

MAINVIEW[®] for VTAM User Guide

Version 1.3

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

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About This Book

This book contains detailed information about the MAINVIEW for VTAM product and is intended for network administrators, system administrators, and system programmers.

To use this book, you should be familiar with the following items:

- Multiple Virtual Storage (MVS) systems, job control language (JCL), and the Interactive System Productivity Facility (ISPF)
- your client and host operating systems

For example, you should know how to respond to ISPF panels and how to perform common actions in a window environment (such as choosing menu items and resizing windows).

How This Book Is Organized

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

Chapter/Appendix	Description
Chapter 1, "Introduction"	provides an introduction to the features and functions of MAINVIEW for VTAM
Chapter 2, "Using MAINVIEW for VTAM"	explains the MAINVIEW for VTAM views that are displayed on the MAINVIEW console, and provides instructions for using the views
Chapter 3, "Error Messages"	explains the messages that can be displayed within the MAINVIEW for VTAM environment

Related Documentation

BMC Software products are supported by several types of documentation:

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

In addition to this book and the online Help, you can find useful information in the following publications:

Category	Document	Description
installation documents	<i>Implementing Security for MAINVIEW Products</i>	describes how to implement MAINVIEW security with your external security manager to protect MAINVIEW product resources from user access
	<i>MAINVIEW Common Customization Guide</i>	provides instructions for manually customizing the MAINVIEW environment for your products
	<i>MAINVIEW Installation Requirements Guide</i>	provides product-specific information such as software and storage requirements, product libraries, and FMIDs
	<i>OS/390 and z/OS Installer Guide</i>	provides instructions for using the installation system, and describes the Product Authorization utility and AutoCustomization
	<i>MAINVIEW for VTAM Customization Guide</i>	provides instructions for customizing and implementing MAINVIEW for VTAM
	<i>ULTRAOPT Customization Guide</i>	provides installation planning information, instructions for setup and testing, and instructions for customizing and implementing ULTRAOPT

Category	Document	Description
core documents	<i>BMC Software Subsystem User Guide</i>	provides information about the operation, implementation, and messages that are issued by the BMC Software Subsystems
	<i>MAINVIEW Administration Guide</i>	provides information about MAINVIEW operations, targets, single-system image contexts, MAINVIEW Alarm Manager, data sets, view customization, and diagnostic facilities
	<i>MAINVIEW Alarm Manager User Guide</i>	describes how to create and install alarm definitions that indicate when exceptions occur in a sysplex
	<i>MAINVIEW Alternate Access Implementation and User Guide</i>	explains how to configure, start, and stop VTAM and EXCP AutoLogon sessions to access MAINVIEW products without an active TSO subsystem
	<i>MAINVIEW Explorer Implementation and User Guide</i>	provides information about installing, configuring, and using MAINVIEW Explorer
	<i>MAINVIEW Quick Reference</i>	provides a quick reference for MAINVIEW terminal sessions, logs, data sets, targets, contexts, windows mode, and full-screen mode and describes the functions, syntax, and parameters of the commands that are used to manage the MAINVIEW window environment
	<i>ULTRAOPT General Information</i>	provides an overview of ULTRAOPT
	<i>ULTRAOPT Messages Manual</i>	provides a list of messages you can receive while using ULTRAOPT
	<i>ULTRAOPT User Guide</i>	provides information about using ULTRAOPT at your data center
	<i>Using MAINVIEW</i>	provides information about working with MAINVIEW products in windows mode and full-screen mode
supplemental documents	release notes, flashes, technical bulletins	provide current information about MAINVIEW for VTAM

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

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

Online Help

MAINVIEW for VTAM includes online Help. In the MAINVIEW for VTAM ISPF interface, you can access Help by pressing **F1** from any ISPF panel.

Release Notes and Other Notices

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

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

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

Conventions

This book uses the following general conventions:

Item	Example
information that you are instructed to type	Type SEARCH DB in the designated field.
specific (standard) keyboard key names	Press Enter .
field names, text on a panel	Type the appropriate entry in the Command field.
directories, file names, Web addresses	The BMC Software home page is at www.bmc.com .
nonspecific key names, option names	Use the HELP function key. KEEPDICTIONARY option
MVS calls, commands, control statements, keywords, parameters, reserved words	Use the SEARCH command to find a particular object.
code examples, syntax statements, system messages, screen text	//STEPLIB DD The table <i>table_name</i> is not available.
emphasized words, new terms, variables	The instructions that you give to the software are called <i>commands</i> . In this message, the variable <i>file_name</i> represents the file that caused the error.

This book uses the following types of special text:

Note: Notes contain important information that you should consider.

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

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

Chapter 1 Introduction

This chapter introduces and describes the features and functions of MAINVIEW for VTAM.

This chapter contains the following sections:

Overview	1-2
Features and Functions	1-3
Sample SAS Program	1-4

Overview

MAINVIEW for VTAM provides a way to monitor OS/390 and z/OS mission-critical application performance. The BMC Software product, ULTRAOPT, collects application performance data. This data is displayed on the MAINVIEW console.

Note: You cannot manipulate the data that is collected by ULTRAOPT; you can only view the data. A license is required to use ULTRAOPT optimization functions and additional functionality.

Features and Functions

MAINVIEW for VTAM provides information about availability tuning, throughput, and end-to-end response times as they relate to the Systems Network Architecture (SNA) communications protocol. Table 1-1 describes the features and functions of MAINVIEW for VTAM.

Table 1-1 Features and Functions

Feature	Description
application connections	provides information about the availability of an application, information about the acceptance of new sessions, and statistics about application connections
LU performance	provides information about the amount of data that is being sent and received, and about optimization rates by logical unit (LU) name to help you identify delays in your network
NCP analysis	provides network performance analyzer statistics for network control program resources such as NCP, SDLC lines, physical units, channel adapters, and NCP/Token-Ring interconnections
storage	provides statistics about storage allocation, Communication Storage Manager (CSM) buffer pools, Virtual Telecommunications Access Method (VTAM) buffer pools, and Common Storage Area (CSA) usage and limit information
TN3270 statistics	provides Response Time Monitor (RTM) and throughput statistics for TN3270 resources by LU name, domain name, and IP address, and provides information about the mapping of TN3270 resources to IP addresses, and the resolving of application associations
Transid performance	provides information about the amount of data that is being sent and received, optimization rates (if you have a license for the optimization product), and host and network response time statistics by transaction ID to help you identify delays in your network
ULTRAOPT Monitor link	provides a hyperlink to the ULTRAOPT Subsystem Menu Note: A license is required to use ULTRAOPT optimization functions and additional functionality.

For information about using these features and functions, see Chapter 2, “Using MAINVIEW for VTAM.”

Sample SAS Program

BMC Software provides a sample Statistical Analysis System (SAS) program in *hilevel.BBSAMP(SMF251)*. You can use this program to format the information that is recorded to system management facility (SMF).

The default startup parameters for SMF recording are specified in the ULTRAOPT product by using the SMFINT and SMFREC startup parameters. For more information about the SMF recording startup parameters, see the *ULTRAOPT Customization Guide*. For information about writing statistics to SMF, see the *ULTRAOPT User Guide*.

For information about SMF records, setting up the SMF data set, and specifying the SMF record type numbers, see the *IBM System Management Facilities* documentation.

Chapter 2 Using MAINVIEW for VTAM

This chapter helps you interpret the views that are provided with MAINVIEW for VTAM. These views display application performance data that is collected by MAINVIEW for VTAM.

This chapter contains the following sections:

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Overview

MAINVIEW windows mode technology provides views that summarize data which is pulled from multiple subsystems. Within MAINVIEW for VTAM, you can display detailed and summary views of collected data. To display a list of all MAINVIEW for VTAM views, select **Select View** (Tools and Menus) on the EZVTAM Menu. For more information about the Select View feature, see the *Using MAINVIEW* manual.

Note: The online Help contains information about MAINVIEW for VTAM views and the fields in them. To access Help, position the cursor over the applicable field and press the Help key (usually **PF1**).

MAINVIEW for VTAM views summarize application performance data that is collected by ULTRAOPT. You can monitor applications by job name, IP address, and port. You can analyze which enterprise resources have priority access to critical data.

Easy Menus

MAINVIEW for VTAM offers a series of easy menus that provide a quick, convenient way to use the product with little introduction and without having to remember view names. Easy menus allow navigation to the parts of MAINVIEW for VTAM, based on a feature that you want to monitor rather than on a specific view.

EZVTAM is the primary easy menu for MAINVIEW for VTAM. The selections on this menu let you access other high-level easy menus, such as EZAPPL, to locate information quickly. Table 2-1 describes the easy menus that are provided in MAINVIEW for VTAM.

Table 2-1 MAINVIEW for VTAM Easy Menus

Menu	Description
EZAPPL	application details
EZLU	logical unit details
EZTN3270	TN3270 details
EZTRAN	transaction details

Accessing MAINVIEW for VTAM

MAINVIEW for VTAM can be accessed from the MAINVIEW Selection Menu (Figure 2-1).

Figure 2-1 **MAINVIEW Selection Menu**

```

----- MAINVIEW Selection Menu -----
OPTION  ==>                                DATE   -- 2002/10/01
                                           TIME   -- 09:33:59
                                           USERID -- RCHLXM4
                                           MODE   -- ISPF 5.2

    0   Parameters and Options
    E   Alerts and Alarms
    P   PLEX Management (PLEXMGR)
    U   Utilities, Tools, and Messages

Solutions for:
    A   Automated Operations
    C   CICS
    D   DB2
    I   IMS
    L   Linux
    N   Network Management
    S   Storage Management
    T   Application Management and Performance Tuning
    W   WebSphere and MQSeries
    Z   OS/390, z/OS, and USS

Enter X to Terminate

                                Copyright BMC Software, Inc. 2002

```

To access MAINVIEW for VTAM, perform the following steps from the MAINVIEW Selection Menu:

- Step 1** Type **N** in the **OPTION** field to select **Network Management**, and press **Enter**.

The Network Management Solutions menu (Figure 2-2) is displayed.

Figure 2-2 Network Management Solutions Menu

```
----- Network Management Solutions -----
OPTION  ==>                                DATE   -- 2002/10/01
                                           TIME   -- 09:37
Management                                  USERID -- RCHLXM4
  1  MVIP          MAINVIEW for IP          MODE   -- ISPF 5.2M
  2  MVVTAM       MAINVIEW for VTAM

Operations
  E  ALERTS      Alert Management

General Services
  M  MESSAGES    Messages and Codes
  P  PARS        Parameters and Options
```

Step 2 Type **2** to select MAINVIEW for VTAM, and press **Enter**.

The Session Control Parameters panel (Figure 2-3) is displayed.

Figure 2-3 Session Control Parameters Panel

```
BMC SOFTWARE ----- SESSION CONTROL PARAMETERS -----  
COMMAND ===>  
  
Subsystem ID    ===> BBCS    (CAS Subsystem ID, ? for list of active SSIDs)  
  
XDM mode       ===> NO      (Execute session in diagnostic mode, Yes/No)  
  
Press ENTER to confirm use of session parameters entered above.
```

Step 3 Type the subsystem ID **BBCS** for the coordinating address space (CAS), and press **Enter**.

The EZVTAM Menu (Figure 2-4) is displayed.

Figure 2-4 EZVTAM Menu

```

01OCT2002 09:50:55 ----- MAINVIEW WINDOW INTERFACE(V4.1.02)-----
COMMAND ==>                                SCROLL ==> PAGE
CURR WIN ==> 1                ALT WIN ==>
>W1 =EZVTAM=====RWBESAD==*=====01OCT2002==09:50:55====MVVTAM===D===1
                                EZVTAM Menu

    Detailed Views                VTAM Analysis                Tools and Menus

> Applications                    . Buffer Statistics          . Select View
> Logical Units                  . CSA Information           . Return...
> TN3270                          . Start Options             . ULTRAOPT Monitor
> Transactions                    . CSM Statistics            . Pending Resources
                                . VTAM Exits

    Summary Views

. Appl Byte Counts                NCP Analysis
. Appl Resp Times
. LU Byte Counts                  . NCP Stats
. LU Resp Times                  . SDLC/CA Stats
. Transid Byte Counts            . NTRI Stats
. Transid Resp Times            . NCP Resource List
    
```

To display a list of all MAINVIEW for VTAM easy menus and views, select **Select View** (Tools and Menus) from the EZVTAM Menu.

Navigating in MAINVIEW for VTAM

Select the menu or view that you want to display by performing one of the following tasks:

- Place the cursor on the menu item you want to view, and press **Enter**.
- Type the name of the easy menu or view on the command line (for example, EZTRAN), and press **Enter**.

As part of the MAINVIEW environment, MAINVIEW for VTAM functions as an extension of the standard ISPF panel interface. For a description of the common window interface, and for details on how to use the features and services that are available within the MAINVIEW environment, see the *Using MAINVIEW* manual.

Working with MAINVIEW for VTAM

You can display MAINVIEW for VTAM views and manage the panels in which the views are displayed in the same way you do any MAINVIEW product. You can display multiple panels of different sizes simultaneously and you can direct actions from one panel to another, all on one terminal.

MAINVIEW for VTAM Views

MAINVIEW for VTAM views display information that helps you monitor and manage your network. To access detailed or summary information about application availability, traffic, sessions (or connections), configuration, routers, service levels, and so on, use the EZVTAM Menu (Figure 2-4 on page 2-6).

In several views, you can perform a “drill-down” function. Drill-down functions let you view more detailed information about an item.

You can drill down for more information in any view where a field name is highlighted. For sample instructions on how to perform a drill-down function, see “Accessing More Application Information” on page 2-9.

Application Connections

The application connections views let you obtain information about the amount of data that is being sent and received, optimization rates (if you have a license for the ULTRAOPT optimization product), and host and network response time statistics by application ID (VTAM Applid). By using these views, you can access the information that you need to identify delays in your network. This data is available for CICS, IMS, and SNA traffic that uses TN3270. Response times are reported in milliseconds.

Table 2-2 describes the views that provide detailed information about application availability, byte counts, connections, and response times.

Table 2-2 Applications Views

View	Description
APPLAV	displays when an application becomes available and when the application is accepting new sessions
APPLCON	displays the number of devices that are connected to an application at any given time
APPLCONS	provides summary information about the number of devices that are connected to an application at any given time
APPLS	displays information about the amount of data that is being sent and received, and about optimization rates by application
APPLSUM	provides summary information about the amount of data that is being sent and received, and about optimization rates by application
ARES	displays statistics for host and network response times by application
ARESUM	provides summary of statistics for host and network response times by application

Accessing More Application Information

Summary: In this task, you will drill down in the APPLDET view to access more information about a specific application identifier (Applid).

To drill down to more information about an Applid, perform the following steps:

Step 1 From the APPLS view (Figure 2-5), position the cursor over the application identifier in the **Applid** field for which you want to see more information.

Figure 2-5 Application Information

```

01OCT2002 12:51:20 ----- MAINVIEW WINDOW INTERFACE(V4.1.02)-----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =APPLS=====RWBESAD==*=====01OCT2002==12:51:20====MVVTAM===D===1
Applid  NumIn  NumOut BytesI BytesO BytesI BytesO Appl Percent
----- DataSt DataSt BefOpt BefOpt AftOpt AftOpt Type Optimized
RWB41T      10    89    41 100382    41  5102 CICS    94.88

```

Step 2 Press Enter.

More Applid information (APPLDET) (Figure 2-6) is displayed.

Figure 2-6 Applid Information

```

01OCT2002 12:54:05 ----- MAINVIEW WINDOW INTERFACE(V4.1.02)-----
COMMAND ==>
CURR WIN ==> 1          ALT WIN ==>
W1 =APPLDET=====RWBESAD=*=====01OCT2002==12:54:05====MVVTAM===D===1

  Appl Info          Data Streams.....

  Applid....   RWB41T NumIn.....          10
  Appl.....   CICS NumOut.....          89

                          Bytes Transmitted

                          Before Optimized.

                          BytesIn.....          41
                          BytesOut.....        100382

                          After Optimized..

                          BytesIn.....          41
                          BytesOut.....        5102

                          Percent Optimized
    
```

To see more pages of the APPLDET view, scroll down by pressing **F8**.

Logical Unit Performance

MAINVIEW for VTAM provides the information that you need for monitoring the amount of data which is transmitted by your applications and through your network.

The logical unit (LU) performance views let you obtain information about the amount of data that is being sent and received, optimization rates (if you have a license for the ULTRAOPT optimization product), and host and network response time statistics by logical unit name. By using these views, you can access the information that you need to identify delays in your network. This data is available for CICS, IMS, and SNA traffic that uses TN3270. Response times are reported in milliseconds.

Table 2-3 describes the views that provide detailed information about LU byte counts and response times.

Table 2-3 Logical Unit Views

View	Description
LURES	displays statistics for host and network response times by LU name
LURESUM	displays a summary of statistics for host and network response times by LU name
LUS	displays information about the amount of data that is being sent and received, and about optimization rates by LU name
LUSUM	displays a summary of information about the amount of data that is being sent and received, and about optimization rates by LU name

NCP Analysis

The NCP Analysis views provide network performance analyzer statistics for network control program (NCP) resources such as NCP, SDLC lines, physical units, channel adapters, and NCP/Token-Ring interconnections.

An NCP performs routing and session management tasks, and it runs in the communications controller.

Table 2-4 describes the views that provide detailed information about your NCP resources.

Table 2-4 NCP Analysis Views

View	Description
NCPINFO	displays NCP statistics by NCP name
NCPSDLC	displays SDLC/CA statistics by resource name
NCPNTRI	displays NCP Token-Ring interconnections statistics
NCPRLIST	displays the NCP resource list, including resource names, NCP names, and resource types

ULTRAOPT Commands for NCP Collection

Table 2-5 describes the commands that can be issued by using the ULTRAOPT command processor.

Table 2-5 ULTRAOPT Commands

Command	Description
/bsop npastart=ncpname	This command starts NPA collection for the NCP that has been specified. The NCP must be defined previously by using the NCOLLECT statement in the STARTUP parameters. This command can be used to restart collection that has been interrupted.
/bsop npastop=ncpname	This command stops NPA collection for the NCP that has been specified. The NCP must be defined previously by using the NCOLLECT statement in the STARTUP parameters. This command can be used to interrupt NPA collection.
/d bsop,npa	This command displays the names of any NCPs that have been defined to ULTRAOPT by using the NCOLLECT statement in the STARTUP parameters.

Sample SAS Program

BMC Software provides a sample SAS program in *hilevel.BBSAMP(SMF251)*. You can use this program to format the information that is recorded to SMF.

The default startup parameters for SMF recording are specified in the ULTRAOPT product by using the SMFINT and SMFREC startup parameters. For more information about the SMF recording startup parameters, see the *ULTRAOPT Customization Guide*. For information about writing statistics to SMF, see the *ULTRAOPT User Guide*.

For information about SMF records, setting up the SMF data set, and specifying the SMF record type numbers, see the *IBM System Management Facilities* documentation.

Storage

For real-time statistics about your buffer pools and storage usage, access the Communication Storage Manager (CSM) Statistics view, the Virtual Telecommunications Access Method (VTAM) Buffer Statistics view, or the Common Storage Area (CSA) Information view. These views let you monitor and manage the storage allocations that are required to run your system at optimum levels.

Table 2-6 describes the views that provide detailed information about your buffer pools and storage usage.

Table 2-6 Storage Views

View	Description
CONFIG	displays startup options, including the current value and the original value
CSAU	displays CSA usage and limit information
CSM	displays storage allocation and CSM buffer pool information
CSMD	displays more details about storage allocation and CSM buffer pools
EXIT	displays VTAM exit information, including exit names, module names, and exit status
PEND	displays VTAM resources and specifies the status of each resource
VTMBUFF	displays VTAM buffer pool statistics
VTMBUFQ	displays a quick view of VTAM buffer pool statistics

TN3270 Statistics

The TN3270 statistics feature provides Response Time Monitor (RTM) and throughput statistics for TN3270 resources. TN3270 statistics also provide information about the mapping of TN3270 resources to IP addresses, and the resolving of application associations. TN3270 information views bridge the gap between IP and SNA protocols.

Table 2-7 describes the views that provide detailed information about TN3270 resources.

Table 2-7 TN3270 Statistics Views

View	Description
TAPPCORR	displays the correlation between a TN3270 LU and the application that the LU is in session with
TDOMAIN	displays information about the amount of data that is being sent and received, and about optimization rates by domain name
TIPADDR	displays information about the amount of data that is being sent and received, and about optimization rates by IP address
TLUS	displays information about the amount of data that is being sent and received, and about optimization rates by TN3270 LU name
TPLUMAP	displays the LU name, IP address, and domain name for each TN3270 session
TRESPDOM	displays the host and network response times by domain name
TRESPIPA	displays the host and network response times by IP address
TRESPLU	displays the host and network response times by LU name

Transaction ID Performance

The transaction ID (Transid) performance views let you obtain information about the amount of data that is being sent and received, optimization rates (if you have a license for the ULTRAOPT optimization product), and host and network response time statistics by transaction ID. By using these views, you can determine details about specific CICS or IMS transaction, such as optimization, response times, and usage for charge back or Service Level Agreements. Response times are reported in milliseconds.

Table 2-8 describes the views that provide detailed information about byte counts and response times.

Table 2-8 Transid Performance Views

View	Description
XACTNS	displays information about the amount of data that is being sent and received, and about optimization rates by transaction ID
XACTNSI	displays information about the amount of data that is being sent and received, and about optimization rates by IP address
XACTNSJ	displays information about the amount of data that is being sent and received, and about optimization rates by domain name server (DNS) name
XACTRES	displays statistics for host and network response times by transaction ID
XACTRESI	displays statistics for host and network response times by IP address
XACTRESJ	displays statistics for host and network response times by DNS name
XACTRSUM	displays a summary of statistics for host and network response times by transaction ID
XACTSUM	displays a summary of information about the amount of data that is being sent and received, and about optimization rates by transaction ID

Tools and Menus

The Tools and Menus section on the EZVTAM Menu (Figure 2-4 on page 2-6) provides you with the following options:

- select view
- return
- ULTRAOPT Monitor

Select View

To display a list of view names and descriptions of the views that are available in MAINVIEW for VTAM, access the Select View option.

Return

You can use the Return option to display the previous view.

ULTRAOPT Monitor

To access the ULTRAOPT Monitor from the EZVTAM Menu, select the ULTRAOPT Monitor option. When you select this option, it activates a hyperlink to the ULTRAOPT™ product. For information about using the Monitor, see the *ULTRAOPT User Guide*.

Note: A license is required to use ULTRAOPT optimization functions and additional functionality.

Exiting from MAINVIEW for VTAM

When you are finished working with MAINVIEW for VTAM, you can return to the MAINVIEW Selections Menu by issuing one of the following commands from the command list:

- Quit
- RETURN

Chapter 3 Error Messages

This chapter provides information about the messages that are issued by or about MAINVIEW for VTAM.

This chapter contains the following sections:

Interpreting Messages	3-2
Message Format	3-2
Message Identifiers	3-3
Message Levels	3-3
Description Format	3-4
Contacting BMC Software Customer Support	3-4
Gathering Problem Report Documentation	3-5
MAINVIEW for VTAM Messages	3-9
ULTRAOPT Monitor Messages	3-11

Interpreting Messages

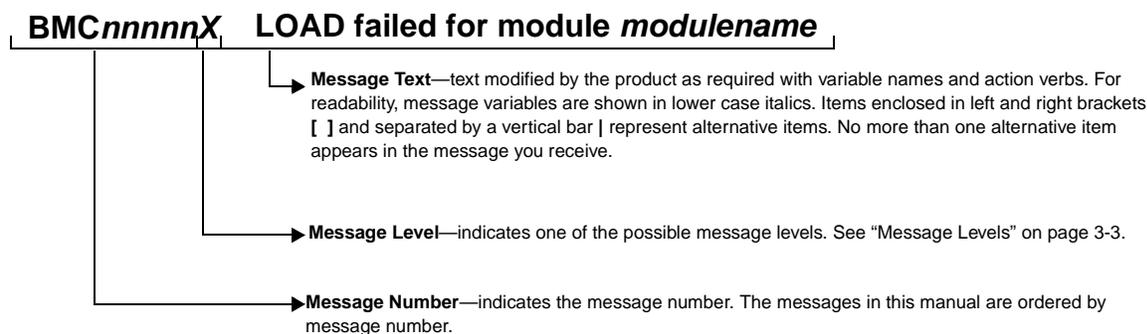
This section provides general information about the messages that are issued by MAINVIEW for VTAM. This section describes the following items:

- parts of a message
- description format
- message levels
- information that you should have available when contacting BMC Software Customer Support

Message Format

Figure 3-1 describes the parts of a message.

Figure 3-1 Parts of a Message



Message text that is italicized and in lowercase characters (*example*) indicates variable text that will be determined when the message is issued.

Message text that is enclosed in left and right brackets and is separated by vertical lines ([ON | OFF]) indicates actual values, one of which will be included at that point in the message.

Message Identifiers

All messages consist of a message identifier and message text of the following format:

BMCnnnnnX Message Text

Table 3-1 describes the message identifiers.

Table 3-1 Message Identifiers

Field	Description
BMC	The prefix identifies the owner of the message. All BMC Software messages begin with <i>BMC</i> .
<i>nnnnn</i>	This two-digit to five-digit number identifies the message.
<i>X</i>	This identifier is the severity code. The severity code indicates the amount of action required by the user and the nature of the message. For an explanation of the severity codes, see Table 3-2.

Message Levels

A severity code indicates the nature of the message and the amount of action that is required by the user. Table 3-2 describes the levels of message severity.

Table 3-2 Message Severity Codes

Code	Description
A (action)	Immediate action is required.
E (error)	The function that you requested was not completed. Action is required.
I (information)	Information only. No action is required.
R (reply)	You must reply to the message before the system can continue.
S (severe)	A severe error occurred. Action is required.
W (warning)	The system is still operating and no immediate action is required. When time is available, further investigation is needed.

Note: All messages with severity code *E* are sent to the system console. Some messages with severity code *A* or *I* are also sent to the system console.

Description Format

The following information is provided for each message:

- *Explanation* explains why the product issued the message.
- *System Action* explains the product action as a result of encountering the situation.
- *User Response* explains the action that you should perform in this situation.

The text that is associated with each message is a short phrase or sentence describing a condition that has occurred or that requests a user response. For example:

```
BMC7005I No active Applids BSOP
```

Contacting BMC Software Customer Support

Some message descriptions instruct you to contact your BMC Software customer support representative. The customer support representative can help you resolve the problem quickly if you can answer the following questions before calling:

- What kind of problem do you have?
- Can you repeat the problem or preceding conditions?
- Do you have supporting dumps or other diagnostic information?
- What has changed in your environment:
 - Have you recently installed a new product on your system?
 - Have you recently modified an application program?
 - Have you recently installed a BMC Software product or product maintenance tape?

Gathering Problem Report Documentation

If you encounter a problem with MAINVIEW for VTAM, BMC Software customer support representatives may ask you to send documentation of the problem in the form of one or more dumps.

To Gather Problem Report Documentation If the Application, System, or Terminal is Hung

Step 1 Before starting GTF, ensure that your GTF trace data set is sufficiently large (at least 100 cylinders) and that it is not allocated with the RLSE parameter.

Step 2 Start your GTF task.

You may need to ask personnel at your data center how to start GTF in your environment. Use the options described in these paragraphs so that records with Event Identifier (EID) `x'0C0'` (zero 'C' zero) can be collected. If you are collecting records for both a VTAM and an ULTRAOPT (BSOP) trace, initialize GTF to collect record types FE1, FF1, FEF, and 0C0. After starting GTF, the following messages are displayed:

```
AHL103I TRACE OPTIONS SELECTED ...
```

```
AHL125A RESPECIFY TRACE OPTIONS OR REPLY U
```

If your GTF procedure did not contain a SYSLIB DD, this message is displayed:

```
AHL100A SPECIFY TRACE OPTIONS
```

If your GTF trace specification contains `TRACE=USRP` and `USR=0C0`, the trace options will show `USR=0C0`; and you may reply `U` to use those options; GTF will be correctly initialized. Go to Step 3.

If your GTF trace specification does not indicate to collect type 0C0 records, then reply to that message with `TRACE=USRP`. The following message is displayed next:

```
AHL101A SPECIFY TRACE EVENT KEYWORDS - USR=
```

If you are collecting records for both a VTAM trace and an ULTRAOPT (BSOP) trace, reply with `USR=(FE1,FF1,FEF,0C0),END`. If you are collecting only ULTRAOPT trace records, reply with `USR=0C0,END`.

These procedures may vary, depending on how GTF is initialized in your environment and what other records you want to collect. BMC Software recommends restricting GTF to collecting ULTRAOPT records (OC0) only unless other traces are being used at that time.

Step 3 Start an ULTRAOPT trace by using the *subsysid* TRACE command. This trace writes ULTRAOPT trace records to your GTF data set.

Step 4 Start a VTAM buffer trace using the following command:

```
F NET,TRACE,TYPE=BUF,ID=Applid,SCOPE=ALL
```

Step 5 Start an ULTRAOPT wraparound trace (wrap trace) by using the Monitor panel 3.4, as described in the *ULTRAOPT User Guide*.

Step 6 Recreate the problem.

Step 7 Stop the wrap trace by using Monitor panel 3.4.

Step 8 Stop the ULTRAOPT GTF trace by using the *subsysid* NOTRACE command.

Step 9 Stop the VTAM buffer trace by using the following command:

```
F NET,NOTRACE,TYPE=BUF,ID=Applid,SCOPE=ALL
```

Step 10 Create an SVC dump of the address space experiencing the problem by using the *Subsysid* DUMP,JOBNAME=(job1[job2]) command, as described in the *ULTRAOPT User Guide*.

(Optional) Use the MVS command DUMP COMM and supply the job name of the appropriate address space. Reply to the prompt with SDATA=(CSA,LSQA,SQA,PSA,TRT,RGN,SUM). Check for log message IEA911 to confirm that the dump is a complete dump, not a partial dump.

Step 11 Print the wrap trace to the SOPRINT VSAM file or to a local JES printer.

If you printed the wrap trace to the SOPRINT VSAM file, use IDCAMS REPRO to copy the VSAM file to tape.

Step 12 Send the dump to your MAINVIEW for VTAM customer support representative by using one of the following methods:

- Copy the GTF data set and the dump to a tape. Ensure that the dump data set is copied to a tape using LRECL 4160 for ESA system dumps.
- FTP the dump.

If you copy the dump to a tape, ship the tape to your MAINVIEW for VTAM customer support representative. Include the following items:

- description of the problem
- user action that preceded the problem
- version number of MAINVIEW for VTAM
- case number

If you FTP the dump, follow the instructions for one of these methods:

- “To Use a TSO Command Line Interface” on page 3-8
- “To Run a Sample Batch Job” on page 3-8

To Gather Problem Report Documentation If the Problem Is Not a Hung Application, Session, or Terminal

Step 1 Create an SVC dump of the address space experiencing the problem by using the *Subsysid* DUMP,JOBNAME=(*job1*[*job2*]) command, as described in the *ULTRAOPT User Guide*.

(Optional) Use the MVS command DUMP COMM and supply the job name of the appropriate address space. Reply to the prompt with SDATA=(CSA,LSQA,SQA,PSA,TRT,RGN,SUM). Check for log message IEA911 to confirm that the dump is a complete dump, not a partial dump.

Step 2 Print the wrap trace to the SOPRINT VSAM file or to a local JES printer.

If you printed the wrap trace to the SOPRINT VSAM file, use IDCAMS REPRO to copy the VSAM file to tape.

Step 3 Send the dump to your MAINVIEW for VTAM customer support representative by using one of the following methods:

- Copy the dump to a tape. Ensure that the dump data set is copied to a tape using LRECL 4160 for ESA system dumps.
- FTP the dump.

If you copy the dump to a tape, ship the tape to your MAINVIEW for VTAM customer support representative. Include the following items:

- description of the problem
- user action that preceded the problem
- version number of MAINVIEW for VTAM
- case number

If you FTP the dump, select one of the following methods:

- TSO command line interface
- sample batch job

To Use a TSO Command Line Interface

Note: Use TRSMMAIN to compress the dump before uploading the information to **FTP.BMC.COM**.

- Step 1** Use TSO to access **FTP.BMC.COM**.
- Step 2** At the prompt, enter **ANONYMOUS** as your ID.
- Step 3** Enter **Your_Email@company.com** as the password.
- Step 4** Enter **CD INCOMING**.
- Step 5** Enter **BINARY**.
- Step 6** Enter **PUT 'MVS.DATASET.NAME.TRS' cnnnnnn_dump1.trc**.
- Step 7** Enter **QUIT**.
- Step 8** Notify your MAINVIEW for VTAM customer support representative that the dump has been uploaded.

To Run a Sample Batch Job

Note: Use TRSMMAIN to compress the dump before uploading the information to **FTP.BMC.COM**.

- Step 1** Run the following batch job:

```
//BATCHFTP JOB
//FTP EXEC PGM=FTP,REGION=4096K
//SYSPRINT DD SYSOUT=*
//OUTPUT DD SYSOUT=*
//INPUT DD *
ftp.bmc.com
anonymous
YOUR_EMAIL@COMPANY.COM
bin
cd /incoming
put 'MVS.DATASET.NAME.TRS' cnnnnnn_dump1.trc
quit
/*
```

- Step 2** Notify your MAINVIEW for VTAM customer support representative that the dump has been uploaded.

MAINVIEW for VTAM Messages

MAINVIEW for VTAM messages display on the MAINVIEW monitor. The message information includes an explanation of the message, the system action, and the suggested user response. Messages are listed in alphanumeric order.

BMC256000I MAINVIEW/VTAM PAS INITIALIZATION COMPLETED

Explanation: The product address space (PAS) is being started at the indicated version, release, and modification level.

System Action: None.

User Response: This message is for your information only. No action is necessary.

BMC256001I MAINVIEW/VTAM PAS INITIALIZATION COMPLETED

Explanation: The product address space (PAS) has been started successfully without incident.

System Action: None.

User Response: This message is for your information only. No action is necessary.

BMC256002I MAINVIEW/VTAM PAS TERMINATING NORMALLY

Explanation: The product address space (PAS) is being terminated under normal circumstances.

System Action: None.

User Response: This message is for your information only. No action is necessary.

BMC256003E MAINVIEW/VTAM PAS TERMINATING DUE TO ERRORS

Explanation: An error has caused the product address space (PAS) to terminate. (This message is preceded by a more detailed error message.)

System Action: The PAS terminates.

User Response: For more information, see the preceding message error message.

BMC256004E MAINVIEW/VTAM DATA COLLECTOR IS NOT LICENSED

Explanation: A valid password has not been detected by the ULTRAOPT Monitoring Facility.

System Action: The product address space (PAS) terminates.

User Response: Install a valid password for the ULTRAOPT address space.

BMC256005E MAINVIEW/VTAM PAS IS ALREADY STARTED

Explanation: A preexisting product address space (PAS) for MAINVIEW for VTAM has been detected on the system in an initialized state. A system is not allowed to run more than one PAS.

System Action: The PAS terminates.

User Response: None.

BMC256010E MAINVIEW/VTAM DATA COLLECTOR IS DISABLED

Explanation: The product address space (PAS) has not detected an ULTRAOPT Monitoring address space.

System Action: The PAS terminates.

User Response: Initialize the ULTRAOPT address space before trying to start the PAS.

BMC256100W TRANSID STATISTICS NOT BEING COLLECTED FOR APPLID <applid name>

Explanation: The product address space (PAS) data collector is not collecting TRANSID statistics for the indicated application.

System Action: TRANSID statistics are not collected for this application.

User Response: Determine whether the application should be configured to report Transid statistics.

BMC256101W SOPCINIT NOT INSTALLED IN XMATT FOR APPLID <applid name>

Explanation: The SOPCINIT program has not been installed in the CICS XMATT exit for the indicated application.

System Action: TRANSID statistics are not collected for this application.

User Response: Install the SOPCINIT program in the XMATT exit for this application to collect TRANSID statistics.

ULTRAOPT Monitor Messages

The ULTRAOPT Monitor component displays MAINVIEW for VTAM message information. The message information includes an explanation of the message, the system action, and the suggested user response. Messages are listed in alphanumeric order.

BMC13353E Unable to open VTAM ACB for NPA Collection.....R15() ACBFLAGS(****)**

Explanation: An error occurred while trying to OPEN the application control block for network performance analyzer collection. *R15(**)* is the return code. Return code 08 most likely indicates a mismatch between the name that is added to the VTAM major node definitions and the NAPPLID name that is coded in the STARTUP parameters.

System Action: Network control program (NCP) collection is disabled.

User Response: If you receive any other return codes, contact BMC Software Customer Support.

BMC13354I NPA Session with NCP *** acquired**

Explanation: A session was successfully acquired with the indicated network control program (NCP).

System Action: The indicated NCP acquires a network performance analyzer (NPA) session.

User Response: This message is for your information only. No action is necessary.

BMC13355E NPA Session with NCP *** failed**

Explanation: A session was not successfully acquired with the indicated network control program (NCP). This error may occur for various reasons, including the following:

- The NCP does not have an NAPLU defined.
- The wrong NPALU was specified in ULTRAOPT start options.
- The NPALU is already in session with another collector, such as NetView Performance Monitor (NPM).

System Action: NCP collection is not started for the indicated NCP.

User Response: Fix the problem as indicated in the Explanation, and restart.

BMC13356E Unable to open RRT for NCP ***; no collection started**

Explanation: ULTRAOPT was unable to OPEN the resource resolution table (RRT) member for the indicated network control program (NCP). The member name should match the NCP name, suffixed with *R*.

System Action: The indicated NCP is not opened, and NCP collection is not started.

User Response: Ensure that the correct NCPLIB has been added to the STEPLIB concatenation in the ULTRAOPT procedure.

BMC13357E GETMAIN error for NCP collection routine.

Explanation: ULTRAOPT was unable to allocate enough private storage to build a collection database for all the network control programs (NCPs) that were defined.

System Action: The collection database is not built for the NCPs that were defined.

User Response: Increase the region private storage size in the ULTRAOPT procedure.

BMC13801I ULTRAOPT MONITORING SUPPORT ENABLED

Explanation: MAINVIEW for VTAM is licensed and active for support.

System Action: Processing continues.

User Response: This message is for your information only. No action is necessary.

BMC13802E ULTRAOPT MONITORING SUPPORT LICENSE HAS EXPIRED

Explanation: The MAINVIEW for VTAM authorization process detected that the license has expired.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact your BMC Software sales representative to obtain a password for the indicated product.

BMC13803E ULTRAOPT MONITORING SUPPORT IS NOT LICENSED FOR THIS CPU

Explanation: The MAINVIEW for VTAM authorization process detected an invalid license for this CPU. This message is received at initialization.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact your BMC Software sales representative to obtain a password.

BMC13834I ULTRAOPT MONITORING SUPPORT HAS *nnn* DAYS REMAINING.

Explanation: MAINVIEW for VTAM is running on a bypass authorization that will expire in *nnn* days. This message is received at initialization.

System Action: None.

User Response: If you are running a MAINVIEW for VTAM trial, contact your BMC Software sales representative to purchase a license and receive a permanent password. If you are running under an Enterprise License Agreement, this message is for your information only. No action is necessary.

BMC13835E ULTRAOPT MONITORING SUPPORT IS EXPIRED OR NOT LICENSED FOR THIS CPU.

Explanation: An attempt was made to start MAINVIEW for VTAM on a CPU for which it is not licensed.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact your BMC Software sales representative to purchase a license and receive a permanent password.

BMC13836E ULTRAOPT MONITORING SUPPORT PHS2 DETECTED AN INVALID PSWD-R15(*xxxxxxxx*).

Explanation: Phase 2 of product authorization validation for MAINVIEW for VTAM has detected an invalid password. This message is received at initialization. *R15* represents the return code from security phase 2 processing.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact your BMC Software sales representative to purchase a license and receive a permanent password.

BMC13837E ULTRAOPT MONITORING SUPPORT HAS BEEN PREVIOUSLY EXECUTED, R15(*xxxxxxxx*).

Explanation: Phase 1 of the product authorization for MAINVIEW for VTAM has already been run. This message is received at initialization. *R15* represents the return code from security phase 1 processing. This message indicates possible tampering with the authorization process.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact BMC Software Customer Support.

BMC13838E ULTRAOPT MONITORING SUPPORT PHS2 DETECTED A CORRUPT DATABASE, R15(xxxxxxxx).

Explanation: Phase 2 of product authorization validation for MAINVIEW for VTAM has detected a corrupt database. This message is received at initialization. *R15* represents the return code from security phase 2 processing.

System Action: MAINVIEW for VTAM is not started.

User Response: Rebuild the product authorization database, if possible. If this process produces error messages indicating that the passwords expired, contact your BMC Software sales representative to obtain new product authorization passwords.

BMC13839E ULTRAOPT MONITORING SUPPORT IS NOT ENABLED DUE TO ERRORS - R15(xxxxxxxx).

Explanation: The MAINVIEW for VTAM security function detected an error during the authorization and validation process. This message is received at initialization. *R15* represents the return code from security processing.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact BMC Software Customer Support.

BMC13840I ULTRAOPT MONITORING SUPPORT PASSWORD NOT FOUND, R15(xxxxxxxx).MAINVIEW for VTAM

Explanation: The product address space (PAS) has been started successfully without incident.

System Action: MAINVIEW for VTAM is not started.

User Response: Contact your BMC Software sales representative to purchase a license and receive a permanent password.

BMC13841W RESPONSE TIME MONITOR NOW ENABLED

Explanation: MAINVIEW for VTAM is currently licensed and active for support. The Response Time Monitor (RESPTM) start option was turned on in support of MAINVIEW for VTAM. If the Response Time Monitor interval (RTMINT) was not set at startup, response time statistics will reset every 15 minutes.

System Action: Processing continues.

User Response: None.

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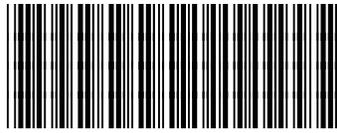
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