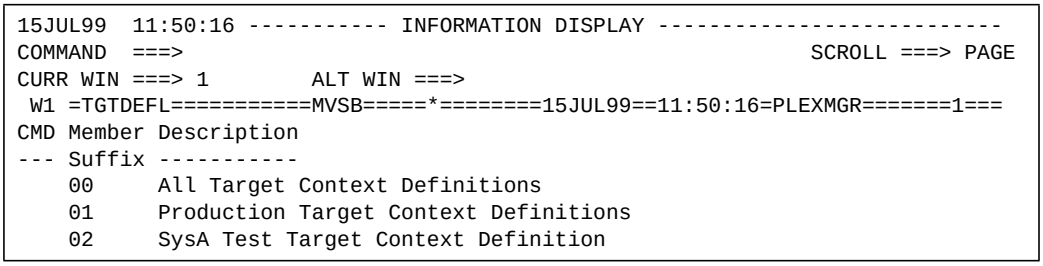
All of your MAINVIEW products are designed to work together within the same terminal session. This chapter gives you several tips to make it easier to use all of your MAINVIEW products with each other.

Your MAINVIEW products can run in either windows mode or full-screen mode or both:

- Windows mode

  When operating in windows mode, one or more windows (up to a maximum of 20) are displayed on your screen. A window information line defines the top border of each window. Figure 3-1 shows an example of windows mode:

Figure 3-1 Example of Windows Mode



- Full-screen mode

When operating in full-screen mode, the product application or service is shown on your entire screen and there is no window information line. Figure 3-2 shows an example of an application in full-screen mode:

Figure 3-2 Example of Full-Screen Mode

```
----------------------------- Log Display -------------- General services
COMMAND ===>                                               TGT ===> DB2F
LINE=      12,340  LOG= #1   STATUS= INPUT    TIME= 17:51:38 INTV===> 3
12:11:00  DS0560W  (04) 12:11:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:12:00  DS0560W  (05) 12:12:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:12:55  XS6311I  BBI/SESSION FOR -CPS17   - TERMINATED
12:13:00  DS0560W  (06) 12:13:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:14:00  DS0560W  (07) 12:14:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:15:00  DS0560W  (08) 12:15:00 ECSA % UTILIZATION(TOTAL) = 72  (>70) ********
12:16:00  DS0560W  (09) 12:16:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:17:00  DS0560W  (10) 12:17:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:22:11  XS6304I  BBI/SESSION FOR -LAA1    - TO -D31X- INITIATED
13:12:00  DS0561I   13:12:00 ECSA % UTILIZATION(TOTAL) NO LONGER > 70
13:28:48  DSNW131I - STOP TRACE SUCCESSFUL FOR TRACE NUMBER(S) 05
13:28:49  DSN9022I - DSNWVCM1 '-STOP TRACE' NORMAL COMPLETION
13:53:02  DS0560W  (01) 13:53:00 ECSA % UTILIZATION(TOTAL) = 72  (>70) ********
13:54:00  DS0560W  (02) 13:54:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:55:01  DS0560W  (03) 13:55:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:56:00  DS0560W  (04) 13:56:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:57:01  DS0560W  (05) 13:57:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:58:00  DS0560W  (06) 13:58:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
```

Transferring between Products

You can switch between products in either full-screen mode or windows mode without quitting your current terminal session. You can transfer:

- from full-screen mode to windows mode
- from windows mode to windows mode
- from windows mode to full-screen mode
- from full-screen mode to full-screen mode

Full-Screen Mode to Windows Mode

The TRANSFER command allows you to switch from products in full-screen mode to those in windows mode and back again. To use this command, enter:

```
TRANSFER target product;view
```

where:

target	Is the system or subsystem being monitored.
product	Can be one of those listed in the first column of Table 3-1.
view	Is the name of the view you want to see.

Table 3-1 Transfer to Windows Mode

Product	To Access
CMF	CMF MONITOR Online
MVALARM	MAINVIEW Alarm Manager
MVCICS	MAINVIEW for CICS
MVDB2	MAINVIEW for DB2
MVIMS	MAINVIEW for IMS
MVMQS	MAINVIEW for MQSeries (formerly known as Command MQ for S/390)
MVMVS	MAINVIEW for OS/390
MVVP	MAINVIEW VistaPoint
MVVTAM	MAINVIEW for VTAM
MVUSS	MAINVIEW for UNIX System Services
PLEXMGR	Plex Manager

For example, enter:

```
TRANSFER * PLEXMGR;PLEXOVER
```

to access the PLEXOVER view in Plex Manager.

Windows Mode to Windows Mode

The CONtext command allows you to switch from a product in windows mode to another product running in windows mode. To use this command, enter:

```
CONtext target product;view
```

where:

target	Is the system or subsystem being monitored.
product	Can be one of those listed in the first column of Table 3-1 on page 3-3.
view	Is the name of the view you want to see.

For example, to access the PLEXOVER view in Plex Manager, enter:

```
CONTEXT * PLEXMGR;PLEXOVER
```

From Windows Mode to Full-Screen Mode

You can switch from windows mode to full-screen mode with either of these methods:

- using the TRANsfer command
- defining a hyperlink

TRANsfer Command

The TRANsfer command allows you to switch from products in windows mode to those in full-screen mode and back again. To use this command, enter:

```
TRANsfer target product
```

where:

target	Is the system or subsystem being monitored.
product	Is one of those listed in the first column of Table 3-2 on page 3-5.

Table 3-2 Transfer to Full-Screen Mode

Product	To Access
AO	MAINVIEW AutoOPERATOR
CAO	CICS Operator Workstation (MAINVIEW AutoOPERATOR)
CICS	MAINVIEW for CICS
DB2	MAINVIEW for DB2
IAO	IMS Operator Workstation (MAINVIEW AutoOPERATOR)
IMS	MAINVIEW for IMS
MAO	MVS Operator Workstation (MAINVIEW AutoOPERATOR)
VTAM	MAINVIEW for VTAM

For example, to access the MVS Operator Workstation menu on system A. enter:

```
TRANsfer SYSA MAO
```

To transfer to a specific full-screen application, use:

```
TRANsfer target product;command
```

where:

target Is the system or subsystem being monitored.

product Is one of those listed in the first column of Table 3-2 on page 3-5.

command See Table 18-1 on page 18-2 for a list of all transfer commands to full-screen applications.

For example, to access the System Status application for MVS Operator Workstation on system A, enter:

```
TRANsfer SYSA MAO;STATUS
```

Hyperlinks

From windows mode, you can directly access a full-screen application by customizing a hyperlink as follows:

1. Go to the product and view where you want to enter the hyperlink.
2. Use the CUSTom primary command to display view customization.
3. Select the Hyperlink option by specifying H and positioning the cursor on the field where you want the hyperlink defined and press ENTER.
4. Enter a command string that stacks the appropriate commands you would enter to leave the windows environment and select the full-screen product and service.

   Make sure you separate each command with a semicolon (;) or with your ISPF command delimiter; for example:

   ```
   TRANsfer target product;command
   ```

   where:

target	Is the system or subsystem being monitored.
product	Is one of those listed in the first column of Table 3-2 on page 3-5.
command	See Table 18-1 on page 18-2 for a list of all transfer commands to full-screen applications.

5. Save the view using the S - SAVE VIEW option in view customization.
6. Test your new hyperlink to ensure that the command string executes properly.

From Full-Screen Mode to Full-Screen Mode

To transfer from a product in full-screen mode to the Primary Option Menu of another product that runs in full-screen mode, enter the following on the COMMAND line:

```
product
```

where *product* is one of those listed in the first column of Table 3-2 on page 3-5.

For example, you can transfer from the MAINVIEW for DB2 History Traces application to the MVS Operator Workstation by entering MAO on the COMMAND line of this application, as shown in Figure 3-3 on page 3-7.

Figure 3-3 Example of Transfer between Products in Full-Screen Mode

```
---------------------------- HISTORY TRACES --------------  PERFORMANCE MGMT
COMMAND ===> MAO                                             TGT ===> DB2X
                                              TIME-- 15:21:17   SCROLL ===>
CSR
COMMANDS: SORT, LOCATE, NEW, STOP, START, TYPE
LC CMDS:  S (SELECT), W (SHOW), P (PRINT),   D (DELETE), E (RESET)
          V (VERIFY), N (NEW),  A (ARCHIVE), F (FREE)

DIRECTORY: SYSO.BAB.CPOPROD.SYSA.TRACEDIR
ENTRIES USED: 39         FREE: 8153
                                                                SCROLL RIGHT
>>>
LC   DATE------TIME TRACEID  TITLE                    USERID   TGT   STAT
ACTV
     96-06-17 07.42 THRDHIST THREAD HISTORY           BTSSED   DB2X  USED
     96-06-14 13.50 SCANS    DB2 APPLICATION TRACE    BBSEDL5  DB2X  USED
     96-06-14 13.20 IODETAIL DB2 APPLICATION TRACE    BBSEDL5  DB2X  USED
```

You can make more than one transfer request. You are, however, usually limited to a maximum of four transfers. Each preceding request is maintained. Pressing the END (PF3/15) key displays the previous application where the transfer request was made.

Table 18-1 on page 18-2 lists all transfer commands for all full-screen applications.

Enabling Multiple Full-Screen Mode Sessions

The PMGLAUTH program is required for these two operations:

- operating in full-screen mode on both sides of an ISPF split screen
- transferring from windows mode to full-screen mode

See the *MAINVIEW Implementation Guide* for installation instructions.

User Session Parameter Settings

You can customize your user session for windows mode and/or full screen mode by selecting the Parameters option from the MAINVIEW Selection Menu. Online help for this option describes the products that run in each or both modes.

Viewing Messages and Codes Online

You can view an explanatory description of a message issued by MAINVIEW by using the Messages and Codes online display. The description includes:

- **REASON** the message was issued
- **SYSTEM ACTION** to be taken
- **USER ACTION** that should be taken
- Name of the module of **ORIGIN**

To use the Messages and Codes display:

- Enter MSG on the COMMAND line of any MAINVIEW display, including the initial MAINVIEW selection menu.

  This allows you to access all MAINVIEW messages online whether or not a product is running.

- Select the M option for messages from a product's MAIN view or from General Services on the Primary Option Menu.

The M option and the MSG primary command display a scrollable list of all MAINVIEW product service or application error messages and abend codes as shown below.

Figure 3-4 Online Messages and Codes Display

```
------------------------------ Messages & Codes  ----------- Row 1316 of 4302
COMMAND ===>                                                 SCROLL ===> HALF

Primary commands:  S string - selects a message,  L string - locates a message
Line commands:  S - Select

LC Msg ID       Message Text
-- ------------ ------------------------------------------------------------
__ BBCQA103     Error adding to tree
__ BBCQA104     System delete failed for system
__ BBCQA105     System halt failed for system
__ BBCQA106     System quiesce failed for system
__ BBCQA107     System start failed for system
__ BBCQA108     System refresh failed
__ BBCQA109     System add failed for system
__ BBCQA110     System change failed for system
__ BBCQA111     Processing error during add
```

Entering the **MSG** primary command with the ID of a message as follows:

`COMMAND ===> MSG` *`msgid`*

only displays the explanation for the requested message. After viewing the description, press your END key. The list of messages is displayed.

Primary commands that can be entered on the COMMAND line from the Messages and Codes display include:

Select Entering an S followed by the entire message ID shows the explanation for that requested message.

Locate Entering an L with a partial message ID scrolls the message list to the set of messages that matches the partial ID.

If the Locate finds an exact match, it shows the explanatory description for that message.

The following line command can be entered in the Line Command (LC) column:

S Entering S next to the message you want and pressing your ENTER key shows the description for that selected message or abend code.

Chapter 4 MAINVIEW Windows Environment

As described in the following sections, the MAINVIEW windows environment allows you to:

- see and control system performance information arranged in views and display views in as many as 20 windows
- view multiple systems as a single system image (SSI)
- summarize and display data for many resources in a single row
- view information from the past
- navigate through views using hyperlinks
- customize views and online help
- display a full-screen graph of data
- export view data to a data set or print it to SYSOUT

Views and Windows

MAINVIEW products collect system performance information as data elements and arrange the elements into a view requested by a user. When a view is requested, it is displayed in a window as described in Chapter 7, “Displaying a View in a Window.” Using the MAINVIEW 3270 windows environment, you can configure your screen into a maximum of 20 windows, each containing an independent MAINVIEW product session with any accessible target system.

There are many ways to control the display and appearance of data in a view:

Complex or Simple Filtering

Use filtering commands or set view filters through view customization to filter the data that displays in a view, as described in Chapter 13, “Filtering Data Displayed in a View.”

Simple filtering allows you to specify one criteria per predefined parameter; for example, you could look at only the workloads running in a certain performance group or service class by filtering the data in a workload activity view. Through view customization, you can define simple filter conditions for a view so that data is filtered before the view is displayed.

Complex filtering allows you to specify multiple criteria for any field in a view using an SQL-like language to define filter conditions; for example, you could look at workloads running in four performance groups or service classes, with names beginning with PAY, and CPU percent utilizations of 87.6 through 94.3.

For more information about filtering data, enter **HELP DATAFILTER** on the COMMAND line. For more information about customizing filters to a view, enter **HELP CUSTom** on the COMMAND line.

Threshold Conditions

Use color or highlighting to add visual indicators to view data that instantly shows when resources are reaching a critical state. By setting threshold conditions through view customization, as described in “Setting Thresholds and Assigning Colors” on page 12-9, you can control the color or highlighting of data that meets a specified condition; for example, display workloads in red when they have a total delay of more than 25%, in pink for more than 20%, in yellow for more than 15%, in blue for more than 10%, and so forth.

For more information about customizing filters to a view, enter **HELP CUSTom** on the COMMAND line.

Alternate Forms

Display views of the same data using alternate forms, as described in “Forms and Queries” on page 6-3, and analyze a problem from different perspectives while conserving system resources. Data is not updated each time an alternate form of the same data is displayed.

For more information about alternate forms, enter **HELP FORM** on the COMMAND line.

For more information about views, enter **HELP VIEW** on the COMMAND line. Enter **HELP CUSTom** for more information about view customization.

Single System Image (SSI)

You can combine data from many targets into a single window and work with the information as if it were from a single system. In any multisystem environment where CASs are configured to communicate with each other, views are enabled for SSI mode.

To display data from multiple systems in one view, use the **CONtext** command, as described in Chapter 11, “Viewing Performance Information from Multiple Systems.”

For more information about this command, enter **HELP CONtext** on the COMMAND line.

Summarized Data

You can summarize the data from a single MVS image or across multiple systems by displaying a summary view or using the **SUM** command. You also can create your own summary views through view customization.

Summary views group several rows of data about multiple resources into a single row that represents all the data for those resources. Resources are grouped together when they have the same values in a field.

When a field is summarized, the data can be displayed as one of several summarization types:

- average
- any alphanumeric value
- count
- maximum
- minimum
- percentage
- sum

Summarization is useful when you want to look at overall performance. For example, you could summarize the performance of a device being used by multiple jobs on a single system. In a shared DASD environment where a device is used by jobs across multiple systems, you could summarize the performance of a device and access SSI mode to see how the device is performing for multiple jobs across multiple systems.

Summarization also is useful when you want to perform long-term trending analysis. If you display multiple intervals of historical data in a view and then summarize the information, you can see the performance trends of resources over several hours or an entire day.

For more information about the **SUM** or **CUSTom** command, enter **HELP** and the name of the command on the COMMAND line.

Historical Data

You can display data from the past, which allows you to:

- Recreate the operating environment as it existed during an interval from the past, such as yesterday, last week, or last month, and compare the historical data in one view concurrently with current system performance data in another view.

- Display multiple intervals of data that span hours, days, even weeks, and perform trending analysis on the historical performance of your system.

- Summarize multiple intervals of data and review past performance for a single resource or a group of resources over any time frame.

To display historical data in a view, use a TIME command, as described in “Using the TIME Command” on page 14-2.

For more information, enter **HELP TIME** on the COMMAND line.

Point-and-Shoot Navigation

You can navigate easily through your system data using hyperlinks, as described in Chapter 9, “Using Hyperlinks from a View.” By positioning the cursor on the resource in a highlighted hyperlink field and pressing ENTER, additional data is displayed that provides you with greater detail about a potential problem.

Using view customization, you can define your own hyperlinks to fields or change the commands that are issued based on a condition the data meets.

For more information about hyperlinks, enter **HELP HYPERLINKS** on the COMMAND line.

View Customization

You can customize the views that are shipped with your MAINVIEW products, as described in Chapter 12, “Customizing Views.” This function allows you to:

- control the display of fields
- change the display format of fields
- create or change graphs of view data
- create, change, or delete hyperlinks between views and/or other products
- set keyword and positional parameters for a view that can be used in filtering
- move fields in a view
- sort the data in a field in ascending or descending order
- duplicate a field
- define a summary view to a tabular view, so the summary view displays when the **SUM** command is entered
- set or remove data threshold conditions for a field, change the color in which data appears when it meets a specific condition, or substitute text for data that meets a specific condition
- create a summary view or change which fields are summarized

- create or customize a graphic display of a view

For more information about view customization, enter **HELP CUSTom** on the COMMAND line.

Graphs and Charts

You can display data in high-resolution charts and graphs with the IBM Graphical Data Display Manager (GDDM) support or in low-resolution charts without GDDM. Using the MAINVIEW GraphManager, you can customize the chart type and title, the range of the X- and Y-axes, and the fields that are graphed.

Low-resolution charts display on non-graphics terminals in monochrome and use only characters (such as asterisks and dashes) to represent graphics. Supported low-resolution chart types include:

- line graphs
- overlay bar charts
- pie charts
- scatterplots
- stacked bar charts

High-resolution charts are displayed on graphics terminals in color and can be three-dimensional graphics. For high-resolution charts, you can use GraphManager to customize:

- colors, line and text styles, and shading patterns
- legend placement and general chart appearance
- scaling, ranges, grid lines, titles, and labels for axes

Supported high-resolution chart types include:

- all types of support for low-resolution charts
- histograms
- multiple side-by-side bar charts
- overlay surface charts
- stacked surface charts
- tabular data displays
- text-only displays
- three-dimensional bar charts
- three-dimensional surface charts

Many views are distributed with default graphics already defined. Graphs are easily displayed by using the GRAph command. MAINVIEW automatically accesses a high- or low-resolution graphic, depending upon the terminal type.

For more information about graphing data, enter **HELP GRAph** on the COMMAND line and press ENTER.

Exporting a View

You can export a view to a data set or print it to a SYSOUT class using the EXPort command. The exported view can be used to supplement performance reports or can be downloaded to a workstation for use with a spreadsheet application.

When you enter the EXPort command, a panel is displayed requesting an existing data set name (or SYSOUT class) and formatting options. The output of the EXPort command includes all the rows of data associated with the view, even data that requires scrolling to be seen online. However, if the logical record length (LRECL) of the data set is less than the width of the view, the view data is truncated on the right.

Online Help

Online help describes every view, every field in every view, and the components of the MAINVIEW window. In addition, help topics are joined with hypertext links for easy access from one subject to another—which means turning to hardcopy documentation less often.

To access online help, press your **HELP** PF key.

You can even create your own help topics—or modify the original help text—to address requirements or procedures unique to your site (see Chapter 5, “Getting Help in Windows Mode”).

Chapter 5 Getting Help in Windows Mode

You can get help at any time about:

- views
- view elements
- window information line elements
- commands
- MAINVIEW

This is an online tutorial about how the MAINVIEW window environment works. The help text is displayed as pop-up windows that overlay only part of your screen or it may fill the entire screen depending upon which version of ISPF you have. If you have ISPF 3.1 or later, help is displayed in pop-up windows.

Displaying Help

Table 5-1 lists the type of help you can get and how to access it.

Table 5-1 How to Get Help

Type of Help	What to Do
Views	Place the cursor on the view name in the window information line and press PF1 (see page 7-2 for details on thewindow information line). Or enter HELP and the name of the view on the COMMAND line for the product that is currently active, as shown below: `COMMAND ===> HELP PLEXMGR` PLEXMGR (Plex Manager) is a common service utility that is distributed with all MAINVIEW products. It is used to manage MAINVIEW product communication. Plex Manager help and Chapter 11, “Viewing Performance Information from Multiple Systems.”, describe its use in more detail. View help for the active product shown in the window information line describes: • parameters you can use for that view • elements included and excluded within the view • elements that hyperlink and to where
View elements	Place the cursor on an element in a view and press PF1.
Window information line elements	Place the cursor on an element in the window information line and press PF1 (see page 7-2 for details on thewindow information line).
Commands	Enter the following as shown: `COMMAND ===> HELP` *cmdname* where *cmdname* is the name of the command. For a list of all the available MAINVIEW window commands you can use, see the *MAINVIEW Command List* quick reference card.
MAINVIEW tutorial	Place the cursor on the COMMAND line and press PF1 to display a list of MAINVIEW beginning and advanced help topics.
You can enter **INDEX** on the COMMAND line of any view help to display an index to the online help for that view. Highlighted hyperlinks let you link to additional help information.	

Customizing Help

You can either use the distributed help or customize it to meet your site's needs. Customized help text works just like distributed help text. You can create help for views, view elements, or any topic and create hyperlinks within your own help text. For information about how to create your own help text, see the *MAINVIEW Administration Guide*.

Chapter 6 Displaying Data in a View

System performance information is presented by MAINVIEW products in either a view or standard ISPF display. A view is used by products that operate in the MAINVIEW window environment. Views can be requested by entering a view name on the COMMAND line or selecting an option from a menu.

When a view is requested, a query is executed against the data collected for that view. The data is then arranged into a form for the view according to the set of instructions associated with the view.

How Data Is Arranged in a View

Views present tabular, summarized, or detailed information. You can change the form of the information as described in the following sections.

View Types

There are three kinds of views available:

- Tabular views

  Rows and columns of data. Each element in a row provides information about the same job, workload, transaction, or resource; for example:

```
 15APR1999  16:27:47 ---------- INFORMATION DISPLAY --------------------------
 COMMAND  ===>                                                SCROLL ===> PAGE
 CURR WIN ===> 1        ALT WIN ===>
 >W1
=CONACT==========(ALL======*=======)15APR1999==16:27:46====PLEXMGR=====16=
 CMD SSI      Product  Target   Status           Description
 --- Context- -------- Context- of_Target---     ------------
     ALL      MVCICS   CICSPDA1 ACTIVE           CICS PRODUCTION 1 ON MVSA
     ALL      MVCICS   CICSQRY  ACTIVE           CICS QUERY REGION ON MVSA
     ALL      MVCICS   CICSPDB1 ACTIVE           CICS PRODUCTION 1 ON MVSB
     ALL      MVCICS   CICSPDB2 ACTIVE           CICS PRODUCTION 2 ON MVSB
     ALL      MVCICS   CICSTEST INACTIVE         CICS TEST REGION MVSB
     ALL      MVCICS   CICSINVT ACTIVE           CICS INVENTORY REGION MVSB
     ALL      MVDB2    DB2PA1   ACTIVE           DB2 PRODUCTION 1 ON MVSA
     ALL      MVDB2    DB2PA2   ACTIVE           DB2 PRODUCTION 2 ON MVSA
     ALL      MVIMS    IMSPRDA  ACTIVE           IMS PRODUCTION 1 ON MVSA
     ALL      MVIMS    IMSCTLA  ACTIVE           IMS CTL ON MVSA
     ALL      MVDB2    DB2PB1   ACTIVE           DB2 PRODUCTION 1 ON MVSB
     ALL      MVDB2    DB2PB2   ACTIVE           DB2 PRODUCTION 2 ON MVSB
     ALL      MVMVS    MVSA     ACTIVE           MAINVIEW FOR MVS ON MVSA
     ALL      MVMVS    MVSB     ACTIVE           MAINVIEW FOR MVS ON MVSB
     ALL      PLEXMGR  MVSA     ACTIVE           TARGET MANAGER ON MVSA
     ALL      PLEXMGR  MVSB     ACTIVE           TARGET MANAGER ON MVSB
```

- Detail views

  Detailed information about a particular resource or element selected from another view; for example:

```
15APR1999  16:34:48 ---------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
 W1 =CONACTZ==CONACTD==(ALL=====*========15APR1999==16:33:08====PLEXMGR=======1
    SSI....  ALL
    Product  MVCICS
    Target.  CICSPDB2
    Server.  SSA1
    System.  MVSB
    Status.  ACTIVE
```

- Summary views

  Multiple data rows combined into a single row based on specific criteria; for example:

```
15APR1999  16:26:25 ----------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =CONACTZ===========ALL======*========15APR1999==16:26:25====PLEXMGR=======3
CMD SSI      Product  Description                              Num  Num
--- Context- -------- ------------                             Targ Act
    ALL      MVMVS    All targets                               2    2
    ALL      PLEXMGR  All targets                               2    2
    ALL      MVCICS   All targets                               6    6
    ALL      MVVP     All targets                              14   14
    ALL      MVDB2    All targets                               4    4
    ALL      MVIMS    ALL targets                               2    2
    ALL      CMF      All targets                               2    2
```

Forms and Queries

Every view comprises one query and one form. When you request a view, a query is issued against the data collected by the MAINVIEW product. Data for the view is extracted by the structured query and processed through a form template that configures the appearance of the elements displayed in the view. Every time you press your ENTER key, the data formatted in the view is refreshed.

You can change the form of the data presented in a view without refreshing the data by using the following command:

```
COMMAND ===> FORM formname
```

where *formname* is the view form you want to use. This command is helpful when you spot a potential problem in one view and want to investigate it using the same information in another view without refeshing the data; for example, issuing the FORM command to view the information for a detailed view from a summary view. To find out what alternate forms are available for a view, select the view name with your help key and look for the topic, `Forms that are valid for this view.`

If you request multiple forms, they are stacked in the order they are requested. You can move forward or backward through the stack, return to a form, change formed data, and end a query using the commands described in Table 6-1.

If you need more information about a command, enter HELP on the COMMAND line as shown:

```
COMMAND ===> HELP cmndname
```

where *cmndname* is the name of the command; for example, `HELP DATAR`.

Table 6-1 Commands for Forms and Queries

To do this	Use this command
Cycle forward to the next form in the stack.	FNEXt
Cycle back to the prior form in the stack.	FPREV
Return to the last form. If there are no more forms in the stack, return to the last query.	END
Delete the current query and all its forms; return to the previous view.	ENDQuery
Change the parameters of a form without refreshing data. Forms only those elements for viewing that meet specified parameter criteria and does not change existing data. Allows you to view elements exceeding what you consider to be a normal condition. For example, if a view shows a delay percentage, you could enter: `COMMAND ===> PARM * 5` to see all delays greater than 5% (qualifier for positional parameters). Online help for a view describes the parameters available for that view and how to use them.	PARm
Change the parameters of a query and refresh data. Allows you to view only those elements exceeding a normal condition, as shown for the PARM command described previously, and presents new data meeting parameter criteria.	QPARm

Table 6-1 Commands for Forms and Queries (continued)

Display a list of the filters currently in effect for both the query and the form. Helps you when you have entered several FORM and QPARm commands but no longer have any data displayed because you accidentally filtered out all possible values.	SHOWFilt
Refresh data in one form without refreshing other forms. The data is updated, even though you have a form applied to it.	DATAR

Locking and Updating Data in Views

A view refreshes data only when you press the ENTER key unless you use the FORM command described previously or lock a view. FORM allows you to see different information about the same data by requesting alternate forms of it. The LOCK command keeps the data displayed by a view. It allows you to look for trends by comparing data locked in a view against current, realtime data shown in another window (see “Creating a Window” on page 7-6) of the same, unlocked view. A locked view is indicated by an `L` in the window information line (described on page 7-2) at the top of the display.

You can keep the lock on a view and update its data by entering the following command on the COMMAND line as shown:

```
COMMAND ===> DATAR
```

This is the data refresh command. It refreshes the data even though the view is locked.

To remove a lock from a view and refresh the data, enter:

```
COMMAND ===> UNLOCK
```

Sorting View Data

Sorting allows you to order rows of data shown in tabular and summary views in numerical or alphabetical order, ascending or descending. By default, numerical data is in descending order, high to low. The default for character data is ascending order, A through Z.

To sort data in a view, you can use either the SOrt or the Order command. Either command is used by:

- Typing the command on the COMMAND line, moving your cursor to the column containing the elements you want to sort, then pressing your ENTER key.

  Entering the command without parameters sorts numerical elements in descending order by default and alphabetical elements in ascending order by default.

- Typing the command on the COMMAND line with an **A** for ascending order or **D** for descending order and selecting the column to be sorted with your cursor.

- Entering the command with the element name as a parameter on the COMMAND line, for example:

  ```
  COMMAND ===> SORT [nameA|nameD]  [A|D]
  ```

  where *name* is the internal name of the column to be sorted. To find out what the internal name of a column is, move your cursor to the column label and press your help key. If you use an internal name instead of selecting a column with your cursor, you must use a . character between the name and the **A** or **D** parameter.

The following examples show using the **SOrt** command to order elements by their defaults and using the **Order** command with a parameter.

To sort a column by its default:

1. Enter the following on the COMMAND line as shown, but do not press your ENTER key:

   ```
   COMMAND ===> SORT
   ```

2. Move your cursor to the label of the column you want to sort by default then press your ENTER key.

To arrange a column by using the descending parameter:

1. Enter the following on the COMMAND line as shown, but do not press your ENTER key:

   ```
   COMMAND ===> ORDER
   ```

2. Move your cursor to the label of the column you want to arrange in descending order then press your ENTER key.

Locating View Data

If you want to find specific information in a view, you can use the Locate command. It searches view data until it finds an alphanumeric character string matching one you specify. That data is then displayed as the first row of the view. You can use the RFind command to find the next occurrence of your request.

Locate can be used as follows:

```
COMMAND ===> L string [FIRST|LAST|PREV|NEXT|elemname]
```

where:

L — is the LOCATE command to find the alphanumeric string specified by *string* If the information you are looking for is in the:

- first column, specify the *string* you want and press the ENTER key.
- a column other than the first one, specify a *string*, place your cursor on the column you want, and press the ENTER key.

string — is an alphanumeric string.

Generic qualifiers of * (any character), ?, and + (any character in that position) can be used for character fields.

FIRST — requests a search for the first occurrence of *string*, for example:

```
COMMAND ===> L MVI* FIRST
```

LAST — requests a search for the last occurrence of *string*, for example:

```
COMMAND ===> L MVI* LAST
```

PREV — requests a search for the previous occurrence of *string*, for example:

```
COMMAND ===> L MVI* PREV
```

NEXT — requests a search for the next occurrence of *string*, for example:

```
COMMAND ===> L MVI* NEXT
```

elemname — is the internal name for a field in a view.

To determine the internal name of a field, place your cursor on a field and press your help key.

For more information about the Locate command, enter the following as shown:

```
COMMAND ===> HELP L
```

Refreshing View Data

You can specify a timed interval for refreshing data in a single view or a timed cycle for refreshing data in more than one view.

- To refresh data in a single view, use the following command:

  ```
  COMMAND ===> ASU nnn
  ```

  where *nnn* is the number of seconds and can be from 3 (or a greater, site-defined value) to 999. The number specified temporarily overrides the default refresh rate defined in your MAINVIEW profile; for example:

  ```
  COMMAND ===> ASU 30
  ```

  This is a request for automatic screen update (ASU) mode every 30 seconds for the view where the command is entered.

  For more information about this command, enter the following:

  ```
  COMMAND ===> HELP ASU
  ```

- To refresh data for several views in a timed cycle, open multiple windows, MAXimize one, and then specify a refresh cycle with NEXt and PREV as described in “Maximizing a Window” on page 7-13.

To cancel refresh, use the attention interrupt key:

- For SNA terminals, use the ATTN key.
- For non-SNA terminals, use the PA1 key.
- For MAINVIEW Alternate Access, use the PA1 key.

For some keyboards, RESET must be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM and MAINVIEW uses the keys assigned by this procedure. The same keys are used by TSO.

Chapter 7 Displaying a View in a Window

When a view is requested, it is shown on your screen in a MAINVIEW window:

Figure 7-1 MAINVIEW Window

```
15APR1999  06:13:59 ---------- INFORMATION DISPLAY -------------------------
COMMAND  ===>                                                 SCROLL ===>
HALF
CURR WIN ===> 1        ALT WIN ===>
>W1
=PLEXOVER==========SYSB=====*========15APR1999==06:13:59====PLEXMGR=======1
C Context  Product  Description                                Status   Server
- -------- -------- ---------------------------------------- -------
--------
  SYSB     PLEXMGR  Target Manager                           Active
PLEXMGR
```

This window presents:

- a control area where commands can be entered and active window status is shown
- a line that shows you window and view status information
- a display area for product views

The following sections describe how to work with windows.

What the Window Information Line Shows

The following line from Figure 7-1 on page 7-1 is called the window information line:

```
>W1 =PLEXOVER========SYSB=====*========15APR1999==06:13:59========PLEXMGR===1
     |         |     |        |        |          |        |      |         |
     view      form  context  scope    date       time     nnnnu  prodid    n
                                          (mode             )
```

This line shows you the status of active windows and views. It comprises the elements described in the Table 7-1:

Table 7-1 Window Information Line Elements

Element	Description
>	Indicates there is more data to see by scrolling to the right. Data to the left is indicated by a < character. A + character means there is more data to both the left and right. If all the data fits in the window, a blank is in this position.
W*n*|*c*	Indicates the status of the active window where: W*n* means this window, identified by *n* which can be 1 through 20, is in waiting status. *c* is a one-letter character status for the window; for example, T. T indicates this is a new window that is ready to receive commands; no view is active in the window (see “Creating a Window” on page 7-6). Select the status character with your cursor and press your help key for a status list. You can hyperlink from a status character listed by online help to see a description of what it means.
view	Represents the name of the view displayed in the window; for example, PLEXOVER shown in the previous example.
form	Represents the name of the form used to display view data. It appears when you use the FORM command to display the data in a different format, as described in “Forms and Queries” on page 6-3.
context|ALL	Represents the name of the current target; for example, SYSB, or a predefined SSI context that includes multiple targets. ALL is a predefined context that includes all active targets.
scope|*	Identifies a target selected with the SCOPE command from an SSI context in an active window. An asterisk (*) indicates the view is showing information for all targets in the context, for example: ALL=====*==== This means all target data for the ALL context is being displayed. The SCOPE command limits the view of the context to the specified target. For example, if you are viewing the predefined context of ALL and enter the following: COMMAND ===> SCOPE SYSB the window information line shows: ALL=====SYSB==== For a description of the CONTEXT and SCOPE commands, enter HELP and the command name on the COMMAND line of a window.
date	Indicates the date (15APR97 shown in Figure 7-1 on page 7-1) that view data in the window was last updated or the end of the interval that it represents if the data is historical.

Table 7-1 Window Information Line Elements (continued)

Element	Description
time	Indicates the time (06:13:59 shown in Figure 7-1 on page 7-1) that view data in the window was last updated or the end of the interval that it represents if the data is historical.
nnnnu	Is a length of time and *u* is a unit of time expressed in intervals (I), minutes (M), hours (H), days (D), or weeks (W). It appears only when the duration parameter is specified with the TIME command for historical data. For more information about historical data: See Chapter 14, "Viewing Historical Data." Enter HELP TIME on the COMMAND line of a window.
mode	Where *mode* indicates BROWSE or EDIT mode, which is used for system administration views and replaces date and time status when either one is in effect. BROWSE is shown when you are viewing existing system administrative definitions; for example, a list of workloads or sampler definitions. EDIT is shown when you have an edit lock on the definitions to change them or create new ones.
prodid	Is the name of the MAINVIEW product you are using; for example, PLEXMGR.
n	Is the number of rows shown in the view (1 in the previous example).

Online help also provides information about these elements. Place the cursor on any element in the window information line and press your help key.

Working with the Window Control Area

The window control area comprises COMMAND, SCROLL, CURR WIN (current window), and ALT WIN (alternate window) fields. This area is used to enter commands, scroll view data, and activate and manage more than one window. By default, a single window is opened when you initially enter a product. You can change this to see data from multiple views simultaneously by splitting the display area into multiple windows, as described in "Creating a Window" on page 7-6. CURR WIN and ALT WIN identify and indicate which window is active when you have multiple windows open.

You can receive online help for any of these elements by selecting one with your cursor and pressing your help key.

Entering Commands

You can use the COMMAND line to enter:

- name of view you want to see
- alternate form commands
- data access commands
- data control commands
- informational commands, such as HELP

- session commands
- window management commands

These commands are listed and described in the *MAINVIEW Command List* a quick-reference card. For an online description, enter the following on the COMMAND line as shown:

```
COMMAND ==> HELP COMMANDS
```

Types of View Parameters

View parameters allow you to filter information to see only the data that is important to you, such as restricting view data to a specific status. You can do this with the following methods:

PARm Command

This command locks existing data, which saves system resources because a query is not issued. To refresh the data, you can use the QPARm command to reissue a query.

PARM can be entered on the COMMAND line of a current view with positional parameters or the internal name for the element you want to filter as follows:

COMMAND ===> PARM {*value1*|*keyword(value*)}

where:

value1 — Is a filter condition applied as a positional parameter (see page page 7-5 for a description of this parameter) for that view. It can be used only for positional parameters valid for the view you want to filter. To see a list of these parameters, place your cursor on the view name and press your help key.

keyword — Is a filter condition applied as a keyword parameter. The keyword parameter is the internal name for an element. The filter condition is used with the element name and must be enclosed in parentheses as *elemname(value)* To see the valid keywords for a view, you can use the SHOWFilt command as follows:

```
COMMAND ===> SHOWF
```

This command shows you the keyword filters currently in effect.

For example, the default positional and keyword parameters for the PLEX view are PRODUCT and CONTEXT. PRODUCT is the first positional parameter and CONTEXT is the second positional parameter. If you want to see the status for a specific context, you could enter one of the following while in the PLEX view:

```
COMMAND ===> PARM * SSIC*
```

For more information about the PARM command, enter HELP PARM on the COMMAND line.

Positional Parameters

These are entered on the COMMAND line in a specific order with a view name; for example:

```
COMMAND ===> viewname parm1 parm2 parm3
```

For a list of the positional parameters that can be used in a view, see online help by doing one of the following:

- enter HELP with the view name, then select the positional parameters topic
- select the view name from the window information line with your cursor and press your help key, then select the positional parameters topic

The parameters must be entered in the sequence shown in online help. You must use an * as a placeholder for each parameter you are not using. For example, if you want to filter status information to INACTIVE only and it is the third parameter for a view, it would be entered on the COMMAND line as follows:

```
COMMAND ==> viewname
```

Keyword Parameters

These are internal element names entered on the COMMAND line with the view name as follows:

```
COMMAND ==> viewname elemname(value)
```

where *elemname* is the internal name for an element shown in online help with the SHOWFilt command for that view and *value* is the filter condition.

View data can also be filtered using the commands and customization options described in Chapter 13, “Filtering Data Displayed in a View.”

Scrolling

If there are more rows or columns to be seen within a window, you can scroll up and down through the rows or left and right through the columns. You can use:

- commands to scroll a numerical amount indicated by the command or by an amount specified in the SCROLL field
- your PF keys to scroll a numerical amount specified in the SCROLL field

A scroll amount entered with a command takes precedence over any amount specified in the SCROLL field. Placing your cursor on the SCROLL field in a window and pressing your HELP key provides a description of how to use this field. You can hyperlink from here for a description of the commands you can use to scroll view data.

PF key assignments can be seen and changed with the KEYS command. For more information about this command, enter HELP KEYS on the COMMAND line.

Creating a Window

By default, your MAINVIEW terminal session (TS) starts with a single window. You can create multiple windows, horizontally and vertically, which allows you to:

- monitor and manage several systems from a single point of control
- see varying levels of detail from a single display

A maximum of 20 windows can be opened simultaneously.

When you split the display area to create another window, the number of the active window is shown in the CURR WIN field in the window control area at the top of the display. The new window is empty and has a window status of T in its window information line, which means it is available to receive view or window commands. For more information, select this status with your cursor and press your HELP key.

You can change the active window by entering the following on the COMMAND line as shown:

```
COMMAND ===> Wn
```

where *n* specifies the number of the window that you want to be the active window.

You can hyperlink from the active window to a related view in another window by using ALT WIN in the window control area. To do so, enter the number of the window in ALT WIN where you want the view from a hyperlink to be displayed. For example, if the active window is window 1 and you want to see more detail in a window you just created, such as window 2:

1. Specify a 2 in ALT WIN.

   This directs the hyperlink to window 2.

2. Place your cursor on a highlighted element in window 1 and press ENTER.

The hyperlink to the more detailed view is shown in window 2 (as demonstrated in the “Example” on page 7-8).

You can use an & character and the window number, such as &2, to retain the alternate window between actions so that you do not have to retype the number every time you want to hyperlink to a view in that window.

Online help provides more information about creating and hyperlinking windows. Enter HELP W*n* on the COMMAND line, where *n* can be 1 to 20.

Splitting Windows Horizontally

To split a window horizontally:

1. Enter HS on the COMMAND line.

2. Place the cursor where you want the new window to begin and press ENTER.

The HS command splits the display at the cursor position and creates another window.

Splitting Windows Vertically

To split a window vertically:

1. Enter VS on the COMMAND line.

2. Place the cursor where you want the new window to begin and press ENTER.

The VS command splits the display at the cursor position and creates another window.

Example

This example demonstrates how to create windows using Plex Manager. Plex Manager is a MAINVIEW system administration product that manages the connections between systems and MAINVIEW products. It is shipped with all MAINVIEW products.

1. Use the following CONTEXT command to access the Plex Manager product and the PLEX view:

   ```
   COMMAND ===> CON * PLEXMGR;PLEX
   ```

   The * character specifies the local CAS where your TS is connected. For more information about this command, see the online help description by entering HELP CON on the COMMAND line or see Chapter 11, “Viewing Performance Information from Multiple Systems.”

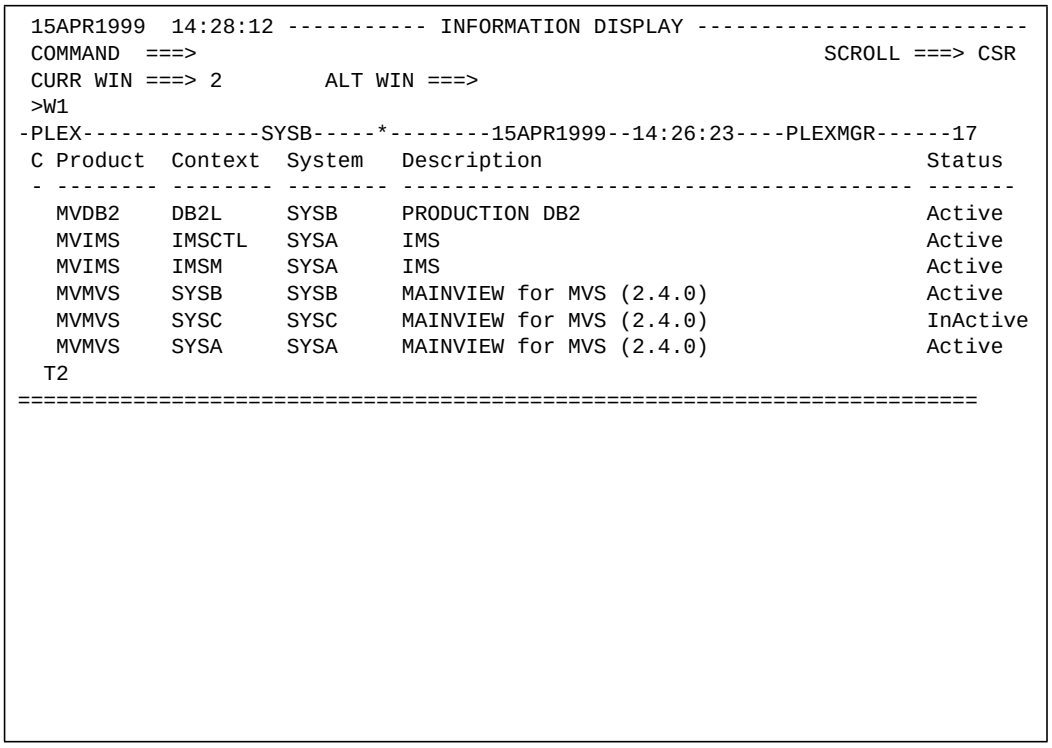
```
 15APR1999  14:26:50 ----------- INFORMATION DISPLAY --------------------------
 COMMAND  ===>                                                SCROLL ===> CSR
 CURR WIN ===> 1        ALT WIN ===>
 >W1
=PLEX==============SYSB=====*========15APR1999==14:26:23====PLEXMGR======17
 C Product  Context  System   Description                              Status
 - -------- -------- -------- ---------------------------------------- -------
   MVDB2    DB2L     SYSB     PRODUCTION DB2                           Active
   MVIMS    IMSCTL   SYSA     IMS                                      Active
   MVIMS    IMSM     SYSA     IMS                                      Active
   MVMVS    SYSB     SYSB     MAINVIEW for MVS (2.4.0)                 Active
   MVMVS    SYSC     SYSC     MAINVIEW for MVS (2.4.0)                 InActive
   MVMVS    SYSA     SYSA     MAINVIEW for MVS (2.4.0)                 Active
   MVVP     SSICICS  SYSA     SPECIALIZED SOFTWARE V                   Active
   MVVP     PUBCICS  SYSA     BBCS PUBLIC CICS V2.12                   Active
   MVVP     GUPCIC4  SYSA     GUPTA CICS V4.10                         Active
   MVVP     GUPCICS  SYSA     GUPTA CICS V3.30                         Active
   MVVP     TERXCICS SYSA     TENERA                                   Active
   MVVP     SYSB     SYSB     MAINVIEW VistaPoint (1.1.0)              Active
   MVVP     SSICIC3  SYSA     SPECIALIZED SOFTWARE V                   Active
   MVVP     SYSC     SYSC     MAINVIEW VistaPoint (1.1.0)              InActive
   MVVP     SYSA     SYSA     MAINVIEW VistaPoint (1.1.0)              Active
   MVVP     SYGYCICS SYSA     SYZYGY CICS V3.30                        Active
   MVVP     IMSM     SYSA     IMS                                      Active
```

   PLEX is the Plex Manager view that lists all active MAINVIEW products, their targets, and their target status. You can use this view to:

   - verify that a product or target system is available before trying to display that product's views
   - access any available system or product by hyperlinking to it from here

2. Enter HS on the COMMAND line, move the cursor down the screen to a position where you want the top of the second window to appear, and press your ENTER key.

The second window you created should be displayed as the active window in the CURR WIN field as follows:



3. Enter 2 in the ALT WIN field but do not press your ENTER key.

   This sets the second window you just created as a destination for a hyperlink from the first window.

4. Select a product from the list in the first window and press your ENTER key.

For example, if MVDB2 is selected from the first window (W1), that product's main menu is displayed in the second window (W2):

```
 15APR1999  14:30:05 ----------- INFORMATION DISPLAY -------------------------
 COMMAND  ===>                                              SCROLL ===> CSR
 CURR WIN ===> 2        ALT WIN ===>
 >W1
-PLEX--------------SYSB-----*--------15APR1999--14:26:23----PLEXMGR------17
 C Product  Context  System   Description                              Status
 - -------- -------- -------- ---------------------------------------- -------
   MVDB2    DB2L     SYSB     PRODUCTION DB2                           Active
   MVIMS    IMSCTL   SYSA     IMS                                      Active
   MVIMS    IMSM     SYSA     IMS                                      Active
   MVMVS    SYSB     SYSB     MAINVIEW for MVS (2.4.0)                 Active
   MVMVS    SYSC     SYSC     MAINVIEW for MVS (2.4.0)                 InActive
   MVMVS    SYSA     SYSA     MAINVIEW for MVS (2.4.0)                 Active
  W2
=MAIN==============DB2L=====*========15APR1999==14:30:04====MVDB2========18
 CMD View Name  Description
 --- ---------- ----------------------------
     ADMIN      Administrative Views
     DMON       Monitors by Target - Interval
     DMONC      Monitors by Target - Cluster
     DMONR      Monitors by Target - Realtime
     DMONS      Monitors by Target - Session
     DOBJ       Objectives Review - Interval
     DOBJR      Objectives Review - Realtime
     DOBJS      Objectives Review - Session
```

Notice that window 2 (W2) is now the active window as indicated by the 2 in the `CURR WIN` field.

5. Enter VS on the COMMAND line and move your cursor in the second window to a place where you want to split the window in half vertically and press your ENTER key.

Using the previous examples, you should have a display similar to the following:

```
 15APR1999  14:32:42 ----------- INFORMATION DISPLAY -------------------------
 COMMAND  ===>                                                SCROLL ===> CSR
 CURR WIN ===> 3        ALT WIN ===>
 >W1
-PLEX--------------SYSB-----*--------15APR1999--14:26:23----PLEXMGR------17
 C Product  Context  System   Description                                Status
 - -------- -------- -------- ------------------------------------------ -------
   MVDB2    DB2L     SYSB     PRODUCTION DB2                             Active
   MVIMS    IMSCTL   SYSA     IMS                                        Active
   MVIMS    IMSM     SYSA     IMS                                        Active
   MVMVS    SYSB     SYSB     MAINVIEW for MVS (2.4.0)                   Active
   MVMVS    SYSC     SYSC     MAINVIEW for MVS (2.4.0)                   InActive
   MVMVS    SYSA     SYSA     MAINVIEW for MVS (2.4.0)                   Active
 >W2 -MAIN--------------DB2L-----*-  T3 ======================================
 CMD View Name  Description         |
 --- ---------- ------------------- |
     ADMIN      Administrative View |
     DMON       Monitors by Target  |
     DMONC      Monitors by Target  |
     DMONR      Monitors by Target  |
     DMONS      Monitors by Target  |
     DOBJ       Objectives Review - |
     DOBJR      Objectives Review - |
     DOBJS      Objectives Review - |
```

Note: If you place your cursor in the window control area at the top of the display and press your ENTER key, this splits the entire view either vertically or horizontally.

6. Make the first window active by entering a 1 in the `CURR WIN` field.

7. Enter 3 in the `ALT WIN` field, which makes it the destination for a hyperlink from the first window.

8. Select another active product from the first window to hyperlink to that product's main window in window 3, as shown in the following example:

```
 15APR1999  14:38:14 ----------- INFORMATION DISPLAY -------------------------
 COMMAND  ===>                                                SCROLL ===> CSR
 CURR WIN ===> 3        ALT WIN ===>
 >W1
-PLEX--------------SYSB-----*--------15APR1999--14:37:01----PLEXMGR------17
 C Product  Context  System   Description                                Status
 - -------- -------- -------- ------------------------------------------ -------
   MVDB2    DB2L     SYSB     PRODUCTION DB2                             Active
   MVIMS    IMSCTL   SYSA     IMS                                        Active
   MVIMS    IMSM     SYSA     IMS                                        Active
   MVMVS    SYSB     SYSB     MAINVIEW for MVS (2.4.0)                   Active
   MVMVS    SYSC     SYSC     MAINVIEW for MVS (2.4.0)                   InActive
   MVMVS    SYSA     SYSA     MAINVIEW for MVS (2.4.0)                   Active
 >W2 -MAIN--------------DB2L-----*- >W3 =MAIN==============SYSB=====*=======25J
 CMD View Name  Description          | C View Name  Description
 --- ---------- ------------------- | - --------- --------------------------
     ADMIN      Administrative View |   ADMIN     Administrative views
     DMON       Monitors by Target  |   CFMON     Coupling Facility views
     DMONC      Monitors by Target  |   EZMENU    Easy access menu
     DMONR      Monitors by Target  |   JOBACT    Job activity views
     DMONS      Monitors by Target  |   SYSACT    System activity views
     DOBJ       Objectives Review - |   USER      User-created views
     DOBJR      Objectives Review - |   UTILITY   System utilities
     DOBJS      Objectives Review - |   VIEWS     All Views
```

The main menu shown in the third window of this example is the result of a hyperlink from the active MVMVS product in window 1 (W1). You now have multiple windows open with a different product in each. This allows you to track multiple targets from a single display. You can also use multiple windows to select views that allow you to hyperlink to progressive detail in each window.

Maximizing a Window

When several windows are open, you may want to see all the data from only one of them. To expand a window to its maximum size, do one of the following:

- specify the MAXimize command with the number of the window as follows:

  ```
  COMMAND ===> W2.MAX
  ```

- put the number of the window you want in the `CURR WIN` field and enter MAX on the COMMAND line.

The window you specified fills the display area. To see other views, you can scroll through each one in sequence by entering NEXt or PREVious in the COMMAND line.

To return all the windows you created to the display area, enter the RESTore command, as follows:

```
COMMAND ===> RESTORE
```

NEXt or PREVious can also be used to specify a timed cycle for refreshing view data if you have more than one window open. NEXt or PREVious scrolls cyclically by the amount of seconds you specify, refreshing view data displayed in maximized windows.

To specify a timed, data refresh cycle for views displayed in multiple windows:

1. Enter MAX on the COMMAND line as described above.

2. Enter NEXt or PREVious as follows:

   To scroll forward in a timed, data refresh cycle through each view, enter:

   ```
   COMMAND ===> NEXt nnn
   ```

   where *nnn* is the number of seconds from 3 to 999.

   To scroll backward in a timed, data refresh cycle through each view, enter:

   ```
   COMMAND ===> PREV nnn
   ```

   where *nnn* is the number of seconds from 3 to 999

   For example if you have opened four windows, have a view in each one, and maximized one of them, then entered:

   ```
   COMMAND  ===> PREV 15
   ```

   The data in each view is displayed and refreshed every 15 seconds, starting with the view in the maximized window where PREV 15 was entered and scrolling backward through all four views in a 15-second data-refresh cycle.

To cancel the data refresh cycle, use the attention interrupt key:

- For SNA terminals, use the ATTN key.
- For non-SNA terminals, use the PA1 key.

- For MAINVIEW Alternate Acess, use the PA1 key.

For some keyboards, RESet must be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM and MAINVIEW uses the keys assigned by this procedure. The same keys are used by TSO.

Closing a Window

You can close any window, provided the window does not have a pending operation. To close a window:

1. Enter the number of the window you want to close in the `CURR WIN` field.

2. Enter the CLOse command on the COMMAND line as shown:

   ```
   COMMAND ===> CLOSE
   ```

When you close a window, its display space is given to any adjoining windows.

To close all open windows at once, use the RESet command. RESet leaves a single empty window. The empty window has a status of T in the window information line, indicating it is available to receive view or window commands. This command also deletes all entries in any view or form stacks.

You can clear a window of its contents, but not close it, by using the CLEar command. A status of T appears in its window information line; it is ready to receive view or window commands.

Chapter 8 Creating and Saving Screens with Views

A screen comprises one or more windows and can be saved in your own personal screen data set or a site data set shared by everyone. Screens are useful when you frequently display the same combination of views, always in the same windows. For example, you might want to save a screen of windows showing the performance of three different systems.

Note: If you are looking at a stack of views and request a screen as described in this chapter, all of the open windows containing your views are closed.

Creating Screens

Creating screen definitions allows you to build an assortment of specialized screens that display views you typically need to troubleshoot repetitive performance problems. To create a screen:

1. Allocate a standard partitioned data set for your screen definitions called *userid*.BBSDEF, where *userid* is your TSO ID.

   Your personal screen definition is displayed before a site-wide screen definition by the same name. If you want to contribute to the site library, see your system administrator.

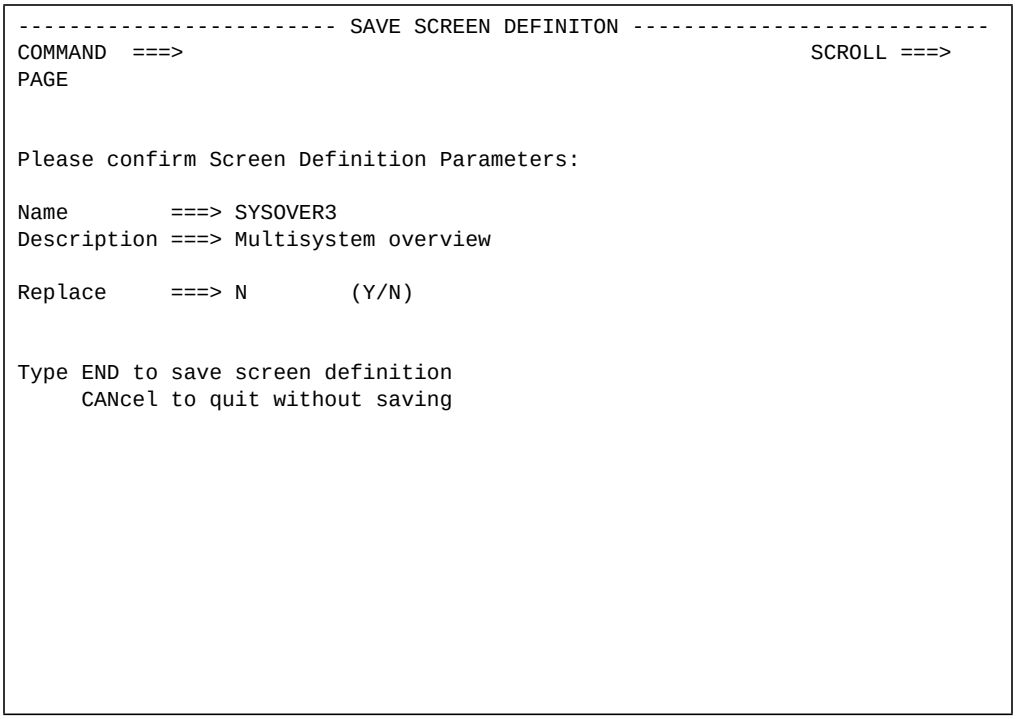
2. Open multiple windows with the views you want, as described in "Creating a Window" on page 7-6.

3. Enter SAVESCR in the command line as shown:

   ```
   COMMAND ===> SAVESCR
   ```

The following dialog is displayed, which lets you save multiple windows you create in one screen under a single name:

Figure 8-1 Save Screen Definition Dialog



Note: If you create a screen definition on a large display monitor, then try to display that screen definition on a smaller monitor, you will receive an error message. Screens created on a smaller monitor, however, always expand to fill the area afforded by a larger display.

4. Enter a unique name for your screen in the `Name` field.

   A description of the screen is optional.

Displaying Screens

To display a screen you created, you can:

- Enter the following command as shown:

  `COMMAND ===> SCReen` *`name`*

  where *name* is the name you specified in the Save Screen dialog.

- Use the SCREENS command (shown below) to display the SCREENS view, which lists all the screen definitions that have been saved for your user session plus those shared by your site, then select the screen you want.

Each MAINVIEW product contains a SCREENS view. If your MAINVIEW products are all installed on the same system, screen definitions for all of them appear in one SCREENS view. To see what screens your site has, enter the following on the COMMAND line as shown:

```
COMMAND ===> SCREENS
```

These screen definitions comprise specific views that reflect current time and contain refreshable data. They give you ideas for creating your own screen definitions and provide a starting point from where you can begin using hyperlinks to explore system performance.

Managing Screen Windows

You can manage your screen windows by using the commands described in “Creating a Window” on page 7-6. These commands let you:

- change the active window in your screen by entering the number of the window you want on the COMMAND line; for example:

  ```
  COMMAND ===> W3
  ```

  or by entering the number in the `CURR WIN` field

- designate a window as a destination for a hyperlink by using the `ALT WIN` field

- change the size and number of your windows with the HS and VS commands

- expand a window to its full size with the MAXIMIZE command and reestablish the screen's original windows with the RESTORE command

- scroll maximized windows with the NEXT and PREV commands

- close a window with the CLOSE command or just empty it without closing it with the CLEAR command

To save any changes you make, use the SAVESCR command.

Setting an Initial Screen

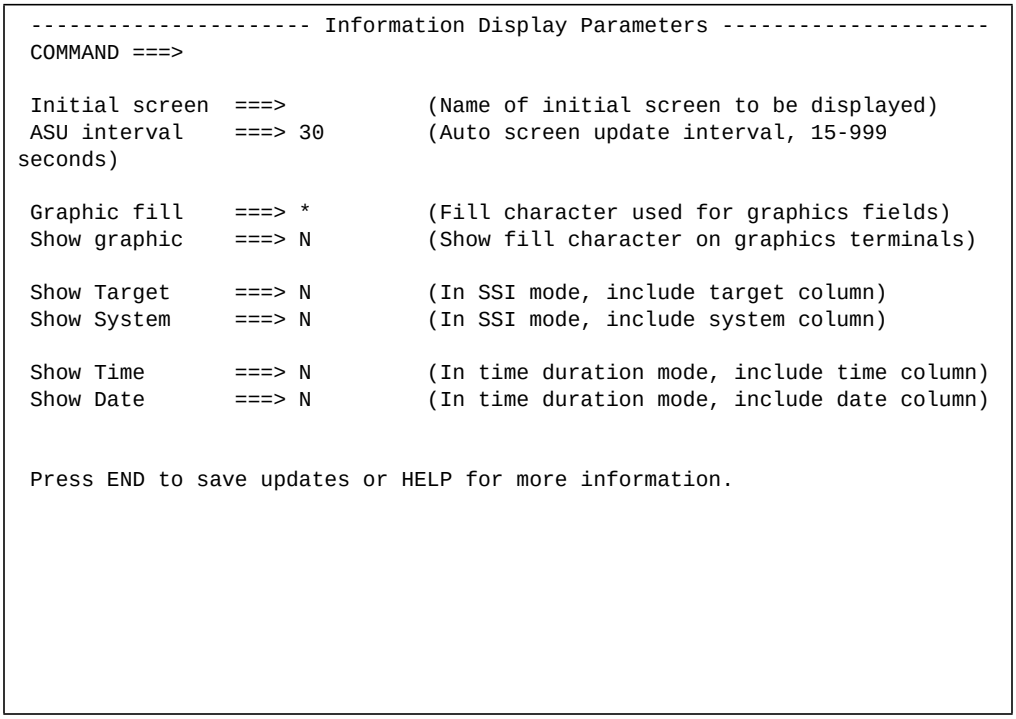
When you start a MAINVIEW product, you can display a screen containing a set of views customized to your site's needs. To do this:

1. Create the screen you want, as described previously in “Creating Screens” on page 8-1.

2. Enter the MVParms command.

3. Select the DISPLAY option from the MAINVIEW Parameter Editors menu.

   The Information Display Parameters dialog is displayed:



```
 ---------------------- Information Display Parameters ---------------------
 COMMAND ===>

 Initial screen  ===>           (Name of initial screen to be displayed)
 ASU interval    ===> 30        (Auto screen update interval, 15-999
seconds)

 Graphic fill    ===> *         (Fill character used for graphics fields)
 Show graphic    ===> N         (Show fill character on graphics terminals)

 Show Target     ===> N         (In SSI mode, include target column)
 Show System     ===> N         (In SSI mode, include system column)

 Show Time       ===> N         (In time duration mode, include time column)
 Show Date       ===> N         (In time duration mode, include date column)


 Press END to save updates or HELP for more information.
```

   For a description of these fields, select one and press your help key.

4. Enter the name of your screen in the Initial screen field.

Only screen names can be used. If you want a view for your initial screen, select the view then save it with a unique name with the SAVEScr command. Enter the screen name you used for that view.

Note: This initial screen is shared by all MAINVIEW products. If you use a screen you created with views from one product, then access a different product initially, you will still get the initial screen you created.

Chapter 9 Using Hyperlinks from a View

MAINVIEW products make it easy for you to display views by establishing hyperlinks between them. You can use predefined hyperlinks to other MAINVIEW products, views, or services.

Hyperlinking to Other MAINVIEW Products

Enter the following command, as shown below:

```
COMMAND ===> CONTEXT * PLEXMGR;PLEX
```

This command allows you to view all the MAINVIEW products installed at your site, their associated targets, and their status. You can use the PLEX view to hyperlink to other MAINVIEW products. For more information about the CONTEXT command, enter the following in the command line:

```
COMMAND ===> HELP CON
```

Selecting a product from this view hyperlinks to a menu for that product.

Hyperlinking between Views

Hyperlinks to other related views appear in different colors or are highlighted if you have a monochrome monitor. To display a view, you simply select one of these elements. A hyperlink is preset to provide you more information about the element you selected. You can also add your own hyperlinks, as described in “Setting Hyperlinks Between Views” on page 12-7.

Chapter 10 Using Menus in Windows Mode

Menus are views that provide a quick, convenient way to other views by a list of selectable options. You can select an option by placing your cursor on an option and pressing your ENTER key. You can create your own menu views to meet your site's specific needs.

There are several kinds of menus you can use to help you:

- Get anywhere quickly from a single place

  These are called easy menus and are identified by:

  EZ*pname*

  where *p* classifies the menu with a product family as shown below and *name* is the name of the menu as follows:

EZA*name*	MAINVIEW Alarm Manager
EZC*name*	MAINVIEW for CICS
EZD*name*	MAINVIEW for DB2
EZI*name*	MAINVIEW for IMS
EZM*name*	CMF MONITOR and MAINVIEW for OS/390
EZQ*name*	MAINVIEW for MQSeries (formerly known as Command MQ for S/390)
EZU*name*	MAINVIEW for UNIX System Services
EZV*name*	MAINVIEW VistaPoint
EZ*p*SSI	MAINVIEW product menu for viewing multiple targets (Single System Image context)

  These are primary easy menus and are displayed as MAIN menu options when a product initializes in a window. You also can access these easy menus by one of these methods:

— Display a list of views with the VIEWS command and select an easy menu from the list.

— Enter the name of the easy menu on the COMMAND line.

- Find information related to a specific resource, job, or workload.

  These are object easy menus that appear from a hyperlink from a related resource, job, or workload object in a view.

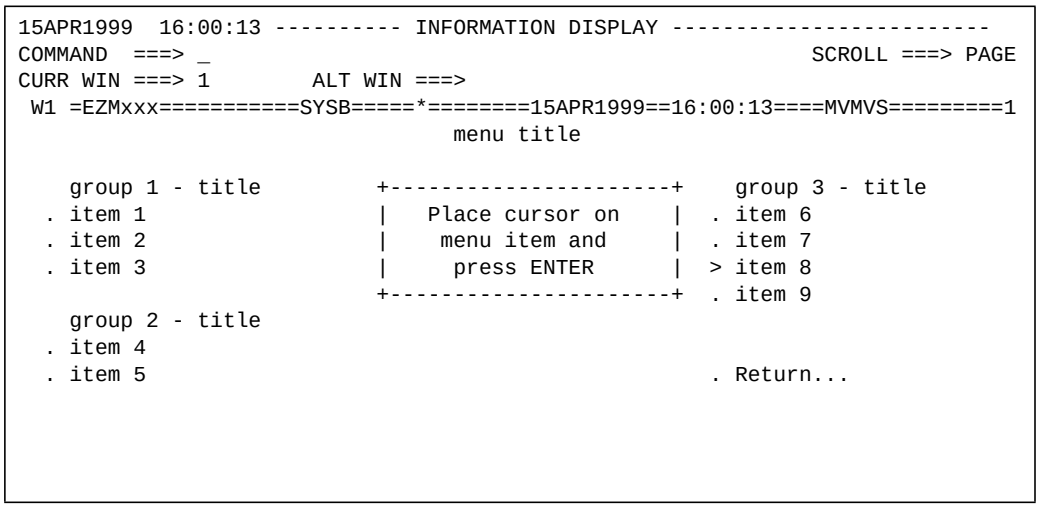
- Select a group of views by function upon initial product entry.

  These are called product MAIN views and are displayed when you request a product by selecting it from the MAINVIEW Selection Menu or from a Plex Manager view. While using a product, you can also request this view by entering its name on the COMMAND line or by selecting it from a list of views with the VIEWS command.

Easy Menus

As mentioned previously, there are primary and object easy menus. Primary and object easy menus look alike. Primary easy menus provide easy access to views by options with descriptive names. Object easy menus are related to objects (such as a resource, job, or workload) shown in other views and are displayed with a hyperlink from an object in a view.

When you request a primary easy menu either by name or from a view list, a view similar to the following is displayed:



Menu options are represented by ITEM in the preceding example. You can change this menu view to suit your site's needs. If you have a color monitor, the default colors for a 3270 monitor are:

Menu title Yellow

Hyperlinks White

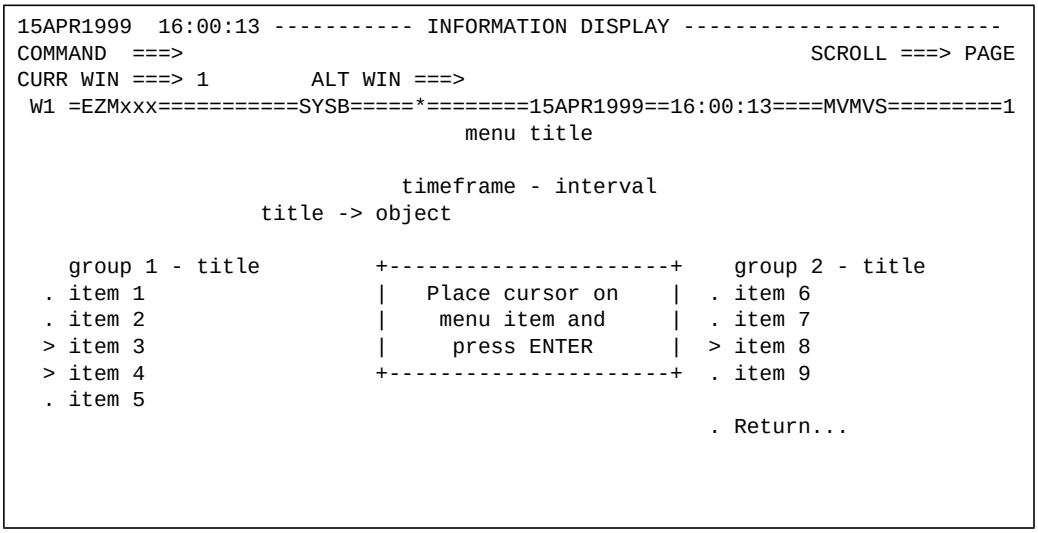
Items preceded by a . character hyperlink to view data. Items preceded by a > character hyperlink to a pop-up window or another menu.

Selecting RETURN shows the previous view.

Group title Blue

An asterisk (*) preceding an item indicates it is not an available option. This can occur when a menu applies to more than one product but not all products are installed. There may be an option that is applicable only to a specific product and that product is not available.

An object easy menu view similar to the following is displayed by hyperlinking from a view object, such as a job, resource, or workload:



You can change this menu view to suit your site's needs. Selections specific to the object (represented by item 1 through 5 in the preceding example) are grouped on the left side of the menu. Selections related to the object as a whole (represented by item 6 through 9 in the preceding example) are grouped on the right side of the menu. If you have a color monitor, the default colors for a 3270 monitor are:

Menu title Yellow

Object Green

Name of the object and its title indicating the type of object.

Hyperlinks White

Items preceded by a . character hyperlink to view data. Items preceded by a > character hyperlink to a pop-up window or another menu.

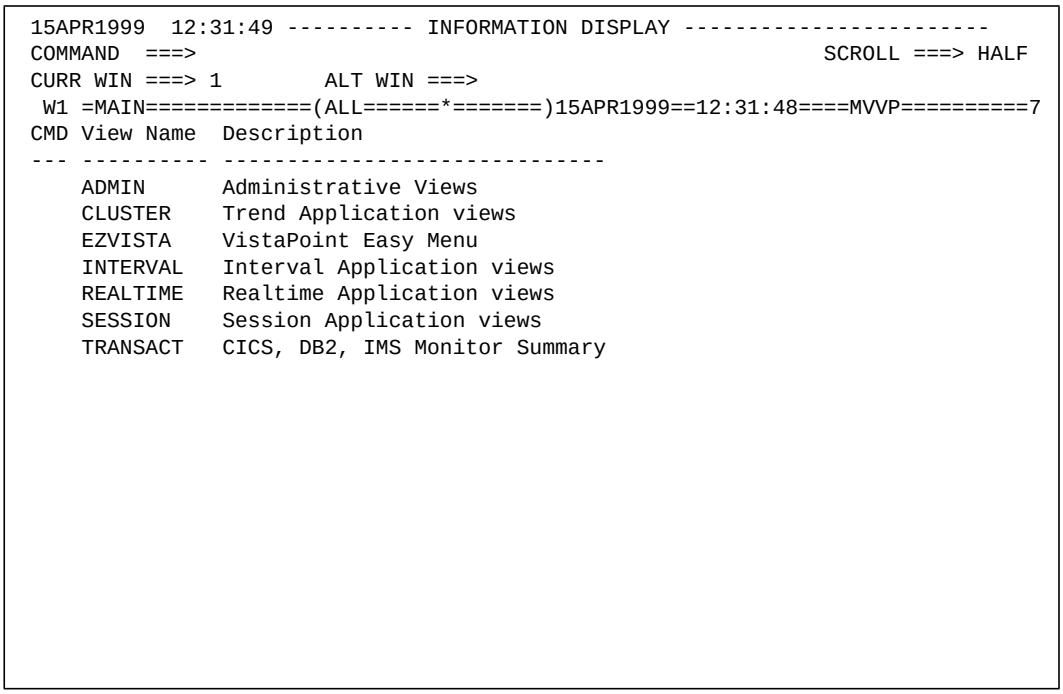
Selecting RETURN shows the previous view.

Group title Blue

An asterisk (*) preceeding an item indicates it is not an available option. This can occur when a menu applies to more than one product, but not all products are installed. There may be an option that is applicable only to a specific product and that product is not available.

MAIN Views

All products have MAIN views at initial product entry. Following is a sample MAIN view for the MAINVIEW VistaPoint product:



```
15APR1999  12:31:49 ---------- INFORMATION DISPLAY -----------------------
COMMAND  ===>                                                SCROLL ===> HALF
CURR WIN ===> 1        ALT WIN ===>
 W1 =MAIN=============(ALL======*=======)15APR1999==12:31:48====MVVP==========7
CMD View Name  Description
--- ---------- ------------------------------
    ADMIN      Administrative Views
    CLUSTER    Trend Application views
    EZVISTA    VistaPoint Easy Menu
    INTERVAL   Interval Application views
    REALTIME   Realtime Application views
    SESSION    Session Application views
    TRANSACT   CICS, DB2, IMS Monitor Summary
```

The MAIN view for all products categorizes each product's views by function. It is the primary starting point to the product's views. If you think you are getting lost, you can always return to the product's starting point by entering MAIN on the COMMAND line.

From the MAIN view, you can select a view category by:

- positioning your cursor on the category you want and pressing your ENTER key
- using a line command

This displays a list of view choices for the category you selected. You can also select a category by entering its name on the COMMAND line. For a description of the actions and commands for this view, place your cursor on the MAIN view name in the window information line and press your HELP key.

Chapter 11 Viewing Performance Information from Multiple Systems

From a single MAINVIEWmainview terminal session, you can control local and remote systems, access different products on those systems, and compare and contrast data from different time periods, all from the same display, and all at the same time. Plex Manager, a common service utility product which is shipped with all MAINVIEW windows products, allows you to define, administer, and access local and cross-system communications between MAINVIEW products in your sysplex or multisystem environment.

Using Plex Manager, you can see:

- multiple MAINVIEW products running across several MVS images in a single view and you can work with the information as a single system image (SSI) context

  Any combination of targets can be named as an SSI context or you can use the predefined SSI context ALL.

- data provided by a single MAINVIEW product running in one or more systems and you can work with the information as a single entity called a target context

Displaying Target Systems

To display target systems, you can select the Plex Manager common service utility from the MAINVIEW Selection menu or use the CONtext command. The CONtext command provides access to:

- multiple occurrences of a product monitoring an SSI context
- a product monitoring a target
- the same product monitoring a different target
- a different product monitoring the same target
- a different product monitoring a different target

You can display specific target data within an SSI context by using the SCOpe command. For more information about CONtext and SCOpe, enter one of the following on the COMMAND line as shown:

```
COMMAND ===> HELP CON

COMMAND ===> HELP SCO
```

As an alternative to the CONtext command, you can use the SET or SETD command. These commands display an ISPF dialog where you can change products, contexts, and targets by changing field values in the dialog:

```
------------- SET WINDOW CONTEXT, PRODUCT, SERVER, SCOPE AND VIEW ---------
COMMAND  ===>


  Window Parameters:

  Context     ===> SYSB
  Product     ===> PLEXMGR
  Server      ===> *
  Scope       ===> *
  View        ===> PLEXOVER


  Type END to set window parameters
       CANcel to quit without setting
```

SETD changes the default settings of new windows, but does not affect the context of the current window. SET is similar to the CONtext command.

The fastest way to access the Plex Manager view is to use the CONtext command:

```
COMMAND ===> CON * PLEXMGR
```

where * is the default target system where Plex Manager is running. This command displays the Plex Manager PLEXOVER view:

```
 15APR1999  15:47:41 ----------- INFORMATION DISPLAY -------------------------
 COMMAND  ===>                                                 SCROLL ===> CSR
 CURR WIN ===> 1        ALT WIN ===>
 >W1
=PLEXOVER==========SYSB=====*========15APR1999==15:46:13====PLEXMGR=======8
 C Context  Product  Description                                Status   Server
 - -------- -------- ---------------------------------------- -------
--------
   IMSCTL   MVIMS    IMS                                      Active   SSA6
   IMSCTL   MVVP     IMS                                      Active   SSA6
   IMSM     MVIMS    IMS                                      Inactive SSA6
   IMSM     MVVP     IMS                                      Inactive SSA6
   PUBCICS  MVCICS   BBCS PUBLIC CICS V2.12                   Inactive SSA1
   PUBCICS  MVVP     BBCS PUBLIC CICS V2.12                   Inactive SSA1
   PUBCIC2  MVCICS   BBCS PUBLIC CICS V3.21                   Active   CCIS
   PUBCIC2  MVVP     BBCS PUBLIC CICS V3.21                   Active   CCIS
```

PLEXOVER summarizes the status of local and remote MAINVIEW products and allows you to select active products. When more than one copy of a MAINVIEW product runs on a single system, PLEXOVER summarizes the status of all the copies in one row.

Entering the following command allows you to view a list of all the available systems and products:

```
CON * PLEXMGR;PLEX
```

where * is the default target system where Plex Manager is running. This command presents the following view:

```
15APR1999  11:05:33 ----------- INFORMATION DISPLAY --------------------------
 COMMAND  ===>                                                SCROLL ===> PAGE
 CURR WIN ===> 1        ALT WIN ===>
 >W1 =PLEX==============MVSA=====*========15APR1999==11:05:33====PLEXMGR======19
 C Product  Context  System   Description                              Status
 - -------- -------- -------- ---------------------------------------- -------
   CMF      MVSA     MVSA     CMF MONITOR Online                       Active
   CMF      MVSB     MVSB     CMF MONITOR Online                       InActive
   MMR      MVSA     MVSA     MAINVIEW for MVS                         Active
   MMR      MVSB     MVXB     MAINVIEW for MVS                         Active
   MVVP     CICSP01  MVSA     CICS Production region 1                 Active
   MVVP     CICSP02  MVSA     CICS Production region 2                 Active
   MVVP     CICSQ03  MVSB     CICS Query region 3                      Active
   MVVP     DB2P     MVSA     DB2 production                           Active
   MVVP     CICSD01  MVSA     CICS development region                  Active
   MVCICS   CICSP01  MVSA     MAINVIEW for CICS                        Active
   MVCICS   CICSQ02  MVSB     MAINVIEW for CICS                        Active
   MVDB2    DB2P     MVSA     MAINVIEW for DB2                         Active
   MVDB2    DB2D     MVSA     MAINVIEW for DB2                         InActive
   MVDB2    DB2Q     MVSB     MAINVIEW for DB2                         InActive
   MVIMS    IMSQA    MVSB     MAINVIEW for IMS                         Active
   PLEXMGR  MVSA     MVSA     Target Manager                           Active
   PLEXMGR  MVSB     MVSB     Target Manager                           Active
```

You can use the PLEX view to verify that a product or system is available before you try to request a product view.

You can select an active product from either this view or the PLEXOVER view by placing your cursor on the product you want and pressing your ENTER key. That product's MAIN menu view is then displayed.

Displaying SSI Contexts

Plex Manager also provides views that show you what targets in each SSI context are active. You can use these views to determine the status of targets being monitored by MAINVIEW products defined within an SSI context. These views are:

CONACTZ	Summarizes all the SSI contexts known to Plex Manager and shows the target status of each product by number of targets and number active.
CONACT	Lists all the SSI contexts known to Plex Manager, showing the name of the SSI context, the targets in that context, and the target status.
CONACTD	Displays the status of a single MAINVIEW product that is monitoring a target in an SSI context known to Plex Manager.

Another SSI context view, called CONASEL, can be selected as a context hyperlink from a MAINVIEW product easy menu. CONASEL provides the same function as CONACTZ only for a specific MAINVIEW product instead of Plex Manager. It summarizes all SSI contexts known to that product.

CONACTZ - SSI Context Status Summary for All Targets

```
15APR1999  10:46:53 ----------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                                 SCROLL ===> HALF
CURR WIN ===> 1        ALT WIN ===>
 W1 =CONACTZ==========SYSB=====*========15APR1999==10:46:53====PLEXMGR======59
CMD SSI      Product  Description                              Num  Num
--- Context- -------- ------------                             Targ Act
    ALL      PLEXMGR  all                                        8    8
    ALL      MVMVS    all                                       11   11
    ALL      MVDB2    all                                       14   14
    ALL      CMF      all                                        2    2
    ALP1     PLEXMGR  Alpharetta Production Complex 1            1    1
    ALP1     MVVP     Alpharetta Production Complex 1            1    1
    ALP1     CMF      Alpharetta Production Complex 1            1    1
    ALP1     MVMVS    Alpharetta Production Complex 1            1    1
    BBE      PLEXMGR  BBE cust training                          1    1
    BBE      MVDB2    BBE cust training                          1    1
    BBE      MVMVS    BBE cust training                          1    1
    BBE      MVVP     BBE cust training                          2    2
    BBE      CMF      BBE cust training                          1    1
    CMG      MVMVS    cmg test context                           1    1
    CMG      CMF      cmg test context                           1    1
    CMG      PLEXMGR  cmg test context                           1    1
    CMG      MVVP     cmg test context                           1    1
```

You can access this view by:

- Entering CONACTZ on the COMMAND line while using the Plex Manager product as follows:

  ```
  COMMAND ===> CONACTZ
  ```

- Entering the following on the COMMAND line as shown if you are not using Plex Manager:

  ```
  COMMAND ===> CON * PLEXMGR;CONACTZ
  ```

  where * is the default target system where Plex Manager is running.

This view lists all SSI contexts known to the current Plex Manager by the MAINVIEW products monitoring the target systems. It provides a count of the number of products by product type and shows a count of the number of products active within each product group.

To obtain specific status information for a product group defined to a context, place your cursor on the product group you want in the `SSI Context` column and press ENTER. This displays the CONACT view for that context.

For more information, you can select an element from this view and press your help key.

CONACT - SSI Context Status for All Targets

```
15APR1999  10:45:55 ----------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                                 SCROLL ===> HALF
CURR WIN ===> 1        ALT WIN ===>
>W1 =CONACT============SYSB=====*========15APR1999==10:45:55====PLEXMGR======17
CMD SSI      Product  Target   Status           Description
--- Context- -------- Context- of_Target---     ------------
    ALL      CMF      SYSB     ACTIVE           CMF MONITOR Online (5.2.0)
    ALL      MVDB2    DB2L     ACTIVE           PRODUCTION DB2
    ALL      MVIMS    IMSM     ACTIVE           MAINVIEW for IMS
    ALL      PLEXMGR  SYSB     ACTIVE           Target Manager
    ALP1     CMF      SYSB     ACTIVE           CMF MONITOR Online (5.2.0)
    ALP1     MVMVS    SYSB     ACTIVE           MAINVIEW for MVS (2.4.0)
    ALP1     MVVP     SYSB     ACTIVE           MAINVIEW VistaPoint (1.1.0)
    ALP1     PLEXMGR  SYSB     ACTIVE           Target Manager
    BBE      CMF      SYSB     ACTIVE           CMF MONITOR Online (5.2.0)
    BBE      MVDB2    DB2L     ACTIVE           PRODUCTION DB2
    BBE      MVMVS    SYSB     ACTIVE           MAINVIEW for MVS (2.4.0)
    BBE      MVVP     DB2L     ACTIVE           PRODUCTION DB2
    BBE      MVVP     SYSB     ACTIVE           MAINVIEW VistaPoint (1.1.0)
    BBE      PLEXMGR  SYSB     ACTIVE           Target Manager
    CMG      CMF      SYSB     ACTIVE           CMF MONITOR Online (5.2.0)
    CMG      MVMVS    SYSB     ACTIVE           MAINVIEW for MVS (2.4.0)
    CMG      MVVP     SYSB     ACTIVE           MAINVIEW VistaPoint (1.1.0)
```

You can access this view by one of the following:

- Selecting a product with your cursor from the `SSI Context` column in the Plex Manager CONACTZ view and pressing your ENTER key
- Entering CONACT on the COMMAND line while using the Plex Manager product as follows:

  ```
  COMMAND ===> CONACT
  ```

  Entering the following on the COMMAND line as shown if you are not using Plex Manager:

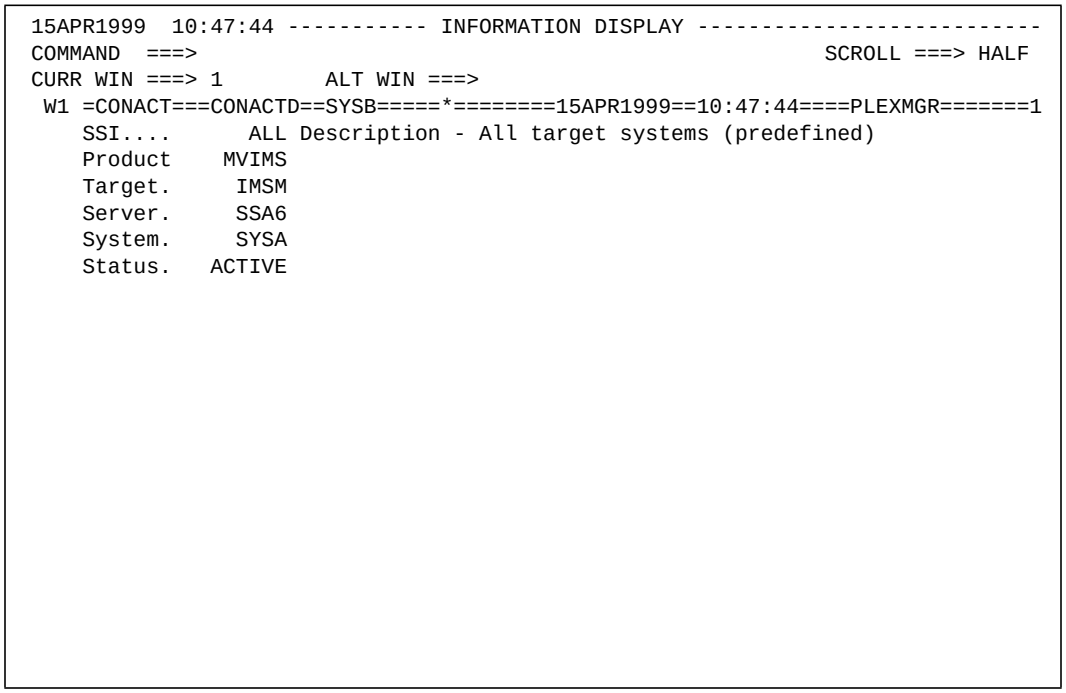
  ```
  COMMAND ===> CON * PLEXMGR;CONACT
  ```

  where * is the default target system where Plex Manager is running.

This view shows the status of each product monitoring a target within an SSI context. For more information about an SSI context, select a name in the SSI Context column and press your ENTER key. This displays the CONACTD view for that context.

For an online description of each element, select one with your cursor and press your help key.

CONACTD - SSI Context Status for a Single Target



You can access this view by selecting a product with your cursor from the `SSI Context` column in the Plex Manager CONACTZ or CONACT view and pressing your ENTER key.

This is a detail view showing activity for a specific product monitoring a single target in an SSI context.

You can select each element from this view and press your help key for an online description of that element.

Chapter 12 Customizing Views

Views can be customized so that a site can manage the performance of its own systems more effectively by:

- changing view elements and hyperlinks between views
- filtering and summarizing data presented in a view
- using color to set a threshold, such as less than 50% workflow to red, so that workloads at risk can be seen at a glance

Views customized to a site's own environment help isolate problems unique to that site. For a list of all the available customization options, enter the following on the COMMAND line:

```
COMMAND ===> HELP CUST
```

Note: Once you are in view customization, enter HELP to find out about the customization options.

Creating a New View

You can build your own assortment of views you typically need to troubleshoot performance problems unique to your site. To create a new view customized to your needs, you must allocate a standard partitioned data set for your views called *userid*.BBVDEF where *userid* is your TSO ID.

The site administrator can customize the site view library (*hilevel*.SBBVDEF) and users can customize their own view library (*userid*.BBVDEF). Personal views are displayed before a site-wide view by the same name. The system administrator can move customized views from a user library to the site library.

Note: Users can be kept out of view customization through security (see *Implementing Security for MAINVIEW Products*).

When you customize a view and save it, it is saved in your own user view library as a new view as shown in the examples in this chapter. These examples show you how to create a new view using the show and include options of customization.

Including Additional Fields

To provide you with more flexibility, some views have more elements than can be displayed. Customization allows you to see all the view elements and include or exclude those as you see fit. The example in this section uses the include option to customize a Plex Manager view to show you how easy it is to create a new view. Subsequent sections show you how to use some of the other customization options.

Online help describes all of the available options. You can browse the option descriptions by entering **HELP CUST** on the COMMAND line (or **HELP** if you are already in view customization).

Step 1 Display the view you want by selecting it from a list of views with the **VIEWS** command or enter its name on the COMMAND line.

The view used in this example (DIAGMSG) was selected from the Plex Manager MAIN selection views.

Step 2 Enter the **CUSTom** command on the COMMAND line of the view you want to change as shown:

```
COMMAND ===> CUST
```

```
 15APR1999  12:00:44 ----------- INFORMATION DISPLAY --------------------------
 COMMAND  ===> CUST                                          SCROLL ===> CSR
 CURR WIN ===> 1        ALT WIN ===>
  W1 =DIAGMSG==========SYSB=====*========15APR1999==12:00:29====PLEXMGR======11
 CMD Option   Status Scope    Description / Diagnostic Activity
 --- -------- ------ -------- --------------------------------
     GXDM     OFF    Global   Extended Diagnostic Mode
     LXDM     OFF    Local    Extended Diagnostic Mode
     GEMM     OFF    Global   Extended Message Mode
     LEMM     OFF    Local    Extended Message Mode
     LSEMM    OFF    Local    Security Extended Message Mode
     LESTR    OFF    Local    Extended Security Trace
     GESTR    OFF    Global   Extended Security Trace
     LSSTR    OFF    Local    Simple Security Trace
     GSSTR    OFF    Global   Simple Security Trace
     GSSM     OFF    Global   Safe Security Message Display
     WSXASTR  OFF    Window   Extended Authorization Simple Trace
```

This displays the customization options and a working copy of the view as follows:

```
----------------------- VIEW CUSTOMIZATION - DIAGMSG -------------------------
OPTION  ===>                                              SCROLL ===> CSR
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
------------------------------------------------------------------------------
Some options ask you to select a target column.  To do so, either type the
option with the column id on the OPTION line (as in: f e to format column E),
or type just the option, move the cursor to the target column and press ENTER.
Your changes are implemented every time you press ENTER.  You may save the
modified view definition with any name you choose.  Enter END (PF3) to exit.
------------------------------------------------------------------------------
    A        B      C        D
CMD Option   Status Scope    Description / Diagnostic Activity
--- -------- ------ -------- --------------------------------
    GXDM     OFF    Global   Extended Diagnostic Mode
    LXDM     OFF    Local    Extended Diagnostic Mode
    GEMM     OFF    Global   Extended Message Mode
    LEMM     OFF    Local    Extended Message Mode
    LSEMM    OFF    Local    Security Extended Message Mode
```

Step 3 Enter the E option to see any hidden elements:

```
COMMAND ===> E
```

This displays column E, the `Security Area` as shown below. Other views could have several hidden elements. Scroll to see them.

```
------------------------ VIEW CUSTOMIZATION - DIAGMSG ------------------------
OPTION  ===> E                                              SCROLL ===> CSR
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Hide excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
------------------------< Show excluded columns >-----------------------------
The view is now displaying all the excluded (or hidden) columns.  Excluded
columns are marked with highlighted column letters.  You can customize an
excluded column (for instance, place a filter on it).  You may also make the
column permanently displayable by using the Include option.
If you select E - Hide excluded, the excluded columns will again be hidden.
-------------------------------------------------------------------------------
    A        B      C        D                                      E
CMD Option   Status Scope    Description / Diagnostic Activity      Security
--- -------- ------ -------- -------------------------------        Area----
     GXDM     OFF   Global   Extended Diagnostic Mode               SYSOPTG
     LXDM     OFF   Local    Extended Diagnostic Mode               SYSOPTL
     GEMM     OFF   Global   Extended Message Mode                  SYSOPTG
     LEMM     OFF   Local    Extended Message Mode                  SYSOPTL
     LSEMM    OFF   Local    Security Extended Message Mode         SYSOPTL
```

Step 4 Enter the I option to include the `Security Area` column in your new view, select the E column with your cursor, and press your ENTER key:

```
------------------------ VIEW CUSTOMIZATION - DIAGMSG ------------------------
OPTION  ===> I                                              SCROLL ===> CSR
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Hide excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
--------------------< Include -   column: E   element: MSGSSECA        >------
The column has been included in the view.  Use the  Exclude option if you want
to hide the column again.



-------------------------------------------------------------------------------
    A        B      C        D                                      E
CMD Option   Status Scope    Description / Diagnostic Activity      Security
--- -------- ------ -------- -------------------------------        Area----
    GXDM     OFF    Global   Extended Diagnostic Mode               SYSOPTG
    LXDM     OFF    Local    Extended Diagnostic Mode               SYSOPTL
    GEMM     OFF    Global   Extended Message Mode                  SYSOPTG
    LEMM     OFF    Local    Extended Message Mode                  SYSOPTL
    LSEMM    OFF    Local    Security Extended Message Mode         SYSOPTL
```

A status message confirms that your column is included, as shown above, in the working copy of the view.

Notice that each column in the above example is assigned a unique letter. This allows you to select a column you want to change with one of the customization options listed in the top portion of the view. You can enter just the character for the option and select the column you want with your cursor. Or, enter the option character and the column letter. The customization option must precede the column letter; for example:

```
COMMAND ===> I E
```

where `I` is the customization option to include a column and `E` is the internal letter assigned to a column.

Step 5 Press your END key to finish customizing the view:

```
----------------------- VIEW CUSTOMIZATION - DIAGMSG ------------------------
OPTION  ===>                                                SCROLL ===> CSR
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Hide excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
-----------------------< Exit View Customization >---------------------------
View: DIAGMSG  has been modified. Do you wish to save your changes?

Save changes ==> YES  If you reply YES , you will be prompted for a view name.
                      If you reply NO  , the view will appear in its original
                      state the next time you request the view by name.
------------------------------------------------------------------------------
    A        B      C        D                                      E
CMD Option   Status Scope    Description / Diagnostic Activity      Security
--- -------- ------ -------- ---------------------------------      Area----
    GXDM     OFF    Global   Extended Diagnostic Mode               SYSOPTG
    LXDM     OFF    Local    Extended Diagnostic Mode               SYSOPTL
    GEMM     OFF    Global   Extended Message Mode                  SYSOPTG
    LEMM     OFF    Local    Extended Message Mode                  SYSOPTL
    LSEMM    OFF    Local    Security Extended Message Mode         SYSOPTL
```

A confirmation message prompts you to save your changes.

Step 6 Enter YES to save your changes.

This displays the dialog shown in the following example:

```
------------------------ VIEW CUSTOMIZATION - DIAGMSG ------------------------
OPTION  ===>                                                 SCROLL ===> CSR
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Hide excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
------------------------< Save View definition >-------------------------------
View name ==> fvdiagms        This view definition will be saved as a member in
Replace   ==> no  (Yes/No)    the data set allocated to DD statement BBVDEF .
Description  ==> Diag Msg Status and Security   Dynamic fields ==> YES (Yes/No)
Summary View ==>              (for tabular view only)
Press ENTER to save the view; enter END (PF3) to end without saving.
--------------------------------------------------------------------------------
    A        B      C        D                                      E
CMD Option   Status Scope    Description / Diagnostic Activity      Security
--- -------- ------ -------- ---------------------------------      Area----
    GXDM     OFF    Global   Extended Diagnostic Mode               SYSOPTG
    LXDM     OFF    Local    Extended Diagnostic Mode               SYSOPTL
    GEMM     OFF    Global   Extended Message Mode                  SYSOPTG
    LEMM     OFF    Local    Extended Message Mode                  SYSOPTL
    LSEMM    OFF    Local    Security Extended Message Mode         SYSOPTL
```

Step 7 Enter a unique name for the view in the `View name` field and press your ENTER key; for example:

`View name ==>` *`newname`*

This saves it as a new view in your user view library. From now on, you can display this new view by selecting it from a list of views with the **VIEWS** command or enter its name on the COMMAND line.

Note: A view with an = character in the `Product` column means the view is available from any MAINVIEW product that runs in windows mode.

Deleting a View

To delete any view that you have defined:

Step 1 Display a list of views with the **VIEWS** command.

Step 2 Issue line command **D** for the view you want to delete.

Note: You can delete any user-defined view, but you cannot delete a view distributed with the product.

Setting Hyperlinks Between Views

Elements highlighted in views have hyperlinks. A hyperlink has a command associated with it. When you position your cursor on a view resource within a highlighted element and press your ENTER key, the associated command is executed. You can customize how hyperlink element names are displayed, the hyperlink command, and the conditions against which the command is issued.

To create, change, or delete a hyperlink in a view:

Step 1 Enter the **CUSTom** command on the COMMAND line of the view you want to change:

```
COMMAND ===> CUST
```

Step 2 Select the H option:

```
COMMAND ===> H
```

Step 3 Place your cursor on the field where you want to change or set a hyperlink and press your ENTER key:

```
------------------------ VIEW CUSTOMIZATION - TGTDEF --------------------------
 OPTION  ===> H                                              SCROLL ===> HALF
 Options: (that require column selection)       Other options:
 F - Format    M - Move       I - Include       G - Graph      S - Save view
 O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
 L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
 ------------------------------------------------------------------------------
 Some options ask you to select a target column.  To do so, either type the
 option with the column id on the OPTION line (as in: f e to format column E),
 or type just the option, move the cursor to the target column and press ENTER.
 Your changes are implemented every time you press ENTER.  You may save the
 modified view definition with any name you choose.  Enter END (PF3) to exit.
 ------------------------------------------------------------------------------
     A        B        C        D                                E
 CMD CAS      Target   Product  Description                      Install
 --- Name---- Name---- -------- ------------                     Status--
     SYSA     DB2P     MVVP     BBCS TEST DB2 V3                 Modified
     SYSA     ETCCIC4  MVCICS   EMPRISE TECH CICS V4.1          Not Installed
     SYSA     SSICICS  MVCICS   SPECIALIZED SOFTWARE V          Modified
     SYSA     ETCDLSOT MVCICS   EMPRISE TECH CICS V3.3          Not Installed
     SYSA     GUPCIC4  MVCICS   GUPTA CICS V4.10                Not Installed
     SYSA     PUBCICS  MVCICS   BBCS PUBLIC CICS V2.12          Modified
     SYSA     PUBCIC3  MVCICS   BBCS PUBLIC CICS V3.30          Modified
     SYSA     ETCCICS  MVVP     EMPRISE TECH CICS V3.3          Modified
```

Use the `Condition:` field in the dialog, shown in the following example, to specify the criteria the data must meet to activate the hyperlink specified in the `Command:` field.

```
----------------------- VIEW CUSTOMIZATION - TGTDEF --------------------------
OPTION  ===> H                                            SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
---------------------< Hyperlink - column: E   element: TGTDSTAT        >------
Condition:       Command: (with parameters)
E = 'Not in*'    PLEXOVER_____________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
_________________ _____________________________________________________________
--------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSA     DB2P     MVVP     BBCS TEST DB2 V3                 Modified
    SYSA     ETCCIC4  MVCICS   EMPRISE TECH CICS V4.1           Not Installed
    SYSA     SSICICS  MVCICS   SPECIALIZED SOFTWARE V           Modified
    SYSA     ETCDLSOT MVCICS   EMPRISE TECH CICS V3.3           Not Installed
```

You can use relational operators and numeric values to establish a filtering condition. For a description of what can be specified for the condition and the hyperlink, press your help key from the customization view and hyperlink through the view customization options for hyperlinks.

Changing the Headings of Fields

Views contain data fields that show a single element of information about a resource in your enterprise. You can change the format of how a field and its data are displayed. To do this:

Step 1 Enter the **CUSTom** command on the COMMAND line of the view you want to change as shown:

```
COMMAND ===> CUST
```

Step 2 Select the F option:

```
COMMAND ===> F
```

Step 3 Place your cursor on the field you want to change and press your ENTER key:

```
----------------------- VIEW CUSTOMIZATION - TGTDEF -------------------------
OPTION  ===> F                                          SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
---------------------< Format  -   column: D   element: TGTDDESC        >------
Data type: Character         Display Mode => 1 ( 1 as is 2 as graph 3 as hex )
Width    => 32               Graph range (for 2): Low => 0     High => 0
Decimals => 0   (for numeric data)     Display zero values => N (Yes/No)
Heading1 => Product Description        Summarization type  => L (A/S/M/X/C/L/P)
Heading2 => -------------------         Condition (for C)  =>
------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSA     SYSA     PLEXMGR  Target Manager                   Modified
    SYSA     SYSA     MVMVS    MAINVIEW  for MVS (2.2.1)        Modified
    SYSB     SYSB     PLEXMGR  Target Manager                   Modified
    SYSB     SYSB     MVVP     MAINVIEW VistaPoint (1.1.0)      Modified
    SYSB     DB2L     MVVP     PRODUCTION DB2                   Not Installed
    SYSB     SYSB     MVMVS    MAINVIEW  for MVS (2.2.1)        Modified
    SYSB     DB2L     MVDB2    PRODUCTION DB2                   Not Installed
    SYSB     SYSB     CMF      CMF MONITOR Online (5.2.0)       Modified
```

Use the `Heading1` and `Heading2` fields in the dialog, shown in the preceding example, to rename the heading of the field you selected. You can also use the other fields in this dialog to change the way the data element is displayed. For a description of what can be specified for the display attributes, press your help key from the customization view and hyperlink through the view customization help for the format option.

Setting Thresholds and Assigning Colors

A data field in a view can be set to a threshold condition. Then when an element of information meets that condition, it is highlighted in color if your monitor supports colors. If your monitor does not support colors, high and low intensity are used.

To set a threshold to a data field and assign it a color:

Step 1 Enter the CUSTom command on the COMMAND line of the view you want to change as shown:

```
COMMAND ===> CUST
```

This displays view customization shown below.

```
------------------------ VIEW CUSTOMIZATION - TGTDEF --------------------------
OPTION  ===>                                                 SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template

--------------------------------------------------------------------------------
Some options ask you to select a target column.  To do so, either type the
option with the column id on the OPTION line (as in: f e to format column E),
or type just the option, move the cursor to the target column and press ENTER.
Your changes are implemented every time you press ENTER.  You can save the
modified view definition with any name you choose and specify where thresholds
are to be saved with the Threshold Location field.  Enter END (PF3) to exit.
--------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSD     SYSD     PLEXMGR  Target Definition                Modified
```

Step 2 Select the T option:

```
COMMAND ===> T
```

Step 3 Put your cursor on the field you want to change and press your ENTER key:

```
------------------------ VIEW CUSTOMIZATION - TGTDEF --------------------------
OPTION  ===> T                                               SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template

--------------< Threshold - column: E   element: TGTDSTAT        >-------------
Condition:               Attr:  Sub:   Inherit from =>     0: GREEN  5: GREEN
1st => E = 'NOT INSTALLED'  => 4  =>                       1: BLUE   6: BLUE
2nd => E = INSTALLED        => 5  =>                       2: YELLOW 7: YELLOW
3rd =>                      =>    =>                       3: PINK   8: PINK
4th =>                      =>    =>                       4: RED    9: RED
5th =>                      =>    =>
6th =>                      =>    =>
7th =>                      =>    =>
8th =>                      =>    =>
--------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSD     SYSD     PLEXMGR  Target Definition                Modified
```

Using the `Condition` and `Attr` fields in the dialog, shown in the preceding example, you can specify:

- Up to 8 threshold conditions in the `Condition` column

  To define a condition, use the internal letter of the field shown in the working copy of the view, a relational operator, and a value. For a list of the valid operators and values, press your help key from the customization view and hyperlink through the view customization help for the threshold option.

- A color for each condition using the `Attr` column and a numeric value from the color list shown on the far right

  To change the colors shown, enter MVParms on the COMMAND line and select the ATTRIBUTES option.

When you save your customized view, you can name it what you like and specify where you want the threshold saved. This gives you the opportunity to use this same threshold for other views containing this field. Specify where you want the threshold condition to be saved by using `Threshold Location` in the `Save View definition` area of `VIEW CUSTOMIZATION` as shown below.

```
------------------------ VIEW CUSTOMIZATION - TGTDEF --------------------------
 OPTION  ===>                                                SCROLL ===> HALF
 Options: (that require column selection)       Other options:
 F - Format    M - Move       I - Include       G - Graph      S - Save view
 O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
 L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template

 ------------------------< Save View definition >------------------------------
 View name ==> TGTDEF          This view definition will be saved as a member in
 Replace   ==> YES (Yes/No)    the data set allocated to DD statement BBVDEF .
 Description  ==> List of all Target Definitions Dynamic fields ==> YES (Yes/No)
 Summary View ==>                 (for tabular view only)
 Threshold Location ==> VIEW      (View/Central)
 Press ENTER to save the view; enter END (PF3) to end without saving.
 ------------------------------------------------------------------------------
     A        B        C        D                                  E
 CMD CAS      Target   Product  Description                        Install
 --- Name---- Name---- -------- ------------                       Status--
     SYSD     SYSD     PLEXMGR  Target Definition                  Modified
```

For `Threshold Location` you can enter one of the following:

CENTRAL — Saves the threshold and its attributes as a member in the PAS parameter library, BBPARM. The member name is BB*p*A*rrrr*, where *p* is the product identifier and *rrrr* is the internal record identifier. If you create another threshold for the same data field, the member is automatically replaced. Do not rename these members.

If you wish to use the same thresholds on multiple PASs, you can copy these members to the PAS parameter libraries, provided the PASs are the same release. Restart each PAS to activate the thresholds. If the PASs are not the same release, you must logon to each PAS and define the thresholds using the CUSTom command.

The same threshold and display attributes defined for a field apply to all instances of the same field element in other views.

VIEW — Saves the threshold and its attributes with the customized view in the BBVDEF view library.

The threshold and display attributes defined for a field apply only to this customized view. This is the default.

Chapter 13 Filtering Data Displayed in a View

You can establish conditions to show only the view data that meets your condition criteria. These conditions are defined with filters. A filter condition is one or more SQL-like expressions used to define criteria for the data elements in one or more fields. Simple filters define a condition for an element in a view column. Complex filters can affect multiple elements and apply to more than one condition. Filters can be set by using the:

- CUSTom command

  The L option can be used to set simple filter conditions against tabular, detail, or group-by views using a column's data element to select data rows. The P option can be used to set more complex filter conditions against any view data element using the Where or QWhere commands presented with this option. Your filter conditions can then be saved with the view by using option S.

- Where or QWhere commands

  These commands can be entered on the COMMAND line of a view to set complex filters. To save them, you must enter view customization with the CUSTom command and use option S.

- PARm command, as described in “Types of View Parameters” on page 7-4

Note: Any previously specified filter is replaced when another filter is specified using view customization, or the Where, QWhere, PARm, or QPARm commands.

Using the L Customization Option to Filter a View Column

To set a filter condition for a data element in a view column, use the L option in view customization. A filter comprises the internal letter assigned to a column as its column ID, an operator, and a numeric or mask value. The filter criteria is applied against the data elements for that column.

For example, if you want to see a specific status in the Plex Manager TGTDEF view:

1. Use the CUSTom command as shown below.

   ```
   COMMAND ===> CUST
   ```

2. Enter L on the COMMAND line of the customization view to filter a column and select the `Install Status` field with your cursor or enter the following on the COMMAND line of the customization view:

   ```
   COMMAND ===> L E
   ```

   where `L` requests the filter option and `E` is the column ID for the `Install Status` column in the TGTDEF view.

   This allows you to specify the filter condition for the column you want as shown in the following example:

```
----------------------- VIEW CUSTOMIZATION - TGTDEF -------------------------
OPTION  ===> L                                              SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
---------------------< Filter  -   column: E   element: TGTDSTAT        >------
Filter condition   => E = N*
Parameter position =>   (optional: 1 to 8; blank means not used positionally)
 A condition consists of the column id, an operator, and a value. This value
 can be overridden by requesting this view with a keyword parameter (using the
 element name as keyword) or a positional parameter (if you assign a position).
------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSA     DB2P     MVVP     BBCS TEST DB2 V3                 Modified
    SYSA     ETCCIC4  MVCICS   EMPRISE TECH CICS V4.1           Not Installed
    SYSA     SSICICS  MVCICS   SPECIALIZED SOFTWARE V           Modified
    SYSA     ETCDLSOT MVCICS   EMPRISE TECH CICS V3.3           Not Installed
    SYSA     GUPCIC4  MVCICS   GUPTA CICS V4.10                 Not Installed
    SYSA     PUBCICS  MVCICS   BBCS PUBLIC CICS V2.12          Modified
    SYSA     PUBCIC3  MVCICS   BBCS PUBLIC CICS V3.30          Modified
    SYSA     ETCCICS  MVVP     EMPRISE TECH CICS V3.3           Modified
```

   Specifying `E = N*` in the `Filter condition` field, as shown above, is a request to show only those targets with a status of `Not Installed`.

3. Use the `Filter condition` field to specify your condition criteria, which in the preceding example results in the following view:

```
---------------------- VIEW CUSTOMIZATION - TGTDEF -------------------------
OPTION  ===> L                                          SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
---------------------< Filter  -   column: E   element: TGTDSTAT        >------
Filter condition   => E = N*
Parameter position =>   (optional: 1 to 8; blank means not used positionally)
 A condition consists of the column id, an operator, and a value. This value
 can be overridden by requesting this view with a keyword parameter (using the
 element name as keyword) or a positional parameter (if you assign a position).
------------------------------------------------------------------------------
    A        B        C        D                                  E
CMD CAS      Target   Product  Product Description                Install
--- Name---- Name---- -------- -------------------                Status--
    SYSA     ETCCIC4  MVCICS   EMPRISE TECH CICS V4.1             Not Installed
    SYSA     ETCCIC4  MVVP     EMPRISE TECH CICS V4.1             Not Installed
    SYSA     TERXCICS MVCICS   TENERA                            Not Installed
    SYSA     ETCDLSOT MVCICS   EMPRISE TECH CICS V3.3             Not Installed
    SYSA     GUPCIC4  MVCICS   GUPTA CICS V4.10                  Not Installed
    SYSA     ETCDLSOT MVVP     EMPRISE TECH CICS V3.3             Not Installed
    SYSA     GUPCIC4  MVVP     GUPTA CICS V4.10                  Not Installed
    SYSA     IMSCTL   MVVP     IMS                                Not Installed
```

4. Save your customized view.

Pressing ENTER displays a prompt to save the filter with the view. Press the HELP key from the customization view for more information about using the L option.

Using the P Customization Option to Filter View Data Elements

To set a complex filter applying several conditions against more than one data element in a view and to save these conditions with the view, use the P option in customization. This option shows you positional parameters in effect and provides QWHERE and WHERE commands where you can specify complex filter conditions. Any previously specified filter will be replaced with the new filter.

Before you can customize a view using QWHERE and WHERE from the P option, you need to know the name of the element you want to filter. To determine the element name:

1. Enter WHATis on the COMMAND line of the view you want to filter before you request customization with the CUSTom command.

2. Place your cursor on the data field for the elements to be filtered and press your ENTER key.

   For example, entering WHAT on the COMMAND line of the Plex Manager TGTDEF view, selecting the `Product` field with your cursor, and pressing your ENTER key displays a `Field Information` window with an `Element Name` of `TGTDPROD` for `Product` data elements.

The following example uses the Plex Manager TGTDEF view to filter the view data to only those products with names that start with MVI or MVV.

1. Use the CUSTom command as shown below.

   ```
   COMMAND ===> CUST
   ```

2. Enter P in the OPTION line of the customization view.

   This presents the following customization view:

```
------------------------ VIEW CUSTOMIZATION - TGTDEF --------------------------
OPTION  ===> P                                              SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
--------------------< Positional Parameters for TGTDEF   >---------------------
# Col Element      Filter               # Col Element      Filter
1                                       5
2                                       6
3                                       7
4                                       8
------------------------------------------------------------------------------
This data displays filters, when QWHERE and/or WHERE commands were issued.
QWHERE


WHERE


------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
```

3. Enter the WHERE command as shown here and in the following sample view:

   ```
   WHERE (TGTDPROD = MVI*) OR (TGTDPROD = MVV*)
   ```

   The WHERE command applies the filter conditions against the data. The view is updated with data that meets the filter conditions.

   TGTDPROD is the element name for the `Product` data field. The condition is to show only those products with names that start with MVI or MVV. Conditional expressions must be enclosed in parentheses.

```
----------------------- VIEW CUSTOMIZATION - TGTDEF --------------------------
OPTION  ===> P                                              SCROLL ===> HALF
Options: (that require column selection)       Other options:
F - Format    M - Move       I - Include       G - Graph      S - Save view
O - Order     R - Repeat     X - Exclude       P - Parameters E - Show excluded
L - Filter    T - Threshold  H - Hyperlink     Z - Summarize  K - Show template
--------------------< Positional Parameters for TGTDEF   >---------------------
# Col Element      Filter              # Col Element      Filter
1                                      5
2                                      6
3                                      7
4                                      8
------------------------------------------------------------------------------
This data displays filters, when QWHERE and/or WHERE commands were issued.
QWHERE


WHERE  (TGTDPROD = MVI*) OR (TGTDPROD = MVV*)


------------------------------------------------------------------------------
    A        B        C        D                                E
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
```

Scroll down and press ENTER to see the results of the filter you set:

```
25APR1199  15:40:22 ----------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                               SCROLL ===> HALF
CURR WIN ===> 1        ALT WIN ===>
>W1 =TGTDEF============SYSB=====*========(99 BROWSE        )====PLEXMGR======22
CMD CAS      Target   Product  Description                      Install
--- Name---- Name---- -------- ------------                     Status--
    SYSA     IMSM     MVIMS    IMS                              Installed
    SYSA     DB2P     MVVP     BBCS TEST DB2 V3                 Installed
    SYSA     DB2X     MVVP     BBCS PROD DB2 V3                 Installed
    SYSA     IMSM     MVVP     IMS                              Installed
    SYSA     ETCCIC4  MVVP     EMPRISE TECH CICS V4.1           Not Installed
```

Pressing your END key displays a prompt asking you if you want to save the filter with the view.

For more information about using QWHERE and WHERE with the P option in customization, press your HELP key from the customization view.

Using QWHERE or WHERE Commands to Filter Data

QWHERE and WHERE, described in “Using the P Customization Option to Filter View Data Elements” on page 13-4, can be entered on the COMMAND line of a view instead of using customization. When you use either of these commands, the following dialog for the command is displayed:

```
------------------------------ SET WHERE FILTER -------------------------
COMMAND  ===>

Where Condition:



 Type END to update the form filter
      CANcel to quit without updating
```

Any previously specified filter will be replaced with the new filter. As with WHERE and QWHERE for the P option in customization, you must know the name of the elements against which the filters is to be applied. To display the name of the element for a field, enter WHAT on the COMMAND line and use your cursor to select the data field. Enter your filter conditions as shown below:

```
------------------------------ SET WHERE FILTER -------------------------
COMMAND  ===>

Where Condition:
(TGTDPROD = MVI*) OR (TGTDPROD = MVV*)



 Type END to update the form filter
      CANcel to quit without updating
```

When you are finished establishing filter conditions for the view, you can save them with the view by using the S option from view customization.

Press your help key from the SET dialog to learn more about the QWHERE and WHERE commands.

Chapter 14 Viewing Historical Data

System data from the past, such as an hour ago, yesterday, or last month can be stored in historical data sets and viewed with the TIME command. To see if data has been recorded to historical data sets, enter DSLIST or VIEW DSLIST on the COMMAND line. This lets you view a list of currently allocated historical data sets.

DSLIST shows the date and time data was recorded. If you use the TIME command to request a date or time that data was not recorded, a message is issued. If the time period you want is not shown by DSLIST, the data might have archived, overwritten by new data, or never collected during that time. See your system administrator if you need access to this data.

Using the TIME Command

When you request historical data with the TIME command, data from the most recent interval specified and preceding intervals is presented in a view. A detail view displays only the last interval in a time frame.

You can enter TIME as follows:

```
COMMAND ===> TIME
```

A `SET TIME FRAME` window prompting you for the TIME command parameters is shown.

The syntax for the TIME command is:

```
TIME date time [{duration|NEXT|PREV} dowmask todmask]
```

where:

date Is required. It is the ending date of the data you want to look at and can be:

ddmmmyyyy Specify the date in the same format as the current date, which always appears in the upper left corner of the screen, for example 15APR1999.

Note: You can change the format of the date by entering MVParms on the COMMAND line and selecting the date option.

*	Current date
=	The date specified with a preceding TIME request
TODAY or TDAY	Today’s date (the same as specifying *)
YESTERDAY or YDAY	Yesterday's date
LASTSUNDAY or LSUN	Last Sunday's date
LASTMONDAY or LMON	Last Monday's date
LASTTUESDAY or LTUE	Last Tuesday's date
LASTWEDNESDAY or LWED	Last Wednesday's date
LASTTHURSDAY or LTHU	Last Thursday's date
LASTFRIDAY or LFRI	Last Friday's date
LASTSATURDAY or LSAT	Last Saturday's date
ENDOF MONTH or EOM	Last day of the previous month
ENDOFYEAR or EOY	Last day of the previous year
LASTWEEKDAY or LWKD	Most recent weekday prior to today
LASTWEEKENDDAY or LWKED	Most recent weekend day prior to today
FIRSTOFMONTH or FOM	First day of the current month
FIRSTOFWEEK or FOW	First day of the current week (Monday)
FIRSTOFYEAR or FOY	First day of the current year

FIRSTWEEKDAY or FWKD	First day of the current week (same as specifying FIRSTOFWEEK
FIRSTWEEKENDDAY or FWKED	First day of the most recent weekend (Saturday)

*-*nnn*
nnn days prior to today, up to 365 days

time Is required. It can be:

hh:mm	The ending time of the data you want to look at
*	Current time
=	Time specified with a preceding TIME request

duration Is optional. It is the time period over which you want your data summarized. The default is one recording interval (usually 15 or 30 minutes).

Specify the duration as:

*nnnn*H	Where *nnnn* is the number of hours in the duration, up to 9999
*nnnn*M	Where *nnnn* is the number of minutes in the duration, up to 9999
*nnnn*I	Where *nnnn* is the number of recording intervals in the duration, up to 9999
*nnn*D	Where *nnn* is the number of days in the duration, up to 416
*nn*W	Where *nn* is the number of weeks in the duration, up to 59
*	Is one recording interval
=	Duration specified with a preceding TIME request
TODAY or TDAY	Today's intervals back to midnight. This keyword can be specified only when a *date* of TODAY is also specified.
MONTH	One month back from the end date

NEXT Is specified instead of the duration parameter. NEXT uses the duration value currently in effect to cycle forward by the duration amount.

PREV Is specified instead of the duration parameter. PREV uses the duration value currently in effect to cycle backward by the duration amount.

dowmask

Is an optional day-of-week mask that limits the selected intervals within the specified time to those that end on specific days of the week. If *dowmask* is specified, *todmask* must also be specified. Specify one of the following:

= (Retains the current day-of-week mask)
*, EVERYDAY or EVDAY
MONDAYS or MONS
TUESDAYS or TUES
WEDNESDAYS or WEDS
THURSDAYS or THUS
FRIDAYS or FRIS
SATURDAYS or SATS
SUNDAYS or SUNS
WEEKDAYS or WKDAYS
WEEKENDS or WKENDS

You can abbreviate these keywords to the shortest recognizable form (for example, SA for SATURDAYS or SU for SUNDAYS, but not S).

Alternatively, you can specify multiple days by providing a 7-character string of N or Y indicators. The first character represents Sunday, the second Monday, the third Tuesday, and so on. N indicates the day is not selected. Y indicates the day is selected. For example, NYNYNYN specifies Mondays, Wednesdays, and Fridays, where NNYNYNN specifies Tuesdays and Thursdays.

todmask

Is an optional time-of-day mask that limits the selected intervals within the specified time to those that end within a time-of-day range. If *todmask* is specified, *dowmask* must also be specified. Specify one of the following:

=	Retains the current time-of-day mask
*, ALLDAY or AD	All hours of the day
PRIMESHIFT or PS	08:01 through 16:00
SWINGSHIFT or SS	16:01 through 00:00
GRAVEYARDSHIFT or GS	00:01 through 08:00

You can abbreviate these keywords to the shortest recognizable form (for example, P for PRIMESHIFT).

Alternatively, you can specify an 11-character string consisting of the start and end times in 24-hour clock notation separated by a dash. For example, 10:01-14:00 specifies intervals ending between 10:01 A.M. and 2:00 P.M.

TIME Command Examples

The following examples demonstrate several different uses of the TIME command:

Example 1: Assume that today is April 15, 1999. To retrieve data from one week ago at 9:25 A.M., enter:

```
COMMAND ===> TIME 08APR1999 09:25
```

This displays data from the previous week at the end of the interval that contains 9:25; that is, the interval between 9:15 and 9:30.

Example 2: To display data from the next interval starting on the same date and time as the last interval specified, enter:

```
COMMAND ===> TIME = = NEXT
```

This is a request for one interval (the default) from the date and time last specified. Using the previous example, data from April 8, during the interval from 9:30 to 9:45, is displayed.

Example 3: To display data from the three-hour period ending on April 15, 1999 at 12 noon, enter:

```
COMMAND ===> TIME 15APR1999 12:00 3H
```

Example 4: To display data from the next day during the same time period, enter:

```
COMMAND ===> TIME 16APR1999 = =
```

The equal signs request the last specified time and duration. Using the previous example, this would be 12:00 and 3H.

Example 5: To display data for 30 minutes ending at 8:00 on April 15, enter:

```
COMMAND ===> TIME 15APR1999 08:00 30M
```

Example 6: To display data from today at 9:00, enter:

```
COMMAND ===> TIME * 9:00
```

The asterisk in this position indicates the current date.

Example 7: To re-establish the current time, enter:

```
COMMAND ====> TIME * * *
```

Example 8: Sometimes the window information line does not look the way you might expect after entering the TIME command. Suppose you enter:

```
COMMAND ===> TIME * 11:00 4I
```

You would expect the window information line to look like this:

```
=======SYSB=====*======15APR1999===11:00====60M=MVMVP===2
```

However, it might look something like this:

```
=======SYSB=====*======15APR1999===10:45====45M=MVMVP===2
```

When the time field contains an earlier time and the duration field contains a lower duration than you expect, that means that data was not available during one or more of the intervals you requested. In this example, data was not recorded between 10:45 and 11:00, so the time field says 10:45.

Example 9: Suppose today is April 15; you want to find out what system performance was like yesterday at 4:00 P.M. and compare it to what the system is doing now.

To do this:

1. Request the view you want.

   The following example uses a MAINVIEW VistaPoint view requested by way of hyperlinks from the MVVP element in the `Product` column of the Plex Manager PLEX view.

2. Create a second window.

   A. Enter the HSplit or VSplit command.
   B. Move the cursor to where you want the new window to begin.
   C. Press ENTER.

   The `CURR WIN` field shows a 2, indicating that the second window you just created is now active.

3. Set the time for window 2 by specifying yesterday's date and 4:00 P.M. as follows:

   ```
   COMMAND ===> TIME 14APR199916:00
   ```

4. Now request the same view for window 2, which is still active.

   Your screen should look something like this:

Figure 14-1 Viewing Data in Two Different Time Periods

```
15APR1999  10:57:59 ----------- INFORMATION DISPLAY --------------------------
COMMAND  ===>                                                SCROLL ===> CSR
CURR WIN ===> 2        ALT WIN ===>
>W1 -APOVERC----------SYSB-----*--------15APR1999--10:52:51----MVVP----------9
CMD Appl           Realtime %Obj       Interval %Obj       Session %Obj  Total
--- --------       0....50...100       0....50...100       0....50...100 Wklds
    APBATCH  -----                138.5 ************+ 142.0 ************+     1
    APPROD   -----                 69.0 *********     105.5 ************+     1
    BBPHONE  155.5 ************+  26.5 ***              27.0 ****               1
    GL        75.0 **********      87.5 ***********    92.5 ************       1
    LAURAAP1 -----                 87.0 ***********    93.0 ************       1
    OLTPWORK -----                -----                103.5 ************+     1
    PAYROLL  116.5 ************+  19.5 ***              20.0 ***                1
    SAMPLE   108.0 ************+  66.0 *********       76.0 **********         1
    TEST0620 -----                 43.5 ******          46.0 ******             1
>H2 =APOVERC==========SYSB=====*========14APR1999==16:00:00====MVVP==========9
CMD Appl           Realtime %Obj       Interval %Obj       Session %Obj  Total
--- --------       0....50...100       0....50...100       0....50...100 Wklds
    APBATCH  155.5 ************+ 136.5 ************+ 134.0 ************+     1
    APPROD   -----                 68.0 *********     114.5 ************+     1
    BBPHONE  155.5 ************+  23.5 ***              34.5 ****               1
    GL       150.0 ************+  90.0 ************   92.5 ************       1
    LAURAAP1  77.5 **********      99.0 *************  89.5 ************       1
```

You can now compare today's system performance with yesterday's.

Note that the window status indicator for the second window shows H2. The H stands for historical data.

If you need more information about the TIME command, enter HELP TIME on the COMMAND line.

Viewing Date and Time Fields for Historical Data

The following fields show the time, date, and hour historical data was collected:

Field Name	Displays
Interval Date	Date data was collected
Intvl Time	Ending time of the interval during which data was collected
Hr (hour)	Hour of day data was collected For example, if the time shows as 8:30, `Hr` shows as 8.

For these fields to appear in a view:

- Historical data must be displayed.
- MAINVIEW parameters must be set to show them.
- They must be allowed and shown for the view.

To control the default display of the date and time fields:

1. Enter the **MVParms** command as follows:

   COMMAND ===> MVP

2. Select the display option.

3. Enter Y (Yes) or N (No) in the `Show Time` and `Show Date` fields for the Information Display Parameters dialog.

Note: You can temporarily see the date and time fields (if available for a view) by issuing these commands:

```
INCLUDE TIME
INCLUDE DATE
```

Chapter 15 Getting Help in Full-Screen Mode

When operating in full-screen mode you can get help with any of these methods:

- using your HELP key
- using the H line command
- selecting the tutorial

Using Your HELP Key

You can get help at any time about the current full-screen application or service by pressing your HELP key. PF1/13 is the default. An ISPF panel with information about the current application or service is displayed. Often, you will be presented with a menu from which you can select further information.

If you press the HELP key when an error message is displayed, a detailed description of the error message is usually generated. With most MVCICS services, you can move the cursor to any field and press the HELP key to get detailed information about that field.

Press the END key to exit help and return to your original application or service.

Using the H Line Command

From each of the following applications, you also can use the H line command to select help for a specific service:

- Current Traces
- Active Timer Requests
- Analyzer Display Services

Note: These applications are not available in all MAINVIEW products.

Selecting the Tutorial

From the Primary Option Menu of each product that operates in full-screen mode, you can select a tutorial option (option T). This option provides you with one or more of the following:

- BBI tutorial

  Information covering all BBI-based products and services you have installed that operate in full-screen mode is provided. Menu options, applications, and commands are described in an extensive set of menus and panels. They are used the same as ISPF tutorials.

- news

  Information about what is new in the current product release is provided.

- tutorial exercises

  Step-by-step exercises to familiarize new users with the product are provided.

Chapter 16 Displaying Data in Full-Screen Mode

System performance information is presented by MAINVIEW products in either a view or standard ISPF display. A standard ISPF display is used by products that operate in full-screen mode.

This chapter discusses how to use these displays when you are in full-screen mode.

Primary Option Menu

Each MAINVIEW product that operates in full-screen mode has a Primary Option Menu. This menu is first displayed when you assess each of these products from the MAINVIEW Selection Menu (see Figure 2-1 on page 2-1).

The first group of selections from these menus consists of specific product options that help you manage performance. These options vary greatly from product to product. See your individual product manuals for more specific information.

The general services options are available from the Primary Option Menus of all MAINVIEW products that run in full-screen mode. This group of options allows you to:

- display refreshable applications in a continuous timed cycle
- display MAINVIEW service messages and monitor warnings, terminal session commands, and target (MVS, CICS, IMS, DB2) messages
- display descriptions of messages generated by MAINVIEW products running in full-screen mode

- display supported terminals and the functions assigned to PF keys by MAINVIEW
- display online help
- terminate the product session

See Chapter 17, “Using General Services” for more information.

Performance Data Display

Figure 16-1 shows the header fields for a sample performance data display when running in full-screen mode. This sample shows both input and output fields, which are available with most MAINVIEW products when running in full-screen mode. When the SERV and PARM fields are available (instead of the COMMAND field), this display also can be used to directly make requests for other display services.

Figure 16-1 Sample Performance Data Display

```
-------------------------   DB2 SYSTEM STATUS     -----------PERFORMANCE MGMT
SERV ==> DB2ST            INPUT   18:05:25  INTVL=> 5  LOG=> N  TGT==> DB2G
PARM ==>                                    ROW      1 OF     26 SCROLL=> CSR
EXPAND:  DB2EX, DBTS, USERS, CICSC, LOCKU, LKOUT, MON(ALL), EDMPL, BFRPL,
ZPARM
```

The input fields are:

SERV Enter a 2- to 5-character service select code for an analyzer display service as described in the product manuals (MAINVIEW for DB2, MAINVIEW for DBCTL, and MAINVIEW for IMS only).

Application or product transfer commands also can be entered in this field as described in Chapter 18, “Transferring Applications.”

PARM Enter (optional) parameters, up to 55 characters as described in the product manuals (MAINVIEW for DB2, MAINVIEW for DBCTL, and MAINVIEW for IMS only).

INTVL Default screen refresh interval of 3 seconds can be modified.

LOG Specify whether the display is to be logged to the TS Image log. Valid entries are Y for yes and N for no.

TGT or CICS Specify the target MVS system or subsystem (CICS, IMS, DB2) as described in “Specifying the Target System” on page 16-4.

SCROLL Enter the scroll amount for scrollable services (this amount can also be entered in the SERV field). If the display cannot be scrolled, `N/A` appears in this field.

The output fields are:

INPUT/RUNNING
Identifies the screen mode, either input or refresh (PF6). Input is accepted when `INPUT` is displayed. `RUNNING` indicates the screen is in refresh mode. Input is not accepted when `RUNNING` is displayed. (Press ATTN or PA1 to exit refresh mode.)

hh:mm:ss or TIME
Time stamp.

service title Service description, up to 24 characters.

EXPAND Indicates additional displays you can access from the current screen to view more information (see “EXPAND Line” on page 16-13).

lines 5 - nn Data lines (scrollable services adapt to terminal size).

Specifying the Target System

The name of an MVS system or subsystem (CICS, IMS, DB2) appears in either the TGT field or CICS field in the upper right corner of the application panels. This identifier is the target system for all commands entered in the application. A default target system for your TS is set by the TARGET parameter in the BBITSP00 member of the BBPROF data set.

The target system can be changed so commands can be directed to another system. After you have changed the target name for a session, it remains at that name until changed again. This is also true for each window in split-screen mode, so you can maintain a different target system on each side of the split.

There are several ways to specify a different target system:

- Enter the new name over the old name in the TGT or CICS field. A valid entry is the subsystem ID of the target DB2 or IMS subsystem, region name of the target CICS region, or name of the target MVS system.

  Note: The system name must be defined in the job name table in BBPARM member BBIJNT00.

- Use the CYCLE SETUP option on the Primary Option Menu. Up to 30 different services from 30 different target systems can be displayed simultaneously using the CYCLE service. Data is updated (refreshed) at specified time intervals.

- Use the SYSTEM command. The SYSTEM command changes the name of the target system from the COMMAND field. To use the SYSTEM command, enter SYSTEM name on the COMMAND line; for example:

  ```
  COMMAND ==> SYSTEM FIFT00
  ```

  changes the name of the current target system to FIFT00.

Program Function (PF) Key Definitions

A set of program function key definitions is maintained for each MAINVIEW product family and the General Services LOG application as members of a site or a user's BBPROF data set as follows:

*xxxx*PFK

where *xxxx* can be:

- CICS, DB2, AO, or IMS for the product applications
- BBI for PF key defaults if there are no product application PF key members
- LOG for log display defaults

This makes PF key usage unique to each product. The default PF key definitions are described in Table 16-1 on page 16-6.

Use the General Services KEYS option from the Primary Option Menu or the KEYS command to display an input panel, shown in Figure 16-3, to change the PF key definitions and assign a PF key label, if needed, as in ISPF.

Figure 16-2 Program Function Keys Input Panel

```
------------------------- PROGRAM FUNCTION KEYS ------- GENERAL SERVICES
COMMAND ===>

The current PF Key assignments for BBI are as follows:
PF1  ===> HELP
PF2  ===> SPLIT
PF3  ===> END                                          To save changes
PF4  ===> PRINT                                        into profile,
PF5  ===> LOG                                          enter SAVE on
PF6  ===> GO                                           the command line.
PF7  ===> UP
PF8  ===> DOWN
PF9  ===> SWAP
PF10 ===> LEFT
PF11 ===> RIGHT
PF12 ===> RETRIEVE

When executing under ISPF, these labels may be displayed using PFSHOW
PF1  LABEL ===>        PF2  LABEL ===>       PF3  LABEL ===>
PF4  LABEL ===>        PF5  LABEL ===>       PF6  LABEL ===>
PF7  LABEL ===>        PF8  LABEL ===>       PF9  LABEL ===>
PF10 LABEL ===>        PF11 LABEL ===>       PF12 LABEL ===>

Press  ENTER to display keys 13 - 24.  Enter END command to EXIT.
```

When KEYS is specified, the definitions in xxxxPFK are displayed. If a PF key member has not been created for the product application, the BBIPFK definitions are displayed. Entering the SAVE command on the COMMAND line of the program function key input panel stores the PF key definitions as a member of the user's BBPROF data set.

Note: The BBIPFK member may contain the MASTER keyword for a shared BBPROF. If the MASTER keyword is specified, online PF key changes are temporary. They cannot be saved in the user's BBPROF data set.

Table 16-1 Program Function Key Definitions

PF Key	Function	Description
PF1 PF13	HELP	Displays HELP and tutorial information about the current application (see Chapter 15, “Getting Help in Full-Screen Mode”).
PF2 PF14	SPLIT	Splits the screen at the cursor into two logical screens.
PF3 PF15	END	Returns to the previous application (exceptions at PF5/17 and PF6/18).
PF4 PF16	PRINT (SCREEN COPY)	Copies the current screen to the BBISPRNT data set, which can be printed later (see “Printing a Screen” on page 16-9).
PF5 PF17	LOG DISPLAY or EXPAND	In AO, MVDB2, MVDBC, and MVIMS, the PF5/17 key transfers to the Log Display general service. PF3/15 returns to the current application (see “Display Logs” on page 17-13 for more information). In MVCICS, the PF5/17 key expands to another service display to provide more information about, for example, the selected data set, file, or program (see “MVCICS Field Expand” on page 16-13 for more information).
PF6 PF18	GO	Refreshes an automatic service display. Displayed application data is dynamically updated (refreshed) at the user-defined interval specified in the INTVL field of the application display. Use the attention interrupt key to stop the refresh cycle.
PF7 PF19	UP	Scrolls up (back) the number of lines specified on the COMMAND field. The default varies with each application.
PF8 PF20	DOWN	Scrolls down (forward) the number of lines specified on the COMMAND field. The default varies with each application.
PF9 PF21	SWAP	Switches between the logical screens created with PF2/14.
PF10 PF22	LEFT	Scrolls to the left.
PF11 PF23	RIGHT	Scrolls to the right.
PF12 PF24	RETRIEVE	Retrieves the last command entered on the COMMAND line. The retrieved command can be reissued without changes or be modified and then reissued.

Assigning Commands to PF Keys

Each set of PF key definitions can be changed for a single terminal session or can be saved across multiple sessions. Any valid system or MAINVIEW product command can be assigned as a PF key value. Any input that can be entered in the first input field of a display, such as the COMMAND or OPTION field, can also be assigned as a PF key value. PF keys also can be used with COMMAND line input. For example, entering a 5 on the COMMAND line and pressing PF8 (defined as DOWN) scrolls down five lines.

Twenty-four keys can be defined. The initial input panel displays the current values for the first 12 keys. Pressing ENTER displays the current values for keys 13 through 24. When ENTER is pressed, the display alternates between PF1 through PF12 and PF13 through PF24.

To change a PF key, select the KEYS option (K) or enter the KEYS command and perform one of the following:

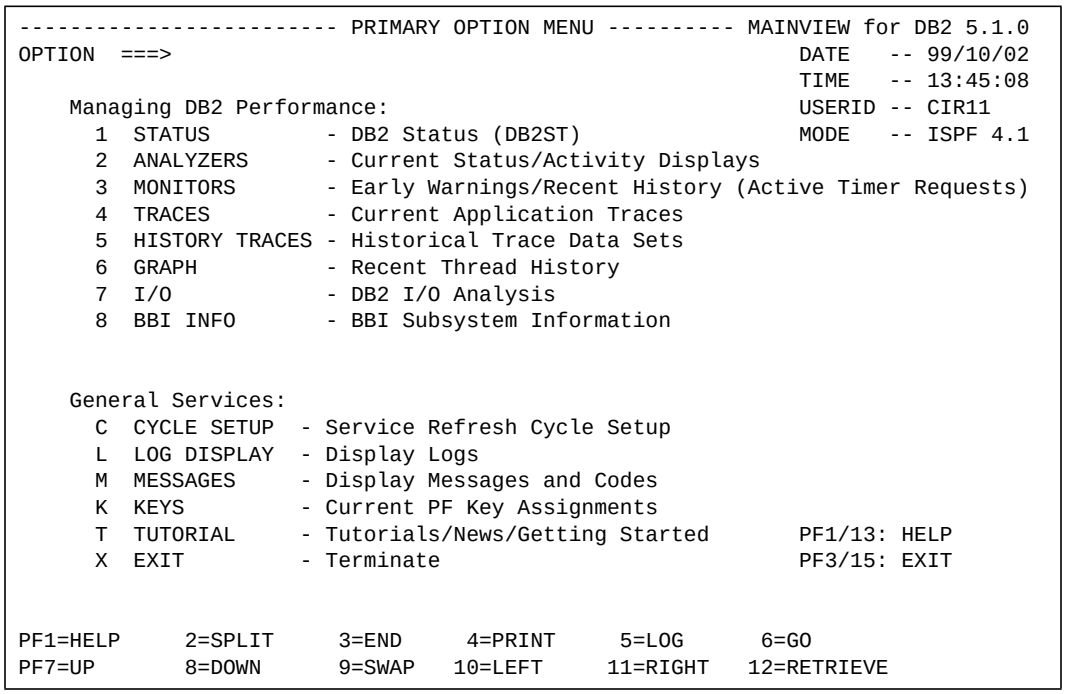
- Enter the new value over the displayed value.
- Assign NOP to disable a PF key.
- Blank out the current value to restore the default definition.

The changes remain in effect until you end the terminal session. You can save the definitions in your BBPROF data set by entering the SAVE command on the COMMAND line.

Assigning Labels to PF Keys

Labels are assigned to PF keys by using the KEYS command or option K from the Primary Option Menu to display the input panel shown in Figure 16-3. Additionally, the ISPF command, PFSHOW, can be used to display labels assigned to the PF keys, as shown in Figure 16-3. If there is no label assignment, the first eight characters of the key value are displayed.

Figure 16-3 PF Keys Label Displayed



```
------------------------ PRIMARY OPTION MENU ---------- MAINVIEW for DB2 5.1.0
OPTION  ===>                                              DATE   -- 99/10/02
                                                          TIME   -- 13:45:08
    Managing DB2 Performance:                             USERID -- CIR11
      1  STATUS         - DB2 Status (DB2ST)               MODE   -- ISPF 4.1
      2  ANALYZERS      - Current Status/Activity Displays
      3  MONITORS       - Early Warnings/Recent History (Active Timer Requests)
      4  TRACES         - Current Application Traces
      5  HISTORY TRACES - Historical Trace Data Sets
      6  GRAPH          - Recent Thread History
      7  I/O            - DB2 I/O Analysis
      8  BBI INFO       - BBI Subsystem Information


    General Services:
      C  CYCLE SETUP  - Service Refresh Cycle Setup
      L  LOG DISPLAY  - Display Logs
      M  MESSAGES     - Display Messages and Codes
      K  KEYS         - Current PF Key Assignments
      T  TUTORIAL     - Tutorials/News/Getting Started       PF1/13: HELP
      X  EXIT         - Terminate                            PF3/15: EXIT


PF1=HELP     2=SPLIT     3=END     4=PRINT     5=LOG      6=GO
PF7=UP       8=DOWN      9=SWAP   10=LEFT     11=RIGHT   12=RETRIEVE
```

To assign a label to a PF key, enter the value in the LABEL field of the input panel. Press ENTER to alternate between the input panel for PF keys 1 through 12 and 13 through 24. Changes are in effect until the end of the terminal session or until they are saved in your BBPROF data set with the SAVE command.

Two labels, NOSHOW and BLANK, have special meaning:

NOSHOW Suppresses displaying the PF key completely

BLANK Suppresses displaying the PF key value only

Splitting the Screen

During TS operation, the physical terminal screen can be split into two logical screens by pressing the SPLIT PF2/14 key. The position of the cursor determines the position of the split. Two panels are displayed on one screen, which provides two application windows. Splitting an application or a tutorial puts the current application on one side of the split and the Primary Option Menu (or ISPF Primary Option Menu if the product was invoked under ISPF) on the other.

The active screen is indicated by the location of the cursor. Pressing the SWAP PF9/PF21 key switches the cursor to the other screen. That screen then becomes the active display.

In services with a SERV field, the SERV field value in the active display is erased when SWAP is used. Use the RETRIEVE command to obtain the SERV value.

The split screen is eliminated when one of the applications ends by pressing the END (PF3/15) key.

Exiting a Display

When you press END, you exit from the display you are currently viewing. Also, after you specify a product line or application transfer, you can press this key to return to the original application or product line from which you made the transfer request. For more information, refer to Chapter 18, “Transferring Applications.”

Printing a Screen

You can use the command PRINT (PF4/16) to copy the current screen display to BBISPRNT, a special data set allocated to the TS. The TS CLIST parameter PRINT (YES) can be specified to create and allocate the print data set. The contents of the BBISPRNT data set can be printed later.

Note: A BBISPRNT DD statement must be included in the TS JCL for this feature to work. For more information, refer to the sample JCL in BBSAMP member SLOGJCL.

Refreshing a Display

You can refresh a single service display or you can set up a group of service displays to refresh cyclically.

To refresh a single current service display, perform one of the following:

- Press GO (PF6/18)
- Type GO on the COMMAND field

The default screen refresh interval is set for the TS by the INTERVAL parameter in BBPROF member BBITSP00. The default interval may be overridden by specifying a new value in the INTV field or, on screens without this field, by entering `GO xx`, where `xx` specifies the new refresh interval.

To enable several services to refresh cyclically, use the CYCLE SETUP option on the Primary Option Menu. Refer to “Service Refresh Cycle” on page 17-2 for details.

To cancel refresh, use the attention interrupt key. For SNA terminals use the ATTN key. For non-SNA terminals, use the PA1 key.

Some keyboards require that RESET be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM and MAINVIEW uses the keys assigned by this procedure. The same keys are used by TSO.

Note: The ENTER key is not supported as a method for exiting screen refresh mode; however, some terminal types can use this method to cancel screen refresh.

Scrolling a Display

Scrollable applications include lists, service displays with CSR in the SCROLL field, and the General Services: LOG DISPLAY and MESSAGES. The end of scrollable data is shown by:

```
********** END OF DATA **********
```

The SCROLL field is always displayed; non-scrollable displays contain N/A in the SCROLL field.

The list applications can be scrolled up (PF7/PF19) or down (PF8/20). Service displays that show CSR in the SCROLL field can be scrolled up or down. A << or >> symbol in the display indicates that the information can be scrolled left (PF10/22) or right (PF11/23). Graph and LOG displays can be scrolled up or down and left or right.

A scroll amount can be specified. For the list applications, the amount is entered on the COMMAND line. For the scrollable service displays, the amount is entered in the SCROLL field or the SERV field.

The scroll amount can be one of the following:

- M or MAX scrolls to the bottom or top of list
- 1 to 32,765 scrolls the corresponding number of lines
- H or HALF scrolls half of display screen amount
- P or PAGE scrolls a full display screen amount
- CSR scrolls to the cursor position

Note: Image logging of a scrollable display logs all collected data, not just one screen. The MAINVIEW AutoOPERATOR IMFEXEC subcommand IMFC supports an option of SCROLL=YES. Reissue an IMFC analyzer display with SCROLL=YES to retrieve additional screens until the `END OF DATA` line is found. Each request retrieves 40 data lines.

Retrieving the Primary Option Menu

The Primary Option Menu can be retrieved by entering one of the following commands on the COMMAND line:

INITIAL Returns to the first menu displayed when the TS was invoked or transferred to from windows mode.

RETURN Returns to the Primary Option Menu of the current product line when the request is made from a product application. All intermediate panels are bypassed. If the request is made on the Primary Option Menu within a nested product line transfer, the application from which the transfer was requested is displayed.

These commands can be assigned to PF keys.

Qualifying Requests

Requests for multiple resources or workloads with similiar names can be made by using a plus (+) or an asterisk (*) character as a name qualifier.

When a + appears at the end of a string, it replaces all following characters. When it appears in the middle of a string, it must be repeated for every character to be replaced. For example, the parameter:

```
S XYZ+
```

displays all databases beginning with the characters XYZ on the Database and Table Space Status panel.

To display all databases beginning with an A character, followed by any two characters, and ending with a D, enter:

```
S A++D
```

An * can also be used to replace a group of characters. For example, to display trace entries for all PLAN names beginning with DSNTI on the DB2 Trace Entries (LTRAC) display, enter:

```
PLAN=DSNTI*
```

These generic qualifiers can be used with:

- parameters, for many analyzer and trace services
- selection criteria keywords, for workload monitor and summary trace data collection services

Expanding a Display

From many full-screen services, you can easily expand to additional related displays for more information. Two methods are provided with different MAINVIEW products:

- MVCICS field expand
- EXPAND line

  This method is used by:

  MVDB2 (all analyzer and trace displays)
  MVDBC and MVIMS (some analyzer and trace displays)
  MVCICS (most trace displays)

MVCICS Field Expand

From MVCICS, you can view additional statistics for a field or a displayed line of information by positioning your cursor on the field or line and pressing your ENTER key. Additional information may be available by pressing your ENTER key again while in an expanded display.

Use END (PF3/15) to return to the original display.

EXPAND Line

The EXPAND line on line four of many analyzer and trace displays indicates additional displays you can access from the current screen to view more information. For example, in Figure 16-4 on page 16-14, the sample EXPAND line indicates that you can access:

- a selectable list of all the active user activity monitors
- the USERS analyzer display
- a more detailed description of any message displayed on the current screen.

Figure 16-4 Sample EXPAND Line

```
 ----------------------------   SAMPLE SERVICE    ----------PERFORMANCE MGMT
 SERV ==>                                                      TGT==>
XXXXXXXX
 PARM ==>                                                       SCROLL=> CSR
 EXPAND:  MON(USER), USERS, LINESEL(MSG)
```

There are two methods of expanding to another display:

EXPAND Select
Tab to a selection in the EXPAND line and press ENTER. For example, in the sample service shown in Figure 16-4, tab to the word USERS and press ENTER to see the USERS resource analyzer display.

There are three types of selections:

MON(xxxx) Accesses a list of all the active monitors related to area xxxx on the Active Timer Requests panel. You can select any listed monitor to view a PLOT of the historical monitor values.

For example, in the sample shown in Figure 16-4:

Move the cursor to MON(USER) and press ENTER to view a list of all the active user activity monitors.

Use line command S and press ENTER to view a PLOT of any listed monitor.

You can also access these monitors by typing a slash (/) as the first character in the PARM field.

xxxxx Invokes the selected analyzer service or a display in another installed product, such as RxD2. These selections are low-lighted and inactive when the product is not available.

LINESEL(xxxx) Accesses more detailed information about the first line in the current display. This step has the same result as moving the cursor to the first row of the display and pressing ENTER.

For example, in the sample service shown in Figure 16-4, tab to the word LINESEL(MSG) and press ENTER to see a more detailed description of the first message displayed on the current screen.

This selection is also a reminder that the line select method can be used.

Line Select
If LINESEL is listed in the EXPAND line, tab to any selected row of the current display and press ENTER to view a more detailed display.

For example, in the USERS resource analyzer display, select a user ID with the tab key and press ENTER to see the DUSER detail display for that user.

As you expand from one display to another, the previous display is saved in a stack. To return from an expanded display, use one of these methods:

- To return to the previous display, press PF3.
- To return to the initial display when you are several levels deep in the stack:
  - From an analyzer service, type CLEAR in the SERV field and press ENTER.
  - If you have selected one or more active monitor lists along your navigation path, press PF3 until you reach an analyzer service.

Accessing RxD2

RxD2 integrates with other MAINVIEW products to provide quick access to information in the DB2 catalog or other DB2 tables. If RxD2 is installed, it can be accessed from any full-screen MAINVIEW application.

To access RxD2, enter RX on the COMMAND or OPTION field of any full-screen MAINVIEW application. To exit RxD2, use the END key (PF3).

Notes:

- Access is possible to remote DB2 subsystems only if connected with DDF to a local DB2 (in the same MVS system as the TS).
- The current target primed in the TGT field becomes the target in RxD2.

Chapter 17 Using General Services

The general services options are available from the Primary Option Menus of all MAINVIEW products that run in full-screen mode. These options are:

Option/Application	Purpose
C CYCLE SETUP	Displays refreshable applications in a continuous timed cycle. (See "Service Refresh Cycle" on page 17-2.)
L LOG DISPLAY	Displays MAINVIEW service messages and monitor warnings, terminal session commands, and target (MVS, CICS, IMS, DB2) messages. (See "Display Logs" on page 17-13.)
M MESSAGES	Displays descriptions of messages generated by MAINVIEW products running in full-screen mode. (See "Display Messages and Codes" on page 17-20.)
K KEYS	Displays supported terminals and the functions assigned to the PF keys by MAINVIEW. (See "Program Function (PF) Key Definitions" on page 16-5.)
T TUTORIAL	Displays online help. (See "Selecting the Tutorial" on page 15-2.)
X EXIT	Terminates the product session. (See "Stopping a TS" on page 2-5.)

Note: You must have a *userid*.BBPROF data set, which is your user profile data set, in order to use many of these functions.

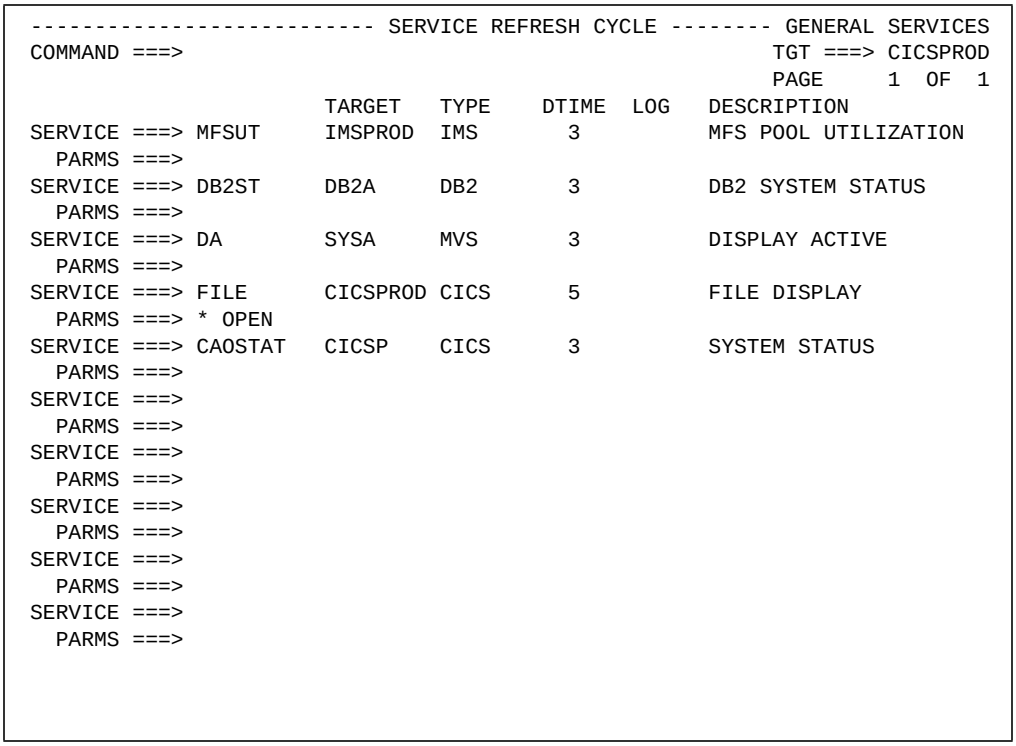
Service Refresh Cycle

Option C, CYCLE SETUP, can be used to set up a timed, cyclic refresh for a maximum of 30 display services. Services and parameters can be defined for a refresh cycle with cycle setup, or they can be predefined in a BBPROF data set member and invoked as needed. The Log Display application (LOG) and other BBI product services can also be defined in CYCLE SETUP.

The member names can be unique or have a 3-character prefix of CYC. See your individual product manuals for valid service names.

Figure 17-1 shows shows the use of the CYCLE SETUP application. Descriptions of this application and the use of the BBPROF member follow the sample application.

Figure 17-1 Service Refresh Cycle Data Entry Panel



```
--------------------------- SERVICE REFRESH CYCLE -------- GENERAL SERVICES
COMMAND ===>                                               TGT ===> CICSPROD
                                                           PAGE     1  OF  1
                        TARGET   TYPE    DTIME  LOG   DESCRIPTION
SERVICE ===> MFSUT      IMSPROD  IMS       3          MFS POOL UTILIZATION
  PARMS ===>
SERVICE ===> DB2ST      DB2A     DB2       3          DB2 SYSTEM STATUS
  PARMS ===>
SERVICE ===> DA         SYSA     MVS       3          DISPLAY ACTIVE
  PARMS ===>
SERVICE ===> FILE       CICSPROD CICS      5          FILE DISPLAY
  PARMS ===> * OPEN
SERVICE ===> CAOSTAT    CICSP    CICS      3          SYSTEM STATUS
  PARMS ===>
SERVICE ===>
  PARMS ===>
SERVICE ===>
  PARMS ===>
SERVICE ===>
  PARMS ===>
SERVICE ===>
  PARMS ===>
SERVICE ===>
  PARMS ===>
```

Cycle Setup Application

Up to 30 services may be defined. Forward and backward scrolling can be used to define and display additional services.

The input fields are:

SERVICE The service select code. See Table 17-1 on page 17-4 for a list of valid service select codes.

Note: If several MAINVIEW products are installed, services and target types (CICS, IMS, DB2, or MVS) can be intermixed.

PARMS Applicable parameters for the specified service separated by spaces.

TARGET A 1- to 8-character identifier of the target. If TARGET and TYPE are not specified, the target displayed in the TGT field is used. If TARGET is not specified but TYPE is, the current target for the specified product line is used.

TYPE The type of product line to process the requested service. A product line type does not need to be entered when only one product line is installed. If a product line is not specified, the active product line is used. When multiple product lines are installed, a product line type must be specified if the service to be requested does not belong to the active product line.

DTIME The number of seconds the specified service display is to be shown before the next display. If a time is not entered, the default specified by the INTERVAL parameter in the BBPROF data set member BBITSP00 is used and displayed in the DTIME field. The BMC Software-distributed value is 3 seconds. If the maximum of 30 services is specified, each with a display time (DTIME) of 3 seconds, the first service in the refresh cycle is displayed approximately every 90 seconds.

LOG (For MVDB2, MVDBC, and MVIMS services) Enter a Y (YES) or N (NO) to log screen images to the TS Image log for offline printing. The default, N, is displayed if no entry is made. A dash (—) displayed in this field indicates Image logging is not supported for the requested service.

Pressing the ENTER key validates the specified services and shows the values in the input fields of the Service Refresh Cycle application. Any of the input field values can be changed. Entering the GO command (PF6/18) starts the cycle, as described in “Starting and Stopping Service Refresh Cycle” on page 17-12. This definition can be saved for later reuse, as described in “SAVE Command” on page 17-12.

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field

Service Select Code	Application Description	Product Line (Type)
BBI (General) Applications		
JOU|JOURNAL	LOG Display	
LOG	LOG Display	
CICS Operator Workstation (MAINVIEW AutoOPERATOR) Applications		
STA|STATUS	CICS System Status	CAO
IMS Operator Workstation (MAINVIEW AutoOPERATOR) Applications		
EX	Status/Exception	IAO
REG|REGION	IMS Regions	IAO
STA|STATUS	Status/Exception	IAO
MVS Operator Workstation (MAINVIEW AutoOPERATOR) Applications		
DA	Address Spaces	MAO
DISP|DISPLAY	Address Spaces	MAO
ENQ|ENQUEUES	Enqueue/Reserve	MAO
OPER|OPERATOR	Operator Requests	MAO
OR	Operator Requests	MAO
REQ|REQUESTS	Operator Requests	MAO
RES|RESERVES	Enqueue/Reserve	MAO
STA|STATUS	System Status	MAO
MAINVIEW AutoOPERATOR Base Applications		
ALE|ALERTS	ALERTS Overview	AO
EMA	EXEC Management	AO
EXEC	EXEC Management	AO
RUL|RULES	Automation Control	AO
XAL|XALRTS	Alert Detail	AO
MAINVIEW for CICS Applications		
AB|ABEND	ABEND Display	CICS
AI|AID	AID Display	CICS
AL|ALIAS	ALIAS Display	CICS
CLA|CLASSES	CLASSES Display	CICS

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field (continued)

Service Select Code	Application Description	Product Line (Type)
C|CONNECT	CONNECT Display	CICS
CONNX|CONNXPND	CONNXPND Display	CICS
CONNXPN2	CONNXPN2 Display	CICS
CONS|CONSOLES	CONSOLES Display	CICS
CST|CSTATUS	CSTATUS Display	CICS
DA|DATATABL	DATABL Display	CICS
DB2S|DB2SYSP	DB2SYSP Display	CICS
DB2T|DB2TASK	DB2TASK Display	CICS
DBC|DBCTL	DBCTL Display	CICS
DBCTA|DBCTASK	DBCTASK Display	CICS
DBCTT|DBCTTASK	DBCTTASK Display	CICS
DD|DDIR	DDIR Display	CICS
DDIRXPND	DDIRXPND Display	CICS
DDIRXPN2	DDIRXPN2 Display	CICS
DE|DEST	DEST Display	CICS
DL|DL/I	DL/I Display	CICS
DSA|DSAS	DSAS Display	CICS
DS|DSNAMES	DSNAMES Display	CICS
EN|ENQUEUE	ENQUEUE Display	CICS
EXI|EXITS	EXITS Display	CICS
F|FILE	FILE Display	CICS
FILEX|FILEXPND	FILEXPND Display	CICS
FILEXPN2	FILEXPN2 Display	CICS
G|GRAPH	GRAPH Display	CICS
I|ICE	ICE Display	CICS
J|JOURNAL	JOURNAL Display	CICS
LP|LPAS	LPAS Display	CICS
M|MONITOR	MONITOR Display	CICS
NUC|NUCLEUS	NUCLEUS Display	CICS
PL|PLAN	PLAN Display	CICS
PLANX|PLANXPND	PLANXPND Display	CICS
PPST	PPST Display	CICS
P|PROBLEM	PROBLEM Display	CICS
PR|PROGRAM	PROGRAM Display	CICS
PSB|PSBNAME	PSBNAME Display	CICS

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field (continued)

Service Select Code	Application Description	Product Line (Type)
REG|REGIONS	REGIONS Display	CICS
REM|REMOTES	REMOTES Display	CICS
REV|REVIEW	REVIEW Display	CICS
SE|SESSIONS	SESSIONS Display	CICS
SH|SHARE	SHARE Display	CICS
ST|STATUS	STATUS Display	CICS
S|SUBPOOL	SUBPOOL Display	CICS
SUF|SUFFIXES	SUFFIXES Display	CICS
SUM|SUMMARY	SUMMARY Display	CICS
T|TASK	TASK Display	CICS
TC|TCBS	TCBS Display	CICS
TEMP|TEMPSTRG	TEMPSTRG Display	CICS
TEMPX|TEMPXPND	TEMPXPND Display	CICS
TE|TERMINAL	TERMINAL Display	CICS
TERMX|TERMXPND	TERMXPND Display	CICS
TI|TIOT	TIOT Display	CICS
TR|TRAN	TRAN Display	CICS
TRANX|TRANXPND	TRANXPND Display	CICS
TS|TSUT	TSUT Display	CICS
VT|VTAM	VTAM Display	CICS
MAINVIEW for DB2 Applications		
BFRPL	Buffer Pool Status	DB2
CICSC	CICS DB2 Connections	DB2
CICSE	CICS DB2 RCT Entry	DB2
CICSR	CICS DB2 RCT Summary	DB2
CLAIM	Claims and Drains for Table Space Partitions	DB2
DBIO	I/O Analysis by Database/Table Space (DB/TS)	DB2
DBIOA	I/O Analysis by Authorization ID (AUTHID)	DB2
DBIOB	I/O Analysis — BPOOL (Realtime)	DB2
DBIOC	I/O Analysis by Connection Name (CONNECT)	DB2
DBIOD	I/O Analysis — Dataset (Realtime)	DB2
DBIOF	I/O Analysis by Buffer Pool (BPOOL)	DB2

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field (continued)

Service Select Code	Application Description	Product Line (Type)
DBIOK	I/O Analysis by Package/Program (PKG/PGM)	DB2
DBIOL	I/O Analysis by Location (LOCATION)	DB2
DBIOP	I/O Analysis by Plan (PLAN)	DB2
DBIOR	I/O Analysis — DB/TS (Realtime)	DB2
DBIOS	I/O Analysis by SQL Statement (SQL STMT)	DB2
DBIOT	I/O Analysis by Time (INTERVAL START)	DB2
DBIOV	I/O Analysis — Volume (Realtime)	DB2
DBTS	DB/TS Status	DB2
DB2EX	DB2 Exceptions	DB2
DB2ST	DB2 System Status	DB2
DDFCV	DDF Conversations	DB2
DDFDT	DDF Statistics Detail	DB2
DDFSM	DDF Statistics Summary	DB2
DDFVT	DDF VTAM Status	DB2
DLOGS	DB2 LOG Status	DB2
DMON	Monitor Summary	DB2
DTRAC	Detail Trace Entry	DB2
DUSER	Detail User Status	DB2
DWARN	Warning Summary	DB2
EDMPL	EDM Pool Status	DB2
LKOUT	Lockout History	DB2
LOCKD	Lock Contention by DB/TS	DB2
LOCKE	Lock Contention, User Detail	DB2
LOCKU	Lock Contention by User	DB2
LTRAC	DB2 Trace Entries	DB2
PLOT	Monitor History	DB2
RIDPL	RID Pool Status	DB2
STRAC	Summary Trace Entry	DB2
TSTAT	Trace Statistics	DB2
TSUMA	Trace Summary by AUTHID	DB2
TSUMC	Trace Summary by CONNECT	DB2
TSUML	Trace Summary by LOCATION	DB2

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field (continued)

Service Select Code	Application Description	Product Line (Type)
TSUMP	Trace Summary by PLAN	DB2
TSUMT	Trace Summary by TIME	DB2
USERS	User Summary	DB2
UTRAC	User Detail Trace	DB2
ZPARM	DB2 System Parameters	DB2
MAINVIEW for IMS/DBCTL Applications		
Unless indicated otherwise, the following applications are provided by both MAINVIEW for IMS and MAINVIEW for DBCTL.		
APPC	APPC Activity Summary	IMS
APPCL	APPC LU Status	IMS
BALGQ	BALG Queuing	IMS
CLASQ	Class Queuing	IMS
DAPPC	Inbound|Outbound Allocation	IMS
DBST	ISAM/OSAM Pools	IMS
DLIST	DL/I Call Status	IMS
DLTCH	Latch Detail	IMS
DMBUT	DMB Pool Utilization	IMS
DMON	Monitor Summary	IMS
DPOOL	Detail Pool	IMS
DREGN	Region Detail	IMS
DSPST	Dispatcher Statistics	IMS
DTRAC	Display Workload Trace	IMS
DWAIT	Display Workload Wait	IMS
DWARN	Warning Summary	IMS
FPBST	Fast Path Buffer Pool	IMS
IRLM	IRMLM IMS Status	IMS
IRLMG	IRMLM Global Status	IMS
ISTAT	Terminal Input Status	IMS
LATCH	Latch Summary	IMS
LCRES	IRLM Lock Contention by Resource	IMS
LCUSR	IRLM Lock Contention by User	IMS
LHRES	IRLM Locks Held by Resources	IMS
LHUSR	IRLM Locks Held by User	IMS
LOGST	Log Statistics	IMS
LUSRD	IRLM Lock User Detail	IMS

Table 17-1 Service Select Codes for Refresh Cycle SERVICE Field (continued)

Service Select Code	Application Description	Product Line (Type)
LTRAC	List of Trace Entries	IMS
MFSST	MFS Statistics	IMS
MFSUT	MFS Pool Utilization	IMS
OSTAT	Terminal Output Status	IMS
QUEST	Queue Statistics	IMS
PI	Program Isolation	IMS
PLOT	Monitor History	IMS
POOLC	Pool Summary (CBT)	IMS
POOLS	Pool Summary (non-CBT)	IMS
PSBUT	PSB Pool Utilization	IMS
REGNS	IMS Regions	IMS
REGND	Region Detail	IMS
RS	ESA Real Storage	IMS
SCHED	Scheduling Statistics	IMS
STAT/ STATR	System Status	IMS
STRAC	Summary Trace Entry	IMS
TRANQ	Transaction Queue Status	IMS
USER	User Status Summary	IMS
VSST	VSAM GLOBAL or Subpool Statistics	IMS

BBPROF Predefined Refresh Cycle Member

A refresh cycle that is used repeatedly can be predefined in a member of the BBPROF data set. The member name is used to invoke it from the COMMAND line. The member can be named:

- a meaningful 1- to 8-character member name such as MTODMIN or OPERATOR
- CYC*xx*

  where *xx* is any two alphanumeric characters

The keywords to define a refresh cycle in the member are:

SERV= The service select code; for example, SERV=LOG (see the SERVICE parameter values in “Cycle Setup Application” on page 17-3).

OPT= Specifies the service parameter(s). A valid statement:

Can be written within single quotes

Multiple parameters (maximum of 60 characters) can be specified in a statement enclosed in single quotes. Statement parameters can be separated by blanks.

Can be written without single quotes

If single quotes are not used, a statement terminates with the last parameter or a comma. Multiple parameters (maximum of 60 characters) can be specified in the statement. Each parameter can be separated by blanks.

TARGET= A 1- to 8-character identifier of the target. If TARGET and TYPE are not specified, the target displayed in the TGT field when the member is selected is used. If TARGET is not specified but TYPE is, the current target for the specified product line when the member is selected is used.

INTVL= Specifies the time in seconds (1 to 99) the service is to be displayed before the next one is shown.

LOG= Specifies either Y (YES) or N (NO) to log the display to the TS Image log. This parameter is applicable only to the MVDB2, MVDBC, and MVIMS product lines. Comments may be included by placing an asterisk in column 1.

For example, the services defined for a refresh cycle in Figure 17-1 on page 17-2 could be defined in a BBPROF member as:

Figure 17-2 Sample Cycle Setup Member

```
*  SAMPLE CYCLE SETUP MEMBER
*
*  IMS DISPLAY MFS UTILIZATION
*
SERV=MFSUT,TYPE=IMS,INTVL=3
*
*  DB2 SYSTEM STATUS
*
SERV=DB2ST,TYPE=DB2,INTVL=3
*
*  MVS ACTIVE DISPLAY
*
SERV=DA,TYPE=MVS,INTVL=5
*
*  CICS OPEN FILE DISPLAY
*
SERV=FILE,OPT=* OPEN,TYPE=CICS,INTVL=3
*
```

The BBPROF member is selected by entering its name with a SELECT or SET command on the COMMAND field of the Service Refresh Cycle application. SELECT can be used to select a 1- to 8-character BBPROF member name across product lines. SET can be used to specify the suffix of a CYC BBPROF member. SELECT allows meaningful names to be defined and is the recommended method for invoking a BBPROF member. Following are examples of SELECT and SET that show the syntax of each command.

SELECT Command

If the member name is 1- to 8-characters, the member is invoked by the SELECT command. The syntax of the SELECT command, which can be abbreviated to S, is:

```
COMMAND ===> SELECT DBADMIN
```

SET Command

If the member name is CYC*xx*, the member can be invoked by using the following SET command syntax:

```
COMMAND ===> SET xx
```

where *xx* is the CYC suffix.

Pressing ENTER displays the Service Refresh Cycle application with the BBPROF member specifications. Any of the values shown in the input fields can be changed. Entering the GO command (PF6/18) starts the cycle.

SAVE Command

Once a group of services is defined using the CYCLE SETUP application, the definition can be saved in the BBPROF data set by issuing one of the following:

```
COMMAND ===> SAVE xx
```

where *xx* is an alphanumeric suffix for CYC

or

```
COMMAND ===> SAVE memname
```

where *memname* is any 3- to 8-character alphanumeric member name.

Starting and Stopping Service Refresh Cycle

Entering the GO command (PF6/18) starts the cycle. The attention interrupt key (ATTN for SNA terminals and PA1 for non-SNA terminals) stops the cycle. When the cycle stops, the last display shown is reissued and returned to the screen in INPUT mode. The status can be analyzed and further requests made for other displays as usual. When PF3 is pressed, the display returns to the Service Refresh Cycle application and shows the service names, parameters, and any short messages. Press PF6 or type GO to restart the cycle.

On some keyboards, the RESET key must be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM. The same keys are used by TSO.

Note: The ENTER key is not supported as a method for exiting screen refresh mode; however, some terminal types can use this method to cancel screen refresh.

Each refreshed service display is shown in the sequence and time (DTIME) specified. For the example in Figure 17-1 on page 17-2, the IMF MFSUT application will be displayed first, followed by the MAINVIEW for DB2 DB2ST application, the MAINVIEW AutoOPERATOR for MVS DA application, and the MAINVIEW for CICS FILE application. The cycle repeats again, starting with IMF MFSUT.

Display Logs

Option L, LOG DISPLAY, displays the BBI-SS PAS Journal log belonging to the:

- BBI-SS PAS associated with the system identified in the target field
- BBI-SS PAS when the BBI-SS PAS ID is specified in the target field
- TS when LOCAL is specified in the target field

The identifier in the target field (TGT or CICS) can be changed to point to any valid DB2 or IMS subsystem, CICS region, MVS system, BBI-SS PAS, or to LOCAL.

Log Display Application

The Log Display application displays all messages and commands from MAINVIEW products running in full-screen mode and may include all target messages. It can be selected from any Primary Option Menu (option L) or by pressing the LOG key (PF5/17) while in any full-screen application.

Figure 17-3 Log Display Application

```
------------------------------ Log Display -------------- General services
COMMAND ===>                                               TGT ===> DB2F
LINE=      12,340  LOG= #1   STATUS= INPUT    TIME= 17:51:38 INTV===> 3
12:11:00  DS0560W  (04) 12:11:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:12:00  DS0560W  (05) 12:12:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:12:55  XS6311I  BBI/SESSION FOR -CPS17   - TERMINATED
12:13:00  DS0560W  (06) 12:13:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:14:00  DS0560W  (07) 12:14:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:15:00  DS0560W  (08) 12:15:00 ECSA % UTILIZATION(TOTAL) = 72  (>70) ********
12:16:00  DS0560W  (09) 12:16:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:17:00  DS0560W  (10) 12:17:00 ECSA % UTILIZATION(TOTAL) = 71  (>70) ********
12:22:11  XS6304I  BBI/SESSION FOR -LAA1    - TO -D31X- INITIATED
13:12:00  DS0561I   13:12:00 ECSA % UTILIZATION(TOTAL) NO LONGER > 70
13:28:48  DSNW131I - STOP TRACE SUCCESSFUL FOR TRACE NUMBER(S) 05
13:28:49  DSN9022I - DSNWVCM1 '-STOP TRACE' NORMAL COMPLETION
13:53:02  DS0560W  (01) 13:53:00 ECSA % UTILIZATION(TOTAL) = 72  (>70) ********
13:54:00  DS0560W  (02) 13:54:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:55:01  DS0560W  (03) 13:55:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:56:00  DS0560W  (04) 13:56:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:57:01  DS0560W  (05) 13:57:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:58:00  DS0560W  (06) 13:58:00 ECSA % UTILIZATION(TOTAL) = 74  (>70) ********
13:58:12  DSN3201I + ABNORMAL EOT IN PROGRESS FOR USER=LGS11
13:58:12  CONNECTION-ID=DB2CALL CORRELATION-ID=LGS11
```

The Log Display application is a 21-line window to the BBI-SS PAS Journal log data set. The application window template displays:

LINE= n Number of the first line of the log being displayed.

LOG #n There are two online BBI-SS PAS Journal log data sets. This is the number of the Journal being displayed.

STATUS= Application mode can be INPUT to enter data or RUNNING for screen refresh.

INPUT Data can be entered only when Log Display is in INPUT mode. Commands can be entered on the COMMAND field. A new target system can be entered in the TGT field. A refresh interval can be entered in the INTV field. Pressing the GO key (PF6/18) changes the application status mode from INPUT to RUNNING (refresh mode).

RUNNING Screen refresh is indicated by the message, RUNNING. To exit refresh and enter input mode, press ATTN (SNA terminal) or PA1 (non-SNA terminal). On some keyboards, the RESET key must be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM and MAINVIEW uses the keys assigned by this procedure. The same keys are used by TSO.

Note: The ENTER key is not supported as a method for exiting screen refresh mode; however, some terminal types can use this method to cancel screen refresh.

TIME= Time Log Display was requested.

I**NTV===> n** Screen refresh interval in seconds. The value can be from 1 to 99 seconds. The default is the INTERVAL parameter value in the BMC Software-distributed BBPROF data set member BITSP00. BBITSP00 Start screen refresh by pressing the GO key (PF6/18) or by entering GO in the command input line.

When the application is entered, the window is positioned to show the most recent messages. The BBI-SS PAS Journal log data shown in the window includes the:

- time stamp of the message or command, which is always displayed
- message origin identifier data
- message text, which includes:
  - all BBI commands and responses issued on behalf of the TS users assigned to the BBI-SS PAS

— all commands and responses issued automatically by BBI EXECs, if an MAINVIEW AutoOPERATOR is installed

— time stamps for BBI-SS PAS start and stop and target system start and stop

— MAINVIEW monitor and exception warning messages

— BBI informational and error messages

— all DB2 messages issued to the system console from selected target DB2 subsystems, if they have been activated in BBPARM member DMRBEX00 (see the *MAINVIEW for DB2 Customization Guide*)

— all IMS and DBCTL IMS messages issued to the system console from selected target IMS subsystems if MAINVIEW AutoOPERATOR for MVS is installed (a rule must be defined as described in the *MAINVIEW AutoOPERATOR Basic Automation Guide*)

— all IMS messages that go to the AOI exit from selected target IMS subsystems if MAINVIEW AutoOPERATOR for IMS is installed (a rule must be defined as described in the *MAINVIEW AutoOPERATOR Basic Automation Guide*)

To view the origin identifier data and a date field, move the Log Display application window to the left with the PF10/22 key. This information is not displayed when Log Display is initially entered.

Log Display highlights every command recorded in the BBI-SS PAS Journal log.

Note: For any commands issued with a user password, a ? replaces the password in the logged command.

PF scroll keys or a Log Display primary command move the Log Display window through the BBI-SS PAS Journal.

Scroll Commands for Log Display

The scroll commands operate the same as similar IBM ISPF scroll commands as follows:

- Scroll amount

The number of lines of data to be moved is entered on the COMMAND field of Log Display. The UP key (PF7/19) or the DOWN key (PF8/20) specifies the direction.

Type in the COMMAND field:	Press PF7/19 to scroll:	Press PF8/20 to scroll:
M or MAX (maximum)	to the top	to the bottom
1 to 9999 (a number)	*n* lines up	*n* lines down
H (half)	half page up	half page down
P (page)	full page up	full page down

Entering the TOP command or BOTTOM command and pressing ENTER, scrolls to the top or the bottom of the data as follows:

```
COMMAND ===> TOP
COMMAND ===> BOT
```

- Left and right scrolling

  Left scrolling
  Enter the number of columns to be scrolled on the COMMAND field. Press PF10/22 to scroll left the specified amount. The default is 21 columns.

  Note: Left scrolling shows data that identifies the origin of the message and a date field.

- Right scrolling

  Enter the number of columns to be scrolled on the COMMAND field. Press PF11/23 to scroll right the specified amount. The default is 21 columns.

Primary Commands for Log Display

Primary commands unique to Log Display locate data anywhere in the BBI-SS PAS Journal log or refresh Log Display.

- L (LOCATE LINE)

  The LOCATE command moves a specific line to the top of the display. When Log Display is initially requested, the most recent log entries fill the screen. The LINE= field shows the line number for the first of these entries. For example, L 13.

- F (FIND CHARACTER(s))

  The FIND command finds an alphanumeric character or string of characters in the Log Display. The search can be started backward from the first displayed line (PREV) or started forward from the first line of the Journal log (FIRST). Pressing the PF5/17 key repeats the FIND :I1.PF5/17 (Log Display repeat find) :I1.FIND command command for Log Display only.

Syntax	**Example**
F c	F x
F 'c...c'	F 'LSNA'
F 'c...c' PREV	F 'LSNA' PREV
F 'c...c' FIRST	F 'LSNA' FIRST

- T (FIND TIME)

  The TIME command finds a specific time in the Journal log for the current date.

Syntax	**Example**
T hh:mm:ss	T 11:30:00
T hh:mm	T 11:30
T hhmm	T 1130
T hh	T 11

- GO (REFRESH LOG DISPLAY)

  The GO command or use of the GO key (PF6/18) refreshes Log Display in the seconds specified in the INTV field. The ATTN (on an SNA terminal) or PA1 (on a non-SNA terminal) key can be used to return to INPUT mode to enter data.

  On some keyboards, the RESET key must be pressed to unlock the attention interrupt key. The attention interrupt procedure is defined by IBM and MAINVIEW uses the keys assigned by this procedure. The same keys are used by TSO.

  Note: The ENTER key is not supported as a method for exiting screen refresh mode; however, some terminal types can use this method to cancel screen refresh.

- DB2 Commands

  An authorized user can issue valid DB2 commands on the COMMAND line of any MAINVIEW application running in full-screen mode. The command results are shown by Log Display.

  The command syntax is:

Syntax	**Example**
-db2cmd	-DIS THD(*)

  where db2cmd is the DB2 command. Each command must have a - character as a prefix.

  The command is issued against the DB2 specified in the TGT field.

- PROFILE

  Note: You must specify `JOURNAL=ENHANCED` in BBPARM member BBISSP00 for the target BBI-SS PAS for the PROFILE specifications to take effect.

  The PROFILE specifications are not active for a target of LOCAL.

  The PROFILE command displays an input panel where you can specify which messages from the Journal log you want to see. Up to six message origin patterns can be included and/or excluded from the Journal log display. Generic qualifiers can be used to define these patterns. For example, you can include all messages from CICS* and exclude all messages from CICSTEST, as shown in Figure 17-4:

Figure 17-4 Defining a Subset of Messages with the PROFILE Command

```
---------------------------- Log Display ------------------ General services
COMMAND ===>
                                                           Date --- 99/07/08
 Included Origins            Excluded Origins              Time --- 10:00:11

  CICS*___                      CICSTEST
  ________                      ________
  ________                      ________
  ________                      ________
  ________                      ________
  ________                      ________
```

The PROFILE specifications are saved in *userid.*BBPROF member LDPARM00. This allows each user to have an individual application profile.

You also can include messages from the current target specified in the TGT field by specifying the variable, &target, in the `Included Origins` column, as shown in Figure 17-5:

Figure 17-5 Including Messages from the Current Target

```
-------------------------------- Log Display -------------- General services
COMMAND ===>
                                                                Date --- 99/07/08
 Included Origins            Excluded Origins                   Time --- 10:05:18

  &TARGET_                      _________
  _________                     _________
  _________                     _________
  _________                     _________
  _________                     _________
  _________                     _________
```

Figure 17-6 shows a sample of the output produced from the profile specified in Figure 17-5. It displays only those messages from target, DB2F.

Figure 17-6 Viewing Messages from the Current Target

```
-------------------------------- Log Display -------------- General services
COMMAND ===>                                                 TGT ===> DB2F
Line        3,913  Log  #1   Status  INPUT    Time  10:33:25 INTV===> 3
15:57:01  DW0120W  (02) 15:57:00 AVG ELAPSED TIME(TRANS) = 99.882  (>5.000) ***
15:58:00  DW0121I   15:58:00 AVG ELAPSED TIME(TRANS) NO LONGER > 5.000
15:58:00  DS0541I   15:58:00 CSA PAGING(TOTAL) NO LONGER > 1800
15:59:00  DW0120W  (01) 15:59:00 AVG ELAPSED TIME(TRANS) = 99.690  (>5.000) ***
16:00:08  DW0121I   16:00:00 AVG ELAPSED TIME(TRANS) NO LONGER > 5.000
17:01:02  DS0540W  (01) 17:01:00 CSA PAGING(TOTAL) = 2599 IN 01:00 MIN (>1800)
17:02:00  DS0540W  (02) 17:02:00 CSA PAGING(TOTAL) = 2530 IN 01:00 MIN (>1800)
17:03:00  DS0540W  (03) 17:03:00 CSA PAGING(TOTAL) = 2341 IN 01:00 MIN (>1800)
17:04:00  DS0541I   17:04:00 CSA PAGING(TOTAL) NO LONGER > 1800
18:19:00  DS0540W  (01) 18:19:00 CSA PAGING(TOTAL) = 2185 IN 01:00 MIN (>1800)
18:20:00  DS0541I   18:20:00 CSA PAGING(TOTAL) NO LONGER > 1800
19:18:00  DS0540W  (01) 19:18:00 CSA PAGING(TOTAL) = 2251 IN 01:00 MIN (>1800)
19:19:00  DS0541I   19:19:00 CSA PAGING(TOTAL) NO LONGER > 1800
19:31:00  DW0120W  (01) 19:31:00 AVG ELAPSED TIME(TRANS) = 101.138  (>5.000) **
19:32:00  DW0120W  (02) 19:32:00 AVG ELAPSED TIME(TRANS) = 99.313  (>5.000) ***
19:33:00  DW0121I   19:33:00 AVG ELAPSED TIME(TRANS) NO LONGER > 5.000
19:34:00  DW0120W  (01) 19:34:00 AVG ELAPSED TIME(TRANS) = 99.200  (>5.000) ***
19:35:00  DW0121I   19:35:00 AVG ELAPSED TIME(TRANS) NO LONGER > 5.000
```

To view the origin of the messages in the Log Display, scroll to the left.

Display Messages and Codes

Option M, MESSAGES, displays a scrollable list of error messages and abend codes. Any message or code can be selected with an S line command for a complete description that includes the:

- **REASON** the message was issued
- **SYSTEM ACTION** to be taken
- **USER ACTION** that should be taken
- Name of the module of **ORIGIN**

When messages are written to the MVS console, such as WTOs, the BBI-SS PAS ID is appended whenever possible.

All messages and codes for all MAINVIEW-installed products running in full-screen mode, including offline products, are in this list. Short messages are listed in alphabetic order before the numbered messages and codes. (Short messages are displayed either in the Service Refresh Cycle display or in the upper right corner of the other service applications.)

Use the **Locate** command to locate a specific message. For example, **L IM** locates the first message beginning with the characters IM and moves it to the top of the display.

The messages are obtained from the BBMLIB data set. This data set can be browsed if a TS is not available. If user messages are added to the BBMLIB data set, they must be prefixed with an @ sign.

Chapter 18 Transferring Applications

Use application transfer commands to move temporarily from one application to another within the same product line. You can use application transfer commands for all the full-screen MAINVIEW applications.

If you want to transfer temporarily from one application in the current product line to another application in another product line, prefix the transfer command with the product line transfer commands and a semi-colon (;). The example in Figure 18-1 shows a transfer from the CICS SYSTEM STATUS application (the CICS option of the MAINVIEW AutoOPERATOR product line) to the MAINVIEW for DB2 Active Timer Requests application.

Figure 18-1 Example of Application Transfer to Another Product Line

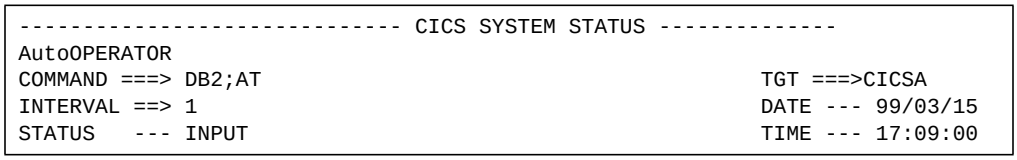


Table 18-1 and Table 18-2 on page 18-2 list valid transfer commands for application transfer.

The application transfer commands listed in Table 18-1 can be entered in any full-screen MAINVIEW application.

Note: These commands are not preceded by a product line transfer command.

Table 18-1 Transfer Commands for Full-Screen Applications

Application Transfer Command	Description
COD or CODES	Messages and Codes List
CYC or CYCLE	Service Refresh Cycle
FOC or FOCAL	FOCAL POINT Overview Display
JOU or JOURNAL	LOG Display
KEY or KEYS	Program Function Keys
LOG	LOG Display
MSG	Messages and Codes List
REF or REFRESH	Service Refresh Cycle
TI	Time Initiated EXEC Requests

Using the information in Table 18-2, enter theproduct line transfer command listed in the first column, a semi-colon, and an application transfer command from the second column on any COMMAND line. You will get the panel listed in the third column if the product listed in the fourth column is installed.

Table 18-2 Application Transfer Commands

Product Line Transfer Command	Application Transfer Command	Description	Product
CICS Operator Workstation or MAINVIEW for CICS			
CAO or CICS	ALE or ALERTS	Alert Overview	AutoOPERATOR
CAO or CICS	AT	Active Timer Requests	MAINVIEW for CICS
CAO or CICS	BROA or BROADCAST	CICS Broadcast	AutoOPERATOR
CAO or CICS	CMRTOOLS	MAINVIEW for CICS Tools Menu	MAINVIEW for CICS
CAO or CICS	CT	Current Traces	MAINVIEW for CICS
CAO or CICS	DM	Display Monitors	MAINVIEW for CICS
CAO or CICS	DW	Display Warnings	MAINVIEW for CICS
CAO or CICS	EX or EXEC or VIEW svc parm1, parm2	Execute a MAINVIEW for CICS service with defaults or passed parameters	MAINVIEW for CICS
CAO or CICS	HIST or HISTORY	MAINVIEW for CICS History Selection	MAINVIEW for CICS
CAO or CICS	HT	History Traces	MAINVIEW for CICS
CAO or CICS	PUT	MAINVIEW for CICS PUT Level	MAINVIEW for CICS
CAO or CICS	SD	Statistics and Defaults	MAINVIEW for CICS

Table 18-2 Application Transfer Commands (continued)

Product Line Transfer Command	Application Transfer Command	Description	Product
CAO or CICS	SM	Start Monitor	MAINVIEW for CICS
CAO or CICS	ST	Start Trace	MAINVIEW for CICS
CAO or CICS	STA or STATUS	CICS System Status	AutoOPERATOR
CAO or CICS	UGR or UGRAPH	User Defined Graph Selection	MAINVIEW for CICS
CAO or CICS	XAL or XALRTS	Alert Detail	AutoOPERATOR
MAINVIEW AutoOPERATOR Base			
AO	ALE or or ALERTS	ALERT Overview	AutoOPERATOR
AO	DPM	Dynamic Parameter Manager	AutoOPERATOR
AO	EMA	EXEC Management	AutoOPERATOR
AO	EVE or EVENTS	Event Activity Statistics	AutoOPERATOR
AO	EXEC	EXEC Management	AutoOPERATOR
AO	MAS	Event Activity Statistics	AutoOPERATOR
AO	MSGS or MSGSTATS	Event Activity Statistics	AutoOPERATOR
AO	OSPI	OSPI Script Development	AutoOPERATOR
AO	NV	NetView OPERATOR WORKSTATION	AutoOPERATOR
AO	RUL or RULES	Automation Control	AutoOPERATOR
AO	SOF	Shared Object Facility	AutoOPERATOR
AO	TI	Time-Initiated EXECs	AutoOPERATOR
AO	XAL or XALRTS	Alert Detail	AutoOPERATOR
MAINVIEW for DB2			
DB2	AN	Analyzer Display Services	MAINVIEW for DB2
DB2	AT	Active Timer Requests	MAINVIEW for DB2
DB2	CT	View Current Traces	MAINVIEW for DB2
DB2	DM	Display Monitors	MAINVIEW for DB2
DB2	DW	Display Warnings	MAINVIEW for DB2
DB2	GC	General Commands	MAINVIEW for DB2
DB2	GT	Graph Thread History	MAINVIEW for DB2
DB2	EX or EXEC svc parm1, parm2	Execute a MAINVIEW for DB2 service with defaults or passed parameters	MAINVIEW for DB2
DB2	HT	HISTORY Traces	MAINVIEW for DB2
DB2	IO	I/O Analysis Options	MAINVIEW for DB2 (Release 3.1 and above)

Table 18-2 Application Transfer Commands (continued)

Product Line Transfer Command	Application Transfer Command	Description	Product
DB2	CTIO	Current I/O Traces	MAINVIEW for DB2 (Release 3.1 and above)
DB2	HTIO	History I/O Traces	MAINVIEW for DB2 (Release 3.1 and above)
DB2	MN	Data Collection Monitors	MAINVIEW for DB2
DB2	PM	DB2 System Status	MAINVIEW for DB2
DB2	SD	Display Statistics and Defaults	MAINVIEW for DB2
DB2	SM	Start Monitors	MAINVIEW for DB2
DB2	ST	Start Application Trace	MAINVIEW for DB2
DB2	VT	View Current Traces	MAINVIEW for DB2
IMS Operator Workstation or MAINVIEW for IMS			
MAINVIEW for IMS applies to both MAINVIEW for IMS and MAINVIEW for DBCTL.			
IAO	ALE or ALERTS	ALERTS Overview	AutoOPERATOR
IAO or IMS	AN	Analyzer Display Services	MAINVIEW for IMS
IAO or IMS	AR	Data Entry Database Areas	AutoOPERATOR
IAO or IMS	AT	Active Timer Requests	MAINVIEW for IMS
IAO or IMS	CT	View Current Traces	MAINVIEW for IMS
IAO or IMS	DAT or DATABASE	Database	AutoOPERATOR
IAO or IMS	DB	Database	AutoOPERATOR
IAO or IMS	DE	Data Entry Databases	AutoOPERATOR
IAO or IMS	DM	Display Monitor Requests	MAINVIEW for IMS
IAO or IMS	DW	Display Warnings	MAINVIEW for IMS
IAO or IMS	EXEC svc parm1, parm2	Execute a service with passed parameters	MAINVIEW for IMS
IAO or IMS	EX	Status/Exception	AutoOPERATOR
IAO or IMS	GC	General Commands	MAINVIEW for IMS
IAO or IMS	HT	HISTORY Traces	MAINVIEW for IMS
IAO or IMS	MAINVIEW for IMS	MAINVIEW for IMS Performance Management	MAINVIEW for IMS
IAO or IMS	ISC	ISC Links	AutoOPERATOR
IAO or IMS	LINE	BTAM Lines	AutoOPERATOR
IAO or IMS	LT or LTERM	LTERMS	AutoOPERATOR
IAO or IMS	MN	Data Collection Monitors	MAINVIEW for IMS
IAO or IMS	MS	Main Storage Databases	AutoOPERATOR
IAO or IMS	NO or NODE	VTAM nodes	AutoOPERATOR

Table 18-2 Application Transfer Commands (continued)

Product Line Transfer Command	Application Transfer Command	Description	Product
IAO or IMS	PD	MAINVIEW for IMS Performance Management	MAINVIEW for IMS
IAO or IMS	PM	MAINVIEW for IMS Performance Management	MAINVIEW for IMS
IAO or IMS	PR or PROGRAM	Program	AutoOPERATOR
IAO or IMS	RC	Fast Path Routing Codes	AutoOPERATOR
IAO or IMS	REG or REGION	IMS Regions	AutoOPERATOR
IAO or IMS	SD	Display Statistics and Defaults	MAINVIEW for IMS
IAO or IMS	SM	Start Monitors	MAINVIEW for IMS
IAO or IMS	ST	Start Trace	MAINVIEW for IMS
IAO	STA or STATUS	Status/Exception	AutoOPERATOR
IMS	STA or STAT	IMS SYSTEM STATUS	MAINVIEW for IMS
IAO or IMS	TR or TRANSACTION	Transaction	AutoOPERATOR
IAO or IMS	VT	View Current Traces	MAINVIEW for IMS
IAO	XAL or XALRTS	ALERTS Detail	AutoOPERATOR
MVS Operator Workstation			
MAO	ALE or ALERTS	ALERTS Overview	AutoOPERATOR
MAO	DA	Address Spaces	AutoOPERATOR
MAO	DASD	DASD Status/Control	AutoOPERATOR
MAO	DISP or DISPLAY	Address Spaces	AutoOPERATOR
MAO	ENQ or ENQUEUES	Enqueue/Reserve	AutoOPERATOR
MAO	OPE or OPERATOR	Operator Requests	AutoOPERATOR
MAO	OR	Operator Requests	AutoOPERATOR
MAO	REQ or REQUESTS	Operator Requests	AutoOPERATOR
MAO	RES or RESERVES	Enqueue/Reserve	AutoOPERATOR
MAO	STA or STATUS	System Status	AutoOPERATOR
MAO	TAP or TAPE	Tape Status/Control	AutoOPERATOR
MAO	MAJ or MAJNODE	VTAM Major Nodes	AutoOPERATOR
MAO	APPL	VTAM Applications	AutoOPERATOR
MAO	CDRM	VTAM CDRMs	AutoOPERATOR
MAO	CDRS or CDRSC	VTAM CDRSCs	AutoOPERATOR
MAO	LINE	VTAM Lines	AutoOPERATOR
MAO	CLS or CLSTR	VTAM Clusters	AutoOPERATOR

Table 18-2 Application Transfer Commands (continued)

Product Line Transfer Command	Application Transfer Command	Description	Product
MAO	TERM or TERMINAL	VTAM Terminals	AutoOPERATOR
MAO	XAL or XALRTS	ALERTS Detail	AutoOPERATOR

Appendix A Using Product Libraries

Of the distributed target libraries, only those libraries and data sets that are changed by customization are described in this section. The purpose of this section is to ensure that site changes to customized product libraries are not lost when your site migrates to a new release or applies product maintenance.

This section provides information about which product libraries to use when you make changes to a product. It explains how the product libraries are created, what their intended use is, and which libraries to use to make your site's changes.

The types of product libraries are:

- SMP-maintained distributed target libraries

  These are created during product installation. They contain load modules, parameters, procedures, samples, views, screen definitions for views, and view help in their original form. The installation procedures are described in the *Product Installation and Maintenance Guide*.

  Note: Never modify these libraries without SMP procedures.

- Site-customized product libraries

  These are created for you by AutoCustomization, or you can create them manually. They contain versions of distributed library members modified to your site's requirements. AutoCustomization procedures are described in the *Product Installation and Maintenance Guide*. Manual procedures are described in the *MAINVIEW Implementation Guide*.

- Product user libraries

  Each user can have their own version of views, screen definitions containing views, and view help in a library with their user ID.

A user profile (*uprefix.userid.*BBPROF) is created during TS initialization if one does not exist already depending upon what products are installed.

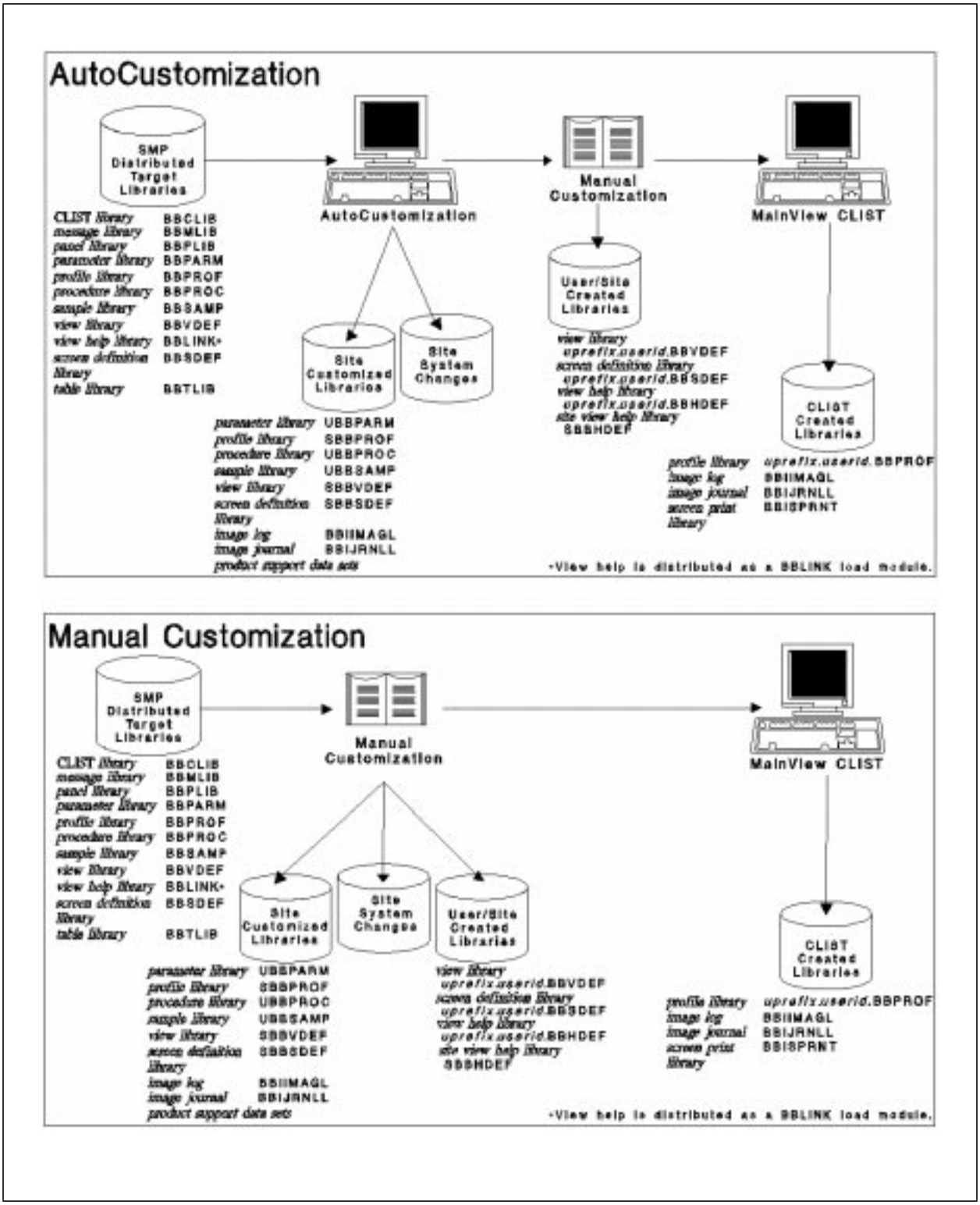
- Image and Journal Logs

  These are used by some products that run in the BBI-SS PAS for recording screen images or messages. They are created for you by AutoCustomization, or you can create them manually. AutoCustomization procedures are described in the *Product Installation and Maintenance Guide*. Manual procedures are described in the *MAINVIEW Implementation Guide*.

- Product support data sets

These data sets are required for some product functions. They are created for you by AutoCustomization, or you can create them manually. AutoCustomization procedures are described in the *Product Installation and Maintenance Guide*. Manual procedures are described in the *MAINVIEW Implementation Guide*.

The following figure shows how customized product libraries are created.



Distributed Libraries

These comprise:

Link library This data set contains MAINVIEW environment and product-specific load modules.

Parameter library
Product parameters

Members in this library contain parameter definitions for related products and product-specific parameter definitions.

Sample library Product samples

Members in this library contain macros, sample JCL, and sample user exit routines.

Profile library Profile information

This library contains members that define PF keys, target system defaults, primary option menu, unique application profiles, and cycle refresh definitions for a user's terminal session for the products that run in full-screen mode.

Procedure library
AutoOPERATOR execute command lists (EXECs)

Members in this library contain user-defined automated applications.

View library Product views

Members in this library contain views used by products operating in windows mode.

Screen library Screen definitions with views

Members in this library include screen definintions containing one or more views.

V**iew help library**Help text

This library contains help text for products providing views.

Message library Messages and abend codes

This library, called BBMLIB, contains messages and abend codes issued by MAINVIEW products.

Panel library ISPF panels

Each member in this library, called BBPLIB, is a panel definition for the TS. User-customized panels should be placed in a separate library and concatenated in front of the distributed panel library.

CLIST library MAINVIEW CLISTs

AutoCustomization and CLISTs used by specific MAINVIEW products are in this library, called BBCLIB.

Table library MAINVIEW tables

This library, called BBTLIB, contains MAINVIEW product tables, AutoCustomization tables, and some MAINVIEW product command tables.

Note: Use the contents of the distributed libraries as models to create your own site-customized product libraries. The distributed libraries should never be modified. All changes described in this manual should be made only to site-customized product libraries. If you change the distributed libraries, subsequent SMP maintenance will overwrite your changes.

Customized Libraries

These comprise:

- your own versions of the distributed libraries
- product support data sets

  These are:

  — BBIBBCFG, BBIDIV, BBIVARS

  This data set is used by all AutoOPERATOR products. BBIBBCFG identifies BBPARM configuration member suffixes to the BBI-SS PAS. BBIDIV is a data storage data set. BBIVARS is a variable pool data set.

  — PARMFILE

  This data set is for MAINVIEW for OS/390 workload configuration definitions and for products supporting historical data processing with the view TIME command.

- image and journal logs

These are used by the AutoOPERATOR products, MAINVIEW for CICS, MAINVIEW for DB2, MAINVIEW for DBCTL, and MAINVIEW for IMS. The Image log is for screen images from timer-driven service requests. The Journal log is for BBI-SS PAS and product commands, responses, and messages.

Parameter Libraries

Each member in this data set contains parameters for a separate product or group of related products. Your site can have several parameter libraries, a distributed version and one or more site-customized versions. Multiple parameter library data sets can be concatenated together. With this technique, a site parameter library set can be created and a data set individualized for each PAS can be concatenated before the site library.

BBPARM

BBPARM is a distributed target library that is created during product installation. This version should never be modified. Subsequent SMP maintenance will overwrite any changes you make. The distributed name is used in this manual for reference only.

UBBPARM

UBBPARM is a copy of the distributed parameter library. It can be created automatically by AutoCustomization, or you can create it manually.

Note: AutoCustomization creates a UBBPARM data set as *hilevel*.*image*.UBBPARM; for example, *hilevel*.IMAGSYSD.UBBPARM. This lets each MVS image have its own BBPARM data set for unique parameters.

Use this copy to make any parameter library changes described in this manual.

AutoCustomization

If you used AutoCustomization successfully when you installed your product libraries as described in the *Product Installation and Maintenance Guide*, it created a UBBPARM data set for you and customized its members.

Manual Customization

If you are customizing the product manually:

1. Create your own UBBPARM data set.
2. Copy the members you need from the distributed BBPARM library into the UBBPARM data set you created.
3. Change the copied members for your needs.

IMS Parameter Library (MAINVIEW for IMS, MAINVIEW for DBCTL, and AutoOPERATOR for IMS Only)

A parameter library, *ibbparm*, where *ibbparm* represents a user-defined parameter library, may be created for each IMS so that each has its own IMFSYS00 member plus any other members that you want to make unique to an IMS target. IMFSYS00 contains BBI-SS PAS to IMS communication parameters. The SUBSYS communication parameter establishes communication between IMS and the BBI-SS PAS.

Manual Customization

A parameter library for a specific IMS must be created manually and copied from the distributed parameter library as described in the customization guides for MAINVIEW for IMS and MAINVIEW for DBCTL. Use this copy of the parameter library to make product changes that are unique to a specific IMS target. For example, different Event Collector initialization parameters can be defined for a specific IMS by copying the IMFECP00 member from the distributed parameter library to your user-defined parameter library.

Sample Libraries

The members in this data set contain:

- sample JCL that can be edited and submitted to perform specified functions
- macros that are referenced when assembling user-written services
- sample user exit routines

Your site can have several sample libraries, a distributed version and one or more site-customized versions. Some members are for more than one product and some are product-specific.

BBSAMP

BBSAMP is a distributed target library that is created during product installation. This version should never be modified. Subsequent SMP maintenance will overwrite any changes you make. The distributed name is used in this manual for reference only.

UBBSAMP

UBBSAMP contains copies of members from the distributed sample library. It can be created automatically by AutoCustomization, or you can create it manually. You can use UBBSAMP to make any changes to members described in this manual.

AutoCustomization

If you used AutoCustomization successfully when you installed your product libraries as described in the *Product Installation and Maintenance Guide*, it created a UBBSAMP data set for you if one did not exist already. UBBSAMP contains copies of members from the distributed sample library. Use these members to customize a product to your site's needs.

Manual Customization

If you are customizing the product manually:

1. Create your own UBBSAMP data set.

2. To change a sample member described in this manual, copy the applicable member(s) you need from the distributed BBSAMP library into the UBBSAMP data set you created.

3. Change the member(s) you copied in UBBSAMP.

Profile Libraries

This section applies only to:

AutoOPERATOR
MAINVIEW for DB2
MAINVIEW for DBCTL
MAINVIEW for CICS
MAINVIEW for IMS

Your site can have several profile libraries, a distributed version and one or more site-customized versions. Members in this data set contain profile information and cycle refresh definitions. Other members are dynamically created. Do not change any members in this library unless instructed to.

You can have a site profile library and a user profile library. The site library can be created automatically by AutoCustomization, or you can create it manually. The site library is a common profile shared by all site users. The MAINVIEW CLIST creates a user profile automatically if one does not exist already. Users should have their own profile library so that each user can specify:

- unique PF keys
- CYCLE commands
- target system defaults
- primary Option Menu
- a unique set of application profiles

The user profile and the site profile should be concatenated before the distributed profile. When a profile is saved, it is stored in the first profile library defined in the concatenation.

BBPROF

BBPROF is a distributed target library that is created during product installation. This version should never be modified. Subsequent SMP maintenance will overwrite any changes you make. The distributed name is used in this manual for reference only.

SBBPROF

SBBPROF is an optional data set. It can be created automatically by AutoCustomization, or you can create it manually. Use SBBPROF to make any changes described in this manual that you want to be shared by all users at your site.

AutoCustomization

If you used AutoCustomization successfully when you installed your product libraries as described in the *Product Installation and Maintenance Guide*, it created an SBBPROF data set for you and customized its members.

Manual Customization

If you are customizing the product manually:

1. Create a common SBBPROF data set for your site.
2. Copy the applicable member(s) you need from the distributed BBPROF library into the SBBPROF data set you created.
3. Change the member(s) you copied in SBBPROF.

User BBPROF

There should be a profile data set for each user so that each user has an individual application profile. The MAINVIEW CLIST created a user profile automatically if one did not exist. It is called *userid*.BBPROF, where *userid* is the user's logon ID. This data set contains profile members customized by a user.

Procedure Libraries (AutoOPERATOR Only)

Your site can have several procedure libraries available, a distributed version and one or more site-customized versions. Members in this data set contain executable procedures used by AutoOPERATOR. These procedures are execute command lists (EXECs) that automate site functions. For more information about EXECs, see the manuals shipped with your AutoOPERATOR product.

BBPROC

BBPROC is a distributed target library that is available when AutoOPERATOR is installed successfully. This version should never be modified. Subsequent SMP maintenance will overwrite any changes you make. The distributed name is used in this manual for reference only.

UBBPROC

UBBPROC is used to contain new user-written EXECs or customized AutoOPERATOR-supplied EXECs from the distributed BBPROC library. It can be created automatically by AutoCustomization or you can create it manually.

AutoCustomization

If you used AutoCustomization successfully when you installed AutoOPERATOR as described in the *Product Installation and Maintenance Guide*, it created a UBBPROC data set for AutoOPERATOR.

If you need to use a specific EXEC sample:

1. Verify that the member was not copied by AutoCustomization to UBBPROC.

2. Copy the sample member you need to modify from the distributed BBPROC to UBBPROC.

3. Make the change in the copied member.

Manual Customization

If you are customizing AutoOPERATOR manually:

1. Create your own UBBPROC data set.

2. Copy the member(s) you need to modify from the distributed procedure library into the UBBPROC data set you created.

3. Change the member(s) you copied in UBBPROC.

View, Screen, and View Help Distribution Libraries

This section applies only to those products operating in windows mode. The distribution libraries for those products are allocated as follows:

Views

The SMP target view library is allocated in the CAS and PAS startup procedure. Site and user view libraries are allocated to the UAS, as described in “Site Libraries” on page A-12 and “User Libraries” on page A-13.

This library contains a uniquely named set of views for a product. View tables allow multiple products to have the same view names. For example, MAINVIEW for OS/390 has one version of VIEWS while CMF MONITOR Online has a completely different version of VIEWS; they are kept separate in the library by being stored in tables with unique names.

Screen Definitions

A set of screen definitions is allocated by the MAINVIEW CLIST.

Help text

Help text for views is distributed as a load module in the *hilevel*.BBLINK load library.

Site Libraries

The following site libraries are created for you during AutoCustomization:

- a view library, allocated as *hilevel*.SBBVDEF
- a screen definition library, allocated as *hilevel*.SBBSDEF

The first S in SBBVDEF and SBBSDEF represents ”site.”

When the MAINVIEW CLIST (created by AutoCustomization) is used to access the MAINVIEW selection menu, *hilevel*.SBBVDEF and *hilevel*.SBBSDEF data sets are allocated to a UAS using the DD names: BBVDEF and BBSDEF.

Note: A system administrator should retain sole authority for adding and deleting views, help text, or screen definitions from site libraries. Granting write authority to more than one user may result in confusion and subject valuable data to overwriting. Users who want to contribute to a site library should contact the system administrator.

If you have an external security system such as RACF, CA-ACF2, or CA-TOP SECRET, it can be used to restrict changes to site libraries from all user IDs except the system administrator's.

User Libraries

User libraries contain customized views, screen definitions, or help text that are available to an individual user only.

Note: If a user does not have access to a user library, any changes made and saved by that user are stored in the site library by default unless the system administrator has prevented write access to the site library. A user library should be created for each user at your site.

1. Create standard partitioned data sets (fixed block, `LRECL=80`) for a user view, screen definition, and help text library.

   Use the following naming convention:

   uprefix.userid.BB*x*DEF

   where:

   uprefix Is a user's TSO prefix

   Note: You can use the UPREFIX parameter in the MAINVIEW CLIST to specify any prefix you want. This is useful for those who have more than one TSO ID and want to use the same user BB*x*DEF data set with all their IDs. If UPREFIX is not specified, the default is *uprefix.userid*.BB*x*DEF.

   userid Is a user's TSO ID

x Is one of the following:

V	View library
S	Screen definition library
H	Help text library

2. Change the user's allocations to contain user and site data sets. Ensure that the user library is searched before the site library.

   Note: If the MAINVIEW CLIST is used to access the MAINVIEW selection menu, it concatenates the view and screen libraries. The user help text library must be added manually to the concatenation.

As many data sets as needed can be added to the concatenation within your site's restrictions. For example, you may want to create department- or group-specific libraries that only a select group of people may access. All of the people in that department or group, then, would name the same data sets on their BB*x*DEF concatenation.

Shared Libraries

User libraries allocated to a UAS are shared by all products providing views. Therefore, if you have more than one of these products installed on your system, you must use caution when saving views and screen definitions.

For example, suppose you create a MAINVIEW for OS/390 view called MYVIEW and save it in your user view library. You then access CMF MONITOR Online and create another view, also called MYVIEW. When you try to save the second MYVIEW, a message warns you that MYVIEW already exists because you created MAINVIEW for OS/390 MYVIEW previously. If you save the second version anyway, the first version of MYVIEW is overwritten.

To avoid possible confusion, you should establish a naming convention at both the site and user levels; for example, C*xxxxxxx* for CMF MONITOR Online views, M*xxxxxxx* for MAINVIEW for OS/390 views.

Library Concatenation

By default, when views, screen definitions, or help text are changed or new ones created and saved, they are saved in the libraries as follows:

1. User library first, if one exists
2. Site library, if one exists

   If neither exist, an error message is displayed.

   Note: The distributed view library cannot be overwritten because it is allocated to a PAS, not a UAS.

When views, screen definitions, or help are requested, the libraries are searched by default as follows:

1. Your user library first, if one exists
2. Your site library, if one exists
3. The distributed library (for views and help text only)

Link Library

This data set must be authorized. Executable modules are obtained from this library if it is specified. If it is not specified, an error message is generated. This data set is concatenated in the target's STEPLIB DD statements for some MAINVIEW products.

Product Support Data Sets

AutoOPERATOR products use:

- BBIBBCFG

  This BBPARM member specifies which configuration members in the BBPARM library are used when AutoOPERATOR starts. Configuration members control the way AutoOPERATOR works. Default members used are AAOEXP00 and AAOALS00.

- BBIDIV

  This data set is mandatory for AutoOPERATOR. It is used to store binary large objects and data across AutoOPERATOR restarts. It is allocated in the BBI-SS PAS startup procedure.

- BBIVARS

  A profile variable pool. Variables are written to this data set when an EXEC that issues a VPUT ... PROFILE ends or when the VCKP command is issued. It is allocated in the BBI-SS PAS log procedure (BBSAMP member SSLOG).

MAINVIEW for OS/390 and products supporting the DSLIST view and the TIME command use:

- PARMFILE

  This VSAM data set is for:

  — user-defined workload definitions created by the MAINVIEW for OS/390 product

  — products providing views of data from a time interval in the pastt

  Data from the past is recorded in historical data sets. PARMFILE is used to contain a directory of the historical data set names, which is shown by a product having a DSLIST view. Data from a historical data set is shown in any of that product's views with the TIME command.

PARMFILE is allocated in the BBI-SS PAS and MVS PAS startup procedures.

Image and Journal Logs

There are two Image and two Journal logs allocated in the BBI-SS PAS startup procedure that are used by the following products:

- AutoOPERATOR (only uses the Journal logs)
- MAINVIEW for CICS
- MAINVIEW for DB2
- MAINVIEW for DBCTL
- MAINVIEW for IMS
- MAINVIEW for MQSeries (formerly Command MQ for S/390)

The BBI-SS PAS Image log records screen images that are produced automatically by timer-driven analyzer and monitor services. Image logging can be disabled by removing the appropriate statement from the BBI-SS PAS startup procedure.

The BBI-SS PAS Journal log records:

- all commands and responses issued from a TS assigned to the BBI-SS PAS
- all commands and responses issued automatically by AutoOPERATOR EXECs
- time stamps for BBI-SS PAS and target system start and stop
- BBI-SS PAS informational, error, and audit messages
- service commands and messages
- DB2 commands and messages

Although it is not recommended, because all operational and diagnostic messages are written to the BBI-SS PAS Journal log, BBI-SS PAS Journal logging can be disabled by removing appropriate DD statements from the BBI-SS PAS startup procedure JCL. BBI-SS PASs cannot share journal data sets.

Note: Image and Journal logs and a screen print data set are allocated to a user's TS by the MAINVIEW CLIST.

Product Library Customization Summary

The following table summarizes how the MAINVIEW product libraries should be configured.

Distributed Target Library	Customized Library	Created by AutoCustomization?	Allocated to which Address Space?	Allocated to What DD Name?
BBLINK	BBLINK	No, AutoCustomization APF-authorizes the distributed BBLINK load library and adds it to your system link library. See “Notes” at the end of the table.	UAS, PAS, CICS target, IMS target	BBILOAD or BBILINK
BBSAMP	UBBSAMP	Yes, AutoCustomization creates a UBBSAMP sample library.	None	None
BBPARM	UBBPARM	Yes, AutoCustomization creates a UBBPARM parameter library. See “Notes” at the end of the table.	MVS PAS: BBI-SS PAS, CICS target, IMS target	PARMLIB: BBIPARM
	ibbparm	No, *ibbparm* is a user-defined parameter library that must be created manually.	IMS target	IMFPARM
BBPARM member BBIBBCFG	UBBPARM member CFG*ssid*A	Yes, AutoCustomization creates the UBBPARM member but only for AutoOPERATOR.	BBI-SS PAS	BBCFG
BBPROC	UBBPROC	Yes, AutoCustomization creates a UBBPROC procedure library but only for AutoOPERATOR.	BBI-SS PAS	SYSPROC
None	BBIDIV data set	Yes, AutoCustomization creates this data set but only for AutoOPERATOR.	BBI-SS PAS	BBIDIV
None	BBIVARS data set	Yes, AutoCustomization creates this data set but only for AutoOPERATOR.	BBI-SS PAS	BBIVARS
None	BBIIMAG1, BBIIMAG2	Yes, AutoCustomization creates dual Image log data sets for: MAINVIEW for: CICS DB2 DBCTL IMS See “Notes” at the end of the table.	BBI-SS PAS	BBIIMAG1, BBIIMAG2

Distributed Target Library	Customized Library	Created by AutoCustomization?	Allocated to which Address Space?	Allocated to What DD Name?
None	BBIIJRNL1, BBIIJRNL2	Yes, AutoCustomization creates dual Journal log data sets for: AutoOPERATOR Command MQ for S/390 MAINVIEW for: CICS DB2 DBCTL IMS	BBI-SS PAS	BBIIJRNL1, BBIJRNL2
None	BBIIMAGL, BBIJRNLL	No, AutoCustomization does not create an Image nor a Journal log. They are created automatically by the MAINVIEW CLIST.	UAS	BBIIMAGL BBIJRNLL
BBPROF	*uprefix.userid.*BBPROF and/or SBBPROF	*uprefix.userid.*BBPROF: No, AutoCustomization does not create a user profile. It is created automatically by the TSO MAINVIEW CLIST. SBBPROF: Yes, AutoCustomization creates a site profile.	UAS	BBIPROF
BBVDEF	*uprefix.userid.*BBVDEF	No, *uprefix.userid.*BBVDEF is a user-defined view library that must be created manually. The MAINVIEW CLIST allocates it.	UAS	BBVDEF
	*hilevel.*SBBVDEF	Yes, AutoCustomization creates a *hilevel.*SBBVDEF site view library. The MAINVIEW CLIST allocates it.		
	*hilevel.*BBVDEF	No, AutoCustomization does not create or modify it. It is a distributed library.	PAS	
BBSDEF	*uprefix.userid.*BBSDEF	No, *uprefix.userid.*BBSDEF is a user-defined screen definition library that must be created manually. The MAINVIEW CLIST allocates it.	UAS	BBSDEF
	*hilevel.*SBBSDEF	Yes, AutoCustomization creates a *hilevel.*SBBSDEF site screen definition library. The MAINVIEW CLIST allocates it.		
	*hilevel.*BBSDEF	No, AutoCustomization does not create or modify it. It is a distributed library.		

Distributed Target Library	Customized Library	Created by AutoCustomization?	Allocated to which Address Space?	Allocated to What DD Name?
View help text	*uprefix.userid.*BBHDEF	No, *uprefix.userid.*BBHDEF is a user-defined help library that must be created manually. Modify the user's TSO logon procedure to allocate it. See “Notes” below.	UAS	BBHDEF
	*hilevel.*SBBHDEF	No, AutoCustomization does not create a *hilevel.*SBBHDEF site help library. You must create it manually. The MAINVIEW CLIST allocates it.		

Notes:

- Concatenation
  User and site-customized libraries should be concatenated before the distributed libraries.
- BBLINK
  IMS and CICS target allocation of the link library require IMS and CICS JCL modifications. UAS allocation of the link library uses a DD name of BBILOAD and BBILINK.
- BBPARM
  IMS and CICS target allocation of the parameter library require IMS and CICS JCL modifications.
- View Help text
  Help text for views is distributed as a BBLINK load module.

Glossary

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

Since this glossary pertains to BMC Software-related products, some of the terms defined may 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 MVS targets for BMC Software MAINVIEW products.

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

BBI subsystem product address space (BBI-SS PAS)
MVS 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
- MAINVIEW for MQSeries (formerly Command MQ for S/390)
- MAINVIEW for VTAM
- MAINVIEW VistaPoint (for CICS, DB2, 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.

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 MVS 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 MVS, and RMF postprocessor. *See* CMF MONITOR Analyzer, CMF MONITOR Online, MAINVIEW for MVS.

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 MVS.

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.

CMRSTAT MAINVIEW for CICS data set that stores both CICS operational statistic records, at 5-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 MVS that monitors usage and reconfigures MVS 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.

CPO Customized Product Offering. Delivery and installation technique that allows any combination of BMC Software SMP/E-maintainable products to be distributed on a product tape to a customer and installed quickly. The CPO product tape contains libraries required for product customization and execution, plus SMP distribution libraries and data sets needed for application of SMP maintenance.

current data Data that reflects the system in its current state. The two types of current data are realtime data and interval data. *Contrast with* historical data. *See also* interval data, realtime 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 MVS data collectors obtain data from MVS services, MVS 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.

DMR *See* MAINVIEW for DB2.

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.

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.*

Event Collector Component for MAINVIEW for IMS 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 batch products: Performance Reporter and Transaction Accountant. If the Extensions for DB2 option to IMS PR, IMS TA, IMS WA, or IMS WM is installed, the Event Collector also measures DB2 activity through the Attach facility.

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

Extensions for DB2 Additions to MAINVIEW for IMS and MAINVIEW for DBCTL that gather DB2 subsystem activity through the IMS Attach facility. These additions are licensed as options to IMS PR, IMS TA, IMS WA, and IMS WM. No license is required for IMS RA, IMS RM, and MAINVIEW AutoOPERATOR for IMS.

Extensions for IRLM Additions to MAINVIEW for IMS and MAINVIEW for DBCTL that analyze database locking and measure IRLM activity when IRLM is used. These additions are licensed as options to IMS RA and IMS RM.

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.

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 realtime 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.

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 MAINVIEW 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 may 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.

IMS PERFORMANCE REPORTER (IMS PR)
Offline product that organizes data and prints reports that can be used to analyze IMS performance.

IMS PR EXTENSIONS for DB2
Licensed option to the IMS Performance Reporter that provides offline statistical, graphic, and calendar reports about DB2 subsystem activity and requests that are integrated with IMS activity.

IMS RA EXTENSIONS for DB2
Additions to the IMS Resource Analyzer that provide online monitoring displays of DB2 region connection and thread status.

IMS RESOURCE ANALYZER (IMS RA)
Online realtime displays used to analyze IMS resources and determine which are affected by specific workload problems.

IMS RESOURCE MONITOR (IMS RM)
Online data collection services used to monitor IMS resources and issue warnings when defined utilization thresholds are exceeded.

IMS RM EXTENSIONS for DB2

Additions to the IMS Resource Monitor that provide timer-driven data collection of DB2 region connection and threads.

IMS TA EXTENSIONS for DB2

Licensed option to the IMS Transaction Accountant that provides integrated accounting of IMS and DB2 activity through the IMS Attach Facility.

IMS TRANSACTION ACCOUNTANT (IMS TA)

Offline product used to produce cost accounting and user charge-back records and reports.

IMS WA EXTENSIONS for DB2

Licensed option to the IMS Workload Analyzer that provides

- Timer-driven workload wait and trace data collection
- Displays of the transaction active and wait time for DB2 processing events
- Trace of DB2 subsystem activity

The trace is either summarized by DB2 calls and CPU usage for DB2 processing or detailed to include call start, elapsed times, SQL statement numbers, and return codes.

IMS WORKLOAD ANALYZER (IMS WA)

Online data collection and display services used to analyze IMS workloads and determine problem causes.

IMS WM EXTENSIONS for DB2

Licensed option to the IMS Workload Monitor that provides timer-driven data collection of the types and number of calls issued to a DB2 subsystem, DB2 transaction input queue and response time, and average DB2 CPU time per transaction.

IMS WORKLOAD MONITOR (IMS WM)

Online data collection services used to monitor IMS workloads and issue warnings when defined thresholds are exceeded.

IMSPlex System Manager (IPSM)

Online 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 realtime 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 detailed (one event, one record) or summarized (more than one event, one record). A detailed IRUF is created by processing the IMS system log through a program called IMFLEDIT. A summarized IRUF is created by processing one or more detailed IRUFs, one or more summarized IRUFs, or a combination of both, through a sort program and the TASCOSTR program. If the Extensions for DB2 option to IMS PR or IMS TA is installed, the IRUF includes data about DB2 calls made through the IMS Attach Facility.

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 and MAINVIEW for DBCTL 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
Monitor that reads the data elements produced by products in the MAINVIEW window environment and returns SQL-syntactic statements.

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

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 realtime application performance analysis and monitoring for CICS system management.

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

MAINVIEW for DBCTL
Product (formerly MV MANAGER for DBCTL) that provides realtime application performance analysis and monitoring for DBCTL management.

MAINVIEW for IMS Product (formerly MV MANAGER for IMS) that provides realtime application performance analysis and monitoring for IMS management.

MAINVIEW for IP Product that monitors OS/390 mission-critical application performance as it relates to IP stack usage. Collected data includes: connections, response time statistics, application availability, application throughput, and IP configuration.

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 MVS System management application (formerly MV MANAGER for MVS). 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 OS/390
System management application (formerly 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 Selection Menu
ISPF selection panel that provides access to all MAINVIEW windows-mode and full-screen mode products.

MAINVIEW VistaPoint
Product that provides enterprise-wide views of performance. Application and workload views are available for CICS, DB2, IMS, and MVS. Data is summarized at the level of detail needed; e.g., reports may be for a single target, an MVS 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.

MV MANAGER for CICS
See MAINVIEW for CICS.

MV MANAGER for DB2
See MAINVIEW for DB2.

MV MANAGER for DBCTL
See MAINVIEW for DBCTL.

MV MANAGER for IMS
See MAINVIEW for IMS.

MV MANAGER for MVS
See MAINVIEW for MVS.

MVALARM *See* MAINVIEW Alarm Manager.

MVCICS *See* MAINVIEW for CICS.

MVDB2 *See* MAINVIEW for DB2.

MVDBC *See* MAINVIEW for DBCTL.

MVIMS *See* MAINVIEW for IMS.

MVMQ *See* MAINVIEW for MQSeries.

MVMVS *See* MAINVIEW for OS/390.

MVUSS *See* MAINVIEW for UNIX System Services.

MVS product address space (PAS)
Address space containing MVS data collectors, including the CMF MONITOR Extractor. Used by MAINVIEW for MVS and CMF MONITOR products. *See* PAS.

MVScope MAINVIEW for MVS application that traces both CPU usage down to the CSECT level and I/O usage down to the channel program level.

MVVP *See* MAINVIEW VistaPoint.

MVVP *See* MAINVIEW VistaPoint.

MVVTAM *See* MAINVIEW for VTAM.

nested help Multiple layers of help pop-up windows. Each successive layer is accessed by hyperlinking 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 MVS OpenEdition address spaces.

online help Help information that is accessible online.

parameter library Data set comprised of members containing 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* MVS product address space (PAS), BBI subsystem product address space (BBI-SS PAS).

performance group workload MVS/SP-defined collection of address spaces. *See* service class workload, workload definition.

PERFORMANCE MANAGER MAINVIEW for CICS online service for monitoring and managing current performance of CICS regions.

PERFORMANCE REPORTER Product component that generates offline batch reports. The following products can generate these reports:

- MAINVIEW for DB2
- MAINVIEW for IMS
- 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 window Window containing help information that, when active, overlays part of the window area. A pop-up panel is displayed when you issue the HELP command.

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 MVS creates a performance group workload for each performance group defined in the current IEAIPSxx member.

procedure library Data set comprised of members containing 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 comprised of members containing 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.

realtime data Performance data as it exists at the moment of inquiry. Realtime data is recorded during the smallest unit of time for data collection. *Contrast with* historical data. *See also* current data and interval data.

row (1) Horizontal component of a view or display comprising all the fields pertaining to a single device, address space, user, etc. (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 realtime data, the cycle is not fixed. Data is sampled each time you press Enter.

sample library Data set comprised of members each of which contains one of the following:

- Sample JCL that can be edited to perform specific functions
- A macro that is referenced in the assembly of user-written services
- A 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
MVS- or MAINVIEW for MVS-defined collection of address spaces.

If you are running MVS Workload Manager (WLM) in goal mode, MAINVIEW for MVS 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, MVS 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. There are no MVS-related measures of service for started task workloads.

service point Specification, to MAINVIEW, of the services required to enable a specific product. Services may be actions, selectors, or views. Each target (e.g., 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.

SRB *See* service request block.

single system image (SSI) Feature of the MAINVIEW window environment architecture that allows you to view and perform actions on multiple MVS systems as though they were a single system. The rows of a single tabular view can contain rows from different MVS images.

SpaceView for MVS Suite of products that assist in all phases of MVS storage management. SpaceView consists of components that perform automation, reporting, trend analysis, and error correction for storage management in MVS.

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).

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.

system resource *See* object.

target Entity monitored by one or more MAINVIEW products, such as an MVS image, IMS or DB2 subsystem, CICS region, or related workloads across systems. *See* context, scope, SSI context.

target context Single target/product combination. *See* context.

TASCOSTR MAINVIEW for IMS and MAINVIEW for DBCTL program that summarizes detail and summary IMS Resource Utilization Files (IRUFs) to be used as input to the offline products.

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 standalone 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.

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 timeframe 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 timeframe 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 MVS 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 (e.g., address spaces, CICS transactions, IMS transactions) according to classification criteria established by a system administrator. (2) In MVS, 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 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 MVS, 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 objectives Performance goals for a workload, defined in WKLIST. Objectives may include measures of performance such as response times and batch turnaround times.

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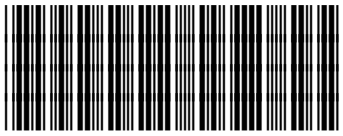

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