MAINVIEW®
for WebSphere MQ
User Guide

Version 4.2.00

September 26, 2003

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United States and Canada

Address BMC Software, Inc.
2101 CityWest Blvd.
Houston TX 77042-2827

Telephone 713 918 8800 or
800 841 2031

Fax 713 918 8000

Outside United States and Canada

Telephone (01) 713 918 8800

Fax (01) 713 918 8000

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Before Contacting BMC Software

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

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

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About This Book

MAINVIEW for WebSphere MQ is a systems management product that enhances WebSphere MQ performance. This book contains detailed information about MAINVIEW for WebSphere MQ and is intended for anyone who administers or manages WebSphere MQ networks. This book describes how you can use MAINVIEW for WebSphere MQ to increase the availability and operability of WebSphere MQ. To use this book, you should be familiar with the following items:

- your database management system (DBMS)
- 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.

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, “Introducing MAINVIEW for WebSphere MQ”	describes MAINVIEW for WebSphere MQ and the features and functions that are new in this release
Chapter 2, “Installing and Customizing MAINVIEW for WebSphere MQ”	provides installation and customization steps for MAINVIEW for WebSphere MQ
Chapter 3, “Security for MAINVIEW for WebSphere MQ”	provides information on security requirements and procedures for MAINVIEW for WebSphere MQ
Chapter 4, “Alias Queues”	describes the functions of the Alias Queues view

Chapter/Appendix	Description
Chapter 5, “Buffer Pools”	describes the functions of the Buffer Pools view
Chapter 6, “Channels”	describes the functions of the Channels view
Chapter 7, “Cluster Queues and Queue Managers”	describes the functions of the Cluster Queues and Queue Mangers view
Chapter 8, “Coupling Facility Manager”	describes the functions of the Coupling Facility Manager view
Chapter 9, “DB2 Manager”	describes the functions of the DB2 Manager view
Chapter 10, “Dead-Letter Queue Messages”	describes the functions of the Dead-Letter Queue Message view
Chapter 11, “Distributed Queuing”	describes the functions of the Distributed Queuing view
Chapter 12, “Events”	describes the functions of the Events view
Chapter 13, “Initiation Queues”	describes the functions of the Initiation Queues view
Chapter 14, “Local Queues”	describes the functions of the Local Queues view
Chapter 15, “Log Manager”	describes the functions of the Log Manager view
Chapter 16, “Messages”	describes the functions of the Messages view
Chapter 17, “Model Queues”	describes the functions of the Model Queues view
Chapter 18, “WebSphere MQ Tuning Wizard”	describes the functions of the WebSphere MQ Tuning Wizard view
Chapter 19, “Namelists”	describes the functions of the Namelists view
Chapter 20, “OTMA IMS Bridge”	describes the functions of the OTMA IMS Bridge view
Chapter 21, “Page Sets”	describes the functions of the Page Sets view
Chapter 22, “Processes””	describes the functions of the Processes view
Chapter 23, “Queue Managers”	describes the functions of the Queue Managers view
Chapter 24, “Queue Sharing Group”	describes the functions of the Queue Sharing Group view
Chapter 25, “Queue Usage”	describes the Queue Usage view
Chapter 26, “Queues”	describes the functions of the Queues view
Chapter 27, “Remote Queues”	describes the functions of the Remote Queues view
Chapter 28, “Select View”	describes the functions of the Select View view
Chapter 29, “Statistics”	describes the functions of the Statistics view
Chapter 30, “Storage Classes”	describes the functions of the Storage Classes view
Chapter 31, “Threads”	describes the functions of the Threads view
Chapter 32, “Topology”	describes the functions of the Topology view
Chapter 33, “MQITrace”	describes the functions of the Trace view
Chapter 34, “Transmission Queues”	describes the functions of the Transmission Queues view
Chapter 35, “Workflow”	describes the functions of the Workflow view

Chapter/Appendix	Description
Chapter 36, “ZPARMS”	displays initial and set values for the queue manager systems parameter and enables dynamic modification of the values
Appendix A, “Problem Determination for Return Code 07F1 when using a Proxy”	provides the steps to identify and resolve problems reported by a 07F1 return code
Appendix B, “Topology Exceptions”	explains the meanings of the topology exceptions

Related Documentation

BMC Software products are supported by several types of documentation:

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

Note: The messages that MAINVIEW for WebSphere MQ generates are available in an MVS data set that is downloaded during installation. For each message, the data set includes an explanation and suggests a user response. The MVS data set is called HLQ.MSGS.BBMLIB is the high-level qualifier that is specified during installation.

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

Document	Description
Implementing Security for MAINVIEW Products	explains basic MAINVIEW security, enhanced security, and MAINVIEW Alternate Access security
MAINVIEW Administration Guide	provides information on MAINVIEW operations, targets, single-system image contexts, MAINVIEW Alarm Manager, data sets, view customization, and diagnostic facilities
MAINVIEW Command List	describes the function, syntax, and parameters of the commands used to manage the MAINVIEW window environment
MAINVIEW Explorer Implementation and User Guide	explains how to install and use MAINVIEW Explorer
MAINVIEW for WebSphere MQ Release Notes	provides supplemental information including installation updates, last-minute product information, and documentation updates
MAINVIEW Common Customization Guide	provides instructions for manually customizing the MAINVIEW environment for your products

Document	Description
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

Online and Printed Books

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

To Access Online Books

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

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

To view any online book that BMC Software offers, visit the support page of the BMC Software Web site at **http://www.bmc.com/support.html**. Log on and select a product to access the related documentation. (To log on, first-time users can request a user name and password by registering at the support page or by contacting a BMC Software sales representative.)

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Online Help

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

Displaying Online Help

The following table lists the type of help you can find and how to access it.

Type of help	What to do
Views	Place the cursor on the view name in the window information line and press **F1**. Or type **HELP** and the name of the view on the **COMMAND** line, as shown below: `COMMAND ===> HELP PLEXOVER` The PLEXOVER view is part of Plex Manager, which is a common service utility that is distributed with all MAINVIEW products. It is used to manage MAINVIEW product communication. View help 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 (field) in a view and press **F1**.
Window information line elements	Place the cursor on an element in the window information line and press **F1**.
Commands	Enter the following command 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.
You can type **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.	

Release Notes and Other Notices

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

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

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

Conventions

This section provides examples of the conventions used in this book.

General Conventions

This book uses the following general conventions:

Item	Example
information that you are instructed to type	Type **SEARCH DB** in the designated field.
specific (standard) keyboard key names	Press **Enter**.
field names, text on a panel	Type **the appropriate entry** in the **Command** field.
directories, file names, Web addresses	The BMC Software home page is at **www.bmc.com**.
nonspecific key names, option names	Use the HELP function key. KEEPDICTIONARY option
MVS calls, commands, control statements, keywords, parameters, reserved words	Use the SEARCH command to find a particular object. The product generates the SQL TABLE statement next.
Unix commands, command options, database names	Use the **sbacktrack** program to create a backup script.

Item	Example

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

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

This book uses the following types of special text:

Note: Notes contain important information that you should consider.

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

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

Chapter 1 Introducing MAINVIEW for WebSphere MQ

MAINVIEW for WebSphere MQ collects information from WebSphere MQ, simplifies presentation of the information, and aids in the management of WebSphere MQ. MAINVIEW for WebSphere MQ maximizes the availability of WebSphere MQ and significantly improves its operability.

This chapter discusses the following topics:

Things You Can Do with MAINVIEW for WebSphere MQ

You can use MAINVIEW for WebSphere MQ to accomplish the following tasks:

- monitor queue managers, queues, and channels, and assess their status
- assess relationships between WebSphere MQ objects
- maximize message distribution
- view message content, type, and storage requirements
- modify attribute values for one or more queue managers and most of their objects
- view, delete, or requeue messages on a queue (MVS queue managers and queue managers managed by a Node Manager)

Navigating in MAINVIEW for WebSphere MQ

As part of the MAINVIEW environment, MAINVIEW for WebSphere MQ functions as an extension of the standard ISPF panel interface. For a description of the common window interface that is the hallmark of the MAINVIEW environment, and for details about how to make use of its features and services, see the manual *Using MAINVIEW.*

Working with MAINVIEW for WebSphere MQ

You can display MAINVIEW for WebSphere MQ views and manage the windows MAINVIEW product. You can simultaneously display multiple windows of different sizes, you can direct actions from one window to another within one screen, and you can hyperlink from a field in one view to another view that provides related information.

For most of the views shown in this book, you can perform one or more of the following actions:

- enter commands that affect a message, a channel, a queue, or a queue manager

- enter commands that display another view
- enter a line command to affect an element listed on a view
- overtype field values to affect an element listed on a view
- hyperlink to a different view

Uppercase and Lowercase Commands in MAINVIEW for WebSphere MQ

When you type a command or an WebSphere MQ object name on the command line, case is ignored. All entries typed on the command line are converted to uppercase.

When you type directly into a field within a screen or view (for example, when you change the value in an overtype field), the case of each character is recognized.

Initiating Actions on MAINVIEW for WebSphere MQ Views

Many of the views in MAINVIEW for WebSphere MQ allow you to change values or to initiate an action, such as requeuing a message or deleting a message from a queue. You can use any of the following methods to initiate an action.

Initiating a Primary Command from the COMMAND Line

On the **COMMAND** line of many views, you can type a primary command and either the name of an object (to avoid scrolling through a long list of items) or a pattern that indicates multiple objects (to perform the action against a number of items simultaneously). Enter the primary command in a form similar to the following examples:

- DELete name
- DEL pattern
- DEL *

Initiating Actions from the Line Command Field

On a view with a line command field, you can enter a line command to perform an action against the entity represented on that line.To enter a line command complete the following steps:

Step 1 Move the cursor to the line command field for a message.

Step 2 Type the command in the line command field.

Step 3 Press **Enter.**

Initiating a Line Command from the COMMAND Line

On a detail view, where there is no line command field, you can enter the line command form of the command on the **COMMAND** line.

Overtyping a Value

In some fields, you can overtype a value. To overtype a value complete the following steps:

Step 1 Move the cursor to the value you want to change.

Step 2 Type the new value.

Step 3 Press **Enter.**

Hyperlinking between MAINVIEW for WebSphere MQ Views

Some views have fields that hyperlink to another view that provides more information. The headings and field names that support hyperlinks are highlighted (the default is white). To hyperlink from one of those fields in a MAINVIEW for WebSphere MQ view complete the following steps:

Step 1 Move the cursor to the data field.

Step 2 Press **Enter.**

Changing the Sort Order on MAINVIEW for WebSphere MQ Views

The data in some MAINVIEW for WebSphere MQ fields is arranged in ascending or descending order. To change the sort order of a field complete the following steps:

Step 1 On the **COMMAND** line, type **SORT.**

Step 2 Move the cursor to the appropriate field.

Step 3 Press **Enter.**

Using Single System Image and MAINVIEW for WebSphere MQ

Some views (the QM and QMZ views, for example) are designed to be used in the Single System Image (SSI) mode.

Other views (the CHANNELS, LQ, and XQ views, for example) are designed to be used for a specific queue manager. When you display one of those views in SSI mode, you will get data from all queue managers in the current context. By default, the queue manager name is not displayed.

To override the default and include the queue manager name in the view, do one of the following options:

- Temporarily activate SSI target inclusion, when you display the view(s), by entering the following command:

```
INclude TARGET
```

- Permanently activate the SSI target by selecting the TS parameter option (0) to list the Information Display Parameters, and then set the SHOW TARGET value to YES.

About Summary Views

For character fields that are not the summary field, the data elements can contain summarized information from multiple queue managers. When the information is different from one queue manager to the other, we follow the convention where unlike characters are represented with an asterisk (*). For example, if a channel is shared by QMGR CSQ1 and QMGR CSQ2, the queue manager name for that channel would display as CSQ*. If there is no common information between the sharing queue managers for that data element, it is shown as all *.

Accessing MAINVIEW for WebSphere MQ

To access MAINVIEW for WebSphere MQ through the WebSphere MQ Easy Menu complete the following steps:

Step 1 Begin at the MainView Selection Menu.

Step 2 On the **COMMAND** line, type **W** to select WebSphere and MQSeries.

Step 3 Press **Enter** to display the WebSphere and MQSeries Solutions menu.

Step 4 On the **COMMAND** line, type **2** to select MAINVIEW for WebSphere MQ.

Step 5 Press **Enter** to display the WebSphere MQ Performance and Control menu.

Step 6 On the **COMMAND** line, type **1** to select MAINVIEW for WebSphere MQ

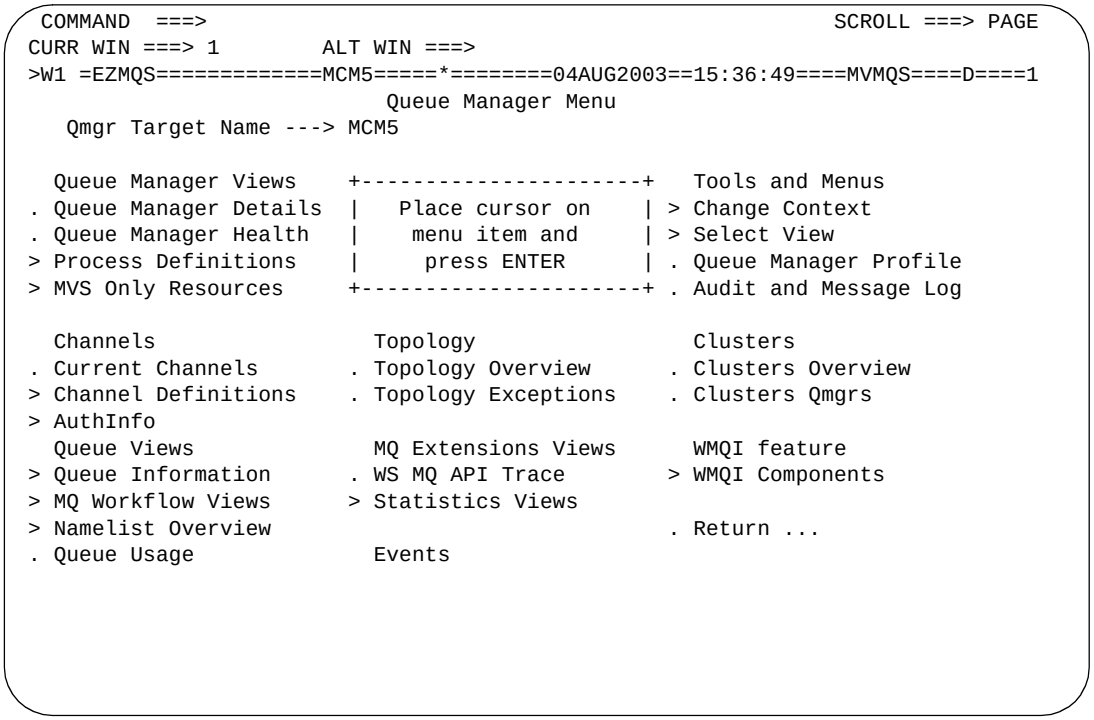
Step 7 Press **Enter** to display the Parameter Confirmation screen.

Step 8 Press **Enter** to display the Session Control Parameters screen

Step 9 Press **Enter** to display the WebSphere MQ Easy Menu (EZMQS), shown in Figure 1-1 on page 1-7.

EZMQS is the primary menu from which you can select MAINVIEW for WebSphere MQ views. Each view accessible from the menu is the first in a series of views that focus on a specific aspect of WebSphere MQ operation and performance. Position the cursor under highlighted text and press **Enter** to hyperlink to a view or related services.

Figure 1-1 EZMQS Menu



Exiting from MAINVIEW for WebSphere MQ

When you finish working with MAINVIEW for WebSphere MQ, you can return to the MAINVIEW Primary Options Menu by entering either of the following commands on the **COMMAND** line:

- Quit
- RETURN

Managing WebSphere MQ

MAINVIEW for WebSphere MQ supports the following management types, which can be used in any combination.

Table 1-1 Management Types Supported by WebSphere MQ

Management Type	Description
MVS	WebSphere MQ requests are sent directly to the MVS queue managers.
Proxy	WebSphere MQ requests are sent between the BBI subsystem and a queue manager on a non-MVS system by routing them through a local *proxy* queue manager on the MVS system.
Agent	WebSphere MQ requests are sent between the BBI subsystem and queue managers on a non-MVS system by routing them through a Node Manager installed on the non-MVS system. Messages are exchanged over a TCP/IP connection.

MAINVIEW for WebSphere MQ Platform Support

MAINVIEW for WebSphere MQ requires WebSphere MQ for MVS/ESA, version 2.1.0 or later. Table 1-2 lists the minimum WebSphere MQ version required on each platform to be managed by agent (the Node Manager versions 4.0.1 and 4.1). Proxy management supports all WebSphere MQ versions.

Table 1-2 WebSphere MQ Version Requirements for the Node Manager

Supported Platforms	Minimum WebSphere MQ Version Requirements
AIX	WebSphere MQ for AIX, version 5.1
HP Nonstop Server	WebSphere MQ for HP-UX, version 5.1
HP-UX	WebSphere MQ for HP-UX, version 5.1
Open VMS for Alpha	WebSphere MQ for Open VMS, version 5.1
OS/400	WebSphere MQ for OS/400, version 5.1
Sun Solaris	WebSphere MQ for Sun Solaris, version 5.1
Windows NT	WebSphere MQ for Windows NT, version 5.1
Windows 2000	WebSphere MQ for Windows 2000, version 5.1

Views on MVS-, Proxy-, and Agent-Based Systems

Table 1-4 lists the primary views that are available in MAINVIEW for WebSphere MQ and shows the availability of each view on MVS-, proxy-, and agent-based systems. Detail forms of the primary views (AQD, for example, is the detail view for the AQ view) are not shown in the table. The support that is available for each primary view is also available for its detail view.

Note: Entries in the MVS, Proxy, and Agent columns in Table 1-4 have the following meanings:

Table 1-3 Symbol Descriptions for Table 1-4

Symbol	Description
X	view is available on the system
—	view is not available on the system
MVS	view is applicable to MVS queue managers only

Table 1-4 MAINVIEW for WebSphere MQ Primary Views (Part 1 of 2)

View	Description	MVS	Proxy	Agent
APST	Application Statistics	X	—	—
AQ	Alias Queues	X	X	X
AUTH	Authentication Information List for SSL	X	—	X
BP	Buffer Pools	X	MVS	MVS
CCHNL	CICS Channels	X	MVS	MVS
CF	Coupling Facility Manager	X	MVS	MVS
CHANNELS	Channels Overview	X	X	X
CLZ	Cluster Summary	X	X	X
DB2	DB2 Manager	X	MVS	MVS
DLQM	Dead-Letter Queue Messages	X	—	X
DQM	Distributed Queuing	X	MVS	MVS
EVTZ	Event Summary	X	—	X
EZWF	Easy Menu - Workflow	X	X	X
IQD	Initiation Queues	X	X	X
LM	Log Manager	X	MVS	MVS
LQ	Local Queues	X	X	X
LQM	Local Queue Messages	X	—	X

Table 1-4 MAINVIEW for WebSphere MQ Primary Views (Part 2 of 2)

View	Description	MVS	Proxy	Agent
MB	Message Browse	X	—	X
MQ	Model Queues	X	X	X
MQEST	Detailed Statistics	X	MVS	MVS
MQITRACE	API Trace Overview	X	—	—
MQMDST	Alternate Key Statistics	X	MVS	MVS
NL	Namelists	X	X	X
OTMA	OTMA IMS Bridge	X	MVS	MVS
PROC	Processes Overview	X	X	X
PS	Page Set Information	X	MVS	MVS
PSU	Page Set Usage	X	MVS	MVS
QMPROF	Queue Manager Profile Definition	X	X	X
QMSEC	Queue Manager Security Status	X	—	X
QMTRC	Queue Manager Trace Status	X	—	X
QMZ	Queue Managers Summary	X	X	X
QP	Queue Performance Overview	X	—	X
QSG	Queue Sharing Group	X	MVS	MVS
QUEUES	List of Running Queues	X	X	X
QUSZ	Queue Usage Summary	X	—	X
RQ	Remote Queues	X	X	X
STC	Storage Classes	X	MVS	MVS
THRDZ	Threads Summary	X	MVS	MVS
TOPOLOGY	Object Analysis and Exceptions	X	X	X
W2OVER	MQ Tuning Wizard	X	—	X
XQ	Transmission Queue	X	X	X
ZPARMS	Queue Manager System Parameters	X	MVS	MVS

MAINVIEW for WebSphere MQ Integrator Support

MAINVIEW for WebSphere MQ Integrator is a system management application that provides monitoring and management of IBM WebSphere MQ Integrator (WMQI) message broker networks. This product allows you to monitor components using multiple panels of different sizes simultaneously and to direct actions from one panel to another, all on one terminal. This product also allows you to start and stop traces for multiple brokers and broker resources easily from one location. MAINVIEW for WebSphere MQ Integrator is a licensed feature of MAINVIEW for WebSphere MQ and requires this product as a prerequisite. For more information, see the *MAINVIEW for MQ Integrator User Guide*.

MAINVIEW Batch Reporting

MAINVIEW for WebSphere MQ is integrated with MAINVIEW Batch Reporting. You can use this batch reporting facility to download the historical data and manipulate this data into meaningful reports. For more information, see *Using MAINVIEW.*

Accessing MAINVIEW Batch Reporting

To access MAINVIEW Batch complete the following steps:

Step 1 Begin at the MainView Selection Menu.

Step 2 On the **COMMAND** line, type **W** to select WebSphere and MQSeries.

Step 3 Press **Enter** to display the WebSphere and MQSeries Solutions menu.

Step 4 On the **COMMAND** line, type **2** to select MAINVIEW for WebSphere MQ.

Step 5 Press **Enter** to display the WebSphere MQ Performance and Control menu.

Step 6 On the **COMMAND** line, type **3** to select Generate MAINVIEW batch reports.

Step 7 Press **Enter.**

BMC Software WebSphere MQ Extensions

BMC Software WebSphere MQ Extensions are used to intercept MQI calls on z/OS. This enables the collecting of statistical and trace information. For distributed systems, intercepts and data collection are provided by PATROL for WebSphere MQ. This enables Queue Performance statistics and the Queue Usage functions. For more information, see the *PATROL for WebSphere MQ Planning and Implementation Guide*.

BMC Software WebSphere MQ Extensions on z/OS

On z/OS, the implementation of BMC Software WebSphere MQ Extensions is called MQE. MQE provides the following types of statistics:

- Qstats or Queue Performance data - provides information about the queue such as API counts and PUT and GET minimum, maximum, and average values.

- Detailed statistics - raw statistical data as collected on z/OS using a record key of the named object, application name and application type. MAINVIEW for WebSphere MQ provides several different views of this data.

- Alternate (MQMD) statistics - collected only when the record key is specified in EXITOPT in the Queue Manager at startup. For information on specifying record keys, see "EXITOPT DD" on page 2-14. You can view these statistics in MAINVIEW for WebSphere MQ 4.2 or later.

- Trace capabilities - traces API calls according to options specified in EXITOPT; you can view these traces in MAINVIEW for WebSphere MQ.

You install MQE by adding a step to execute the program MMAHINIT prior to the execution of CSQYASCP in the queue manager master JCL procedure. For more information, see “Installing BMC Software WebSphere MQ Extensions” on page 2-11. MMAHINIT calls routines that perform the following functions:

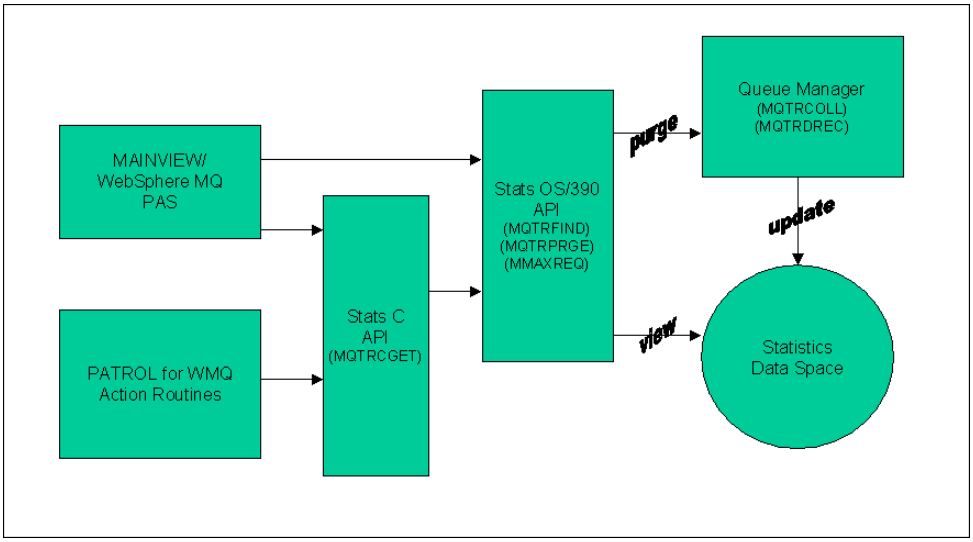
- build control blocks
- read the EXITOPT file, then process the command or save it for later
- set up for initialization in the QMGR step
- call product pre-initialization

MMAHINIT is called with one parameter: the product ID. The product ID for statistics and trace is MQT. When you use this parameter, statistics and trace functions are installed.

When MQE is initialized, it creates the statistics data space and replaces the addresses of WebSphere MQ routines with the addresses of MQE intercept routines. The MQE intercept routine calls an exit routine before and/or after the WebSphere MQ routine, as necessary, to gather the requested statistical information. When each exit gains control, it calls MQTRCOLL with the information needed to create or update statistics records in the data space. MQTRCOLL checks for an existing record each time an object is accessed via the API. Each record key is hashed by named object, application name and application type. Each key is checked to find a slot in the hash table. If a match is found the record is updated, otherwise a new record is created. This data is then available for access by an internal API for either MAINVIEW for WebSphere MQ or PATROL for WebSphere MQ.

Figure 1-2 illustrates extensions API calls on z/OS.

Figure 1-2 Extensions API Calls on z/OS



Accessing Distributed Systems Queue Statistics via MAINVIEW for WebSphere MQ

BMC Software's MAINVIEW for WebSphere MQ product can manage queue managers running on distributed systems from the mainframe. Using this product, you can also view queue statistics and queue usage from distributed systems queue managers via the mainframe. MAINVIEW for WebSphere MQ sends a request to the node manager to solicit the statistics.

The node manager transmits the requested statistics to MAINVIEW for WebSphere MQ for viewing. For more information, see the *PATROL for WebSphere MQ Configuration Guide*.

Chapter 2 Installing and Customizing MAINVIEW for WebSphere MQ

MAINVIEW for WebSphere MQ operates as a client in the BBI-SS product address space (PAS) and uses MAINVIEW services. When you install and customize MAINVIEW for WebSphere MQ, you can take advantage of the MAINVIEW services, connect to WebSphere MQ, and enable the MAINVIEW for WebSphere MQ features.

As you install and customize MAINVIEW for WebSphere MQ, you can access Help for the views and view fields you encounter during the process. To access Help for a field, move your cursor to the field and press the Help key (usually F1). This chapter discusses the following topics:

Installation System

MAINVIEW for WebSphere MQ is installed by using the OS/390 and z/OS Installer. The installation system provides the combined benefits of IEBCOPY and SMP/E.

- IEBCOPY loads all the required elements from tape but does not create a change management environment (no SMP/E data sets).

- SMP/E performs the actions of IEBCOPY and implements a change management environment.

The installation system combines tape images, copies files to your system (IEBCOPY or SMP/E), and creates installation JCL. The installation system delivers the speed and simplicity of IEBCOPY *and* the control and flexibility of SMP/E, enabling a fast customization path for customers who require a rapid installation and the ability to view each customization step.

The installation system provides the following options for installing your BMC Software products:

- Standard installation:
  - IEBCOPY unload (required)
  - SMP/E library creation (optional, but suggested for ease of maintenance)
- Full SMP/E installation

The installation system provides a consistent distribution, installation, customization, and maintenance process for installing BMC Software solutions on OS/390 and z/OS platforms. For more information about installing MAINVIEW for WebSphere MQ, refer to the *OS/390 and z/OS Installer Guide*.

Installation Checklist

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

The checklist is divided into the following sections:

- “Preparation Steps” on page 2-5
- “Installation Steps” on page 2-6
- “Customization Steps” on page 2-7

Combining Checklists for Multiple Products

The checklist is for the product (or products) that are listed in “Products” on page 2-4. You can use the Installation Checklist Generator to create a checklist that integrates the checklist in this book with checklists in other product books.

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

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

Products

This checklist pertains to the following BMC Software products:

- MAINVIEW for WebSphere MQ version 4.2.00
- MAINVIEW for WebSphere MQ Integrator version 4.2.00

Preparation Steps

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

✓	Step	Task	Description	Reference
	1	assemble needed materials	Gather all installation tapes, tape cover letters, product release notes, product technical bulletins, the *OS/390 and z/OS Installer Guide*, customization guides, planning guides, and so on.	your product shipment and the support page on the BMC Software Web site. For more information, see http://www.bmc.com
	2	review tape cover letters	The tape cover letters are shipped with your tapes. They list the materials in your shipment.	your product shipment
	3	review product release notes	The release notes describe enhancements, changes, and fixes for a product and contain important information you need to know.	your product shipment
	4	review technical bulletins and flashes	Technical bulletins and flashes contain information about problems that have been identified since the product was last released.	your product shipment or the support page on the BMC Software Web site. For more information, see http://www.bmc.com
	5	obtain product passwords	Contact BMC Software if you have not received passwords for your products.	*OS/390 and z/OS Installer Guide*, "BMC Software Product Authorization" appendix product authorization letter
	6	read prerequisites	Prerequisites state the operating system version requirements, space requirements, authorization requirements, and so on.	*MAINVIEW for WebSphere MQ User Guide*
	7	read migration considerations	Migration considerations describe the process of migrating from a previous version of the product or from another product.	*MAINVIEW for WebSphere MQ User Guide*
	8	read installation considerations	Installation considerations describe information about running with other products and product implementation.	*MAINVIEW for WebSphere MQ User Guide*
	9	obtain authorization to complete the installation	Reading the installation tapes or creating the installation data sets might require RACF authorization.	contact your system administrator, security administrator, or other administrator
	10	obtain authorization to complete customization	Customization of some products might require APF authorization.	*MAINVIEW Common Customization Guide*, "Customizing the MAINVIEW Environment" chapter

✓	Step	Task	Description	Reference
	11	complete planning, testing, and setup	This information is required before product installation and for migration from another product.	*MAINVIEW for WebSphere MQ User Guide*
	12	fill out worksheets	A worksheet contains information, such as data set names and library locations, that you will need for completing installation.	*MAINVIEW for WebSphere MQ User Guide*

Installation Steps

The following installation steps help you run the BMC Software OS/390 and z/OS Installer to successfully complete installation for all of your OS/390 and z/OS BMC Software products. The installation system combines tape images, copies files to your system (Standard or SMP/E), creates installation JCL, and applies maintenance to installed products.

✓	Step	Task	Description	Reference
	1	understand the installation system	The installation system has features and functions that you should be familiar with before using it.	*OS/390 and z/OS Installer Guide*, “Introduction” chapter
	2	unload the base installation libraries from the installation tape	The base installation libraries contain the installation system.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	3	create the customized installation libraries	The customized installation libraries specify a site-specific installation environment.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	4	start the installation system	The installation system automates many installation steps.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	5	specify repository information	The repository profile contains installation and customization options that are used when performing subsequent installations.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	6	specify user options	The user options determine how the installation system runs and specify where installation JCL is stored.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	7	select the products to install	The installation system generates all the steps necessary for the products you want to install.	*OS/390 and z/OS Installer Guide,* “Using the Installation System” chapter
	8	run the JCL that was created by the installation system	The installation system presents installation JCL for your approval and helps you to run the JCL.	*OS/390 and z/OS Installer Guide*, “Running Installation JCL” chapter

✓	Step	Task	Description	Reference
	9	specify product authorization passwords	Permission to run your products is granted.	*OS/390 and z/OS Installer Guide*, "Using the Installation System" chapter
	10	verify installation	Some products include an installation verification program (IVP) or provide information to verify installation.	*MAINVIEW for WebSphere MQ User Guide*

Customization Steps

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

✓	Step	Task	Description	Reference
	1	create or update system objects, components, or resources	System objects, components, and resources include such items as sysplex or coupling facility, VTAM, TCP/IP, and LPARs.	*MAINVIEW Common Customization Guide*
	2	create or update subsystem objects, components, or resources	Subsystem objects, components, and resources include such items as DB2 plans, DB2 table spaces, and APPLIDs.	*MAINVIEW Common Customization Guide*
	3	allocate, create, or update data sets or files	Many products require specific data sets or files.	*MAINVIEW Common Customization Guide*
	4	set up data collectors	Many products use a data collector to store system data that they have collected.	*MAINVIEW Common Customization Guide*
	5	install or update the interface	Some products require customization of ISPF or require the use of an interface other than ISPF.	*MAINVIEW Common Customization Guide*
	6	create or update profiles or global parameters	Most products require profiles or parameters to be set or updated.	*MAINVIEW Common Customization Guide*
	7	create or update the initialization PROC, CLIST, REXX EXEC, or started task	Most products require a startup routine to run.	*MAINVIEW Common Customization Guide*
	8	define or update security	All products provide information for interfacing to RACF or other security products. Some products include their own security features in addition to or instead of RACF security.	*MAINVIEW for WebSphere MQ User Guide*
	9	implement user exits	Some products provide user exits for interfacing with the product.	*MAINVIEW Common Customization Guide*

✔	Step	Task	Description	Reference
	10	perform additional customization tasks for your products	Some products require additional tasks to be performed before the products are completely installed.	*MAINVIEW for WebSphere MQ User Guide*
	11	verify customization	Some products provide information to verify customization of the product.	*MAINVIEW for WebSphere MQ User Guide*

Installing MAINVIEW for WebSphere MQ

The information that is required for installation of MAINVIEW for WebSphere MQ from the distribution tape is provided in the *OS/390 and z/OS Installation Guide*.

When MAINVIEW for WebSphere MQ is installed on your system, you must identify MAINVIEW for WebSphere MQ to the BBI subsystem. You must also provide access to WebSphere MQ, either manually or automatically, by using AutoCustomization. AutoCustomization performs most of the necessary steps, providing panels where you can enter information. Later, you can establish your site's security. For more information on establishing your site's security, see Chapter 3, "Security for MAINVIEW for WebSphere MQ."

If you plan to customize MAINVIEW for WebSphere MQ *manually*, see the *MAINVIEW Common Customization Guide* for information about how to proceed. The following steps may be necessary to customize MAINVIEW for WebSphere MQ.

Note: The DDNAME BMCMSGLG, which is used as a repository for diagnostic information, will be dynamically allocated by the product. If the BBISS address space is started using SUB=MSTR then the BMCMSGLG must be added to the BBISS JCL. This DDNAME can either point to SYSOUT=* or a dataset with DCB attributes of BLKSIZE=32760, MAX LRECL=32752, RECFM=VB.

Step 1 When you set the BBI-SS PAS environment, add the following product record to member BBISSP00 in your copy of the BBPARM parameter library (which you define by using the BBIPARM DD record in the BBI-SS WebSphere MQ PAS job):

```
PRODUCT=MVMQS
```

Step 2 To the STEPLIB DD record in the BBI-SS PAS job, add the following WebSphere MQ-authorized program library:

prefix.SCSQAUTH

The variable *prefix* was defined when you installed WebSphere MQ.

Note: The program library must be APF authorized.

If you are using TCPaccess, skip to Step 4. If you are not using TCPaccess, proceed with Step 3.

Note: Before continuing with following steps, consult with your TCP/IP programmer to determine which of the following steps may be necessary.

Step 3 If you plan to manage non-MVS queue managers using the Node Manager, consult with your TP/IP programmer to determine which of the following steps may be necessary:

3.A It may be necessary to add the following DD records to your STEPLIB concatenation:

tcpprefix.SEZATCP
tcpprefix.SEZALINK
tcpprefix.SEZALPA

The variable *tcpprefix* was defined when you installed TCP/IP.

Note: These program libraries must be APF-authorized.

3.B Depending on your system configuration, it may be necessary to add the following DD record to the BBI-SS PAS job:

```
//SYSTCPD DD DISP=SHR,DSN=tcpprefix.tcpipdata
```

3.C Create member BBTTCP*xx* in your copy of the BBPARM library.

The variable *xx* is 00 or the suffix that you specify with the GTS parameter in member BBISSP00. Member BBTTCP00 defines your TCP/IP environment and has the following statement:

```
TCPNAME=TCP/IP started task
```

TCPNAME is set to the started task name of your TCP/IP job.

If you are using InterLink 5.3, BBTTCP00 should contain the following statement only:

```
DEBUG=ERROR
```

This allows MAINVIEW for WebSphere MQ to determine the name and release of TCP/IP.

Step 4 If you are running the TCPaccess TCP/IP stack, you must create BBTTCP*xx* in your copy of the BBPARM library. The variable *xx* is 00 or the suffix that you specify with the GTS parameter in member BBISSP00. Member BBTTCP00 defines your TCP/IP environment and has the following statement:

```
TCPNAME=TCPaccess started task
STACK=ILINK41/ILINK52
```

TCPNAME is set to the started task name of your TCPaccess job. STACK is set based on the version of TCPaccess you are running. If you are running TCPaccess version 5.2 or 5.3, use ILINK52.

Migrating BMC Software Extensions for WebSphere MQ

If you are upgrading to MAINVIEW for WebSphere MQ version 4.2, you will migrate to BMC Software Extensions for WebSphere MQ version 3.0. Do not run BMC Software Extensions for WebSphere MQ version 1.3 and version 3.0 on the same OS/390, z/OS instance without BPL0935 applied to your version 1.3 system.

If you are running...	Uses the following version of BMC Software Extensions for WebSphere MQ
MAINVIEW for MQSeries 4.0	version 1.3
PATROL for MQ Operator 2.3.01 (not an SMP/E install)	version 1.3 (not SMP)

Follow the instructions that apply to the product you are running.

MAINVIEW for MQSeries 4.0

Step 1 Apply BPL0935 to BBLHK13 before you implement BMC Software Extensions for WebSphere MQ version 3.0.

PATROL for MQ Operator 2.3.01

Step 1 Run a MAINVIEW for WebSphere MQ version 4.2 PAS and test Extensions without upgrading to the new Extensions version in the queue managers. Many Extensions functions will be unavailable.

Step 2 Migrate all queue managers to BMC Software Extensions for WebSphere MQ version 3.0 in the queue managers and include BBLINK first in the MMASERV STEPLIB.

Installing BMC Software WebSphere MQ Extensions

To enable collection of queue statistics on OS/390, BMC Software WebSphere MQ Extensions (MQE) must be installed for the queue manager. When you install MQE, the extensions are enabled by default.

You can install MQE by adding a step to execute the program MMAHINIT prior to the execution of CSQYASCP in the queue manager master JCL procedure. MMAHINIT calls routines that perform the following functions:

- build control blocks
- read the EXITOPT file, then process the command or save it for later
- set up for initialization in the QMGR step
- call product pre-initialization

For each MVS queue manager that you need to gather MQITRACE (MQ API) or queue performance statistics, you must update the queue manager started task JCL. To update the queue manager started task JCL complete the following steps:

Step 1 Add the following step before the CSQYASCP(QMGR) step:

```
//BMCINIT EXEC PGM=MMAHINIT,ACCT=(5511),PARM='MQT'
//STEPLIB DD DSN=your.BBILINK,DISP=SHR
```

Note: PARM is a list of product IDs. The Queue Performance Statistics product ID is MQT. Do not repeat this step, other BMC Software products that use other MQExtensions, add the additional PARMs to the EXEC statement.

MMAHINIT is called with one parameter: the product ID. The product ID for statistics and trace is **MQT**. When you use this parameter, statistics and trace functions are installed. If additional products (or sub-products) are installed, the parameter should also include the additional products. For example, the `PARM='MQT,xxx'` statement would include both MQT and product `xxx`. Currently, MQT is the only valid parameter.

Step 2 To change the MQE default settings for a queue manager, add the appropriate API trace control to EXITOPT DD. For more information see, "EXITOPT DD" on page 2-14.

Note: Excluding the TREXCEPTION keyword, if you enter the same keyword more than once, the last value is used.

Step 3 In the QMGR step, add the following statement:

```
TIME = Nolimit
```

Note: You must add the `TIME=NOLIMIT` statement when two steps run in a started task because MVS issues the following message when the second step starts: "`IEF188I PROBLEM PROGRAM ATTRIBUTES ASSIGNED`". In other words, if the program to be run is not a started task that runs only a single step, the system nullifies the NODSI or SYST parameters. All other program properties remain in effect.

Step 4 In the QMGR step, add the same libraries to the STEPLIB concatenation.

Step 5 If your WebSphere MQ programs are being loaded out of linklist, you must add the following DD statement to the CSQYASCP step:

```
//BMCCSQ DD DSN=your.mqseries.SCSQAUTH,DISP=SHR
```

Verifying MQE Installation

Two FMIDs are used to install MQE: BBLHK*nn* and BBLST*nn* (where *nn* is the extensions version). The MMAHINIT module will be in your BBLINK library.

Verifying MQE is Installed for a Specific Queue Manager

MQE is installed in the queue manager by adding a step prior to queue manager initialization, adding the BBLINK library to the STEPLIB of the CSQYASCP step, and adding TIME=NOLIMIT to the exec card.

Additionally, prior to the `CSQ9022i ssid CSQYASCP 'START QMGR' NORMAL COMPLETION` message in the SYSLOG, you should see the following message, which indicates statistics and trace are activated: `BMCMMA201887I` *`jobname`* `MCIN1000 - MQT ACTIVATED.`

Removing MQE

To disable MQE, comment out the step that executes the MMAHINIT program. This will remove the extensions at the next restart.

Verifying whether Statistics and Trace Collection is Enabled

You can determine whether statistics and trace collection is enabled by using one of the following methods:

- Use the QM view to determine the current state of extensions for the queue manager.
- Review the SYSLOG for the BMCMMA201887I message. The last message should indicate the current status.

Disabling Statistics and Trace Collection

To disable the collection of statistics and trace information, but keep MQE installed, complete the following instruction.

Step 1 From the QM view, enter the **PQP** line command. This will stop collection, but does not remove the hooks or delete any stats data.

Step 2 To restart, enter the **SQP** line command from the QM view.

EXITOPT DD

EXITOPT DD is used to specify default parameters used in collecting and reporting DUMP, MQITRACE, or ALTERNATE Key statistics. Its use is optional. However, if EXITOPT DD is not defined, alternate key statistics are not available.

To use EXITOPT, enter the DD card into the started task of the queue manager that you want to affect (see example below). The `parmlib` member contains the keyword and values listed below.

Note: Excluding the TREXCEPTION keyword, if you enter the same keyword more than once, the last value is used.

Example

```
//MMAHOOKS EXEC PGM=MMAHINIT,ACCT=(5611),PARM='MQT'
//STEPLIB  DD  DSN=BCL.QA.M9A38U.MQR42.BBLINK,DISP=SHR
//EXITOPT  DD  DISP=SHR,DSN=BCL.QA.EXITOPT.PARMLIB(BCL5XOPT)
```

Table 2-1 EXITOPT DD Parameters (Part 1 of 4)

Entry	Description
DUMPS	
DUMPCNT=*nn*	maximum number of dumps taken for this queue manager, where ***nn*** is the number. The default value is 4.
STGLV*n*=*xxxxxx*	lowest latency time collected from bucket ***n***. **xxxxxx** is the bound value, in one-hundredths of a second. Valid values for ***n* = 2, 3, 4, 5, or 6** The defaults are: STGLV2 = 100 (1 second) STGLV3 = 200 (2 seconds) STGLV4 = 500 (5 seconds) STGLV5 = 1500 (15 seconds) STGLV6 = 6000 (60 seconds)
STCNT=*nnnnn*	number of entries to set aside for detailed statistics Default: **90000**
STDYNACCUM=	Valid values: • **NO** – delete statistics records when the dynamic queue is closed • **YES** – accumulate dynamic queues by model name and application name Note: The application name must be defined using **STDYNAPPL=APPL**, as described below. The default value is Yes.

Table 2-1 EXITOPT DD Parameters (Part 2 of 4)

Entry	Description
STDYNAPPL=	Valid values: • **APPL** – use application name as part of the key • **QMGR** – use a queue manager name in place of an application name The default value is APPL.
API Trace Control	
TRTCNT=*nn*	number of trace tables. The default value is 4.
TRTSIZE=*nn*	size of trace tables, in 4k pages **Example**: When TRTSIZE=5, the trace table size is 20k.
TRQUEUE=queuename_pattern	bases the trace on an individual queue or set of queues in the queue manager. use a * for multiple characters use a ? for single characters The default value is OFF.
TRAPPL=app_name_pattern	bases the trace on the application name. If TRAPPL = *blank*, the job name is used The default value is OFF.
TRJOB=jobname_pattern	bases the trace on an individual job or set of jobs in the queue manager. use a * for multiple characters use a ? for single characters The default value is OFF.
TRRESOLVED=resolved_queue_name_pattern	bases the trace on an individual resolved queue name or set of resolved queue names in the queue manager. use a * for multiple characters use a ? for single characters The default value is OFF.
TREXCEPTION=	Valid values: • **ON** – trace exceptions RC>2 (Default) • **WARNING** – trace exceptions RC>1 • **ANY** | **ALL** – trace non-zero reason codes • **OFF** – do not trace exceptions • **IGNORENOMSG** – do not trace; no message available. For version 3 only. **Note**: All exception values are cumulative, except for **OFF**. The default value is ON and IGNORENOMSG.

Table 2-1 EXITOPT DD Parameters (Part 3 of 4)

Entry	Description
Alternate Statistics (MQMD Statistics)	
STALTKEY1=*aaaaaaa*	This is the only field not taken from MQMD. The value indicates the name of the queue being accessed. Valid values for ***aaaaaaa***: • **RESOLVED** – resolved queue name • **NAMED** – named object • None –- no AltKey1 field The default value is None.
STALTKEY2=*bbbbbbb*	This value is taken from the MQMD. It identifies the second part of the key. Valid values for ***bbbbbbb***: • **MSGID** – message identifier • **CORRELID** – correlation identifier • **REPLYTOQ** – reply queue name • **REPLYTOQMGR** – reply queue manager name • **USERIDENTIFIER** – user identifier • **ACCOUNTINGTOKEN** – accounting token • **APPLIDENTITYDATA** – application data related to an identity message • **PUTAPPLNAME** – name of the application that put the message • **REPORT** – options for report messages • **MSGTYPE** – message type • **EXPIRY** – message lifetime • **FEEDBACK** – feedback or reason code • **ENCODING** – numeric message data encoding • **FORMAT** – message data format name • **PRIORITY** – message priority • **PERSISTENCE** – message persistence • None –- no AltKey2 field The default value is None.

Table 2-1 EXITOPT DD Parameters (Part 4 of 4)

Entry	Description
STALTKEY3=*cccccc*	This value is taken from the MQMD. It identifies the second part of the key. Valid values for ***cccccc***: • **REPORT** – options for report messages • **MSGTYPE** – message type • **EXPIRY** – message lifetime • **FEEDBACK** – feedback or reason code • **ENCODING** – numeric message data encoding • **FORMAT** – message data format name • **PRIORITY** – message priority • **PERSISTENCE** – message persistence • None –- no AltKey3 field • The default value is None.
STALTCNT=*nnnnn*	number of entries to set aside for collecting MQMD statistics Default: **30000**
STALTKL2=*nn*	if the length of Key 2 is less than the whole field, use this entry to specify the length of the Key 2 field. **Example**: If only the first eight bytes of correlation identifier are relevant for collection purposes, specify the following: **STALTKEY2=CORRELID** **STALTKL2=8** The default value equals the field length of STALTKEY2.
STALTSYS=(YES | NO)	When STALTSYS=NO, MQMD statistics are not collected for queues with names starting with **SYSTEM.*** and **CSQ***. The default value is YES.
STALTBMC=(YES | NO)	When STALTBMC=NO, MQMD Statistics are not collected for queues with names starting with BBSMVS.*, MCM.*, AMQ.*, BMC.*, or SYSBMC.* The default value is YES.

PAS and CAS Issues

For instructions about starting and stopping both a PAS and a CAS, see the MAINVIEW Administration Guide.

- BMC Software recommends that you only monitor 15 MVS queue managers per PAS. If you monitor more than 15, you may encounter S32E-11C abends, which are caused by WebSphere MQ issuing too many STIMERM SET requests on behalf of the PAS.

Defining Queue Manager Target Names

For each queue manager that you want to manage with MAINVIEW for WebSphere MQ, you must define a queue manager target name and associate it with the appropriate PAS. When you define a queue manager target name, a service point is established and you are able to access to MAINVIEW for WebSphere MQ services. You can use one of the following process to define the a queue manager target name:

- by editing the job name table (BBIJNT00) to create static entries
- through the PLEX Manager to create dynamic entries

Defining Queue Manager by Editing Job Name Table (Static Entry)

The job name table (BBIJNT00) in your copy of the BBPARM parameter library defines the queue manager target names for MAINVIEW for WebSphere MQ. Targets defined in the BBPARM member BBIJNT00 are considered static definitions. The format of each entry is as follows:

TARGET=name,TYPE=QMGR,SUBSYS=ssid,[DESC=]

Table 2-2 describes these entries.

Table 2-2 Queue Manager Target Names

Entry	Description
TARGET	is the uppercase name of an MVS queue manager (1 to 4 characters) or a distributed queue manager (1 to 8 characters) If a distributed queue manager name has lowercase characters, or more than eight characters, you must create a queue manager profile to specify the actual queue manager name (see “Defining Queue Manager Profiles” on page 2-21).
TYPE	identifies the target as an WebSphere MQ queue manager
SUBSYS	indicates the subsystem ID of the PAS that monitors the queue manager
DESC	is an optional description of the queue manager shown on some Plex Manager views

Changes to BBIJNT00 take effect when the PAS is restarted.

When you have defined the queue manager targets, you may need to create new queue manager profiles (see “Defining Queue Manager Profiles” on page 2-21).

Defining Target Name through PLEX Manager (Dynamic Target)

MAINVIEW for WebSphere MQ supports dynamic target definitions, which allows you to monitor new queue managers without adding entries to the JNT, and without stopping and restarting the queue manager.

For a discussion of managing targets and target contexts, see the MAINVIEW *Administration Guide*.

To define queue manager target names dynamically through the PLEX Manager complete the following steps:

Step 1 Verify that DYNTGT = YES in BBISSP00.

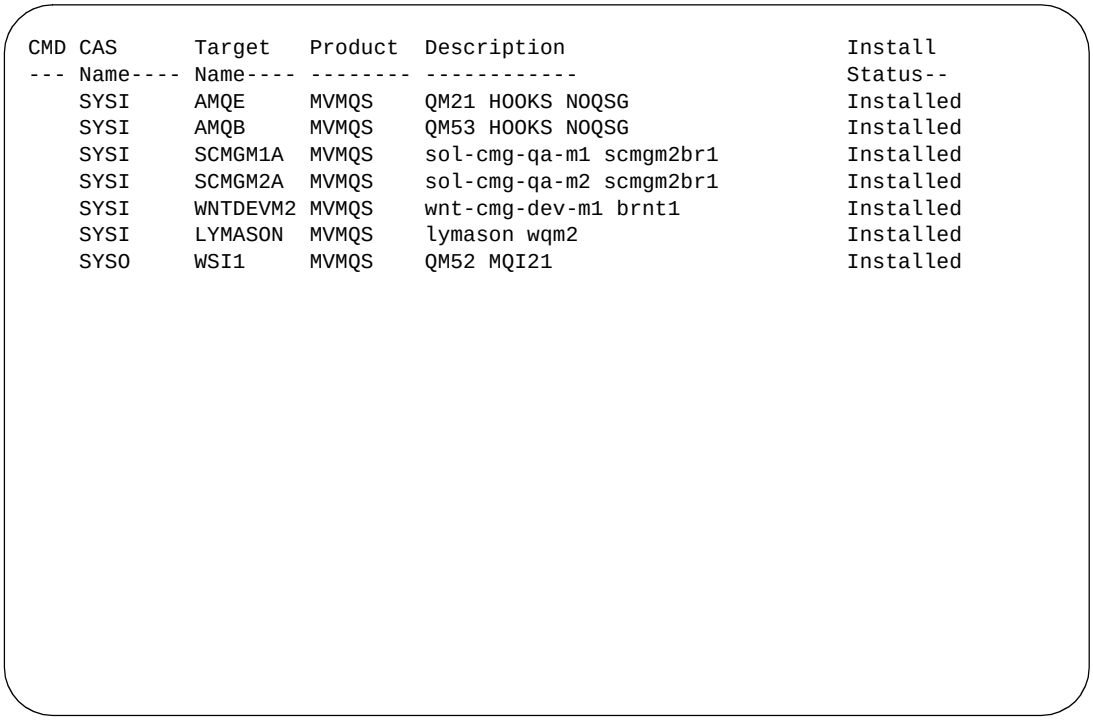
Step 2 Begin at the MainView Selection Menu.

Step 3 On the **COMMAND** line, type **1** to select PLEXMGR.

Step 4 Press **Enter** to display the PLEXOVER view.

Step 5 On the **COMMAND** line, type **TGTDEF** and press **Enter** to display the TGTDEF view, shown in Figure 2-1.

Figure 2-1 TGTDEF View



```
CMD CAS      Target   Product  Description                    Install
--- Name---- Name---- -------- ------------                   Status--
    SYSI     AMQE     MVMQS    QM21 HOOKS NOQSG               Installed
    SYSI     AMQB     MVMQS    QM53 HOOKS NOQSG               Installed
    SYSI     SCMGM1A  MVMQS    sol-cmg-qa-m1 scmgm2br1        Installed
    SYSI     SCMGM2A  MVMQS    sol-cmg-qa-m2 scmgm2br1        Installed
    SYSI     WNTDEVM2 MVMQS    wnt-cmg-dev-m1 brnt1           Installed
    SYSI     LYMASON  MVMQS    lymason wqm2                   Installed
    SYSO     WSI1     MVMQS    QM52 MQI21                     Installed
```

Step 6 Add the new target name.

Step 7 Type **INSTALL** on the **COMMAND** line. MAINVIEW for WebSphere MQ obtains the new target name and attaches a service point. You do not need to restart the PAS. The target definitions are saved across restarts.

When you have defined the queue manager targets, you may need to create new queue manager profiles (see “Defining Queue Manager Profiles” on page 2-21).

See the MAINVIEW *Administration Guide* for a description of the TGTDEF view and information on saving and installing dynamic target definitions.

Special Considerations

Note the following special considerations when using dynamically defined targets:

- You must add a valid JNT entry that points to a queue manager.
- If multiple target definitions are defined for the same queue manager instance, the first one found in the combined BBIJNT00/BBMTXP00 in-memory list is used.

- Target definitions specified in member BBIJNT00 override dynamic target definitions in BBMTXP00.
- Existing targets defined in BBIJNT00 cannot be modified from the TGTDEF view. If they are modified, the changes are ignored.
- Historical data is not available for inactive queue manager instance that are defined dynamically.

MAINVIEW for WebSphere MQ obtains the new target name and attaches a service point. You do not need to restart the PAS. The target definitions are saved across restarts.

When you have defined the queue manager targets, you may need to create new queue manager profiles (see “Defining Queue Manager Profiles” on page 2-21).

Defining Queue Manager Profiles

Each queue manager target name requires a profile that specifies the properties of the queue manager. You need at least one profile for each management type you use. MAINVIEW for WebSphere MQ supports the following management types:

Table 2-3 Management Types Supported by MAINVIEW for WebSphere MQ

Type	Profile
MVS	queue manager is on the local MVS system
Proxy	queue manager is on a non-MVS platform and managed through a *proxy* queue manager on the MVS system
Agent	queue manager is on a non-MVS platform and managed through a Node Manager that is installed on the non-MVS system messages are exchanged over a TCP/IP connection

The following sections describe how to view, add, change, and delete queue manager profiles. A scenario for creating and changing queue manager profiles is provided in “Establishing Queue Managers” on page 2-32

Note: To access queue manager profiles, you must be in target mode, not SSI mode.

Viewing Queue Manager Profiles

The QMPROF view lists existing queue manager profiles. To display the QMPROF view, select Queue Manager Profile from the EZMQS view or type **QMPROF** on the **COMMAND** line. Figure 2-2 shows a sample QMPROF view for the BBI-SS PAS. To display the details of a profile, place the cursor on the target name and press **Enter.**

If a JNT entry exists for a queue manager, but a matching definition does not exist, and the queue name is less than four characters, an MVS queue manager is assumed. If the queue name is greater than four characters, a proxy queue manager is assumed. For more information see, Table 2-6 on page 2-24.

The QMPROF view has fields for the following items:

- queue manager target name to which this profile applies
- how the queue manager is managed—directly (MVS), by a Node Manager for MQ (AGENT), or through an MVS queue manager (PROXY)
- priority level for command messages
- reply time-out length in seconds
- heartbeat interval
- proxy queue manager (MVS queue manager that is managing a remote queue manager)
- queue manager name (when remote queue manager name is different from target name)
- set history collection
- BMC Integrated Event Listener Subscription
- number of connections to leave open to remote agent for this queue manager
- IP address
- port number

Figure 2-2 QMPROF View

```
19JUN2003  13:49:25 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =QMPROF============LMASON74=*========(00 BROWSE        )====MVMQS====D===20
CMD QMgr     MVS  Manage  Message Reply  Heart Proxy
--- Target   QMgr Type   Priority  Time Beat I QMgr     Queue Manager Name
    S400L    No   AGENT         1   120      2          LAM4100
    S400K    No   AGENT         1   120      2          qm1
    SMQIS1   No   AGENT         1    60     10          smqibr1qm
    MCM6     Yes  MVS           1    45      0
    MCMZ     Yes  MVS           1    45      0
    LYMASON7 No   AGENT         1    60     10          newqm
    LMASON74 No   AGENT         1   100      0          lymason74
    LMASON7  No   AGENT         1    60     10          newqm
    HAPPY    Yes  MVS           1   240      2
    CSQA     Yes  MVS           1    45      0
    BCL3     Yes  MVS           1    60      2
    BCL0     Yes  MVS           1    60      2
    BCLC     Yes  MVS           1    45      0
    BCLA     Yes  MVS           1    60      2
    AMQE     Yes  MVS           1    45      0
    AMQD     Yes  MVS           1    60      2
```

QMPROF View Primary Commands

Table 2-4 lists the QMPROF view primary commands. These commands are entered in the COMMAND field.

Table 2-4 QMPROF View Primary Commands

Command	Description
ADD	Add a QMgr target definition.
CANcel	Cancel changes or edit mode.
EDIT	Obtain an edit lock on all QMgr definitions.
INSTALL	Install changes into the executing system.
SAVE	Save changes to the parameter library.

QMPROF View Line Commands

Table 2-5 lists the QMPROF view line commands.

Table 2-5 QMPROF View Line Commands

Command	Description
ADD	Add a QMgr target definition.
CHA	Modify a QMgr target definition.
DEL	Delete a QMgr target definition.
RHB	Reset the heartbeat interval.
UND	Restore a QMgr target definition.

MAINVIEW for WebSphere MQ provides the sample profiles that are listed in Table 2-6.

Table 2-6 Sample Queue Manager Profiles

Target Name	Type of Queue Manager
CSQA	sample for MVS queue managers
????	default profile for MVS queue managers This profile is used for target names of four characters or fewer that do not have a matching profile.
*	default profile for remote queue managers that are managed by proxy This profile is used for target names of more than four characters that do not have a matching profile.

Establishing an Edit Lock

Before you add, change, or delete a queue manager profile, you must obtain an edit lock on the BBPARM member (BBSTQM00) that contains queue manager profiles. To do so, type **EDIT** on the **COMMAND** line. An edit lock prevents other users from editing the queue manager profiles at the same time.

Adding Queue Manager Profiles

To add a new profile using the system default values, type **ADD** on the **COMMAND** line on the QMPROF view. To add a new profile using the parameters from an existing profile (including a sample profile), type **ADD** on the line next to the profile.

Both methods display the Select Queue Manager Type panel shown in Figure 2-3.

Figure 2-3 Select Queue Manager Type Panel

```
- -------------------------- SELECT QUEUE MANAGER TYPE ---------------------
COMMAND ===>

Target      ===>  *
QMgr Type   ===>  PROXY       (MVS, PROXY, AGENT)


MVS   -  This is a queue manager running on MVS
PROXY -  This is a queue manager running on a non-MVS platform
         that will be managed through an MVS queue manager
AGENT -  This is a queue manager running on a non-MVS platform
         that will be managed through a BMC Software Distributed
         System MQSeries Agent with TCP/IP


Press End to continue.   Enter  CANCEL to leave without adding.
```

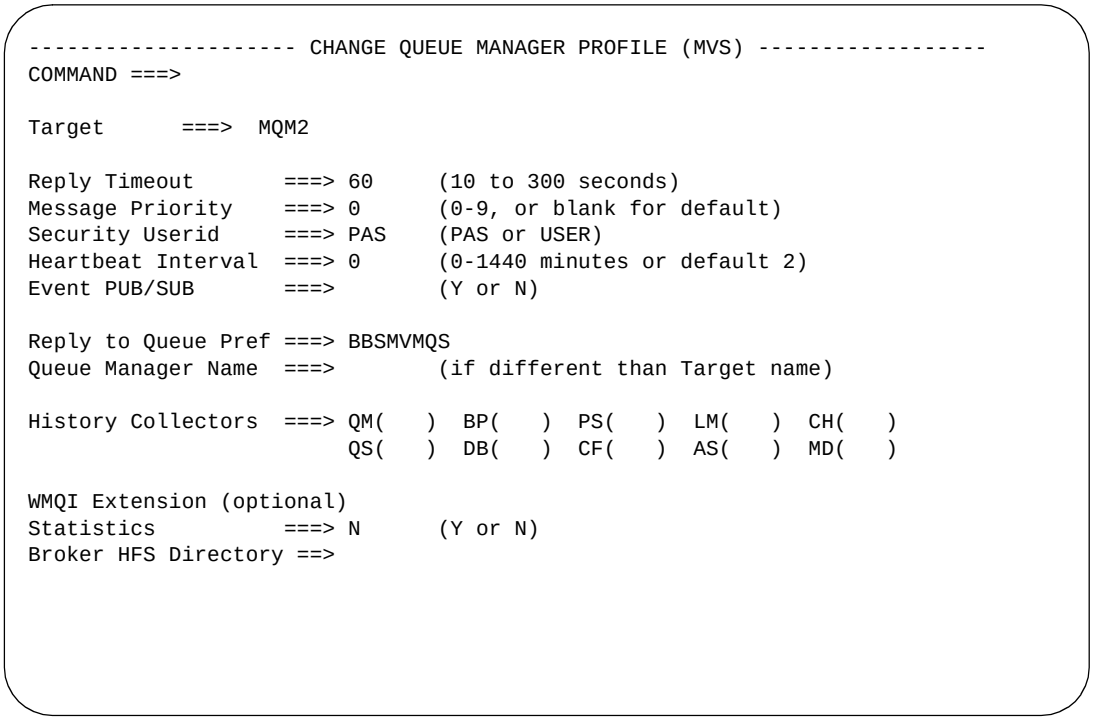
Specify the following:

Table 2-7 Select Queue Manager Type Panel Fields

Field	Description
Target	Type the name of the queue manager target that this profile applies to. Include wildcard characters (? and *) to apply the same profile to multiple targets. For example, CSQ? applies to all four-character target names that start with CSQ. Only queue managers of type MVS and PROXY can have the same profile. Each AGENT queue manager must have a unique profile.
QMgr Type	Type MVS, PROXY, or AGENT to specify how the queue manager is managed. Note that a queue manager of type PROXY resides on a non-MVS system and is managed through a proxy queue manager on MVS.

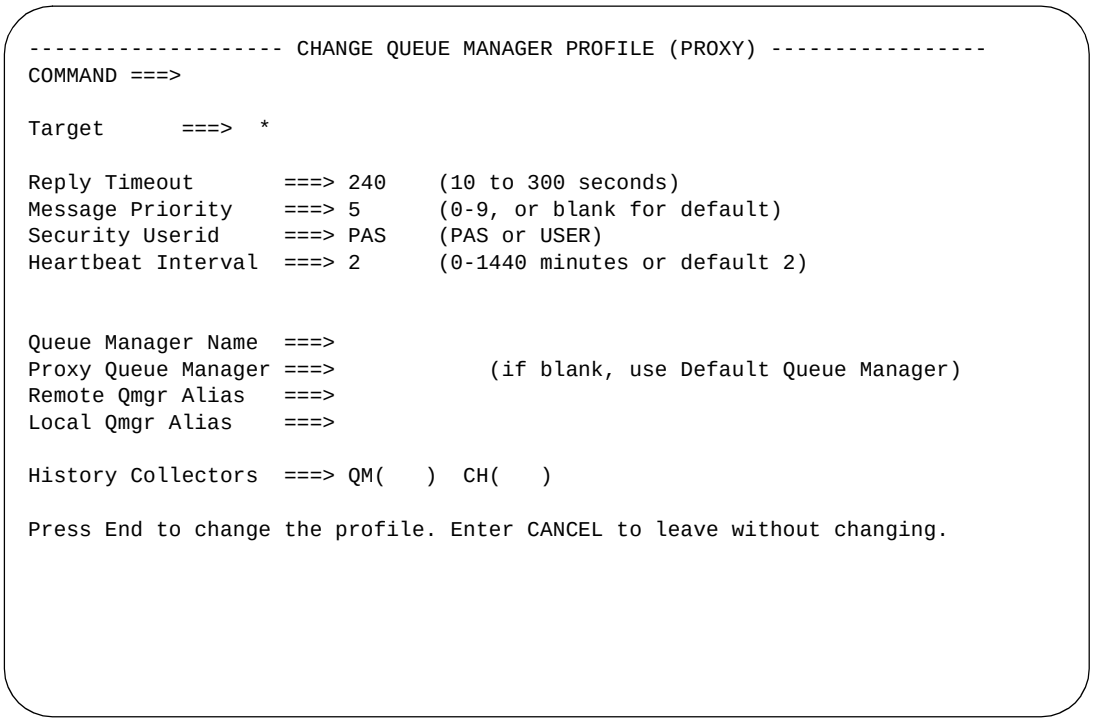
Press **End** to display the Add Queue Manager Profile panel for the queue manager type you specified. Figure 2-4 shows the panel for an MVS queue manager, Figure 2-5 shows the panel for a PROXY queue manager, and Figure 2-6 shows the panel for an AGENT queue manager.

Figure 2-4 Add Queue Manager Profile (MVS) Panel



```
--------------------- CHANGE QUEUE MANAGER PROFILE (MVS) ------------------
COMMAND ===>

Target      ===>  MQM2

Reply Timeout       ===> 60     (10 to 300 seconds)
Message Priority    ===> 0      (0-9, or blank for default)
Security Userid     ===> PAS    (PAS or USER)
Heartbeat Interval  ===> 0      (0-1440 minutes or default 2)
Event PUB/SUB       ===>        (Y or N)

Reply to Queue Pref ===> BBSMVMQS
Queue Manager Name  ===>        (if different than Target name)

History Collectors  ===> QM(   )  BP(   )  PS(   )  LM(   )  CH(   )
                         QS(   )  DB(   )  CF(   )  AS(   )  MD(   )

WMQI Extension (optional)
Statistics          ===> N      (Y or N)
Broker HFS Directory ==>
```

Figure 2-5 Add Queue Manager Profile (Proxy) Panel



```
-------------------- CHANGE QUEUE MANAGER PROFILE (PROXY) ----------------
COMMAND ===>

Target      ===>  *

Reply Timeout       ===> 240    (10 to 300 seconds)
Message Priority    ===> 5      (0-9, or blank for default)
Security Userid     ===> PAS    (PAS or USER)
Heartbeat Interval  ===> 2      (0-1440 minutes or default 2)


Queue Manager Name  ===>
Proxy Queue Manager ===>            (if blank, use Default Queue Manager)
Remote Qmgr Alias   ===>
Local Qmgr Alias    ===>

History Collectors  ===> QM(   )  CH(   )

Press End to change the profile. Enter CANCEL to leave without changing.
```

Figure 2-6 Add Queue Manager Profile (Agent) Panel

```
-------------------- CHANGE QUEUE MANAGER PROFILE (AGENT) -----------------
COMMAND ===>

Target      ===>  LMASON4

Reply Timeout       ===> 240    (10 to 300 seconds)
Connect Timeout     ===>        (5  to 180 seconds)
KeepAlives Sockets  ===>        (0-10)
Message Priority    ===> 0      (0-9, or blank for default)
Security Userid     ===> PAS    (PAS or USER)
Heartbeat Interval  ===> 0      (0-1440 minutes or default 2)

Queue Manager Name  ===> newqm
IP Address
      ===> lymason-hou-74
Service
      ===> 5000
History Collectors  ===> QM(   )  CH(   )  QS(   )
WMQI Extension (optional)
Statistics          ===> N      (Y or N)
```

Enter the appropriate values in each field (see the field descriptions in Table 2-8). When you are done, press **End** to save the profile or type **CANcel** to discard the profile. New profiles take effect when you type **INStall** on the QMPROF view or when the PAS is restarted.

Queue Manager Profile Fields

Table 2-8 describes the fields you can specify for each queue manager profile.

Note: In Table 2-8, a *local* queue manager is one that is on the same MVS system as the PAS specified in the associated queue manager target definition.

Table 2-8 Queue Manager Profile Fields (Part 1 of 3)

Field Descriptions	MVS	Proxy	Agent
Target The queue manager target name that the profile applies to. The name can contain wildcards (? or *) for MVS and PROXY queue managers. Each AGENT queue manager must have a unique profile.	X	X	X
Reply Timeout Maximum length of time, in seconds, that MAINVIEW for WebSphere MQ, waits for a reply to a command.	X	X	X
Connect Timeout This field allows the user to specify how many seconds MAINVIEW for WebSphere MQ will wait for a TCP/IP connection with the Node Manager to complete before canceling the request. A connect timeout can be from 5 to 180 seconds. The default is 30.			X
KeepAlives Sockets This field allows the user to specify how many sockets MAINVIEW for WebSphere MQ will keep alive with the Node Manager to improve the response time. KeepAlives sockets can be from 0 to 10 sockets. The default is 0. Note: Setting KeepAlives Sockets above 0 leaves the connection(s) to the Node Manager open and can greatly improve response time, but may increase usage of TCP resources.			X
Message Priority MAINVIEW for WebSphere MQ priority set for query messages to the queue manager.	X	X	X
Security UserID The ID passed to the queue manager for security checks. The values are the following: • PAS is the ID associated with the BBI-SS PAS started task • USER is the ID associated with the TSO session For more information, see “Passing User IDs to WebSphere MQ” on page 3-3	X	X	X
Heartbeat Interval The number of minutes between the PINGs issued by the BBI-SS PAS to the queue manager. If the queue manager does not respond to the PINGs, requests for data are not made to that queue manager. If 0 is specified, no PINGs are issued before making data requests to the queue manager.	X	X	X

Table 2-8 Queue Manager Profile Fields (Part 2 of 3)

Field Descriptions	MVS	Proxy	Agent
Event PUB/SUB Provides a history of event messages. If another process is running the BMC Integrated Event Listener, MAINVIEW for WebSphere MQ can subscribe to the Event Listener. The messages are non-persistent but have no expiration time. The default is Yes.	X		
Reply to Queue Prefix A 1- to 32-character string used as a prefix for reply queues that MAINVIEW for WebSphere MQ creates to communicate with local queue managers. If the queue manager serves as a proxy for a remote queue manager, the prefix is also used for the reply queue for the remote queue manager. The default prefix is BBSMVMQS	X		
Queue Manager Name A 1- to 48-character string that specifies the name of the queue manager. Specify this parameter when the queue manager name is longer than eight characters or contains lowercase characters. When specified, messages use the transmission queue with this name unless a remote queue manager alias is specified.	X	X	X
IP Address IP address or host name of the node where the Node Manager is running.			X
Service TCP/IP port number that is serviced by the Node Manager.			X
Proxy Queue Manager MVS queue manager used as a proxy to communicate with the remote queue manager.		X	
Remote Qmgr Alias An optional 1- to 48-character string that specifies the transmission queue name or queue manager alias to be used when a message is sent to the remote queue manager. If not specified, messages are sent to a transmission queue with the name of the remote queue manager; if the remote queue manager is not specified, the target name is used. Specify a remote queue manager alias when one of the following situations occurs: • There is no transmission queue with the name of the remote queue manager or its associated target name. • You want to use a transmission queue that has a name different from that of the remote queue manager.		X	

Table 2-8 Queue Manager Profile Fields (Part 3 of 3)

Field Descriptions	MVS	Proxy	Agent
Local Qmgr Alias An optional 1- to 48-character string that specifies the reply to queue manager name. When an alias is not specified, replies are directed to a transmission queue with the name of the local queue manager. Specify a local queue manager alias when • There is no transmission queue with the name of the local queue manager. • You want the reply to use a transmission queue that has a name different from the local queue manager.		X	
History Collectors Allows history collection to be turned off by QMGR. This field indicates whether history data are to be collected for the following. The default setting is ON.	X	X	X
• Queue Manager (QM)	X	X	X
• Buffer Pool (BP)	X		
• Page Set (PS)	X		
• Log Mgr (LM)	X		
• Channel (CH)	X	X	X
• Queue Stats (QS)	X		X
• DB2 (DB)	X		
• Coupling Facility (CF)	X		
• Appl Stats (AS)	X		
• MQMD Stats (MD)	X		
WebSphere MQ Integrator	For WebSphere MQ Integrator field information, see the *MAINVIEW for WebSphere MQ Integrator User Guide*.		

Changing Queue Manager Profiles

On the QMPROF view, type **CHA** on the line next to the profile that you want to change. On the Change Queue Manager Profile panel, type over the data that you want to change. For a description of each field, see Table 2-8 on page 2-28.

When you are done, press **End** to save the profile or type **CANcel** on the **COMMAND** line to discard the changes. The changes take effect when you type **INStall** on the QMPROF view or when the PAS is restarted.

Deleting Queue Manager Profiles

On the QMPROF view, type **DEL** on the line next to the profile that you want to delete. The profile is displayed in yellow. To restore the deleted profile, type **UND** on the line next to the profile. To remove deleted profiles from the QMPROF view, press **End** or type **SAVE** on the **COMMAND** line.

Primary Commands on the QMPROF View

Table 2-9 lists the primary commands you can enter on the **COMMAND** line of the QMPROF view.

Table 2-9 QMPROF View Primary Commands

Command	Action
ADD	add a queue manager profile without using a profile as a model
CANcel	cancel any changes made to the profile since the last SAVE
EDIT	establish an edit lock to prevent other users from changing a queue manager profile while you are modifying it
END	save changes made during the current session and exit QMPROF The changes do not take effect until you enter an INStall command or restart the PAS.
INStall	update the runtime version of the queue manager profile
SAVE	save changes made during the current session and retain the edit lock The changes do not take effect until you enter an INStall command or restart the PAS.

Line Commands on the QMPROF View

Table 2-10 lists the line commands you can enter on the QMPROF view.

Table 2-10 QMPROF View Line Commands

Command	Action
ADD	add a queue manager profile using this profile as a model
CHA	change the current queue manager profile
DEL	delete the indicated queue manager profile
RHB	reset the heartbeat interval The BBI-SS PAS issues a ping to the queue manager and updates the heartbeat interval with the current value from the profile.
UND	cancel a DELete command and retain the queue manager profile

Hyperlinking to Display an Existing Queue Manager Profile

To display an existing queue manager profile, place the cursor on the target name in the QMPROF view and press **Enter**. Table 2-11 lists the view displayed for each queue manager type.

Table 2-11 QMPROF View Hyperlinks

Management Type	View	Description
MVS	QMPROFDM	profile of an MVS queue manager
PROXY	QMPROFDR	profile of a remote non-MVS queue manager being managed by a local MVS queue manager
AGENT	QMPROFDA	profile of a remote non-MVS queue manager being managed by a Node Manager

Establishing Queue Managers

This section provides a scenario of the types of queue managers you might be working with in your MAINVIEW for WebSphere MQ environment. Figure illustrates the environment, and the information that follows the figure describes the steps that need to be taken.

Figure 2-7 Example of a MAINVIEW for WebSphere MQ Environment

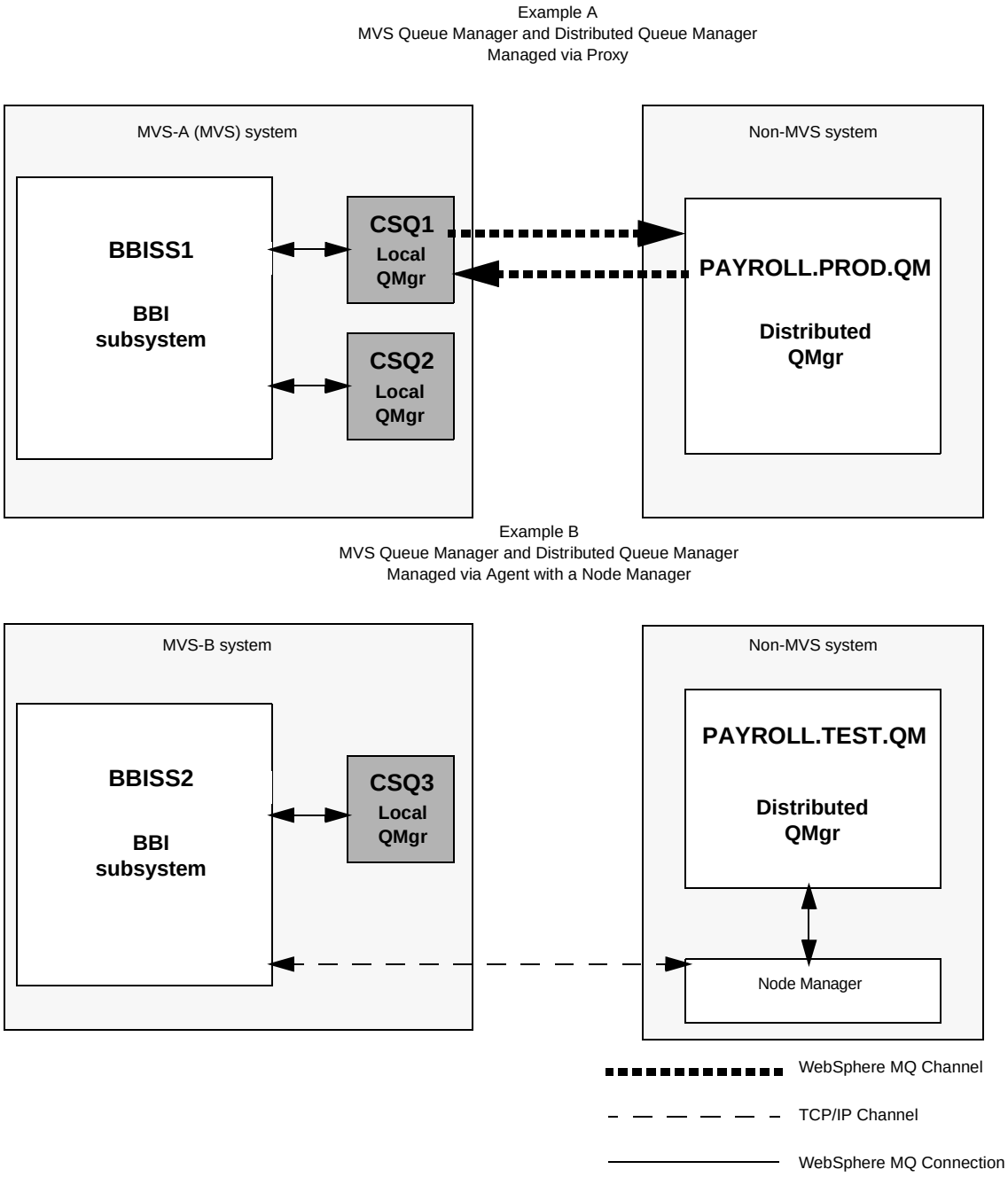


Figure 2-7 illustrates the three ways that MAINVIEW for WebSphere MQ uses queue managers.

Table 2-12 Description of Figure 2-7

Management Type	Example Description
MVS	In Example A, messages are sent between the BBISS1 subsystem and the CSQ2 local queue.
Proxy	In Example A, messages are sent between the BBISS1 subsystem and the queue manager on a non-MVS system by way of a local proxy queue manager (CSQ1).
Agent	In Example B, a TCP/IP connection is used to allow BBISS2 to exchange messages with PAYROLL.TEST.QM, which resides on a non-MVS system. A Node Manager must be installed and running on the non-MVS system.

The following procedure describes how to define queue manager targets and profiles for the environment shown in Figure 2-7. Review this procedure to become familiar with the process of adding and altering the different kinds of queue managers.

Step 1 Add queue manager target names. Define the following queue manager target names to the PAS (see “Defining Queue Manager Target Names” on page 2-18):

- CSQ1
- CSQ2
- CSQ3
- PAYTEST (for PAYROLL.TEST.QM)
- PAYPROD (for PAYROLL.PROD.QM)

Step 2 Create queue manager profiles. Display the QMPROF view to create profiles for the queue managers that you defined to the PAS in Step 1 (see “Viewing Queue Manager Profiles” on page 2-22). Profiles are not required for the local MVS queue managers (CSQ1, CSQ2, and CSQ3) unless you want to change the default values for reply time-out, message priority, or reply-to queue. The default values are provided in profile ???? shown on the QMPROF view.

Step 3 Obtain an edit lock. Before you can add or change queue managers, you must type **EDIT** on the **COMMAND** line of the QMPROF view. That places an edit lock on the BBPARM member (BBSTQM00) that contains queue manager profiles.

Step 4 Add a new AGENT queue manager profile.

4.A Type **ADD** command on the **COMMAND** line of the QMPROF view. The Select Queue Manager Type panel is displayed.

4.B Type in the queue manager target name **PAYTEST** and the queue manager type **AGENT**.

4.C Press **End** to access the Add Queue Manager Profile (Agent) panel (see Figure 2-6 on page 2-27).

4.D Type in the following values (change the other fields as needed):

Table 2-13 Add Queue Manager Profile (Agent) Panel Fields

Field	Value
Reply Timeout	must be10 to 300 seconds
Queue Manager Name	PAYROLL.TEST.QM
IP Address	IP address of the Node Manager
Service	IP port of the Node Manager

4.E Press **End** to save your changes or type **CANcel** on the **COMMAND** line to exit without saving.

Step 5 Add a new PROXY queue manager profile using the default profile as a model.

5.A Access the QMPROF view and type **ADD** on the line beside the * profile (the last profile on the view).

5.B On the Select Queue Manager Type panel, type the queue manager target name PAYPROD.

5.C Press **End** to access the Add Queue Manager Profile (Proxy) panel (see Figure 2-5 on page 2-26).

5.D Type in the values as listed in Table 2-14 (change the other fields as needed).

Table 2-14 Add Queue Manager Profile (Proxy) Panel Fields

Field	Value
Queue Manager Name	PAYROLL.PROD.QM
Proxy Queue Manager	CSQ1
Remote Queue Manager Alias	optional (name of transmission queue or queue manager alias from CSQ1 to PAYROLL.PROD.QM)
Local Queue Manager Alias	optional (name of transmission queue or queue manager alias from PAYROLL.PROD.QM to CSQ1)

5.E Press **End** to save your changes or type **CANcel** on the **COMMAND** line to exit without saving.

Step 6 Change a queue manager profile.

Step 7 Choose an option.When you finish adding and changing queue managers, enter one of the commands described in Table 2-15.

Table 2-15 QMPROF Commands

Command	Definition
CANcel	discards the changes made since the last INStall command (changes made before the last INStall remain in effect)
INStall	updates the current queue manager profile with the changes you made
SAVE	saves the changes and retain the edit lock. Changes do not take effect until the PAS is restarted or an INStall command is entered

Starting the Command Server

For full functionality, MAINVIEW for WebSphere MQ requires that you run a command server on each managed queue manager

For an MVS Queue Manager

Step 1 On an MVS console, type the following command to a queue manager to see if the command server is running:

qmgrcpf DISPLAY CMDSERV

The variable *qmgrcpf* is the command prefix defined in MVS for WebSphere MQ.

Step 2 To start the command server, type the following command on an MVS console:

qmgrcpf START CMDSERV

For a Distributed Queue Manager

Step 1 On the **COMMAND** line, type the following command to a queue manager to see if the command server is running:

DSPMQCSV queuemanagername

Step 2 To start the command server, type the following command on the **COMMAND** line:

STRMQCSV queuemanagername

Saving and Viewing Historical Data

If you have created BBI-SS PAS historical data sets, you can view the historical data on the views described in Table 2-16.

Table 2-16 VBBI-SS PAS Historical Data Views (Part 1 of 2)

Views	Sample Data
MVS Queue Managers	data manager and message manager statistics, such as • number of MQGET and MQPUT requests • number of MQOPEN and MQCLOSE requests • number of message get and put requests • number of object create, get, put, and delete requests For more information, see “QMMVS: MVS Queue Managers” on page 23-9. For a complete list of the available statistics, see the SMF 115 record in the WebSphere MQ *for OS/390 System Management Guide*.
Buffer Pools	buffer manager statistics, such as • number of pages read and written to DASD • lowest number of available buffers • number of page updates For more information, see “BP: Buffer Pools” on page 5-2. For a complete list of the available statistics, see the SMF 115 record in the WebSphere MQ *for OS/390 System Management Guide*.
Page Sets	page set statistics, such as pages in use For more information, see the PS view in Chapter 21, “Page Sets.”
Channels	channel statistics, such as message rate and number of bytes sent. MAINVIEW for WebSphere MQ 4.1changed the format of the history records to allow for more accurate information and more records to be collected. For more information, see the channel views in Chapter 6, “Channels.”
Log Manager	log manager statistics, such as • wait count for unavailable buffers • number of read requests delayed due to MAXALLC parameter setting For more information, see “LM: Log Manager” on page 15-2. For a complete list of the available statistics, see the SMF 115 record in the WebSphere MQ *for OS/390 System Management Guide*.

Table 2-16 VBBI-SS PAS Historical Data Views (Part 2 of 2)

Views	Sample Data
Queue Performance	queue performance data for any MVS queue manager running with MQ Extensions and any distributed systems queue running with MQ Extensions that is monitored by Node Manager. For more information, see “QP: Queue Performance Overview” on page 29-38.
Coupling Facility	shows coupling facility usage by the queues For more information, see the channel views in Chapter 8, “Coupling Facility Manager.” For a complete list of the available statistics, see the SMF 115 record in the WebSphere MQ *for OS/390 System Management Guide*.
DB2	shows DB2 usage by the queue manager For more information, see the channel views in Chapter 9, “DB2 Manager.” For a complete list of the available statistics, see the SMF 115 record in the WebSphere MQ *for OS/390 System Management Guide*.
Application Statistics	Applications Statistics are collected for MVS queue managers only. Performance and access data is collected by application name. For more information, see “APST: Application Stats” on page 29-3.
MQMD Stats	provides detailed alternate key get detail information about the current open activity on the queue. For more information, see “MQMDST: Alternate Key Statistics” on page 29-23.

To view historical data, type **TIME** on the **COMMAND** line and specify a time range on the displayed panel.

By default, historical data is saved automatically every 15 minutes. You can use the IRRI parameter to specify a different interval in member BBIISP00 in your copy of the BBPARM parameter library.

For more information on creating historical data sets, see the *MAINVIEW Common Customization Guide*. For more information on WebSphere MQ performance statistics, see the WebSphere MQ *for OS/390 System Management Guide*.

Using MAINVIEW Alarm and Filters

When using filters in MAINVIEW for WebSphere MQ with MAINVIEW Alarm Manager, this feature indicates whether MAINVIEW Alarm Manager passes the alarm definition filters to the monitored PAS. The default is NO for most MAINVIEW products.

MAINVIEW for WebSphere MQ uses this field to reduce the amount of data that has to pass through the network and be processed. For example, a remote target has 5000 channels. When MAINVIEW for WebSphere MQ sends channels requests to a remote target with a filter of “A*”, only channels that start with “A*” are returned. If the request is made via MAINVIEW Alarm without changing the Passing PARMs field, all channels are returned, then the filter is applied.

Note: The Passing PARMs field is not visible in the ALMADD01, ALMEDI01, and ALMBRO01 views that are distributed with MAINVIEW Alarm Manager. If you want to use this field, you must first customize the appropriate view to Include the field. For information about customizing views, see the MAINVIEW Administration Guide.

Connecting MAINVIEW for WebSphere MQ to a Distributed Systems Queue Manager via PROXY.

When Connecting MAINVIEW for WebSphere MQ to a Distributed Systems Queue Manager via PROXY, WebSphere MQ requests are sent between the BBI subsystem and a queue manager on a non-MVS system by routing them through a local proxy queue manager on the MVS system.

Connection by proxy requires WebSphere MQ channels and is considered inbound monitoring. The preferred method of monitoring distributed systems queue managers from MAINVIEW for WebSphere MQ is via Agent and requires PATROL for WebSphere MQ to be licensed and running on the distributed systems platform.

Step 1 Define the MQ objects necessary for connectivity.

For an example of how to define transmission queues and channel queues for an MVS queue manager, look at member BBSMQSCL in your copy of the BBSAMP library. For an example of how to define transmission queues and channel queues for a distributed queue manager, look at member BBSMQSCD in your copy of the BBSAMP library.

Note: If you create channels with a transmission queue name other than the remote queue manager name, you must create a remote queue definition with that transmission queue name for this to work properly.

Step 2 Define the Queue Manager target names.

Both the distributed systems queue managers and the MVS queue managers must be defined. For more information, see “Defining Queue Manager Target Names” on page 2-18.

Step 3 Define the Queue Manager Profile.

Each queue manager target name requires a profile that specifies the properties of the queue manager. For more information, see “Defining Queue Manager Profiles” on page 2-21.

For more information about creating QMPROF definitions, see Figure 2-5 “Add Queue Manager Profile (Proxy) Panel” on page 2-26 and Table 2-8 “Queue Manager Profile Fields” on page 2-28.

Note: When defining the QMPROF definition, if you specify the security user ID as USER, then the TSO user ID for each user will also have to be defined and assigned `mqm` authority on the distributed systems platforms.

Step 4 Set up Security.

For more information, see “Security for Windows NT and UNIX Platforms” on page 3-7.

Note: For Windows NT, the user ID of the PAS must be defined in upper case. For Unix, the user ID of the PAS must be defined in lower case. In addition, the userid of the PAS must also be assigned to the mqm group.

To Test the Connection

If you have done everything correctly, you should be able to see the distributed systems queue managers.

Step 1 Validate that the Channels are started.

Step 2 Validate that the Command Server is started on the distributed systems platforms.

Step 3 Type CON <*distributed systems queue manager name*> on the command line.

Step 4 From the EZQSSI view, select the Queue Manager Overview menu option to see that queue manager.

Note: If you cannot connect, follow the instructions in Appendix A, “Problem Determination for Return Code 07F1 when using a Proxy”.

Note: Not all views and functions apply in a proxy environment. For more information, see “Views on MVS-, Proxy-, and Agent-Based Systems” on page 1-9.

Using QMM Batch

Before you can create or execute a batch file, you must invoke the message management command line interface program, QMM. The command line interface allows you to build and execute commands and batch files to manage WebSphere MQ messages that reside on local host where either MAINVIEW for WebSphere MQ or PATROL for WebSphere MQ is installed. For more information, see the *BMC MQ Message Management Command Line Interface Reference Manual*.

The following is a sample run that sets the queue manager, looks at specific queues in CSQ1, displays specific messages on a queue, and displays the message text.

---------- WebSphere MQ performance and control ----------

Option ===> 4

1 MVMQS MAINVIEW for WebSphere MQ
2 MVMQI MAINVIEW for WebSphere MQ Integrator
3 MVBATCH Generate MAINVIEW batch reports
4 QMM Message Management

General Services
M MESSAGES Display Messages and Codes
N NOTES Release Notes

Copyright 2002 BMC Software, Inc.

BMCQMM792E PWSMQ - Message Management: CPU AUTHORIZATION FAILURE IN PHASE 1, RC=0004

PATROL for MQ - Message Management V4.0.00 (built Sep 20 2002)

QMM command:
set qmgr csq1

BMCQMM200I SET command completed with condition code 0

```
QMM command:
dis *:test* q

  Match     Msgs Queue                    Queue Manager
    0       0 TEST.LOCALQ                 CSQ1
    3       3 TEST.QUEUE                  CSQ1
    0       0 TEST.QUEUE1                 CSQ1
   70       70 TEST.QUEUE100              CSQ1
ALIASQ      70TEST.QUEUE100.ALIAS         CSQ1
    0       0 TEST.QUEUE11                CSQ1
    0       0 TEST.QUEUE2                 CSQ1
    9       9 TEST.QUEUE99                CSQ1

BMCQMM200I DIS command completed with condition code 0

QMM command:
DISPLAY test.queue100 where _msgnum  =  33

Queue: TEST.QUEUE100              Queue manager: CSQ1

Msg#   Size Msgtype  Format   Date     Time-GMT Message starts ...
33     10 DATAGRAM MQSTR    20030211 18593760
WWWWWWWWWW
BMCQMM309I 1 of 70 messages match for queue TEST.QUEUE100

BMCQMM307I Total messages selected: 1
BMCQMM200I DISPLAY command completed with condition code 0

QMM command:
DISPLAY test.queue100 sel mqstr detail where _msgnum  =  53

Queue: TEST.QUEUE100              Queue manager: CSQ1

Message text  . . . . . . . . . . . . . . . :
```

HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH
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QMM command:
exit

Chapter 3 Security for MAINVIEW for WebSphere MQ

You will need to ensure that appropriate access has been enabled and proper restrictions have been applied for communications within WebSphere MQ, in MAINVIEW for WebSphere MQ, and between MAINVIEW for WebSphere MQ and individual users. For more information on security, see the following books:

- For details on MAINVIEW security, see *Implementing Security for MAINVIEW Products*.
- For details on defining access to WebSphere MQ, see the appropriate system management guide.

This chapter discusses the following topics:

Security between MAINVIEW for WebSphere MQ and MVS Queue Managers

If WebSphere MQ security has not been activated, you need take no further steps.

If WebSphere MQ security has been activated, you must ensure that the user ID associated with the BBI-SS product address space (PAS) has access to the following:

- Connection profile to the queue manager
- Context security authorization
- Reply queues (for message statistics)

Security checking is not required. The omission of security checking minimizes administration time and reduces overhead. To circumvent all security checking for MAINVIEW for WebSphere MQ, set RESLEVEL=0 for the user ID associated with the BBI-SS PAS.

If it is not possible to set RESLEVEL=0, do the following:

Step 1 If the WebSphere MQ connection security switch profile is not defined, you must add profiles to the MQCONN class and authorize the BBI-SS PAS ID for READ access to those profiles.

The format for these profiles is the following:

ssid.BATCH

The *ssid* is the subsystem ID of the queue manager. An example of such a profile is the following:

CSQ1.BATCH

Step 2 If the WebSphere MQ context security switch profile is not defined, you must add profiles to the MQADMIN class and authorize the BBI-SS PAS ID for CONTROL access to those profiles.

The format for these profiles is

ssid.CONTEXT

An example of such a profile is

CSQ1.CONTEXT

Step 3 MAINVIEW for WebSphere MQ creates reply queues for each local MVS queue manager, which are used for replies to commands. If the queue security switch profile is not defined, you must add profiles for these reply queues and authorize the BBI-SS PAS ID for ALTER access to the profiles (see “Defining Queue Profiles” on page 3-6).

The format of the reply queue names is the following:

prefix.REPLY.*target*

Table 3-1 Reply Queue Name Variables

Variable	Description
prefix	is the Reply to Queue Prefix defined in the MVS queue manager profile. (See “Defining Queue Manager Profiles” on page 2-21.) The default prefix is BBSMVMQS For an MVS queue manager that serves as a proxy for a remote queue manager, two reply queues are created with the same prefix (one with the MVS queue manager target name, and one with the remote queue manager target name).
target	is the target name defined in the Job Name Table (JNT) BBIJNT00 or on the TGTDEF view in Plex Manager

Passing User IDs to WebSphere MQ

WebSphere MQ grants access based on the user’s ID. In each queue manager profile, you can specify which user ID is passed to WebSphere MQ (see “Defining Queue Manager Profiles” on page 2-21). These values are as described in Table 3-2.

Table 3-2 WebSphere MQ User ID Values

ID	Value
PAS	is the ID associated with the BBI-SS PAS is passed to WebSphere MQ For each queue manager that uses this option, the PAS ID must have the WebSphere MQ authorizations described in the following sections. Each individual user's access to WebSphere MQ objects and commands can be controlled through MAINVIEW for WebSphere MQ. For more information, see *Implementing Security for MAINVIEW Products*.
USER	is the ID associated with the TSO session connected to the BBI-SS PAS is passed to WebSphere MQ This allows your existing security definitions in WebSphere MQ to determine access to WebSphere MQ objects and commands. The TSO user ID is treated as an alternate user ID. For each queue manager that uses this option, do the following: 1. If the WebSphere MQ alternate user switch profile is not defined, add resource profiles to the MQADMIN class and authorize the BBI-SS PAS ID for UPDATE access to the profiles. The format for these resources is: ssid.ALTERNATE.USER.alternateuserid An example of a resource definition is CSQ1.ALTERNATE.USER.* 2. If the command security switch profile is not defined, add command profiles for the DISPLAY verb and authorize the BBI-SS PAS ID for READ access to those profiles (see "Defining Command Profiles").

Defining Command Profiles

If the command security switch profile is not defined, you must add profiles to the MQCMDS Class and authorize the BBI-SS PAS ID to access those profiles.

The format for these profiles is the following:

ssid.verb.type

Table 3-3 describes the command security switch profile variables.

Table 3-3 Command Security Switch Profile Variables (Part 1 of 2)

Variable	Definition
ssid	the subsystem ID of the queue manager

Table 3-3 Command Security Switch Profile Variables (Part 2 of 2)

Variable	Definition
verb	the command, or action, that can be performed on the resource
type	the resource that receives the action

Table 3-4 lists the access required by the BBI-SS PAS ID for each verb and resource type.

Table 3-4 PAS ID Access to Command Profiles (Part 1 of 2)

Access	Verb	Resource Type	
READ	DISPLAY	CHANNEL CHSTATUS CLUSQMGR DQM GROUP MAXSMSGS NAMELIST	PROCESS QMGR QUEUE THREAD STGCLASS USAGE AUTH
ALTER	DEFINE	CHANNEL MAXSMSGS PROCESS NAMELIST QALIAS	QLOCAL QMODEL QREMOTE STGCLASS
ALTER	ALTER	CHANNEL PROCESS NAMELIST QALIAS QLOCAL AUTH	QMGR QMODEL QREMOTE STGCLASS SYSTEM
ALTER	DELETE	CHANNEL PROCESS NAMELIST QALIAS	QLOCAL QMODEL QREMOTE STGCLASS
ALTER	CLEAR	QLOCAL	
ALTER	MOVE	QLOCAL	
ALTER	REFRESH	CLUSTER	
ALTER	REVERIFY	SECURITY	
CONTROL	ARCHIVE	LOG	
CONTROL	BACKUP	CFSTRUCT	
CONTROL	RECOVER	BSDS	CFSTRUCT
CONTROL	RESET	CHANNEL CLUSTER	TPIPE
CONTROL	RESOLVE	INDOUBT	

Table 3-4 PAS ID Access to Command Profiles (Part 2 of 2)

Access	Verb	Resource Type	
CONTROL	START STOP	CHANNEL CHINIT	LISTENER QMGR
CONTROL	SUSPEND	QMGR	
CONTROL	RESUME	QMGR	
CONTROL	PING	CHANNEL	

Defining Command Resource Profiles

If the command resource security switch profile is not defined, you must add resource profiles to the MQADMIN Class and authorize the BBI-SS PAS ID for ALTER access to the profiles.

The format for these profiles is the following:

ssid.type.resourcename

An example of such a profile is the following:

CSQ1.QUEUE.PLETTER.QUEUE

Defining Queue Profiles

If the queue security switch profile is not defined, you must add queue profiles to the MQQUEUE or GMQQUEUE Class and authorize the BBI-SS PAS ID for ALTER access to the profiles.

The format for these profiles is the following:

ssid.qname

An example of such a profile is the following:

CSQ1.PLETTER.QUEUE

Note: Be sure to include the reply queues that MAINVIEW for WebSphere MQ creates for each local MVS queue manager (see Step 3 on page 3). Access for the PAS ID is required for all queue managers. The format of the reply queue names is the following:

prefix.REPLY.*target*

Security between WebSphere MQ and Distributed Platforms

When the BBI-SS PAS is secured from displaying a particular object on a distributed platform, WebSphere MQ does not provide details for the secured object or for any object that alphabetically follows the name of the secured object.

- The following objects are defined:

  QA, QB, QC, QD, QE

- QC is secured for display.

- When you access a view, you will receive information for QA and QB, but not for QC, QD, and QE.

Security for Windows NT and UNIX Platforms

Security for distributed platforms is provided by the Object Authority Manager (OAM) for WebSphere MQ.

Complete the following steps to configure the security:

Step 1 Define a user ID that matches the user ID associated with the BBI-SS PAS.

The ID you define has been specified in the started task security table for your External Security Manager. During BBI-SS PAS startup, the job log displays message IEF695I, which identifies the defined user ID.

Step 2 Define the user to the WebSphere MQ mqm group.

Membership in the mqm group ensures complete access to WebSphere MQ, including DISPLAY, ALTER, and DEFINE authority for WebSphere MQ objects.

Step 3 Stop the queue manager and then restart it to activate the command.

This step is necessary because group authorizations may be cached by the OAM. Changes made after authorizations for a group are cached and are not recognized until the queue manager is restarted.

For Windows NT, if WebSphere MQ is defined as a started service, it cannot be assigned as a System Account. If WebSphere MQ is assigned as a System Account and then defined as a started service, channel actions will fail and authorization errors will occur.

To change the Account setting complete the following steps:

Step 1 Access the Control Panel.

Step 2 Double-click **Services**.

Step 3 Select **IBM WebSphere MQ** and click the **Startup** button.

Step 4 In the **Log On As** dialog box, click **This Account** and specify an administrative account with mqm group privileges.

Step 5 Click **OK.**

Security for the OS/400 Platform

You can establish security between WebSphere MQ and OS/400 in the following ways:

- Assign the ID associated with the BBI-SS PAS to a group that has QMQM authority, which provides access to all resources, with minimum effort (the preferred method).

- Individually authorize the BBI-SS PAS ID to each WebSphere MQ object, which requires that each object (queue, channel, process) be explicitly authorized.

For individual authorization, you must specify the following authorizations (AUT):

Table 3-5 Individual Authorization

Authorization	Information
*READ	Required to display object attributes
*UPDT	Required to alter object attributes
*DLT	Required to delete an object
*ADD	Required to add an object

Chapter 4 Alias Queues

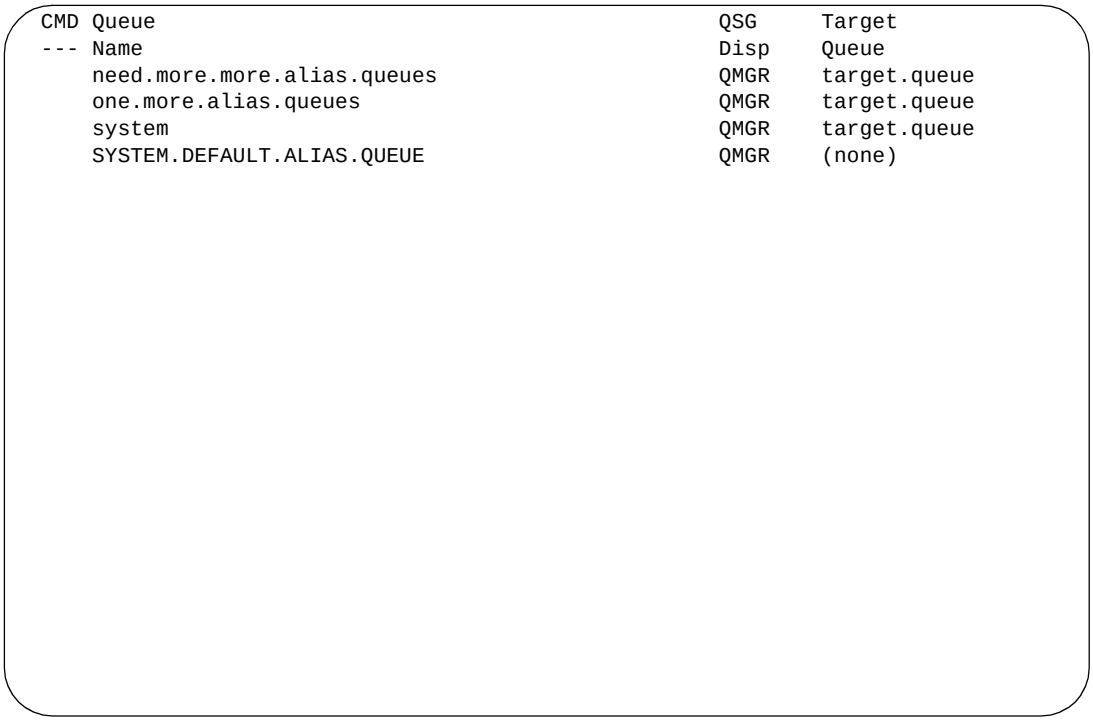
The alias queue views provide information about alias queues.

This chapter discusses the following topics:

AQ: Alias Queues

The AQ view provides information about all alias queues. The AQ view, shown in Figure 4-1, is displayed when you hyperlink from the EZQI view or when you type **AQ** on the **COMMAND** line.

Figure 4-1 AQ View



AQ View Primary Commands

Table 4-1 lists the primary commands you can enter on the **COMMAND** line to add or delete a queue.

Table 4-1 AQ View Primary Commands (Part 1 of 2)

Command	Action
ADD queuename (AQD only)	on detail views, add a new queue definition using the currently displayed queue as a model
DELete queuename	delete the queue from the queue manager
DELete queuename pattern	delete one or more alias queues

Table 4-1 AQ View Primary Commands (Part 2 of 2)

Command	Action
MODEForc	force changes when the alias queue is in use After you issue the MODEForc command, any overtype changes you make to fields are “forced,” even if the alias queue is in use. The MODEForc option remains in effect for the view until a MODENorm command is issued or a new view is displayed.
MODENorm	resets the update mode to normal MODENorm is used after the MODEForc command. After you issue the MODENorm command, overtype changes to fields will not take effect if the alias queue is in use.

AQ View Line Commands

Table 4-2 shows the line commands you can use to perform actions against an entity on an AQ view line.

Table 4-2 AQ View Line Commands

Command	Action
ADD	overtype the queue name to create a new alias queue with identical characteristics To give the new alias queue a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	delete a queue from the queue manager
[1]Valid only if using MVS Queue Managers 5.2. and above	

AQ View Overtype Field

Table 4-3 shows the field you can overtype on the AQ view and the value you can use.

Table 4-3 AQ View Overtype Field

Overtype Field	Value
Target Queue	up to 48-character string

AQ View Hyperlinks

Table 4-4 shows the AQ view fields from which you can hyperlink and the destination for the links.

Table 4-4 AQ View Hyperlinks

Field	View	Information
Queue Name	AQD	details about the alias queue
Target Queue	QUEUES	type of queue being aliased

AQD: Alias Queue Details

The AQD view provides detailed information about an alias definition. The AQD view, shown in Figure 4-2, is displayed when you hyperlink from the AQ view or when you enter the **AQD aliasqueuename** command on the **COMMAND** line.

Figure 4-2 AQD View

```
Queue.............. need.more.more.alias.queues
  Description......... (none)
  Queue Manager Name.. CSQA
  QSG Disposition..... QMGR

  Target Queue........ target.queue

  Inhibited Actions...
   Puts............... No
   Gets............... No

  Default.............
   Message Priority... 0
   Message Persistence No

  Scope.............. N/A

  Sharing In Clusters.
   Cluster Name....... (none)
   Cluster Namelist... (none)

  Default Bind........ On Open

  Alteration Date..... 2000-05-30
  Alteration Time..... 13.43.39
```

AQD View Primary Commands

Table 4-5 lists the primary commands you can enter on the command line to add or delete a queue.

Table 4-5 AQD View Primary Commands

Command	Action
ADD new queuename	create a new alias queue with characteristics identical to those displayed
DELete *	delete the queue

AQD Line Commands

Table 4-6 lists the AQD line commands you can enter to add or delete a queue.

Table 4-6 AQD View Line Commands

Command	Action
ADD	create a new alias queue with characteristics identical to those displayed
DEL	delete the queue

AQD View Overtype Fields

Table 4-7 lists the fields you can overtype on the AQD view and the values you can use for each.

Table 4-7 AQD View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Description	up to 64-character string
Target Queue	up to 48-character string
Inhibited Actions, Puts	‘yes’ or ‘y’ or ‘no’ or ‘n’
Inhibited Actions, Gets	‘yes’ or ‘y’ or ‘no’ or ‘n’
Default Message Priority	integer up to 9
Default Message Persistence	‘yes’ or ‘y’ or ‘no’ or ‘n’
Scope	‘qmgr’ or ‘q’ or ‘cell’ or ‘c’ For MVS queue managers, scope is not applicable and the value must be ‘N/A’.

Table 4-7 AQD View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Cluster Name	up to 48-character string
Cluster Namelist	up to 48-character string
Default Bind	‘On Open’ or ‘Not Fixed’

AQD View Hyperlink

Table 4-8 shows the AQD view field from which you can hyperlink and the destination for the link.

Table 4-8 AQD View Hyperlink

Field	View	Information
Target Queue	QUEUES	type of queue being aliased

AQZ: Alias Queue Summary

The AQZ view provides summary information about all alias queues. The AQZ view, shown in Figure 4-3, is displayed when you hyperlink from the EZQQI view or when you enter the **AQZ** command on the **COMMAND** line.

Figure 4-3 AQZ View

```
CMD Queue                                              Target
--- Name                                               Queue
    SYSTEM.DEFAULT.ALIAS.QUEUe1                        (none)
    SYSTEM.DEFAULT.ALIAS.QUEUE                         (none)
```

There are no primary commands for this view.

AQZ View Line Commands

Table 4-9 shows the line commands you can use to perform actions against an entity on an AQZ view line.

Note: In the summary views, each line may represent more than one queue. Any overtypes or line commands will affect all queues represented by that line.

Table 4-9 AQZ View Line Commands

Command	Action
ADD	overtype the queue name to create a new alias queue with identical characteristics
DEL	delete a queue from the queue manager

AQZ View Overtype Field

Table 4-10 shows the field you can overtype on the AQZ view and the value you can use.

Note: In the summary views, each line may represent more than one queue. Any overtypes or line commands will affect all queues represented by that line.

Table 4-10 AQZ View Overtype Field

Overtype Field	Value
Target Queue	up to 48-character string

AQZ View Hyperlinks

Table 4-11 shows the AQZ view fields from which you can hyperlink and the destination for the links.

Table 4-11 AQZ View Hyperlinks

Field	View	Information
Queue Name	AQD	If there is one instance of Queue Name. The AQD view provides details about the alias queue.
Queue Name	AQ	If there is more than one instance of Queue Name. The AQ view provides information about all alias queues.
Target Queue	QUEUES	type of queue being aliased

Chapter 5 Buffer Pools

The buffer pool views provide statistical information about the buffer pools serving the MVS queue managers.

This chapter discusses the following topics:

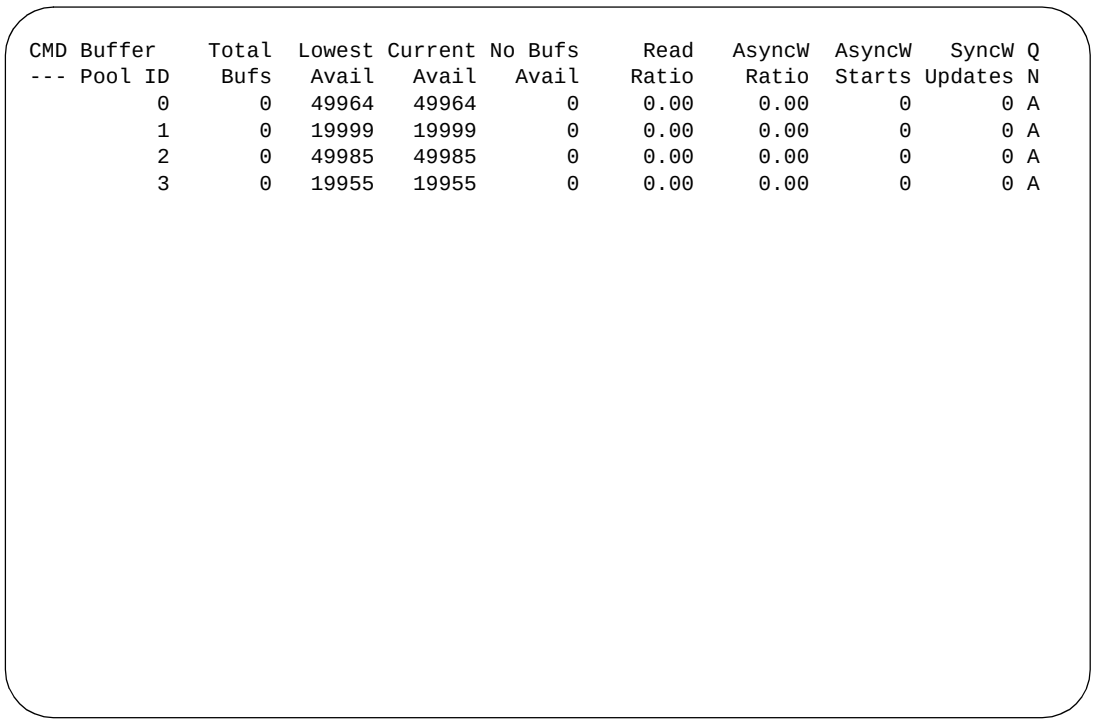
BP: Buffer Pools

The BP view provides information on all buffer pools. The BP view, shown in Figure 5-1, is displayed when you hyperlink from the EZQMMVS or QMMVSD view or when you enter the BP command. Counts and rates are provided for three time frames. These time frames are explained in Table 5-1.

Table 5-1 BP Time Frames

Time Frame	Description
Realtime	collected every ten seconds from the SMF115 record created by the queue manager
Interval	accumulated from the real time data for a period of time defined by the IRRI value in the BBIISP00 member in BBPARM It is reset to 0 at the end of the IRRI.
Session	accumulated from the realtime data over a 24-hour period It is reset to 0 at 12:00 midnight (local time).

Figure 5-1 BP View



CMD	Buffer Pool ID	Total Bufs	Lowest Avail	Current Avail	No Bufs Avail	Read Ratio	AsyncW Ratio	AsyncW Starts	SyncW Updates	Q N
	0	0	49964	49964	0	0.00	0.00	0	0	A
	1	0	19999	19999	0	0.00	0.00	0	0	A
	2	0	49985	49985	0	0.00	0.00	0	0	A
	3	0	19955	19955	0	0.00	0.00	0	0	A

There are no primary commands, line commands, or overtype fields for the BP view.

BP View Hyperlink

Table 5-2 shows the BP view field from which you can hyperlink and the destination for the link.

Table 5-2 BP View Hyperlink

Field	View	Information
Buffer Pool ID	BPD	details about this buffer pool

BPD: Buffer Pool Details

The BPD view provides details on a single buffer pool. The BPD view, shown in Figure 5-2, is displayed when you hyperlink from the BP view or when you enter the BPD command (with a buffer pool ID).

Figure 5-2 BPD View

```
Buffer Pool ID....           0
Queue Manager..... CSQ4
                             Realtime           Interval           Session
Ratios.............
  Page Read.......     0.00                0.00               0.00
  Page Find.......     0.00                0.00               0.00
  AsyncW               0.00                0.00             653.00

Counts/Rates......
  Total Buffers...     1050                1050               1050
  Lowest # bufs...     1011                1011                972
  Current # bufs..     1011                1011               1011
  No bufs avail...        0       0.00        0     0.00         0        0
  Page get reqs...        0       0.00     6096   608.00     12373     1236
  New page reqs...        0       0.00       50     4.00        98        9
  Page read I/O...        0       0.00        0     0.00       567       56
  Page updates....        0       0.00     1577   157.00      3082      307
  Pages to DASD...        0       0.00        0     0.00      1960      195
  Page write I/O..        0       0.00        0     0.00         3        0
  Sync write I/O..        0       0.00        0     0.00         0        0
  AsyncW starts...        0       0.00        0     0.00         0        0
  Sync updates....        0       0.00        0     0.00         0        0
  Page not in pool        0       0.00        0     0.00       584       58
  Hash chain chged        0       0.00        0     0.00         0        0
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the BPD view.

Chapter 6 Channels

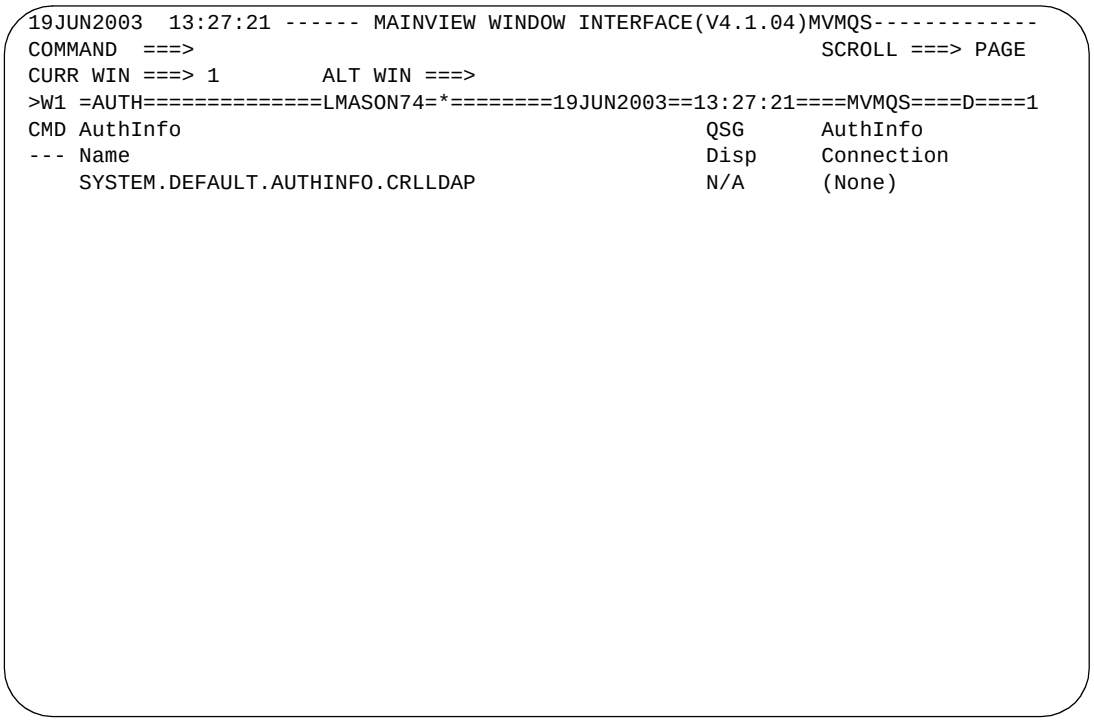
The channel views provide information about the status and messages for each channel you are monitoring.

This chapter discusses the following topics:

AUTH: Authentication Information List

The AUTH view provides an Authentication Information List for SSL. Authentication Information is used to perform certificate revocation list checking for LDAP servers. To access the AUTH view, enter **AUTH** at the COMMAND line.

Figure 6-1 AUTH View



Thee are no primary commands for this view.

AUTH View Line Commands

Table 6-1 lists the AUTH view line commands.

Table 6-1 AUTH View Line Commands

Command	Description
ADD	Create a new AuthInfo with attributes identical to those of an existing AuthInfo. On tabular views, overtype the name of the AuthInfo the attributes of which you want to copy. Enter the command to create the new AuthInfo definition. For those queue managers which support queue sharing groups, you can also overtype the QSGDISP value. **Note**: All fields must be overtyped with the same command. Scroll the view if necessary.
DEL	Delete the AuthInfo on the line where you enter the command.
REP AuthInfoname	Replace the attributes of the specified AuthInfo with the attributes of the AuthInfo on the line where you enter the command. If the specified AuthInfo does not exist, a new one is created.

AUTH View Overtype Fields

Table 6-2 lists the AUTH view overtype fields that you can overwrite.

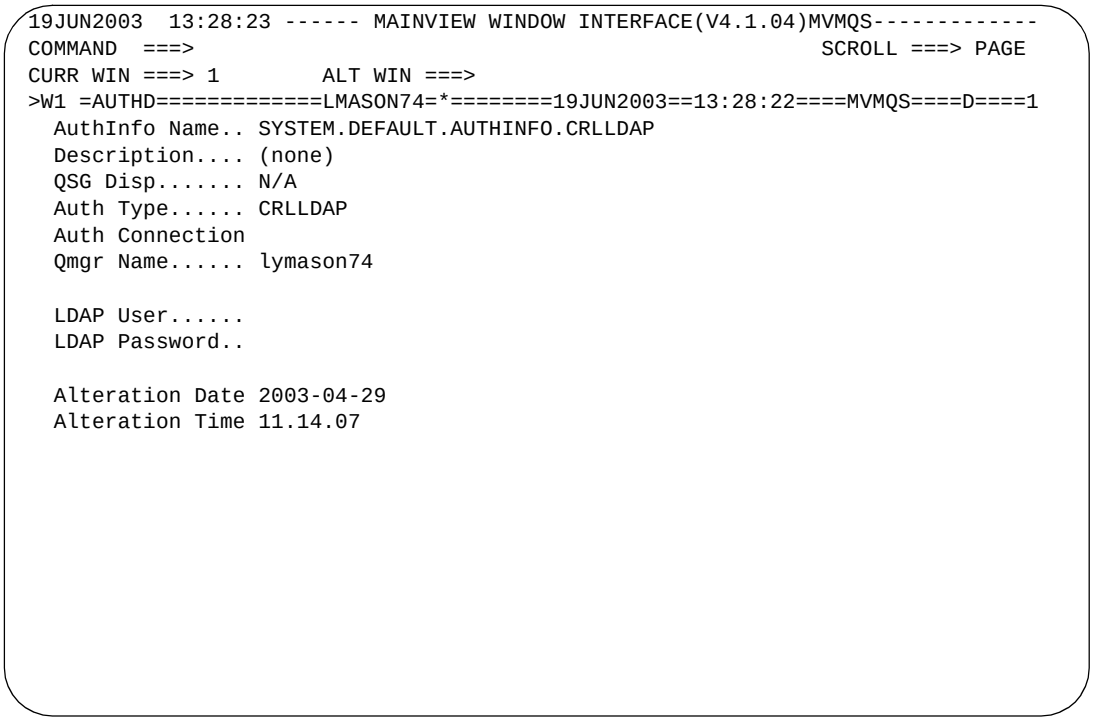
Table 6-2 AUTH View Overtype Fields

Command	Value
Description	a maximum length of 64 characters. In DBCS, it can contain DBCS characters to a maximum length of 64 bytes.

AUTHD: Authentication Information List Detail

The AUTHD view provides an Authentication Information List for SSL information. When the AUTHD command is specified, applicable data is displayed (if available); otherwise, a **There is no data** message is displayed.

Figure 6-2 AUTHD View



AUTHD View Primary Commands

Table 6-3 lists the AUTHD view primary commands.

Table 6-3 AUTHD View Primary Commands

Command	Description
ADD AuthInfoname	On detail views, add a new AuthInfo with the same attributes as the current AuthInfo.
DELete AuthInfoname	On tabular views, delete the specified AuthInfo from the queue manager.
REP AuthInfoname	Replace the attributes of the specified AuthInfo with the attributes of the AuthInfo on the line where you enter the command. If the specified AuthInfo does not exist, a new one is created.

AUTHD View Line Commands

Table 6-4 lists the AUTHD view line commands.

Table 6-4 AUTHD View Line Commands

Command	Description
ADD	Create a new AuthInfo with attributes identical to those of an existing AuthInfo. On tabular views, overtype the name of the AuthInfo the attributes of which you want to copy. Enter the command to create the new AuthInfo definition. For those queue managers which support queue sharing groups, you can also overtype the QSGDISP value. **Note**: All fields must be overtyped with the same command. Scroll the view if necessary.
DEL	Delete the AuthInfo on the line where you enter the command.
REP AuthInfoname	Replace the attributes of the specified AuthInfo with the attributes of the AuthInfo on the line where you enter the command. If the specified AuthInfo does not exist, a new one is created.

AUTHD View Overtype Fields

Table 6-3 lists the AUTHD view overtype fields that you can overwrite.

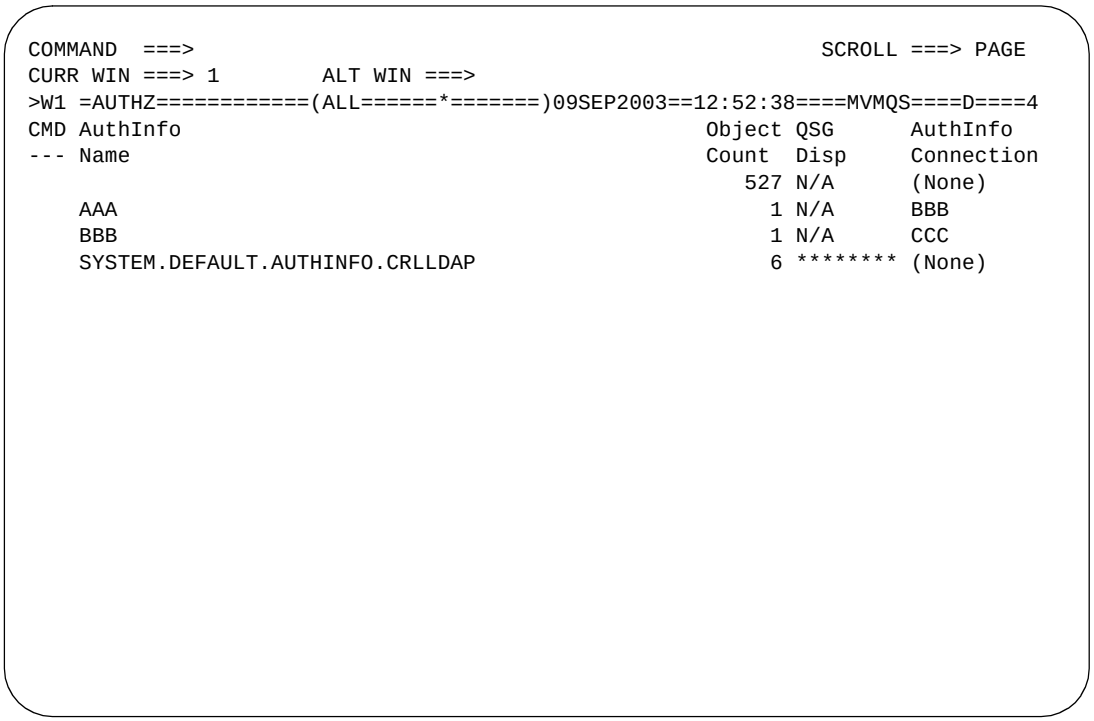
Table 6-5 AUTH View Overtype Fields

Command	Value
Description	The description defined for the AuthInfo. It can be up to 64 characters in length and it is an alternate identification for the AuthInfo. This attribute can be altered if you have appropriate authorization.

AUTHZ: Authentication Information List Summary

The AUTHZ view provides an Authentication Information List summary. Authentication Information is used to perform certificate revocation list checking for LDAP servers. To access the AUTHZ view, enter **AUTHZ** at the COMMAND line.

Figure 6-3 AUTHZ View



```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =AUTHZ============(ALL======*=======)09SEP2003==12:52:38====MVMQS====D====4
CMD AuthInfo                                          Object QSG      AuthInfo
--- Name                                              Count  Disp     Connection
                                                        527 N/A      (None)
    AAA                                                   1 N/A      BBB
    BBB                                                   1 N/A      CCC
    SYSTEM.DEFAULT.AUTHINFO.CRLLDAP                       6 ******** (None)
```

Thee are no primary commands for this view.

AUTHZ View Line Commands

Table 6-1 lists the AUTHZ view line commands.

Table 6-6 AUTHZ View Line Commands

Command	Description
ADD	Create a new AuthInfo with attributes identical to those of an existing AuthInfo. On tabular views, overtype the name of the AuthInfo the attributes of which you want to copy. Enter the command to create the new AuthInfo definition. For those queue managers which support queue sharing groups, you can also overtype the QSGDISP value. **Note**: All fields must be overtyped with the same command. Scroll the view if necessary.
DEL	Delete the AuthInfo on the line where you enter the command.
REP AuthInfoname	Replace the attributes of the specified AuthInfo with the attributes of the AuthInfo on the line where you enter the command. If the specified AuthInfo does not exist, a new one is created.

AUTHZ View Overtype Fields

Table 6-2 lists the AUTHZ view overtype fields that you can overwrite.

Table 6-7 AUTHZ View Overtype Fields

Command	Value
Description	a maximum length of 64 characters. In DBCS, it can contain DBCS characters to a maximum length of 64 bytes.

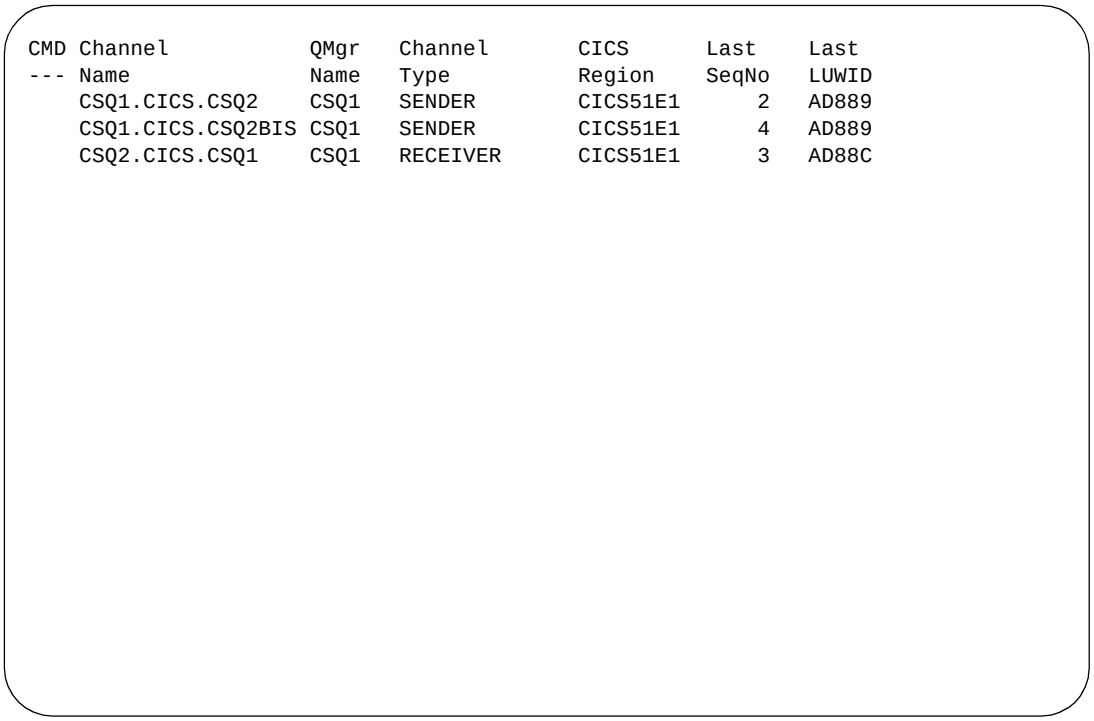
CCHNL: CICS Channels

The CICS channels view provides an overview of the CICS channels, showing the channel name, channel type, queue manager name, and other significant attributes.

The CCHNL view, shown in Figure 6-4, is displayed when you select CICS Channels on the EZQMMVS view or when you type **CCHNL** on the **COMMAND** line.

Note: Before you display the CCHNL view, make sure that all the CICS channels for each queue manager have been started. The CCHNL view does not display information about CICS channels that are not started (even though they have been defined).

Figure 6-4 CCHNL View



CMD	Channel Name	QMgr Name	Channel Type	CICS Region	Last SeqNo	Last LUWID
---	CSQ1.CICS.CSQ2	CSQ1	SENDER	CICS51E1	2	AD889
	CSQ1.CICS.CSQ2BIS	CSQ1	SENDER	CICS51E1	4	AD889
	CSQ2.CICS.CSQ1	CSQ1	RECEIVER	CICS51E1	3	AD88C

There are no primary commands, line commands, or overtype fields for the CCHNL view.

CCHNL View Hyperlink

Table 6-8 shows the CCHNL view field from which you can hyperlink and the destination for the link.

Table 6-8 CCHNL View Hyperlink

Field	View	Information
Channel Name	CCHNLD	Details about a CICS channel

CCHNLD: CICS Channel Details

The CICS channel detail view provides details about a specified CICS channel. Information is provided about recent activity on the channel.

The CCHNLD view, shown in Figure 6-5, is displayed when you hyperlink from the CCHNL view or when you type **CCHNLD** on the **COMMAND** line.

Figure 6-5 CCHLD View

```
Channel............CSQ1.CICS.CSQ2BIS
Type...............SENDER

QMgr Name..........CSQ1

CICS Region........CICS51E1

Sequential DeliveryYes

Sequence Number..
  Last sent
  Last committed

Last LUWID.........AD889E6E6A47DC00
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the CCHNLD view.

CHANNELS: Channels Overview

The channels view provides an overview of all the WebSphere MQ channels, showing current status, messages, and other significant attributes.

The CHANNELS view, shown in Figure 6-6, is displayed when you type **CHANNELS** on the **COMMAND** line, or when you hyperlink from CHANNELS on the EZMQS menu.

Figure 6-6 Channels View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =CHANNELS=========(ALL======*=======)27AUG2003==12:49:26====MVMQS====D=3150
CMD Channel              Queue    Channel  Channel  QSG    Chl     Connecting
--- Name                 Manager  Type     Status   Disp   Disp    To System
    abc                  AMQE     RECEIVER INACTIVE QMGR   N/A     (none)
    amqe.error.SENDER    AMQE     SENDER   INACTIVE QMGR   N/A     LYMASON(4347
    amqe.error.SENDER1   AMQE     SENDER   INACTIVE QMGR   N/A     LYMASON(4347
    ccmvsexits           AMQD     CLNTCONN INACTIVE QMGR   N/A     sysi(14023)
    cm_2_huynhmb         huynh    RECEIVER INACTIVE QMGR   N/A
    grt.to.MQM2RECEIVER  MQM2     RECEIVER INACTIVE QMGR   N/A     (none)
    huynhmb_2_cm         huynh    SENDER   INACTIVE QMGR   N/A
    AMQE.ERROR.SENDER    AMQE     SENDER   STOPPED  QMGR   N/A     CONNECTION.N
    BCLC0000             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0001             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0002             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0003             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0004             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0005             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0006             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
    BCLC0007             BCLC     RECEIVER INACTIVE QMGR   N/A     (none)
```

There are no primary commands for this view.

CHANNELS View Line Commands

Table 6-9 lists the line commands you can use to perform actions against an entity on a CHANNELS view line.

Table 6-9 CHANNELS View Line Commands

Command	Action
ADD	create a new channel with identical characteristics To give the new channel a different QSG group disposition, overtype the QSGDISP field.[1]
BO	backout indoubt messages on the channel
CMT	commit indoubt messages on the channel
DEL	delete the channel
P	ping the channel
RST	reset the message sequence number
SCF	stop the channel using the FORCE option and the CONNAME filter (version 5.3 and later)
SQF	stop the channel using the FORCE option and the QMNAME filter (version 5.3 and later)
STA	start the channel. Channels with shared XMIT queues start shared by default. For an option other than the default, overtype the ChlDisp field. For example, to start FixShared, overtype the ChlDisp field with “fix” on the same line that STA is typed.
STO	stop the channel
STF	stop the channel using the FORCE option
STQ	stop the channel using a QMNAME filter (version 5.3 and later)
STC	stop the channel using CONNAME filter (version 5.3 and later)
[1]Valid only if using Queue Manager 5.2 and above	

CHANNELS View Overtype Field

Table 6-10 shows the field you can overtype on the CHANNELS view.

Table 6-10 CHANNELS View Overtype Field

Overtype Field	Value
Current Seq Num	integer up to 999999999

Note: Take the following precautions when you change a current sequence number:

- When the channels are active, reset the current sequence number for the sending channel.
- When the channels are inactive, reset the current sequence numbers of both the sending and the receiving channels. (If you have distributed queue managers, this precaution is possible only when you use two sets of sending and receiving channels or when you are using Node Manager.)

CHANNELS View Hyperlinks

Table 6-11 shows the CHANNELS view fields from which you can hyperlink and the destination for each link.

Table 6-11 CHANNELS View Hyperlinks (Part 1 of 2)

Field	View	Information
Channel Name	CHATTR	The name defined for the channel. This is an up to 20-character value and must be defined on both the sending and the receiving queue manager. It is a good practice to identify in the channel name the queue managers associated with a channel. For MVS, this is easily implemented because the length of queue manager names is up to 4 characters. On other platforms, where the queue manager name can be longer, you may need to use shorter names for the queue meaningful

Table 6-11 CHANNELS View Hyperlinks (Part 2 of 2)

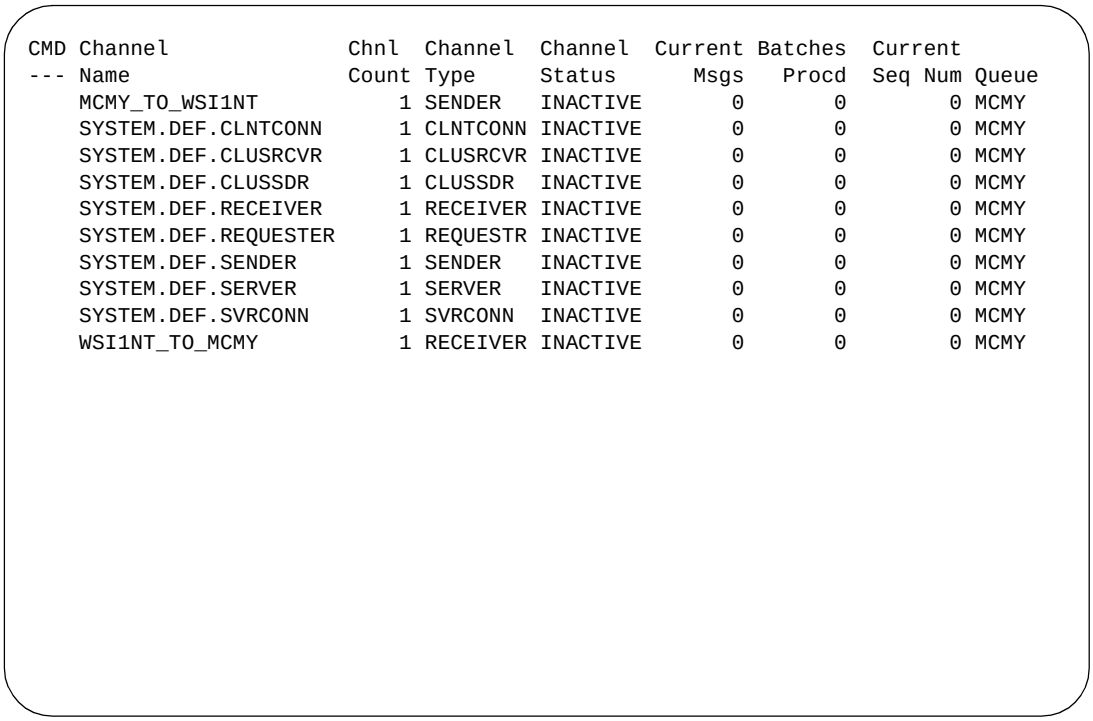
Field	View	Information
Channel Status	CHST	Indicates the current status of the channel: • STARTING - A request has been made to start the channel but the channel has not yet begun processing. • BINDING - The channel is performing channel negotiation and is not yet ready to transfer messages. • INITIALIZING - The channel initiator is attempting to start a channel. • RUNNING - The channel is either transferring messages at this moment, or is waiting for messages to arrive on the transmission queue so they can be transferred. • STOPPING - The channel is stopping or a close request has been received. • RETRYING - A previous attempt to establish a connection has failed. The MCA will re-attempt the connection after the specified retry interval. • PAUSED - The channel is waiting for the message-retry interval to complete before retrying an MQPUT operation. • STOPPED - The channel has been manually stopped, or the retry limit has been reached. A channel in this state can only be restarted by issuing the START CHANNEL command, or starting the MCA program. • REQUESTING - The requestor channel is requesting services from a remote MCA.
Connected System	CHATL	Accommodates long connection names if the connection name of the partner is 264 characters. Otherwise, the 48 character name is displayed. • For LU 6.2, it is the fully-qualified name of the partner Logical Unit. • For TCP, it is either the host name or the network address of the remote machine. This attribute can be altered if you have appropriate authorization. If this field is too small to contain your change make the change using the Long name on the CHATL view. This field is valid only for channels of the following types: • SDR Sender • SVR Server • RQSTR Requester • CLNTCONN Client-connection • CLUSSDR Cluster-sender • CLUSRCVR Cluster-receiver

CHANZ: Channel Summary

The CHANZ view provides a list of all channels, showing the current status and their significant attributes. This summary is listed by channel name.

The CHANZ view, shown in Figure 6-7, is displayed when you type **CHANZ** on the **COMMAND** line.

Figure 6-7 CHANZ View



```
CMD Channel              Chnl  Channel  Channel  Current Batches  Current
--- Name                 Count Type     Status       Msgs   Procd  Seq Num Queue
    MCMY_TO_WSI1NT           1 SENDER   INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.CLNTCONN      1 CLNTCONN INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.CLUSRCVR      1 CLUSRCVR INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.CLUSSDR       1 CLUSSDR  INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.RECEIVER      1 RECEIVER INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.REQUESTER     1 REQUESTR INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.SENDER        1 SENDER   INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.SERVER        1 SERVER   INACTIVE        0       0        0 MCMY
    SYSTEM.DEF.SVRCONN       1 SVRCONN  INACTIVE        0       0        0 MCMY
    WSI1NT_TO_MCMY           1 RECEIVER INACTIVE        0       0        0 MCMY
```

There are no primary commands, or overtype fields for the CHANZ view.

CHANZ View Line Commands

Table 6-12 lists the line commands you can use to perform actions against an entity on a CHANZ view line.

Table 6-12 CHANZ View Line Commands

Command	Action
ADD	creates a new channel
DEL	deletes the channel

CHANZ View Hyperlinks

Table 6-13 shows the CHANZ view fields from which you can hyperlink and the destination for each link.

Table 6-13 CHANZ View Hyperlinks

Field	View	Information
Channel Name	CHLNAME	The name defined for the channel. This is an up to 20-character value and must be defined on both the sending and the receiving queue manager. It is a good practice to identify in the channel name the queue managers associated with a channel. For MVS, this is easily implemented because the length of queue manager names is up to 4 characters. On other platforms, where the queue manager name can be longer, you may need to use shorter names for the queue managers so the channel name can be meaningful. Asterisks may appear in this field indicating multiple non-matching values or names. **Note:** If the Channel count is greater than one, the hyperlink destination is the CHANNELS view.
Channel Status	CHLST	Indicates the current status of the channel: • STARTING - A request has been made to start the channel but the channel has not yet begun processing. • BINDING - The channel is performing channel negotiation and is not yet ready to transfer messages. • INITIALIZING - The channel initiator is attempting to start a channel. • RUNNING - The channel is either transferring messages at this moment, or is waiting for messages to arrive on the transmission queue so they can be transferred. • STOPPING - The channel is stopping or a close request has been received. • RETRYING - A previous attempt to establish a connection has failed. The MCA will re-attempt the connection after the specified retry interval. • PAUSED - The channel is waiting for the message-retry interval to complete before retrying an MQPUT operation. • STOPPED - The channel has been manually stopped, or the retry limit has been reached. A channel in this state can only be restarted by issuing the START CHANNEL command, or starting the MCA program. • REQUESTING - The requestor channel is requesting services from a remote MCA. **Note:** If the Channel count is greater than one, the hyperlink destination is the CHANNELS view.

CHATL: Long Channel Name

The CHATL view enables you to display and change the channel connection name when it exceeds the length of CHLCONN or CHLCONN2. The length of a CHATL connection name is up to 48 characters in z/OS and up to 256 characters in distributed systems computers.

The CHATL view, shown in Figure 6-8, is displayed when you place the cursor on a connection name and press **Enter**.

Figure 6-8 CHATL View

```
>W1 =CHATL============(ALL======*=======)02SEP2003==14:56:47====MVMQS====D====1
   Channel Name........ CLNTNEWQM
    Type............... SVRCONN
    Connection Name.... N/A
    Status............. INACTIVE
    Indoubt............
    Chl Disposition.... N/A
    Start Time.........
    Start Date.........

   Description.........
   Queue Manager....... newqm
   Xmit Queue..........
   Connection Long Name
     bytes   0 -  65...
     bytes  66 - 131...
     bytes 131 - 195...
     bytes 196 - 263...
```

CHATL View Primary Commands

Table 6-14 lists the CHATL view primary commands.

Table 6-14 CHATL View Primary Commands

Commands	Description
ADD channelname	add a new channel with attributes identical to the current channel
DELete patternname	deletes the displayed channel

Table 6-14 CHATL View Primary Commands

Commands	Description
SCF patternname	stop the channel with the FORCE option and the CONNAME filter (version 5.3 and later)
SQF patternname	stop the channel with the FORCE option and the QMNAME filter (version 5.3 and later)
STA patternname	start the channel
STCp patternname	stop the channel with the CONNAME filter (version 5.3 and later)
STF patternname	stop the channel with the FORCE option
STOp patternname	stop the channel
STQp patternname	stop the channel with the QMNAME filter (version 5.3 and later)

CHATL View Line Commands

Table 6-15 lists the CHATL view line commands.

Table 6-15 CHATL View Line Commands

Commands	Description
ADD	On tabular views, create a new channel definition. Overtype the channel with the attributes you want to copy. For those queue managers that support queue sharing groups, you can also overtype the QSGDISP value. **Note**: all fields must be overtyped with the same command. Scroll the view if necessary.
DEL	On tabular views, delete the channel listed on the line where you enter the command.
BO	issue the RESOLVE CHANNEL ACTION (BACKOUT) command to restore any backed-out in-doubt messages to the transmission queue.
CMT	issue the RESOLVE CHANNEL ACTION (COMMIT) command to delete any committed in-doubt messages from the transmission queue.
P	ping the channel
RST	reset the sequence number **Note**: You must overtype the sequence number field to prevent the channel sequence number from being reset to **1**.
SCF	stop the channel with the FORCE option and CONNAME filter

Table 6-15 CHATL View Line Commands

Commands	Description
SQF	stop the channel with the FORCE option and QMNAME filter
STA	start the channel **Note**: If you overtype the channel disposition field in the tabular view, the channel will start with the current disposition
STC	stop the channel with CONNAME filter
STF	stop the channel with the FORCE option **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STO	stop the channel **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STQ	stop the channel with QMNAME filter

CHATL View Overtype Fields

Table 6-16 lists the CHATL view overtype fields.

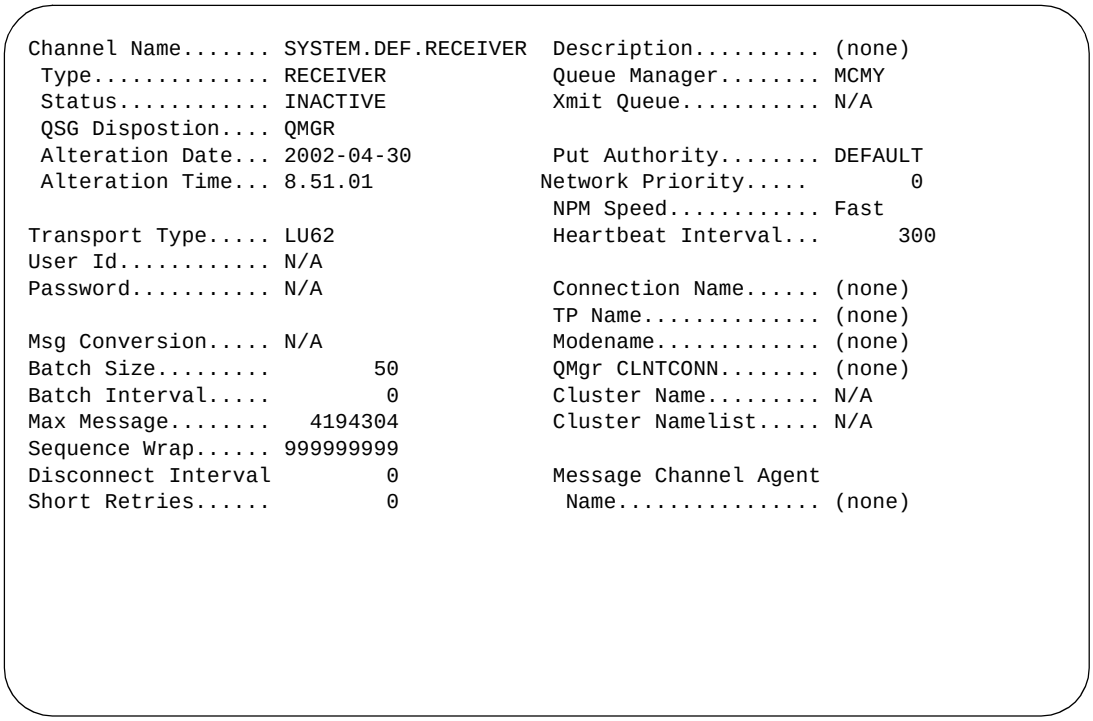
Table 6-16 CHATL View Overtype Fields

Field	Description
Connection Name	On z/OS, the field accommodates up to 48 characters. On distributed systems, the field accommodates up to 264 characters.
Description	the maximum length of this field is 64 characters.
Transmission Queue	the name of the queue from which messages are retrieved. See IBM's rules for naming WebSphere MQ objects.

CHATTR: Channel Attributes

The CHATTR view, shown in Figure 6-9, is displayed when you hyperlink from the CHANNELS view or when you type **CHATTR** on the **COMMAND** line.

Figure 6-9 CHATTR View



CHATTR View Primary Commands

Table 6-17 lists the primary commands you can enter on the command line for this view.

Table 6-17 CHATTR View Primary Commands (Part 1 of 2)

Command	Action
ADD channelname	On detail views, adds a new channel with identical attributes.
DELete *	On detail views, deletes the channel for which information is currently displayed from the queue manager.

Table 6-17 CHATTR View Primary Commands (Part 2 of 2)

Command	Action
SCF *	Stop the channel using the FORCE option and CONNAME filter (version 5.3 and higher)
SQF *	Stop the channel with the FORCE option and QMNAME filter (version 5.3 and higher)
STA *	Start the channel
STCp	Stop the channel using the CONNAME filter (version 5.3 and higher)
STF *	Stop the channel with the FORCE option
STOp *	Stop the channel
STQp *	Stop the channel using the QMNAME filter (version 5.3 and higher)

CHATTR View Line Commands

Table 6-18 lists the CHATTR view line commands.

Table 6-18 CHATTR View Line Commands

Commands	Description
ADD	On tabular views, create a new channel definition. Overtype the channel with the attributes you want to copy. For those queue managers that support queue sharing groups, you can also overtype the QSGDISP value. **Note**: all fields must be overtyped with the same command. Scroll the view if necessary.
DEL	On tabular views, delete the channel listed on the line where you enter the command.
BO	Issue the RESOLVE CHANNEL ACTION (BACKOUT) command to restore any backed-out in-doubt messages to the transmission queue.
CMT	Issue the RESOLVE CHANNEL ACTION (COMMIT) command to delete any committed in-doubt messages from the transmission queue.
P	Ping the channel.
RST	Reset the sequence number. **Note**: You must overtype the sequence number field to prevent the channel sequence number from being reset to **1**.
SCF	Stop the channel with the FORCE option and CONNAME filter.

Table 6-18 CHATTR View Line Commands

Commands	Description
SQF	Stop the channel with the FORCE option and QMNAME filter.
STA	Start the channel. **Note**: If you overtype the channel disposition field in the tabular view, the channel will start with the new disposition
STC	Stop the channel with CONNAME filter.
STF	Stop the channel with the FORCE option. **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STO	Stop the channel. **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STQ	Stop the channel with QMNAME filter.

CHATTR View Overtype Field

Table 6-19 shows the field you can overtype on the CHATTR view.

Table 6-19 CHATTR View Overtype Field (Part 1 of 2)

Overtype Field	Value
Batch Heartbeat	decimal integer from 0 to 999999
Batch Interval	decimal integer from 1 to 999999999
Batch Size	decimal integer from 1 to 9999
Cluster Name	up to 48-character string
Cluster Namelist	up to 48-character string
Connection Name	up to 60-character string
Description	up to 64-character string
Disconnect Interval	decimal integer from 1 to 999999
Heartbeat Interval	decimal integer from 1 to 999999
Keepalive Interval	decimal integer from 0, 1 to 999999, or Auto
Local Communication Address	IP Address (low port to high port range)
Long Retries	decimal integer from 1 to 999999999
Long Retries Interval	decimal integer from 0 to 999999999
Max Message Length	decimal integer from 0 to 4194304
Message Channel Agent Name	up to 20-character string

Table 6-19 CHATTR View Overtype Field (Part 2 of 2)

Overtype Field	Value
Message Channel Agent Type	‘p’ or ‘process’ or ‘t’ or ‘thread’ (OS/2 and Windows NT only)
Message Channel Agent User ID	up to 28-character string
Mode Name	up to 8-character string (LU62 only sending channels, OS/2, MVS)
Msg Conversion	‘y’ or ‘yes’ or ‘n’ or ‘no’
Msg Retries Count	decimal integer from 0 to 999999999 (not for MVS)
Msg Retries Interval	decimal integer from 0 to 999999999 (not for MVS)
Network Priority	decimal integer from 0 to 9 (for non-MVS cluster receiver channels)
NPM Speed	‘fast’ or ‘normal’
Password	up to 12-character string (not for OS/400)
Put Authority	‘DEF’ or ‘CTX’
QMgr CLNTCONN	up to 48-character string that is the client connection queue manager name
Sequence Wrap Number	decimal integer from 100 to 999999999
Short Retries	decimal integer from 0 to 999999999
Short Retry Interval	decimal integer from 0 to 999999999
SSL Client Authentication	Required or Optional
SSL Cipher Spec	maximum length of 32 characters
SSL Peer Name	maximum length of 1024 bytes on Windows 2000, Windows NT, and Unix. A maximum of 256 bytes on z/OS.
TP Name	up to 64-character string (LU62 only sending channels, OS/2, MVS)
Transmission Queue	maximum length of 48 characters
Transport Type	‘Netbios’ (OS/2 and Windows NT only) or ‘LU62’ or ‘TCP’
User ID	up to 12-character string (not for OS/400)

CHATTR View Hyperlinks

Table 6-20 shows the CHATTR view fields from which you can hyperlink and the destination for each link.

Table 6-20 CHATTR View Hyperlinks (Part 1 of 2)

Field	View	Information
Connection Name	CHATTR	The name defined for the channel. This is an up to 20-character value and must be defined on both the sending and the receiving queue manager. It is a good practice to identify in the channel name the queue managers associated with a channel. For MVS, this is easily implemented because the length of queue manager names is up to 4 characters. On other platforms, where the queue manager name can be longer, you may need to use shorter names for the queue managers so the channel name can be meaningful.
Channel Status	CHST	Indicates the current status of the channel: • STARTING - A request has been made to start the channel but the channel has not yet begun processing. • BINDING - The channel is performing channel negotiation and is not yet ready to transfer messages. • INITIALIZING - The channel initiator is attempting to start a channel. • RUNNING - The channel is either transferring messages at this moment, or is waiting for messages to arrive on the transmission queue so they can be transferred. • STOPPING - The channel is stopping or a close request has been received. • RETRYING - A previous attempt to establish a connection has failed. The MCA will re-attempt the connection after the specified retry interval. • PAUSED - The channel is waiting for the message-retry interval to complete before retrying an MQPUT operation. • STOPPED - The channel has been manually stopped, or the retry limit has been reached. A channel in this state can only be restarted by issuing the START CHANNEL command, or starting the MCA program. • REQUESTING - The requestor channel is requesting services from a remote MCA.

Table 6-20 CHATTR View Hyperlinks (Part 2 of 2)

Field	View	Information
Xmit Queue	LQD	The name of the transmission queue associated with a channel. This channel typically services all messages for a given transmission queue. In MQ/ESA, it is possible to have multiple channels serving a single transmission queue. In this case, messages may go to one or another of the channels. This attribute can be altered if you have appropriate authorization. This field is valid only for channels of the following types: • SDR Sender • SVR Server
<Exit Information>	CHNLX	This field exists so you can hyperlink to this information.
<Saved Records>	CHNLS1Z	This field exists so you can hyperlink to this information.

CHNLSVST: Channel Saved Records Detail

The CHNLSVST channel detail view provides details for saved channel status records. Information is provided about recent activity on the channel.

The CHNLSVST view is displayed when you hyperlink from the CHNLS1Z or CHNLS2Z views, or when you type CHNLSVST on the **COMMAND** line.

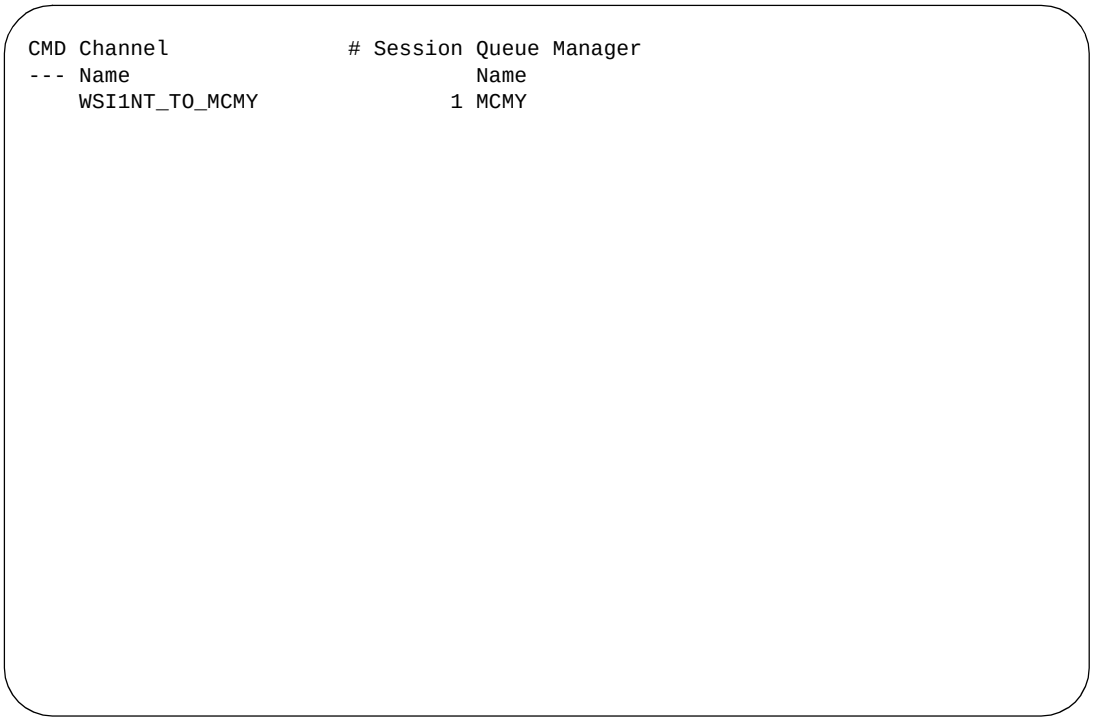
There are no primary commands, line commands, overtype fields, or hyperlinks for the this view.

CHNLS1Z: Channel Saved Records Summary

The CHNLS1Z view provides a summary view for saved Channel status records. The records are summarized based on Channel name.

The CHNLS1Z view, shown in Figure 6-10, is displayed when you hyperlink from the CHATTR view <*saved status*> field or when you type **CHNLS1Z** on the **COMMAND** line.

Figure 6-10 CHNLS1Z View



There are no primary commands, line commands, overtype fields, or hyperlinks for the this view.

CHNLX: Channel Exits

Figure 6-11 shows the CHNLX view, which displays all exits defined to the channel. On the CHNLX view, you can enter multiple exit names and user data for Message, Send, and Receive exits.

The CHNLX view is displayed when you hyperlink from a any of the exits on the CHNLAD view, or when you type **CHNLX** on the **COMMAND** line.

Figure 6-11 CHNLX View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =CHNLX============BCL5=====*========09SEP2003==16:26:46====MVMQS====D====
   Channel Name.. CCBCL5
   Queue Manager. BCL5

   Security Exit.
    Name......... scyexit
    User Data.... scydata

   Message Exit..
    Name......... msgexit
    Name.........
    Name.........
    Name.........
    Name.........
    Name.........
    Name.........
    User Data.... msgexit1
    User Data....
    User Data....
```

There are no primary commands, line commands, or hyperlinks for the CHNLX view.

CHNLX View Overtype Fields

Table 6-21 lists the fields you can overtype on the CHNLX view and the values you can use in the fields.

Table 6-21 CHNLX View

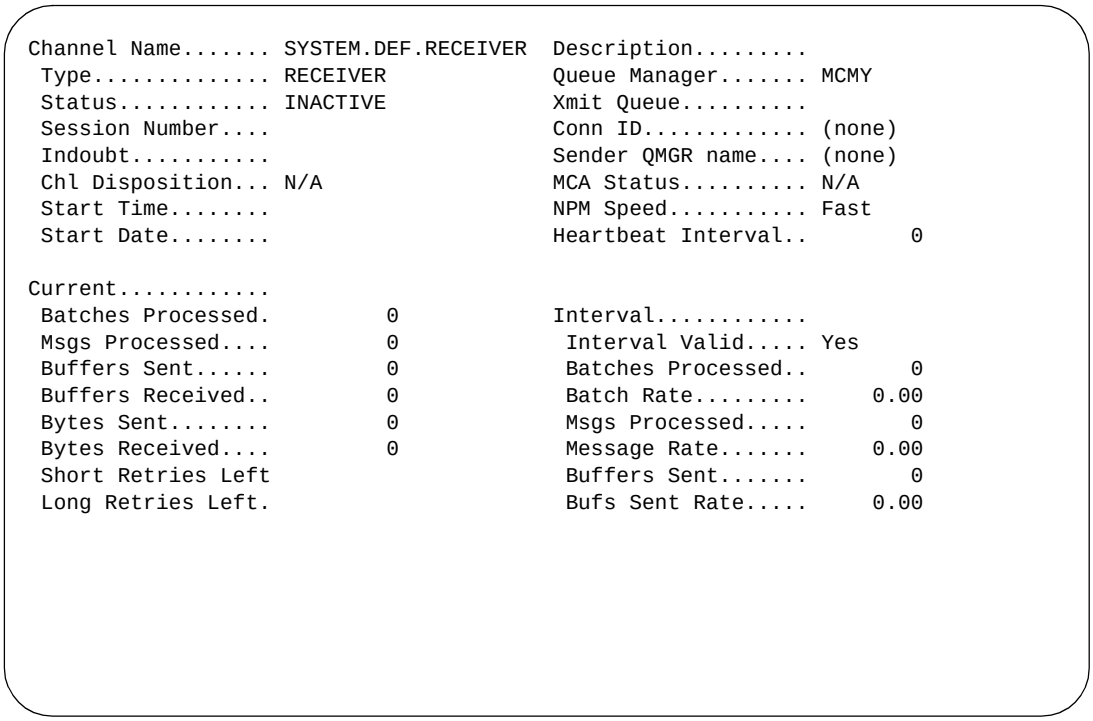
Overtype Field	Value
Security Exit Name	user-provided exit
Security Exit User Data	up to 32 characters of data that is passed to the security exit. When a single exit is used for multiple channels, you can use this field to identify the unique requirements for each channel.
Message Exit Name	for each message on the channel, the name(s) of the exit(s) that are given control • Sending Channel: This exit is given control after the message is received from the transmission queue. • Receiving Channel: The exit is given control before the message is put to the destination queue.
Message Exit User Data	up to 32 characters of data passed to the channel message exit(s)
Send Exit Name	for each message on the sending channel, the name(s) of the exit(s) that are given control • Immediately before data is sent out on the network • At initialization and termination of the channel
Send Exit User Data	up to 32 characters of data passed to the channel send exit(s)
Receive Exit Name	for each message on the receiving channel, the name(s) of the exit(s) that are given control • Immediately before the received network data is processed • At initialization and termination of the channel
Receive Exit User Data	up to 32 characters of data passed to the channel receive exit(s)
Msg-Retry Exit Name	channel message-retry exit name

CHST: Channel Statistics

The channel status view provides statistics and detail information about usage for a single WebSphere MQ channel.

The CHST view, shown in Figure 6-12, is displayed when you hyperlink from the status field on the CHANNELS OR CHATTR view.

Figure 6-12 CHST View



There are no line commands for the CHST view.

CHST View Primary Commands

Table 6-22 lists the primary commands you can enter on the command line for this view.

Table 6-22 CHST View Primary Commands (Part 1 of 2)

Command	Action
STA *	starts the channel

Table 6-22 CHST View Primary Commands (Part 2 of 2)

Command	Action
STOp *	stops the channel
STF	stops the channel using the FORCE option

CHST View Hyperlinks

Table 6-23 shows the CHST view fields from which you can hyperlink and the destination for each link.

Table 6-23 CHST View Hyperlinks

Field	View	Information
Channel Name	CHNLAD	channel definition

MCHL: Channel List

The MCHL view shown in Figure 6-13, enables you to see your channel definitions with a QSGDISP when applicable. Hyperlink from Easy Menus to navigate to this view.

Figure 6-13 MCHL View

```
19JUN2003  13:34:06 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS------------
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MCHL==============LMASON74=*========19JUN2003==13:34:06====MVMQS====D===14
   Channel               Type    QSG    NPM    HB  Put Auth  Type    Transpor P
-- Name                          Disp   Speed  Int
   to.lymason74         RECEIVER QMGR   FAST   300 DEFAULT  N/A      TCP/IP   N
   to.WQM2              SENDER   QMGR   FAST   300          Process  TCP/IP   N
   SYSTEM.AUTO.RECEIVER RECEIVER QMGR   FAST   300 DEFAULT  N/A      TCP/IP   N
   SYSTEM.AUTO.SVRCONN  SVRCONN  QMGR   FAST   300          N/A      TCP/IP   N
   SYSTEM.DEF.CLNTCONN  CLNTCONN QMGR   FAST   300          N/A      TCP/IP   N
   SYSTEM.DEF.CLUSRCVR  CLUSRCVR QMGR   FAST   300 DEFAULT  Thread   TCP/IP   N
   SYSTEM.DEF.CLUSSDR   CLUSSDR  QMGR   FAST   300          Thread   TCP/IP   N
   SYSTEM.DEF.RECEIVER  RECEIVER QMGR   FAST   300 DEFAULT  N/A      TCP/IP   N
   SYSTEM.DEF.REQUESTER REQUESTR QMGR   FAST   300 DEFAULT  Process  TCP/IP   N
   SYSTEM.DEF.SENDER    SENDER   QMGR   FAST   300          Process  TCP/IP   N
   SYSTEM.DEF.SERVER    SVR      QMGR   FAST   300          Process  TCP/IP   N
   SYSTEM.DEF.SVRCONN   SVRCONN  QMGR   FAST   300          N/A      TCP/IP   N
   TO.AMQH              SENDER   QMGR   FAST   300          Process  TCP/IP   N
   TO.WQM2              SENDER   QMGR   FAST   300          Process  TCP/IP   N
```

There are no primary commands for this view.

MCHL View Line Commands

Table 6-24 lists the MCHL view line commands.

Table 6-24 MCHL View Line Commands

Commands	Description
ADD	On tabular views, create a new channel definition. Overtype the channel with the attributes you want to copy. For those queue managers that support queue sharing groups, you can also overtype the QSGDISP value. **Note**: all fields must be overtyped with the same command. Scroll the view if necessary.
DEL	On tabular views, delete the channel listed on the line where you enter the command.
BO	Issue the RESOLVE CHANNEL ACTION (BACKOUT) command to restore any backed-out in-doubt messages to the transmission queue.
CMT	Issue the RESOLVE CHANNEL ACTION (COMMIT) command to delete any committed in-doubt messages from the transmission queue.
P	Ping the channel.
RST	Reset the sequence number. **Note**: You must overtype the sequence number field to prevent the channel sequence number from being reset to **1**.
SCF	Stop the channel with the FORCE option and CONNAME filter.
SQF	Stop the channel with the FORCE option and QMNAME filter.
STA	Start the channel. **Note**: If you overtype the channel disposition field in the tabular view, the channel will start with the new disposition
STC	Stop the channel with CONNAME filter.
STF	Stop the channel with the FORCE option. **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STO	Stop the channel. **Note**: If you overtype the channel status field in the tabular view, the channel will stop with the new state.
STQ	Stop the channel with QMNAME filter.

MCHL View Overtype Fields

Table 6-25 shows the field you can overtype on the MCHL view.

Table 6-25 MCHL View Overtype Field (Part 1 of 2)

Overtype Field	Value
Batch Heartbeat	decimal integer from 0 to 999999
Batch Interval	decimal integer from 1 to 999999999
Batch Size	decimal integer from 1 to 9999
Cluster Name	up to 48-character string
Cluster Namelist	up to 48-character string
Connection Name	up to 60-character string
Description	up to 64-character string
Disconnect Interval	decimal integer from 1 to 999999
Heartbeat Interval	decimal integer from 1 to 999999
Keepalive Interval	decimal integer from 0, 1 to 999999, or Auto
Local Communication Address	IP Address (low port to high port range)
Long Retries	decimal integer from 1 to 999999999
Long Retries Interval	decimal integer from 0 to 999999999
Max Message Length	decimal integer from 0 to 4194304
Message Channel Agent Name	up to 20-character string
Message Channel Agent Type	‘p’ or ‘process’ or ‘t’ or ‘thread’ (OS/2 and Windows NT only)
Message Channel Agent User ID	up to 28-character string
Mode Name	up to 8-character string (LU62 only sending channels, OS/2, MVS)
Msg Conversion	‘y’ or ‘yes’ or ‘n’ or ‘no’
Msg Retries Count	decimal integer from 0 to 999999999 (not for MVS)
Msg Retries Interval	decimal integer from 0 to 999999999 (not for MVS)
Network Priority	decimal integer from 0 to 9 (for non-MVS cluster receiver channels)
NPM Speed	‘fast’ or ‘normal’
Password	up to 12-character string (not for OS/400)
Put Authority	‘DEF’ or ‘CTX’
QMgr CLNTCONN	up to 48-character string that is the client connection queue manager name

Table 6-25 MCHL View Overtype Field (Part 2 of 2)

Overtype Field	Value
Sequence Wrap Number	decimal integer from 100 to 999999999
Short Retries	decimal integer from 0 to 999999999
Short Retry Interval	decimal integer from 0 to 999999999
SSL Client Authentication	Required or Optional
SSL Cipher Spec	maximum length of 32 characters
SSL Peer Name	maximum length of 1024 bytes on Windows 2000, Windows NT, and Unix. A maximum of 256 bytes on z/OS.
TP Name	up to 64-character string (LU62 only sending channels, OS/2, MVS)
Transmission Queue	maximum length of 48 characters
Transport Type	'Netbios' (OS/2 and Windows NT only) or 'LU62' or 'TCP'
User ID	up to 12-character string (not for OS/400)

MCHL View Hyperlinks

Table 6-26 lists the MCHL view hyperlinks.

Table 6-26 MCHL View Hyperlinks

Hyperlink	Destination
Channel Name	CHATTR view
Xmit Queue	LQD view

Chapter 7 Cluster Queues and Queue Managers

The cluster views provide information about the operation and performance of the cluster queues you are monitoring.

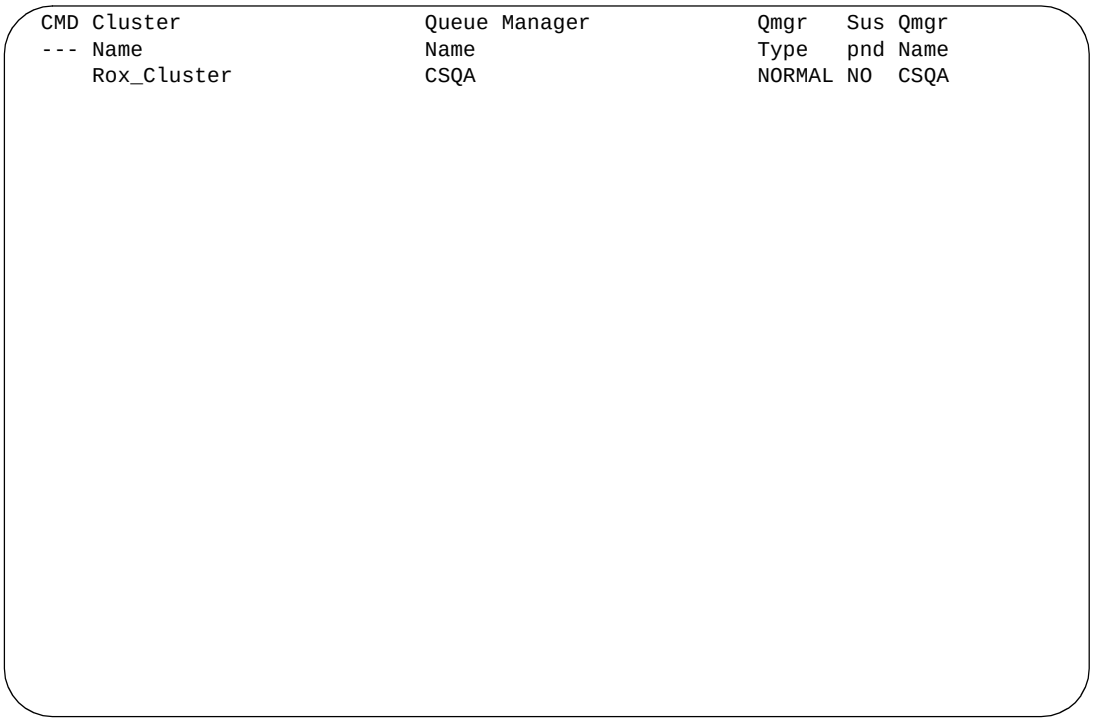
This chapter discusses the following topics:

CLUSTER: Cluster Overview

The CLUSTER view provides an overview of the queue managers in each cluster in the current context. If the Channel Initiator is not started, no data is returned because the queue manager inhibits cluster commands.

The CLUSTER view, shown in Figure 7-1, is displayed when you select a cluster from the CLZ view or when you type **CLUSTER** on the **COMMAND** line.

Figure 7-1 CLUSTER View



There are no primary commands or overtype fields for the CLUSTER view.

CLUSTER View Line Commands

Table 7-1 lists the line commands you can use to perform actions against an entity on a CLUSTER view line.

Table 7-1 CLUSTER View Line Commands

Command	Action
FOR	halt processing of a cluster queue manager using the FORCE option
REF	delete the current cluster information so that the repository is refreshed
RST	delete the queue manager from the cluster
SUS	halt processing of a cluster queue manager
REM	delete the queue manager from the cluster using the FORCEREMOVE option
RSM	activate a suspended cluster queue manager

CLUSTER View Hyperlinks

Table 7-2 lists the CLUSTER view fields from which you can hyperlink and the destination for each link.

Table 7-2 CLUSTER View Hyperlinks

Field	View	Information
Cluster Name	CQMD	cluster queue manager details
Queue Manager Name	CQM	cluster queue managers
Queue Manager Type	CQM	cluster queue managers

CLZ: Cluster Summary

The CLZ view provides a summary of all clusters in the current context.

The CLZ view, shown in Figure 7-2, is displayed when you select Clusters Overview from the EZQSSI view or when you type **CLZ** on the **COMMAND** line.

Figure 7-2 CLZ View

```
CMD Cluster                                          Cluster
--- Name                                             Qmgrs #
    Rox_Cluster                                            1
```

CLZ View Line Commands

Table 7-3 lists the line commands you can use to perform actions against an entity on a CLZ view line.

Note: In the summary views, each line may represent more than one channel. Any overtypes or line commands will affect all queues represented by that line.

Table 7-3 CLZ View Line Commands

Command	Action
FOR	halt processing of a cluster queue manager using the FORCE option
REF	delete the current cluster information so that the repository is refreshed
RST	delete the queue manager from the cluster
SUS	halt processing of a cluster queue manager
REM	delete the queue manager from the cluster using the FORCEREMOVE option
RSM	activate a suspended cluster queue manager

CLZ View Hyperlinks

Table 7-4 lists the CLZ view fields from which you can hyperlink and the destination for each link.

Table 7-4 CLZ View Hyperlinks

Field	View	Information
Cluster Name	CLUSTER	queue managers in the cluster
Cluster Queue Manager	CLUSTER	queue managers in the cluster

CQ: Cluster Queues

The CQ view provides an overview of activity for all cluster queues in the current context.

The CQ view, shown in Figure 7-3, is displayed when you select Cluster Queues from the EZMQS view or when you type **CQ** on the **COMMAND** line.

Figure 7-3 CQ View

```
CMD Queue                                          Queue    QSG    Cluster  C
--- Name                                           Type     Disp   Name     Q
    CSQA.ROX.CLUSTER.QUEUE                         QLOCAL   QMGR   Rox_Clus C
    SYSTEM.ADMIN.COMMAND.QUEUE                     QLOCAL   QMGR   JOHNNYB  C
```

There are no primary commands, line commands, or overtype fields for the CQ view.

CQ View Hyperlinks

Table 7-5 lists the CQ view fields from which you can hyperlink and the destination for each link.

Table 7-5 CQ View Hyperlinks

Field	View	Information
Queue Name	CQD	details for the cluster queue
Queue Type	AQD, LQD, or RQD	details for the queue type
Cluster Name	CLUSTER	queue managers in the cluster
Cluster Queue Manager	CQM	all cluster queue managers

CQD: Cluster Queue Details

The CQD view provides information about the definition and usage of a cluster queue.

The CQD view, shown in Figure 7-4, is displayed when you hyperlink from the CQ view or when you type **CQD** on the **COMMAND** line.

Figure 7-4 CQD View

```
Queue.............. TEST.ALIAS.CLUSTER.QUEUE
  Description ........ (none)
  Queue Manager Name.. CSQ1
  Queue Manager Ident. CSQ1.B1B19EFB9448C200

  Cluster Queue Type.. QALIAS

  Inhibited Actions...
   Puts............... No

  Default.............
   Message Priority... 0
   Message Persistence No

  Sharing In Clusters.
   Cluster QMgr....... CSQ1
   Cluster Name....... MQS30
   Cluster Namelist... N/A
   Cluster Date....... yyyy-mm-dd
   Cluster Time....... 14.51.15

  Default Bind........ On Open

  Alteration Date..... yyyy-mm-dd
  Alteration Time..... 14.51.15
```

There are no primary commands or line commands for the CQD view.

CQD View Hyperlink

Table 7-6 lists the CQD view field from which you can hyperlink and the destination for the link.

Table 7-6 CQD View Hyperlinks

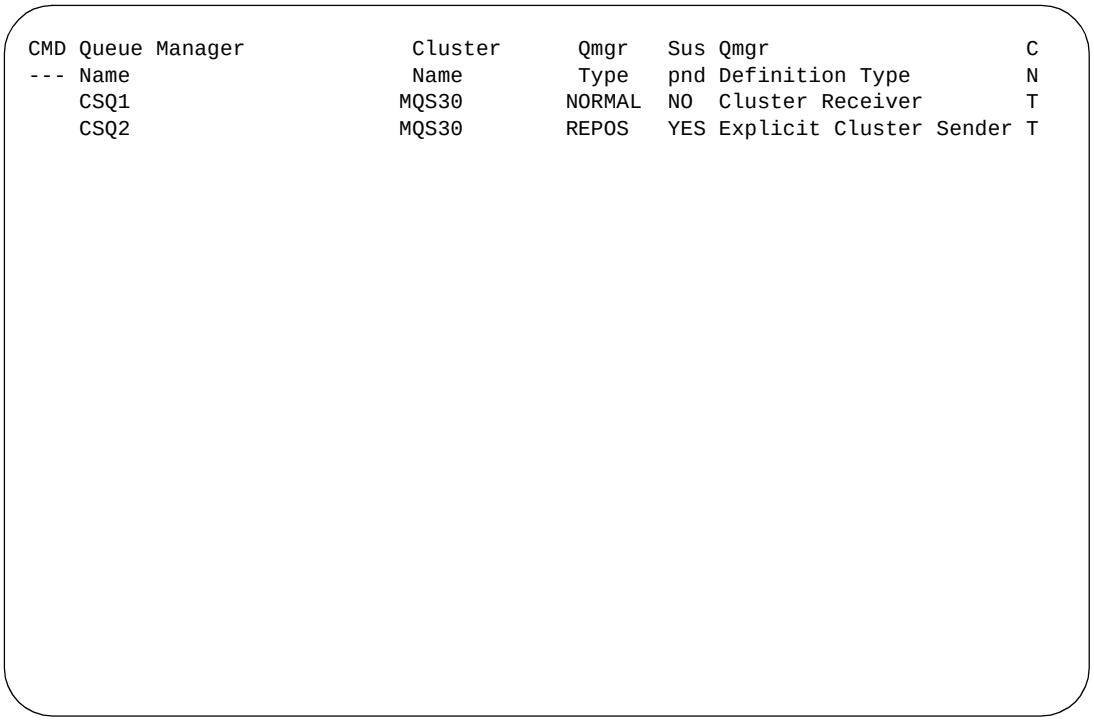
Field	View	Information
Queue Type	AQD, LQD, or RQD	details for the queue type

CQM: Cluster Queue Managers

The CQM view provides an overview of all the cluster queue managers that are being monitored.

The CQM view, shown in Figure 7-5, is displayed when you select Cluster Queue Managers on the EZQSSI view or when you type **CQM** on the **COMMAND** line.

Figure 7-5 CQM View



There are no primary commands or overtype fields for the CQM view.

CQM View Line Commands

Table 7-7 lists the line commands you can use to perform actions against an entity on a CQM view line.

Table 7-7 CQM View Line Commands

Command	Action
FOR	halt processing of a cluster queue manager using the FORCE option
REF	delete the current cluster information so that the repository is refreshed
RST	delete the queue manager from the cluster
SUS	halt processing of a cluster queue manager
REM	delete the queue manager from the cluster using the FORCEREMOVE option
RSM	activate a suspended cluster queue manager

CQM View Hyperlinks

Table 7-8 lists the CQM view fields from which you can hyperlink and the destination for each link.

Table 7-8 CQM View Hyperlinks

Field	View	Information
Queue Manager Name	CQMD	cluster queue manager details
Cluster Name	CLUSTER	queue managers in the cluster
Queue Manager Type	CQM	queue managers of that type
Channel Name	CHANNELS	channel names and status

CQMD: Cluster Queue Manager Details

The CQMD view provides information about the definition and usage of a cluster queue manager. The CQMD view, shown in Figure 7-6, is displayed when you hyperlink from the CQM view or when you type **CQMD** on the **COMMAND** line.

Figure 7-6 CQMD View

```
Qmgr Type............ NORMAL              Queue Manager Name.. CSQA
  Suspend.............. NO                  Cluster Name........ Rox_Cluster
  Cluster Date......... 1999-10-20          Qmgr Identifier..... CSQA.B29F53F
  Cluster Time......... 10.44.53            Qmgr Definition Type Cluster Rece

  Channel Attributes...                     Channel Attributes..

  Transport Type....... TCP                 Channel name........ TO.CSQA
  User Id..............                     Description......... (none)
  Password.............                     Channel Status......

  Msg Conversion....... NO                  Put Authority....... DEFAULT
  Batch Size...........        50           Network Priority....        0
  Batch Interval.......         0           NPM Speed........... FAST
  Max Message.........   4194304           Heartbeat Interval..      300
  Sequence Wrap........ 999999999
  Disconnect Interval..      6000           Connection Name..... 172.17.8.92(
  Short Retries........        10           TP Name............. (none)
       Interval........        60           Modename............ (none)
  Long  Retries........ 999999999
       Interval........      1200           Security Exit.......
  Msg  Retries.........         0            Name................ (none)
       Interval........         0            User Data.......... (none)
                                           Message Exit........
  Message Channel Agent                     Name................ (none)
   Name................ (none)              User Data.......... (none)
```

There are no line commands or overtype fields for the CQMD view.

CQMD View Primary Commands

Table 7-9 lists the primary commands you can enter on the command line on the CQMD view.

Table 7-9 CQM View Primary Commands (Part 1 of 2)

Command	Action
FORce	halt processing of a cluster queue manager using the FORCE option
REFresh	delete the current cluster information so that the repository is refreshed

Table 7-9 CQM View Primary Commands (Part 2 of 2)

Command	Action
RST	delete the queue manager from the cluster
SUSpend	halt processing of a cluster queue manager
REMove	delete the queue manager from the cluster using the FORCEREMOVE option
RSM	activate a suspended cluster queue manager

CQMD View Hyperlinks

Table 7-10 lists the CQMD view fields from which you can hyperlink and the destination for each link.

Table 7-10 CQMD View Hyperlinks

Field	View	Information
Security Exit	CQMDX	cluster channel exit
Message Exit	CQMDX	cluster channel exit
Send Exit	CQMDX	cluster channel exit
Receive Exit	CQMDX	cluster channel exit
Msg-Retry Exit	CQMDX	cluster channel exit

CQMDX: Cluster Channel Exits

Figure 7-7 shows the CQMDX view, which displays all exits defined for the cluster channel, is displayed when you hyperlink from the CQMD view or when you type **CQMDX** on the **COMMAND** line.

Figure 7-7 CQMDX View

```
>W1 =CQMDX=============BCLC=====*========02SEP2003==15:34:08====MVMQS====D====1
   Security Exit.
    Name......... SCYEXIT
    User Data.... scydata

   Message Exit..
    Name......... MSGEXIT1
    Name.........
    Name.........
    Name.........
    Name.........
    Name.........
    Name.........
    User Data.... msgdata1
    User Data....
    User Data....
    User Data....
    User Data....
    User Data....
```

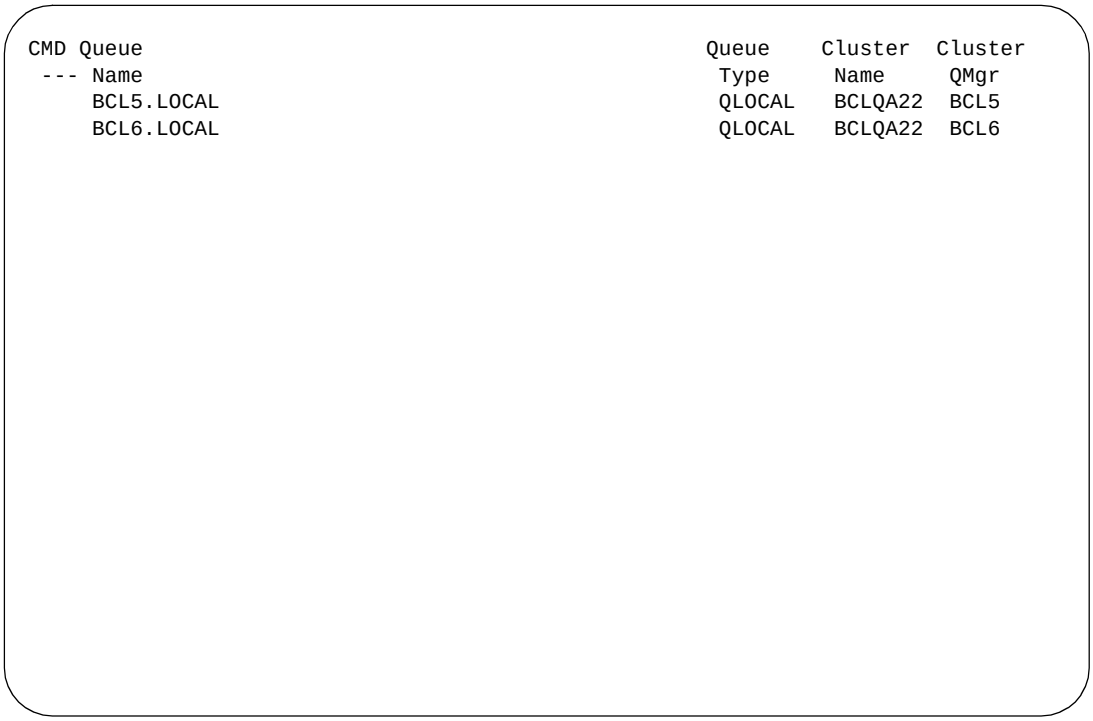
There are no commands or overtype fields for the CQMDX view.

Note: You can change the data from the CHNLX view.

CQZ: Cluster Queue Summary

The CQZ view displays a summary of all cluster queues. The queues are listed by queue name. The CQZ, shown in Figure 7-8, is displayed when you type **CQZ** on the **COMMAND** line.

Figure 7-8 CQZ View



There are no primary commands, line commands, or overtype fields for the CQZ view.

CQZ View Hyperlinks

Table 7-11 lists the CQZ view fields from which you can hyperlink and the destination for each link.

Table 7-11 CQZ View Hyperlinks (Part 1 of 2)

Field	View	Information
Queue Name	CQ	information on the queue manager and the cluster queues
Queue Type	LQD	details of the cluster queue

Table 7-11 CQZ View Hyperlinks (Part 2 of 2)

Field	View	Information
Cluster Name	CLUSTER	an overview of the queue managers in each cluster in the current context
Cluster QMgr	CQM	an overview of the cluster queue manager

Chapter 8 Coupling Facility Manager

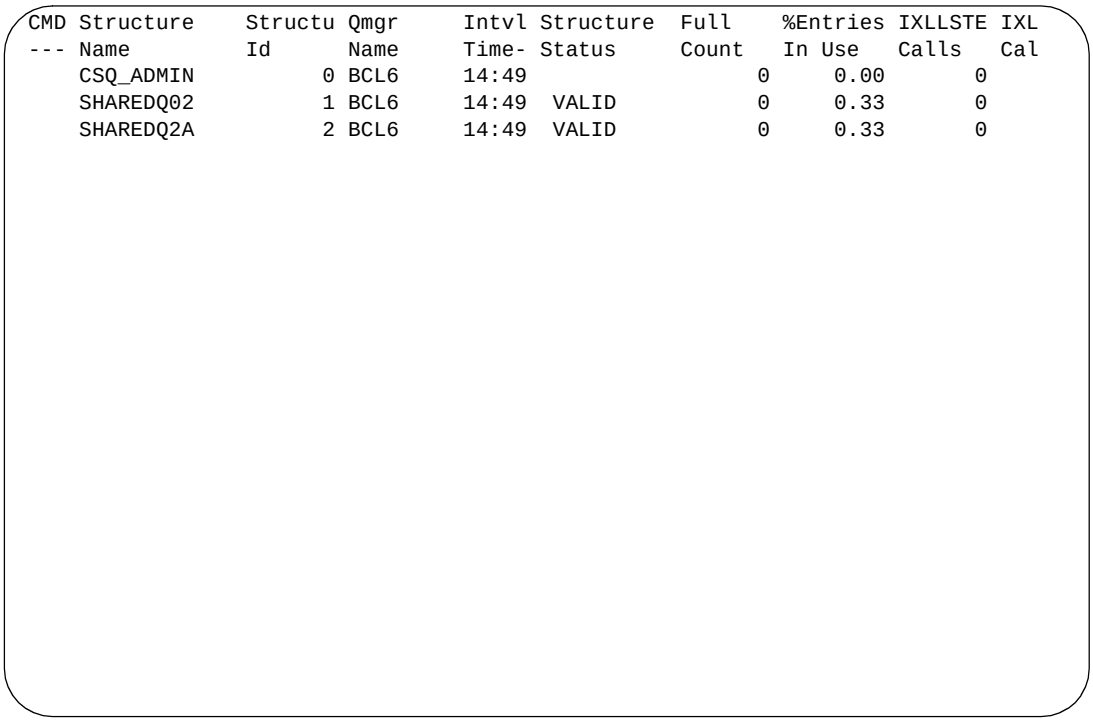
The queue manager stores shared messages and shared queues in the coupling facility. The Coupling Facility Manager views provide information about coupling facility usage by the queue.

This chapter discusses the following topics:

CF: Coupling Facility Manager

The CF view provides an overview of the use of the Coupling Facility by the MVS queue manager. The CF view, shown in Figure 8-1, is displayed when you hyperlink from the EZQMVS or EZQMMVS views, or when you type **CF** on the **COMMAND** line.

Figure 8-1 CF View



```
CMD Structure    Structu Qmgr     Intvl Structure  Full    %Entries IXLLSTE IXL
--- Name         Id      Name     Time- Status     Count   In Use   Calls   Cal
    CSQ_ADMIN          0 BCL6     14:49                  0     0.00       0
    SHAREDQ02          1 BCL6     14:49  VALID           0     0.33       0
    SHAREDQ2A          2 BCL6     14:49  VALID           0     0.33       0
```

There are no primary commands, line commands, or overtype fields for this view.

CF View Hyperlink

Table 8-1 lists the CF view fields from which you can hyperlink and the destination for the links.

Table 8-1 CF View Hyperlink

Field	View	Information
Structure Name	CFD	detailed statistical analysis of the usage of the Coupling Facility by the queue manager
Structure ID		

CFD: Coupling Facility Manager Detail

The CFD view provides a detailed statistical analysis of the usage of the Coupling Facility by the queue manager. The view displays usage for one specific Coupling Facility structure. Counts and rates are provided for three time frames. These time frames are explained in Table 8-2.

Table 8-2 CFD Time Frames

Time Frame	Description
Realtime	collected every ten seconds from the SMF115 record created by the queue manager
Interval	accumulated from the real time data for a period of time defined by the IRRI value in the BBIISP00 member in BBPARM It is reset to 0 at the end of the IRRI.
Session	accumulated from the realtime data over a 24-hour period It is reset to 0 at 12:00 midnight (local time).

The CFD view, shown in Figure 8-2, is displayed when you hyperlink from the CF view or when you type **CFD** on the **COMMAND** line.

Figure 8-2 CFD View

```
Queue Mgr.... BCL6
Struc Name... CSQ_ADMIN
Struc Id.....        0
Struc Status.

Entries......
 Total.......        0
 In Use......        0
 % In Use....     0.00
                          Realtime            Interval            Session
Structure....
 Full States.        0          0.00        0       0.00        0       0.00
 Max Entries.        0                      0                  15
 Max Elements        0                      0                 132

IXLLSTE......
 # Calls.....        0          0.00        0       0.00        4       0.00
 Redrives....        0          0.00        0       0.00        0       0.00
Time........        0           0.0         0        0.0       40        9.9

IXLLSTM......
 # Calls.....        0          0.00        0       0.00        0       0.00
 Redrives....        0          0.00        0       0.00        0       0.00
 Time........        0           0.0        0        0.0        0        0.0
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

CFSS: Coupling Facility Structure and Status

The CFSS view, shown in Figure 8-3, provides an overview of the backup and recovery parameters for a Coupling Facility application structure if it has been defined.

Figure 8-3 CFSS View

```
CURR WIN ===> 1        ALT WIN ===>
>W1 =CFSS==============AMQC=====*========04AUG2003==15:27:29====MVMQS====D===
CMD Structure    Struct Struct   Struc Alter      Alter Bckp Backup     Bckp
--- Name         Id     Type     Level Date       Time  QMGR Date       Time
    ABCD              1 APPL         2 2003-07-16 16.16
    ABCNEW            2 APPL         2 2003-05-07 12.05
    A1GHFHG           3 APPL         2 2003-07-29 14.35
    A12345678900      4 APPL         2 2003-05-15 10.08
    A13456789012      5 APPL         2 2003-05-05 17.46
    A23456789012      6 APPL         2 2003-05-07 16.40
    A93456789012      7 APPL         2 2003-06-06 11.09
    CFABC             8 APPL         3 2003-07-18 14.19
    CFABCDE           9 APPL         2 2003-07-18 14.23
    CFABCDEF         10 APPL         3 2003-07-18 14.24
    CFCCC            11 APPL         2 2003-06-06 15.44
    CFF42            12 APPL         2 2003-06-17 13.31
    CF1              13 APPL         3 2003-06-17 17.13
    CF11             14 APPL         2 2003-06-06 16.03
    CF42             15 APPL         2 2003-06-17 13.43
    E234567890       16 APPL         2 2003-04-16 13.46
    LAMBCL           17 APPL         3 2003-05-29 15.33 BCL3 2003-04-09 16.42
    MAXCF001         18 APPL         3 2003-06-23 09.01 MCM8 2003-06-23 09.01
    QSH2             19 APPL         3 2003-05-12 17.03 AMQC 2003-05-12 17.03
    SHAREDQ01        20 ADMIN        3 2003-06-06 12.42 AMQC 2003-05-12 16.59
    SHAREDQ02        21 ADMIN        3 2003-06-11 13.35 AMQC 2003-05-12 16.59
```

CFSS View Line Commands

Table 8-3 lists the CFSS view Line commands. These commands are available only for WebSphere MQ version 5.3 and later.

Table 8-3 CFSS View Line Commands

Command	Description
ADD structurename	Define the backup and recovery parameters for a Coupling Facility application structure.
DEL structurename	Delete a CF application structure definition.
BCK	Initiate Backup of an Application Structure.
REC	Initiate a normal recovery for a Coupling Facility application structure. This command requires that you supply a parameter indicating the recovery type.

CFSSD: Coupling Facility Structure and Status Detail

The CFSSD view, shown in Figure 8-4, provides a detailed look at the definition and status of the Coupling Facility structures defined to WebSphere MQ.

Figure 8-4 CFSSD View

```
CURR WIN ===> 1        ALT WIN ===>
>W1 =CFSSD=============AMQC=====*========04AUG2003==15:25:23====MVMQS====D====
  Structure Info....
   Queue Manager.... AMQC
   Structure Name... ABCD
   Description...... DD..
   Structure Id.....        1
   Status.......... NOTFOUND
   Structure Type... APPL
   Recovery......... NO
   Structure Level..        2
   Structure Size...        0
   Entries In Use...
   Structure Entries
   Size Used........
   Alter Date....... 2003-07-16
   Alter Time....... 16.16.55
   Fail Date........
   Fail Time........
  Backup Entries....
   Backup QMGR......
   Backup Date......
   Backup Time......
   Backup Status....
   Backup Size......        0
   Backup Start RBA.
```

CFSSD View Primary Commands

Table 8-3 lists the CFSSD view primary commands. These commands are available only for WebSphere MQ version 5.3 and later.

Table 8-4 CFSSD View Primary Commands

Command	Description
ADD structurename	Define the backup and recovery parameters for a Coupling Facility application structure.
DELETE structurename	Delete a CF application structure definition.

Table 8-4 CFSSD View Primary Commands

Command	Description
BACKUP interval	Initiate Backup of an Application Structure. Optionally, you supply a parameter that indicates how long (in seconds) to wait before initiating the Backup.
Recover type	Initiate recovery for a Coupling Facility application structure. This command requires that you supply a parameter indicating the recovery type. Valid values: • **NORMAL** - Perform a true recovery on the CF structures • **PURGE** - Recover to empty CF structures. Any messages in the CF structures are lost.

Chapter 9 DB2 Manager

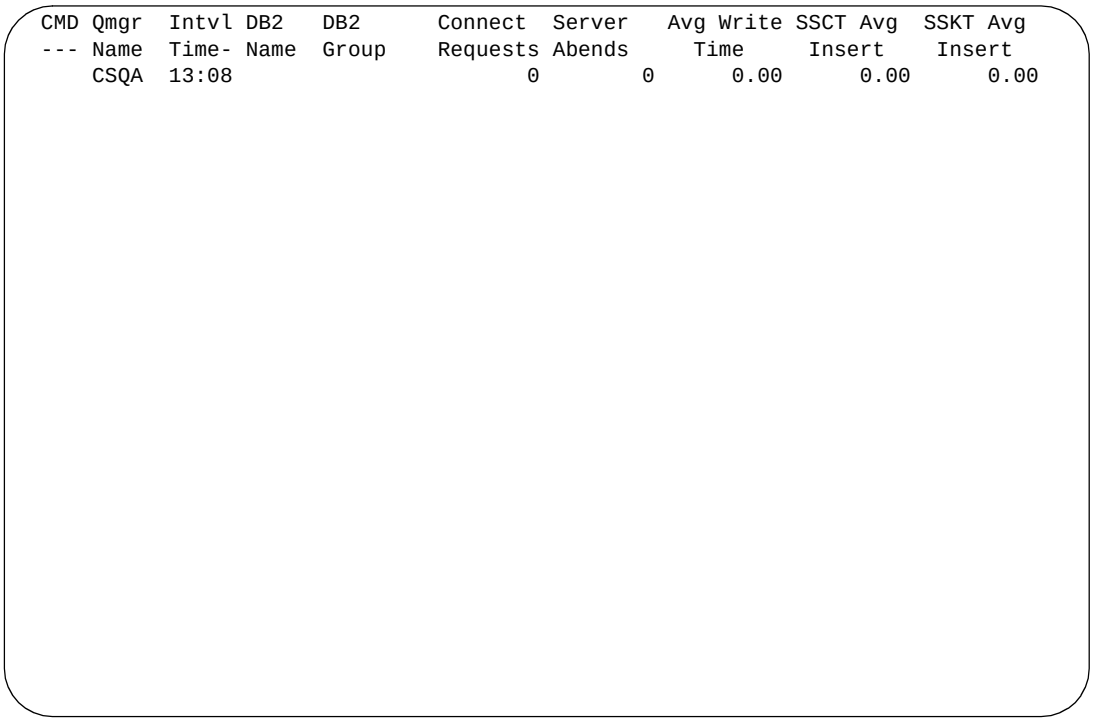
The DB2 Manager views provide information of the use of DB2 by the MVS queue manager.

This chapter discusses the following topics:

DB2: DB2 Manager

The DB2 view provides an overview of the use of DB2 by the MVS queue manager. The DB2 view, shown in Figure 9-1, is displayed when you hyperlink from the EZQMVS or EZQMMVS views, or when you type **DB2** on the **COMMAND** line.

Figure 9-1 DB2 View



```
CMD Qmgr  Intvl DB2   DB2      Connect  Server   Avg Write SSCT Avg  SSKT Avg
--- Name  Time- Name  Group    Requests Abends     Time     Insert    Insert
    CSQA  13:08                      0        0      0.00      0.00      0.00
```

There are no primary commands, line commands, or overtype fields for the DB2 view.

DB2 View Hyperlinks

Table 9-1 shows the DB2 view fields from which you can hyperlinks and the destination for the links.

Table 9-1 DB2 View Hyperlinks (Part 1 of 2)

Field	View	Information
Qmgr Name	QMD	queue manager details
Connect Requests	DB2D	detailed statistics of DB2 calls made by the queue manager

Table 9-1 DB2 View Hyperlinks (Part 2 of 2)

Field	View	Information
Server Abends	DB2D	detailed statistics of DB2 calls made by the queue manager
Avg Write Time	DB2RTIME	detailed statistics of the amount of time the DB2 calls made on behalf of the shared sync key table(s)
SSCT Avg Insert	DB2CTIME	detailed statistical analysis of the amount of time the DB2 calls made on behalf of the shared channel status table(s)
SSKT Avg Insert	DB2KTIME	provides a detailed statistical analysis of the amount of time the DB2 calls (made by the MVS queue manager) took

DB2D: DB2 Manager Details

The DB2D view provides a detailed statistical analysis of the DB2 calls made by the queue manager. The DB2D view, shown in Figure 9-2, is displayed when you type **DB2D** on the **COMMAND** line. All DB2 detail views (DB2D, DB2CTIME, DB2KTIME, DB2RTIME) show counts and rates for three time frames. These time frames are explained in Table 9-2.

Table 9-2 DB2D Time Frames

Time Frame	Description
Realtime	collected every 10 seconds from the SMF115 record created by the queue manager
Interval	accumulated from the realtime data for a period defined by the IRRI value in the BBIISP00 member in BBIPARM It is reset to 0 at the end of the IRRI.
Session	accumulated from the realtime data over a 24 hour period. It is reset to 0 at midnight local time

Figure 9-2 DB2D View

```
Queue Manager..... CSQA
 DB2 Subsystem.....
 DB2 Sharing Group.
                            Realtime            Interval            Session

 Server Tasks......
  Defined..........        0                   0                   0
  Active...........        0                   0                   0
  Abends...........        0                   0                   0
  Max q-depth......        0                   0                   0

 Requests..........
  Connect..........        0     0.00          0     0.00          0     0.00
  Disconnect.......        0     0.00          0     0.00          0     0.00
  Requeues.........        0     0.00          0     0.00          0     0.00
  Deletes..........        0     0.00          0     0.00          0     0.00
  List.............        0     0.00          0     0.00          0     0.00
  Read.............        0     0.00          0     0.00          0     0.00
  Update...........        0     0.00          0     0.00          0     0.00
  Write............        0     0.00          0     0.00          0     0.00

 SSCT Requests.....
  Select...........        0     0.00          0     0.00          0     0.00
  Insert...........        0     0.00          0     0.00          0     0.00
  Update...........        0     0.00          0     0.00          0     0.00
  Delete...........        0     0.00          0     0.00          0     0.00
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the DB2D view.

DB2CTIME: DB2 Call Times Detail

The DB2CTIME view provides a detailed statistical analysis of the amount of time the DB2 calls made by the MVS queue manager took. These calls are those made on behalf of the shared channel status table(s). Times (in milliseconds) and average times are provided for three time frames. The DB2CTIME view, shown in Figure 9-3, is displayed when you type **DB2CTIME** on the **COMMAND** line.

Figure 9-3 DB2CTIME View

```
Queue Manager CSQA
DB2 Subsystem
                         Realtime            Interval            Session

SSCT - Select
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0

SSCT - Insert
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0

SSCT - Update
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0

SSCT - Delete
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the DB2CTIME view.

DB2KTIME: DB2 Call Times Detail

The DB2KTIME view provides a detailed statistical analysis of the amount of time the DB2 calls made by the MVS queue manager took. These calls are those made on behalf of the shared sync key table(s). The DB2KTIME view, shown in Figure 9-4, is displayed when you type **DB2KTIME** on the **COMMAND** line.

Figure 9-4 DB2KTIME View

```
Queue Manager CSQA
DB2 Subsystem
                        Realtime            Interval            Session

SSKT - Select
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0

SSKT - Insert
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0

SSKT - Delete
 TCB Time....        0      0.00         0      0.00         0      0.00
 SQL Time....        0      0.00         0      0.00         0      0.00
 Overhead....        0      0.00         0      0.00         0      0.00
 Max TCB Time        0                   0                   0
 Max SQL Time        0                   0                   0
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the DB2KTIME view.

DB2RTIME: DB2 Call Times Detail

The DB2RTIME view provides a detailed statistical analysis of the amount of time the DB2 calls made by the MVS queue manager took. The DB2RTIME view, shown in Figure 9-5, is displayed when you type **DB2RTIME** on the **COMMAND** line.

Figure 9-5 DB2RTIME View

```
Queue Manager CSQA
 DB2 Subsystem
                          Realtime            Interval            Session
 Delete.......
  TCB Time....        0      0.00         0      0.00         0      0.00
  SQL Time....        0      0.00         0      0.00         0      0.00
  Overhead....        0      0.00         0      0.00         0      0.00
  Max TCB Time        0                   0                   0
  Max SQL Time        0                   0                   0

 List.........
  TCB Time....        0      0.00         0      0.00         0      0.00
  SQL Time....        0      0.00         0      0.00         0      0.00
  Overhead....        0      0.00         0      0.00         0      0.00
  Max TCB Time        0                   0                   0
  Max SQL Time        0                   0                   0

 Read.........
  TCB Time....        0      0.00         0      0.00         0      0.00
  SQL Time....        0      0.00         0      0.00         0      0.00
  Overhead....        0      0.00         0      0.00         0      0.00
  Max TCB Time        0                   0                   0
  Max SQL Time        0                   0                   0

 Update.......
  TCB Time....        0      0.00         0      0.00         0      0.00
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the DB2RTIME view.

Chapter 10 Dead-Letter Queue Messages

The dead-letter queue messages views provide information about messages that have been placed on the dead-letter queue.

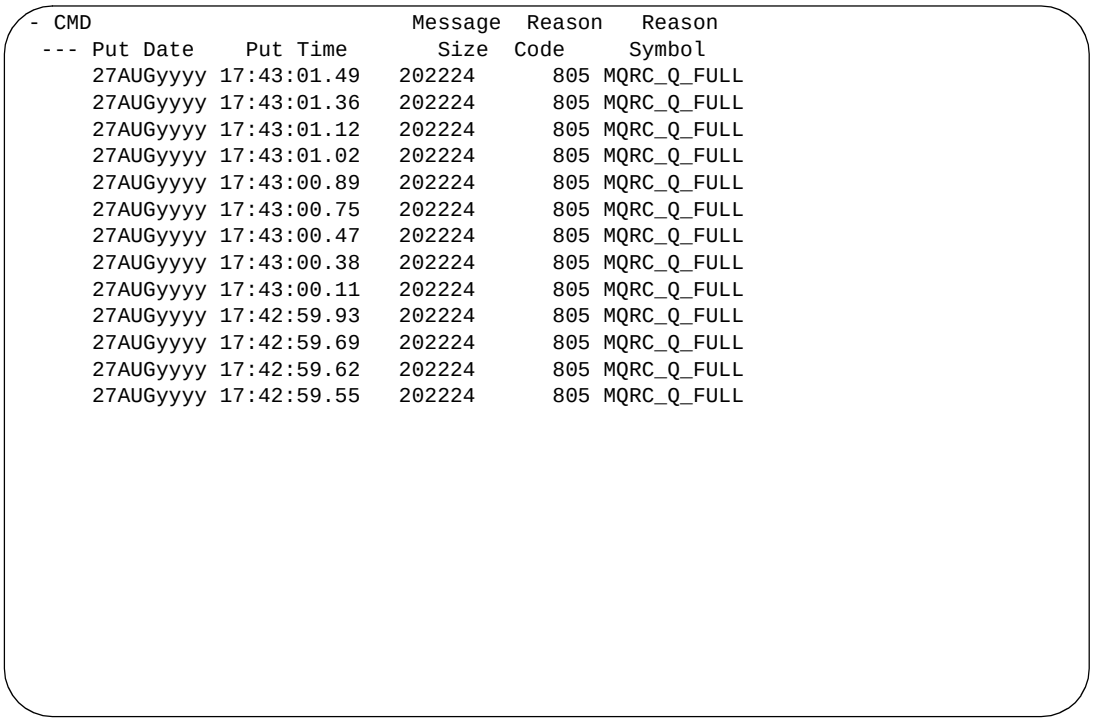
This chapter discusses the following topics:

DLQM: Dead-Letter Queue Messages

The DLQM view lists the messages on the dead-letter queue in the current context, showing the original destination for each message, as well as the time and the reason each message was put on the dead-letter queue.

The DLQM view, shown in Figure 10-1, is displayed when you hyperlink from Dead Letter Queue on the EZQQI menu, or when you type **DLQM** on the **COMMAND** line.

Figure 10-1 DLQM View



```
- CMD                          Message  Reason   Reason
 --- Put Date    Put Time        Size  Code     Symbol
     27AUGyyyy 17:43:01.49   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:01.36   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:01.12   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:01.02   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:00.89   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:00.75   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:00.47   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:00.38   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:43:00.11   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:42:59.93   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:42:59.69   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:42:59.62   202224      805 MQRC_Q_FULL
     27AUGyyyy 17:42:59.55   202224      805 MQRC_Q_FULL
```

Before you can view the messages on a dead-letter queue, the queue must be enabled for MQGET requests.

DLQM View Primary Commands

Table 10-1 lists the primary commands you can enter on the command line to requeue messages on the DLQM view.

Table 10-1 DLQM View Primary Commands

Command	Action
REQueue queuename	requeue the messages(s) to the queue named in the specified Original Destination Queue field. Note: REQueue can be used only when the value in the Format field is MQDEAD.
REQueue queuename pattern	

DLQM View Line Commands

Table 10-2 shows the line commands you can use to perform actions against an entity on a DLQM view line.

Table 10-2 DLQM View Line Commands

Command	Action
DEL	delete the message from the dead-letter queue
REQ	requeue the message to the queue named in the Original Destination Queue field

DLQM View Overtype Field

Table 10-3 shows the field you can overtype on the DLQM view and the value you can use.

Table 10-3 DLQM View Overtype Field

Overtype Field	Value
Original Destination Queue	name of the queue to which the message is to be queued
Note: You can scroll to the right to display the entire queue field.	

DLQM View Hyperlinks

Table 10-4 lists the DLQM view fields from which you can hyperlink and the destination for each link.

Table 10-4 DLQM View Hyperlinks

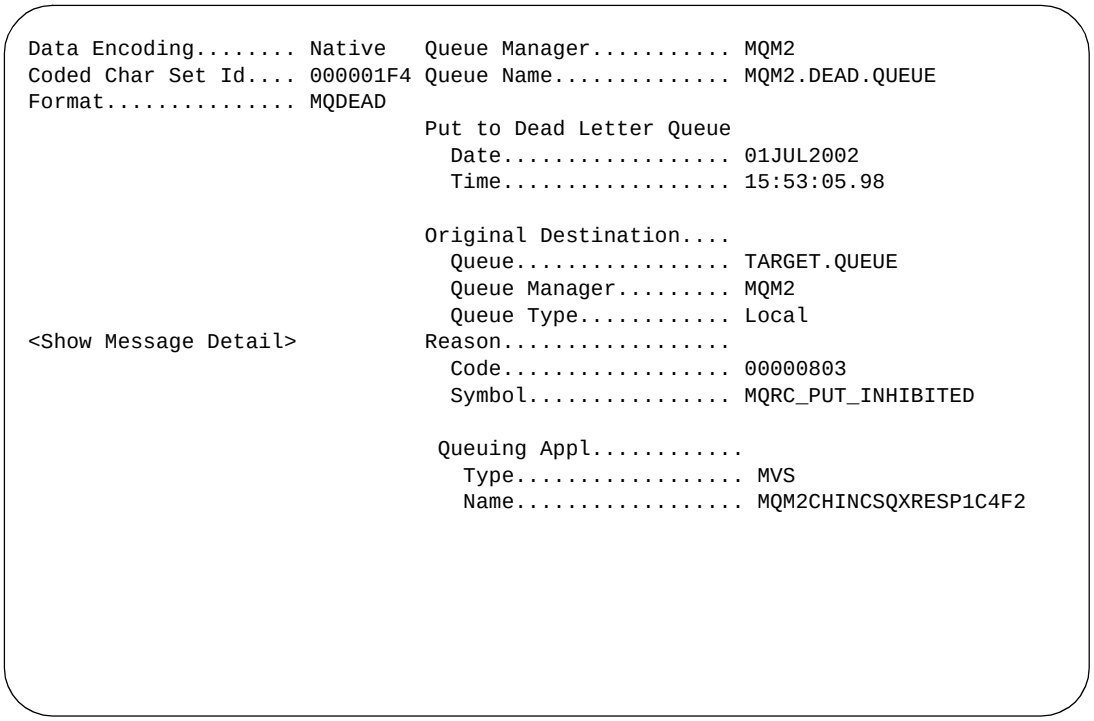
Field	View	Information
Put Date	DLQMD	details about a message on the dead-letter queue
Message Size	MB	content of the message
Original Destination Queue	LQD XQD RQD AQD QUEUES	details about the original destination queue. The hyperlink destination depends on the queue type. The QUEUES view is displayed if the queue type is not known or if the queue is distributed. QUEUES * is displayed if the queue is not found.

DLQMD: Dead-Letter Queue Message Details

The DLQMD view shows details from the dead-letter header of a message on the dead-letter queue. Information is provided about when, how, and why the message was put on the dead-letter queue.

The DLQMD view, shown in Figure 10-2, is displayed when you hyperlink from the DLQM view or when you type **DLQMD** on the **COMMAND** line.

Figure 10-2 DLQMD View



DLQMD View Primary Commands

Table 10-5 lists the primary commands you can enter on the command line to delete or requeue the message described in the DLQMD view.

Table 10-5 DLQMD View Primary Commands

Command	Action
DELete *	delete the message from the dead-letter queue
REQueue *	requeue the message back to the Original Destination Queue

DLQMD View Overtype Field

Table 10-6 shows the field you can overtype on the DLQMD view and the value you can use.

Table 10-6 DLQMD View Overtype Fields

Overtype Field	Value
Original Destination Queue	name of the queue to which the message is to be queued
Note: You can scroll to the right to display the entire queue field.	

DLQMD View Hyperlinks

Table 10-7 shows the DLQMD view fields from which you can hyperlink and the destination for each link.

Table 10-7 DLQMD View Hyperlinks

Field	View	Information
Show Message Detail	LQMD	original descriptor for the message
Show Message Text	MB	message text
Original Destination Queue	LQD XQD RQD AQD QUEUES	details about the original destination queue. The hyperlink destination depends on the queue type. The QUEUES view is displayed if the queue type is not known or if the queue is distributed. QUEUES * is displayed if the queue is not found.
Queue Manager	EZMQS	main EZ menu for queue managers
Original Destination Queue Manager	EZMQS	main EZ menu for queue managers

DLQMZ: Dead-Letter Queue Message Summary

The DLQMZ view displays a summary of messages on the dead letter queue. the Messages are summarized by the reason placed on the queue.

The DLQMZ view, shown in Figure 10-3, is displayed when you hyperlink from the DLQM view or when you type **DLQMZ** on the **COMMAND** line.

Figure 10-3 DLQMZ View

```
CMD Reason                                                  Qmgr
--- Symbol                              Reason Count        Name
    MQFB_DATA_LENGTH_NEGATIVE                7              CSQ3
    MQRC_PUT_INHIBITED                      10              CSQ3
    MQRC_UNKNOWN_OBJECT_NAME                10              CSQ3
    OTMA x'1A' IMS detected error            1              CSQ3
    OTMA x'1C' Synch flag not set            1              CSQ3
```

Chapter 11 Distributed Queuing

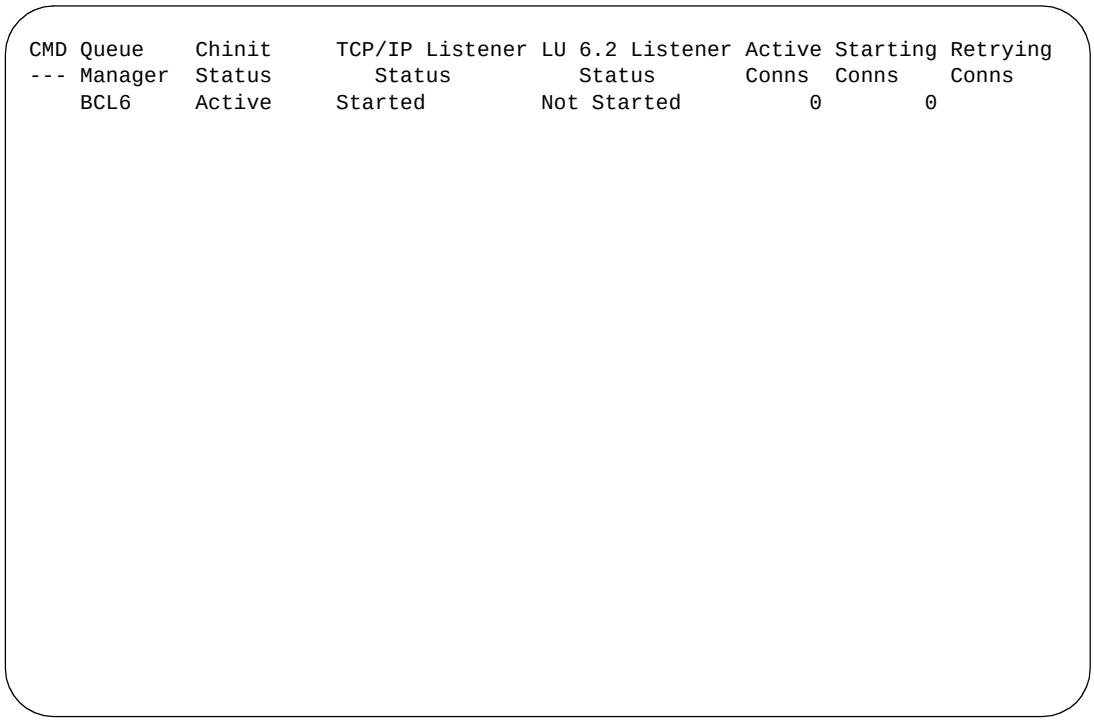
The distributed queuing views provide information about the channel initiator and the listeners.

This chapter discusses the following topics:

DQM: Distributed Queuing

The DQM view provides an overall picture of the channel initiator status and the local listeners. The DQM view, shown in Figure 11-1, is displayed when you hyperlink from the EZQMVS or EZQMMVS view, or when you when you type **DQM** on the **COMMAND** line.

Figure 11-1 DQM View



DQM View Primary Commands

Table 11-1 lists the primary commands you can enter on the **COMMAND** line of the DQM view.

Table 11-1 DQM View Primary Commands (Part 1 of 2)

Command	Action
STARTCHINIT envparm parm	starts the Channel Initiator with the optional envparm or parm data
STARTLSTR TCP/LU62 port/luname group/qmgr	starts the TCP/IP or LU62 listener using the optional TCP/IP port or the LU name. The group/qmgr parameter starts either the group or local listener. The default is the local listener. [1]

Table 11-1 DQM View Primary Commands (Part 2 of 2)

Command	Action
STOPCHINIT	stops the Channel Initiator
STOPLSTR TCP/LU62	stops the TCP/IP or LU62 listener
[1]Valid only if using MVS Queue Managers 5.2 and above.	

DQM View Hyperlinks

Table 11-2 shows the DQM view fields from which you can hyperlink and the destination for the links.

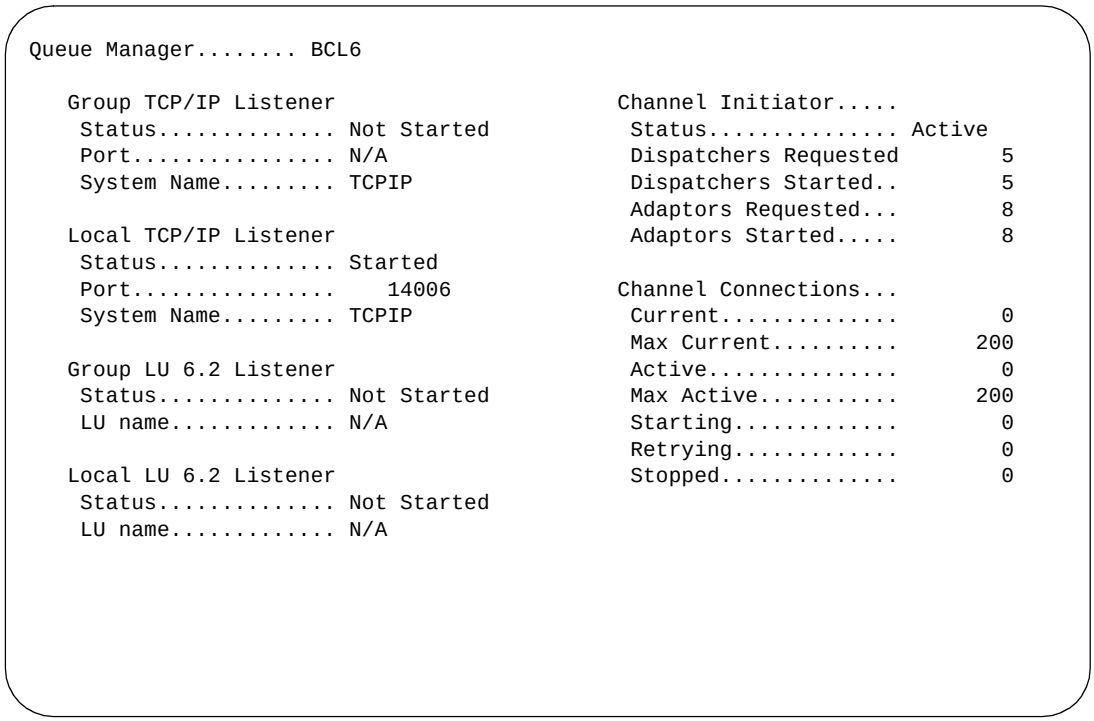
Table 11-2 DQM View Hyperlinks

Field	View	Information
Queue Manager	QMMVSD	details of MVS queue manager
Chinit Status	DQMD	details of the distributed queue
Active	CHANNELS	overview of the channel
Starting		
Retrying		
Stopped Conns		

DQMD: Distributed Queuing Details

The DQMD view shows details on the channel initiator and listeners. The DQMD view, shown in Figure 11-2, is displayed when you when you hyperlink from the DQM view or when you type **DQMD** on the **COMMAND** line.

Figure 11-2 DQMD View



There are no line commands, or overtype fields for the DQMD view.

DQMD View Primary Commands

Table 11-3 lists the primary commands you can enter on the **COMMAND** line of the DQMD view.

Table 11-3 DQMD View Primary Commands (Part 1 of 2)

Command	Action
STARTCHINIT envparm parm	starts the Channel Initiator with the optional envparm or parm data
STARTLSTR TCP/LU62 port/luname	starts the TCP/IP or LU62 listener using the optional TCP/IP port or the LU name

Table 11-3 DQMD View Primary Commands (Part 2 of 2)

Command	Action
STOPCHINIT	stops the Channel Initiator
STOPLSTR TCP/LU62	stops the TCP/IP or LU62 listener

DQMD View Hyperlinks

Table 11-4 shows the DQMD view fields from which you can hyperlink and the destination for the links.

Table 11-4 DQMD View Hyperlinks

Field	View	Information
Queue Manager	QMMVSD	details of MVS queue manager
Current	CHANNELS	overview of the channel
Active		
Starting		
Retrying		
Stopped		

Chapter 12 Events

The EVENTS view displays event messages in a format specific to event messages. The time and date of occurrence and the type of event are shown, along with the associated object for the event. If you are using the Integrated Event Listener (MMAELSR), the event messages are displayed from SYSTEM.ADMIN.<*subsysid pas*>.EVENTS.PUBQ queues. If you are not using the Integrated Event Listener, the event messages are displayed on SYSTEM.ADMIN.* queues, but a specific queue can be shown by specifying it as a parameter or by hyperlinking from LQ or LQD views.

In MAINVIEW for WebSphere version 4.2, you have the option to subscribe or not subscribe to the Integrated Event Listener using QMPROF. For more information, see “Defining Queue Manager Profiles” on page 2-21.

This chapter discusses the following topics:

EVENTS: Events List

The Events List, shown in Figure 12-1, is displayed when you type **EVENTS** on the **COMMAND** line.

Figure 12-1 EVENTS View

```
CMD Put Date   Put Time    Event                       Associated
---   (GMT)      (GMT)     Type                        Resource
    16MAY2002  17:31:03.96 MQRC_Q_MGR_ACTIVE           MCMY
    15MAY2002  21:00:40.23 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  19:37:24.69 MQRC_CHANNEL_STOPPED        SYSTEM.BKR.CONFIG
    15MAY2002  19:36:50.80 MQRC_CHANNEL_STOPPED        SYSTEM.BKR.CONFIG
    15MAY2002  19:20:20.95 MQRC_UNKNOWN_OBJECT_NAME    abc
    15MAY2002  19:20:20.94 MQRC_UNKNOWN_OBJECT_NAME    abc
    15MAY2002  19:20:20.93 MQRC_UNKNOWN_OBJECT_NAME    abc
    15MAY2002  19:20:20.89 MQRC_CHANNEL_STARTED        WSI1NT_TO_MCMY
    15MAY2002  19:18:42.09 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  19:11:48.50 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  19:03:51.88 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  19:03:04.44 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  18:43:01.74 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  18:42:12.29 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  18:41:04.63 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
    15MAY2002  18:40:02.66 MQRC_CHANNEL_STOPPED        WSI1NT_TO_MCMY
```

There are no primary commands for this view.

EVENTS View Line Commands

Table 12-1 lists the line commands you can use to perform actions against an entity on a EVENTS view line.

Table 12-1 EVENTS View Line Commands

Command	Action
DEL	Delete the message from the queue specified in the Queue Name field.
REQ	Requeue the message(s) to the queue specified in the Queue Name Field. Note: REQ can be used only when the value in the Format field is MQDEAD.

EVENTS View Overtype Field

Table 12-2 shows the field you can overtype on the EVENTS view.

Table 12-2 EVENTS View Overtype Field

Overtype Field	Value
Queue	new name of queue to which message will be queued

EVENTS View Hyperlink

Table 12-3 lists the EVENTS view fields from which you can hyperlink and the destination for the links.

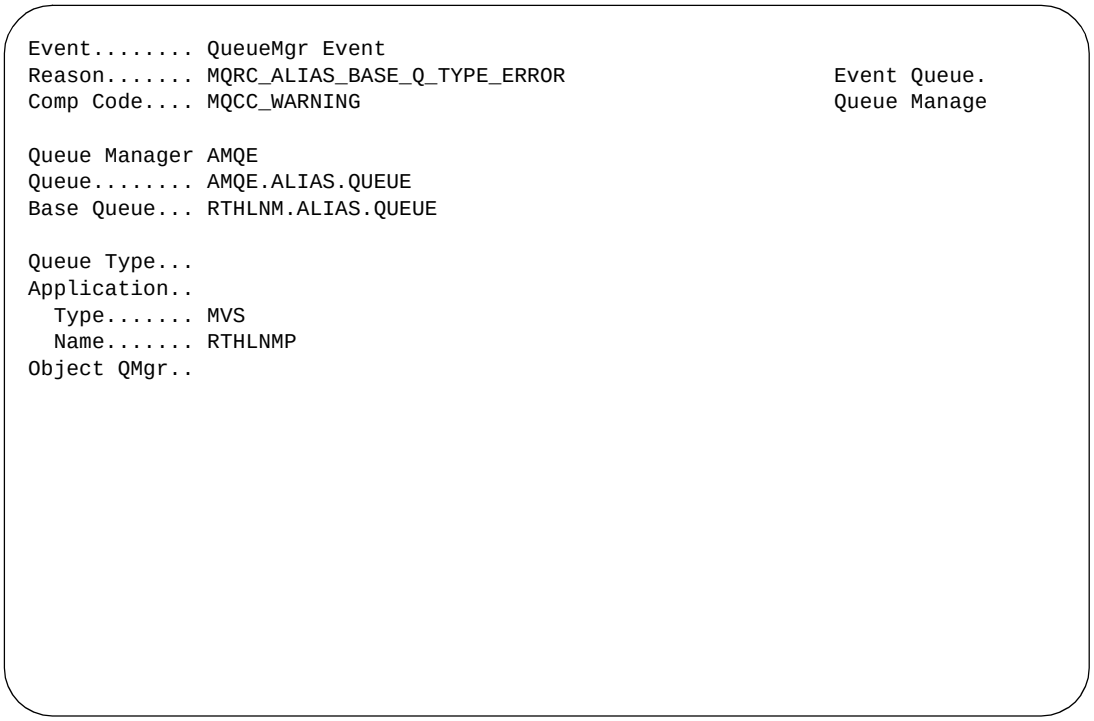
Table 12-3 EVENTS View Hyperlink

Field	View	Information
Put Date	LQMD	Indicates the date (GMT) that the message was put on the current queue.
Event Type	Event view	Identifies the reason why the event was generated.
Message Size	MB	Represents the total length of the message. Includes application data plus any header data added by the queue manager.
Queue	LQD	The name of the queue that the message is currently on.

EVTAB: Event Message - Alias Base

The Event Message - Alias Base, shown in Figure 12-2, is displayed when you hyperlink from a MQRC_ALIAS_BASE event type from the EVENTS view.

Figure 12-2 EVTAB View



There are no primary commands, line commands, overtype fields, or hyperlink fields for this view.

EVTAB View Hyperlink

Table 12-4 lists the EVTAB view fields from which you can hyperlink and the destination for the links.

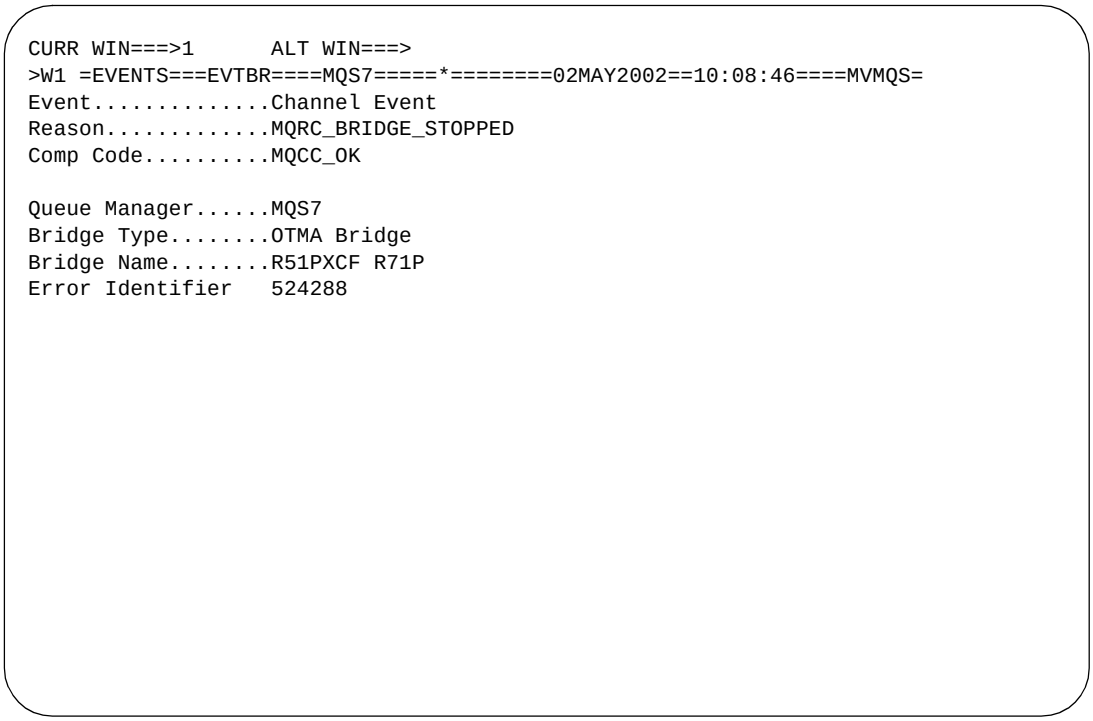
Table 12-4 EVTAB View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.
Base Queue	LQD	Identifies the queue name to which the alias resolves.

EVTBR: Event Message - Bridge

The Event Message - Bridge, shown in Figure 12-3, is displayed when you hyperlink from a MQRC_BRIDGE event type from the EVENTS view.

Figure 12-3 EVTBR View



There are no primary commands, line commands, overtype, or hyperlink fields for this view.

EVTCF: Event Message – Configuration

The EVTCF view, shown in Figure 12-4, is a detail view that shows details about CONFIGURATION events.

The EVTCF view is displayed when you hyperlink from a MQRC_CONFIG_* event type from the EVENTS view.

Figure 12-4 EVTCF View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =EVENTS===EVTCF===(ESAJ=====MCM5====)04AUG2003==16:36:15====MVMQS====D====1
  Event................. Configuation Event
  Reason................ MQRC_CONFIG_REFRESH_OBJECT
  Comp Code............. MQCC_OK

  Queue Manager......... MCM5
  Event Userid.......... CMGALL
  Event Origin.......... Init
  Object Type........... Channel
  Object name........... C400

  Disposition........... Qmanager
  Event Application Name
  Event Application Type No Context
```

There are no primary commands, line commands, overtype fields, or hyperlinks for this view.

EVTCH: Event Message - Channel

The Event Message - Channel, shown in Figure 12-5, is displayed when you hyperlink from a MQRC_CHANNEL_* event type from the EVENTS view.

Figure 12-5 EVTCH View

```
Event.............Channel Event
 Reason............MQRC_CHANNEL_STARTED
 Comp Code.........MQCC_OK

 Queue Manager.....AMQE
 Channel...........TOWQM2
 Xmit Q
 Connection........172.19.135.43
```

There are no primary commands, line commands, or overtype fields for this view.

EVTCH View Hyperlink

Table 12-5 lists the EVTCH view fields from which you can hyperlink and the destination for the links.

Table 12-5 EVTCH View Hyperlink

Field	View	Information
Channel	CHANNELS	The Channel name
Xmit Q	LQD	The transmission queue name

EVTCHST: Event Message - Channel Stop

The Event Message - Channel Stop, shown in Figure 12-6, is displayed when you hyperlink from a MQRC_CHANNEL_* event type from the EVENTS view.

Figure 12-6 EVTCHST View

```
Event.............. Channel Event
  Reason.............. MQRC_CHANNEL_STOPPED                          Event
  Comp Code........... MQCC_FAILED                                  Queue

  Queue Manager....... MCMY
  Channel............. WSI1NT_TO_MCMY
  Xmit Q..............
  Connection..........
  Reason Qualifier.... Channel Stopped With Error

  Error Identifier.... 20009519
  Auxillary Error Data
    Integer 1.........     2085
    Integer 2.........        0
    String 1......... WSI1NT_TO_MCMY
    String 2......... WSI1NT_TO_MCMY
    String 3......... MCMY
  Channel Error Data..
```

There are no primary commands, line commands, or overtype fields for this view.

EVTCHST View Hyperlink

Table 12-6 lists the EVTCHST view fields from which you can hyperlink and the destination for the links.

Table 12-6 EVTCHST View Hyperlink

Field	View	Information
Channel	CHANNELS	The Channel name
Xmit Q	LQD	Identifies the transmission queue name.

EVTNA: Event Message - Not Authorized

The Event Message - Not Authorized is displayed when you hyperlink from a MQRC_NOT_AUTHORIZED_ event type from the EVENTS view.

There are no primary commands, line commands, or overtype fields for this view.

EVTNA View Hyperlink

Table 12-7 lists the EVTNA view fields from which you can hyperlink and the destination for the links.

Table 12-7 EVTNA View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.
Process	PROC	the process that generated the event

EVTQ: Event Message - Queue

The Event Message - Queue, shown in Figure 12-7, is displayed when you hyperlink from a MQRC_PUT_INHIBIT_ event type from the EVENTS view.

Figure 12-7 EVTQ View

```
Event.............QueueMgr Event
 Reason............MQRC_Q_MGR_ACTIVE
 Comp Code.........MQCC_WARNING

 Queue Manager......MQS7
 Reason Qualifier...MQRQ_OK
```

There are no primary commands, line commands, or overtype fields for this view.

EVTQ View Hyperlink

Table 12-8 lists the EVTQ view fields from which you can hyperlink and the destination for the links.

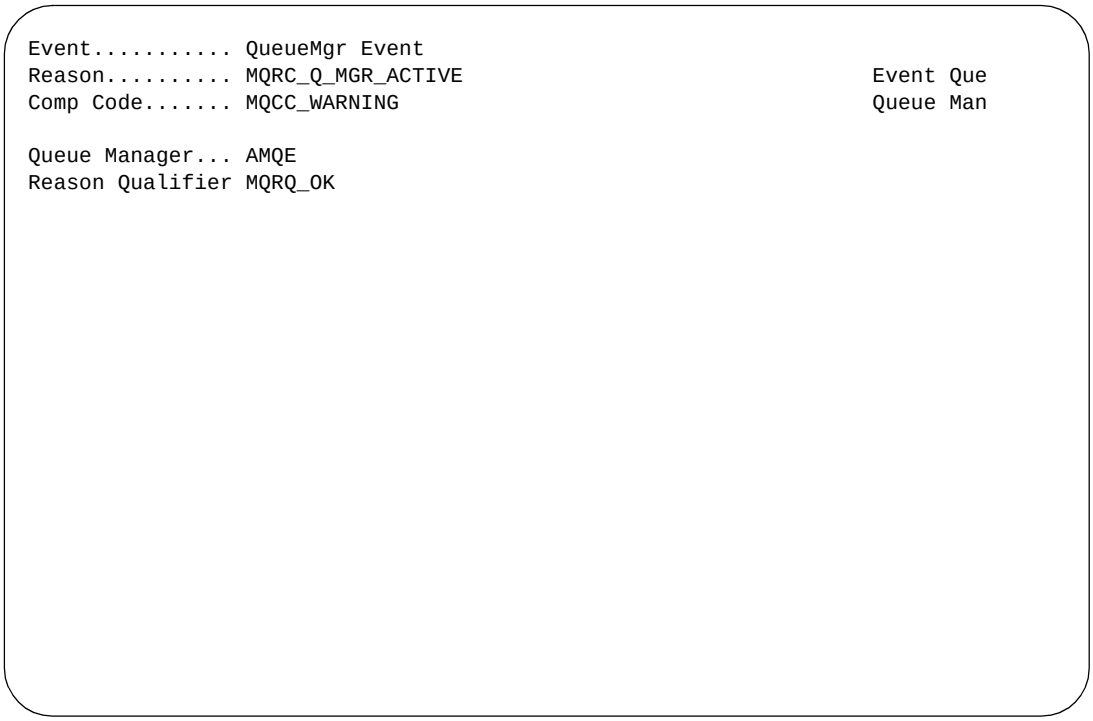
Table 12-8 EVTQ View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.

EVTQM: Event Message - QMgr

The Event Message - QMgr, shown in Figure 12-8, is displayed when you hyperlink from a MQRC_QMGR_* event type from the EVENTS view.

Figure 12-8 EVTQM View

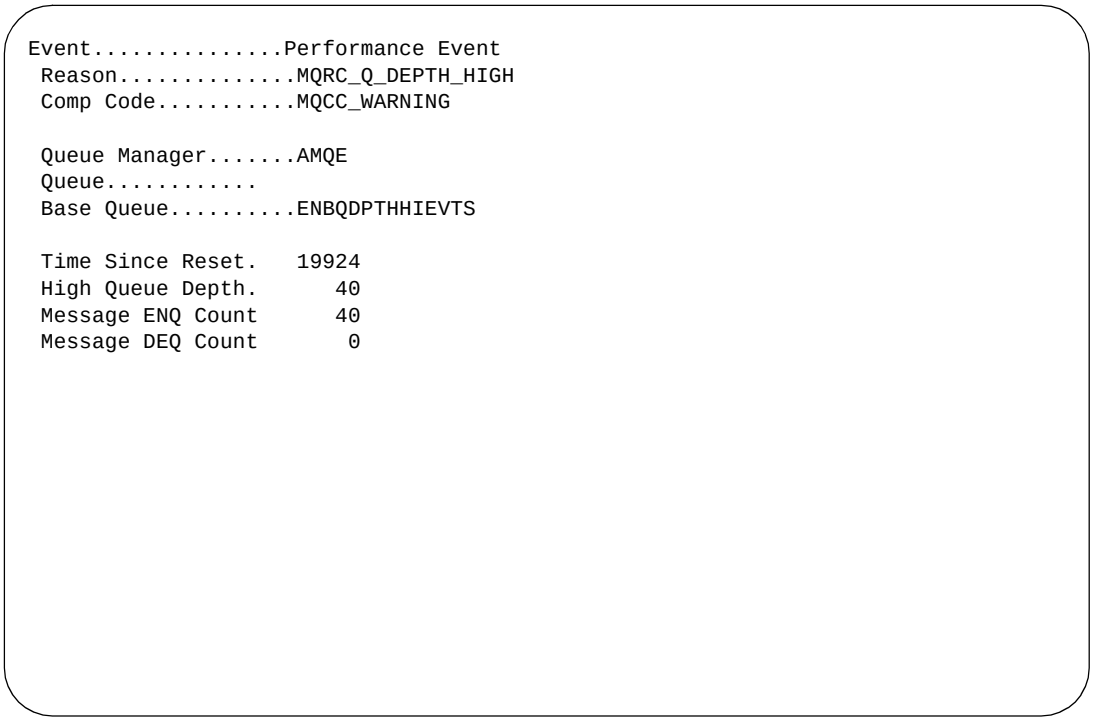


There are no primary commands, line commands, overtype, or hyperlink fields for this view.

EVTQS: Event Message - Queue Stats

The Event Message - Queue Stats, shown in Figure 12-9, is displayed when you hyperlink from a MQRC_PERFORMANCE_* event type from the EVENTS view.

Figure 12-9 EVTQS View



There are no primary commands, line commands, or overtype fields for this view.

EVTQS View Hyperlink

Table 12-9 lists the EVTQS view fields from which you can hyperlink and the destination for the links.

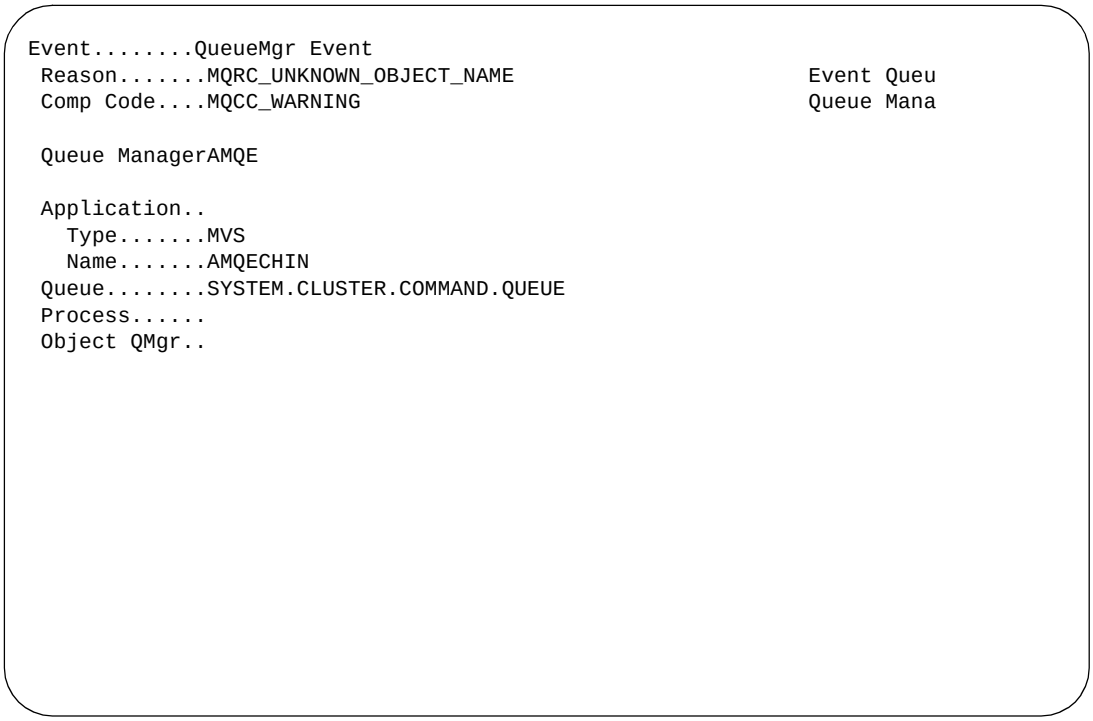
Table 12-9 EVTQS View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.
Base Queue	LQD	what the alias queue name was derived from

EVTUO: Event Message - Unknown Object

The Event Message - Unknown Object, shown in Figure 12-10, is displayed when you hyperlink from a MQRC_UNKNOWN_OBJECT event type from the EVENTS view.

Figure 12-10 EVTUO View



There are no primary commands, line commands, or overtype fields for this view.

EVTUO View Hyperlink

Table 12-10 lists the EVTUO view fields from which you can hyperlink and the destination for the links.

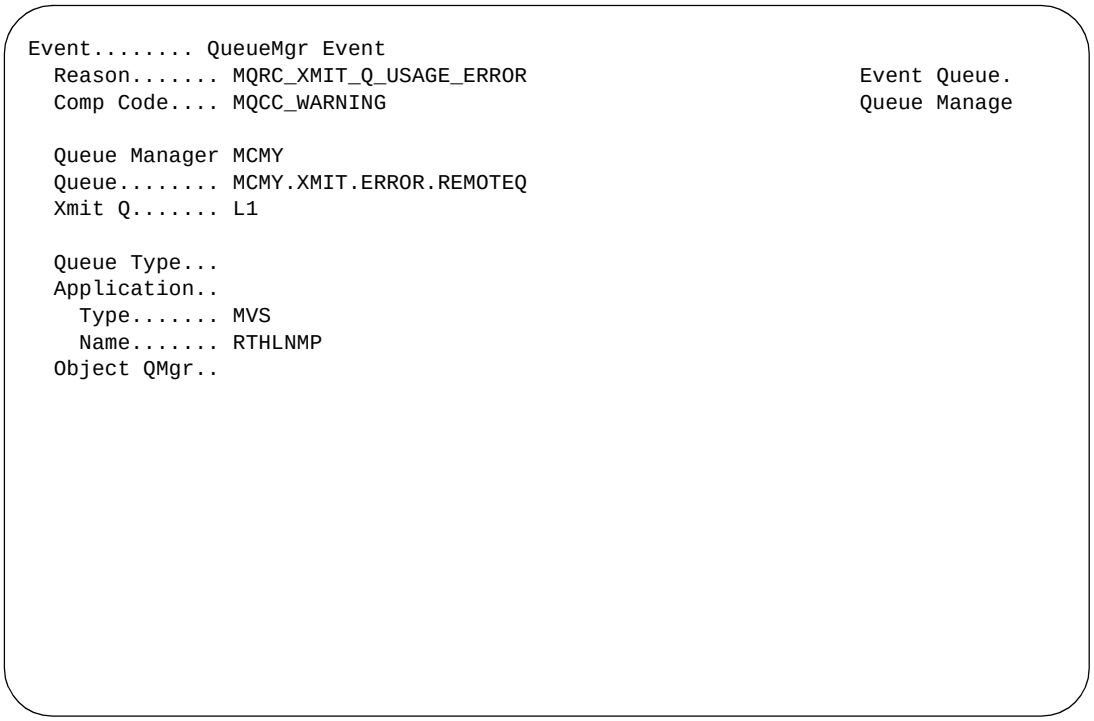
Table 12-10 EVTUO View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.
Process	PROCD	the process that generated the event

EVTXMIT: Event Message - XMIT

The Event Message - XMIT, shown in Figure 12-11, is displayed when you hyperlink from a MQRC_XMIT_Q* event type from the EVENTS view.

Figure 12-11 EVTXMIT View



There are no primary commands, line commands, or overtype fields for this view.

EVTXMIT View Hyperlink

Table 12-11 lists the EVTXMIT view fields from which you can hyperlink and the destination for the links.

Table 12-11 EVTXMIT View Hyperlink

Field	View	Information
Queue	LQD	Identifies the queue on which the event was generated.
Xmit Q	LQD	Identifies the transmission queue name.

EVTZ: Event Summary

The EVTZ view is one of the family of EVENT views. EVTZ provides summary of events.

The Event Summary view is displayed when you type **EVTZ** on the **COMMAND** line of the EZQSSI or EZMQS menus.

By default, this displays all the messages on SYSTEM.ADMIN.* queues, but a specific queue can be shown by specifying it as a parameter or by hyperlinking from the LQ or LQD views. An example of a EVTZ view is shown in Figure 12-12.

Figure 12-12 EVTZ View

```
CMD Event
 --- Type                              Message Count        Queue Manager Name
     MQRC_CHANNEL_STOPPED                      6             CSQA
     MQRC_CHANNEL_STARTED                      2             CSQA
     MQRC_Q_MGR_ACTIVE                         1             CSQA
```

There are no primary commands, line commands, or overtype fields for this view.

EVTZ View Hyperlinks

Table 12-12 lists the EVTZ view fields from which you can hyperlink and the destinations of each link.

Table 12-12 EVTZ View Hyperlinks

Field	View	Information
Event Type	EVENTS	event messages
Message Count	LQM	list of all messages for local queues
Queue	LQD	details of queue

Chapter 13 Initiation Queues

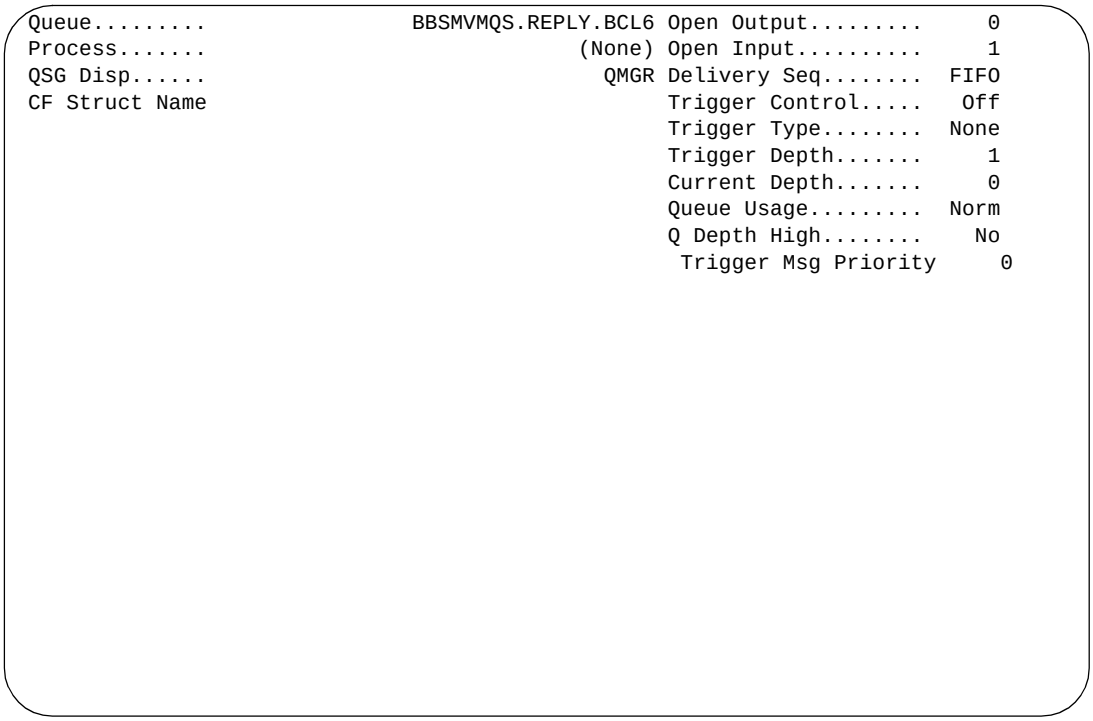
MAINVIEW for WebSphere MQ provides list of queues which have initiation queues specified. The Initiation Queue Summary shows a list of all queues that are indicated as Initiation Queues in queue definitions of other queues.

This chapter discusses the following topics:

IQD: Initiation Queue Detail

The IQD view, shown in Figure 13-1, is displayed when you hyperlink from a IQZ initiation queue or type **IQD <*queuename*>** on the **COMMAND** line.

Figure 13-1 IQD View



There are no primary or line commands for this view.

IQD View Overtype Field

Table 13-1 shows the field you can overtype on the IQD view and the value you can use.

Table 13-1 IQD View Overtype Field (Part 1 of 2)

Overtype Field	Value
Delivery Sequence	message delivery sequence, ‘f’ or ‘fifo’ or ‘p’ or ‘prior’
Trigger Control	trigger control, ‘n’ or ‘on’ or ‘f’ or ‘off’
Trigger Type	Trigger type, ‘n’ or ‘none’ or ‘f’ or ‘first’ or ‘e’ or ‘every’ or ‘d’ or ‘depth’
Trigger Depth	decimal integer up to 999999999

Table 13-1 IQD View Overtype Field (Part 2 of 2)

Overtype Field	Value
Trigger Priority	trigger message priority, 1-digit decimal integer
Queue Usage	‘n’ or ‘normal’ or ‘t’ or ‘x’ or ‘transmission’
Process	up to 48-character string MAINVIEW for WebSphere MQ does not verify the value.
CFSTRUCT	max 12 characters. Include only characters A thru Z, 0 thru 9, and must start with an uppercase letter (A to Z)

IQD View Hyperlink

Table 13-2 lists the IQD view fields from which you can hyperlink and the destination for the links.

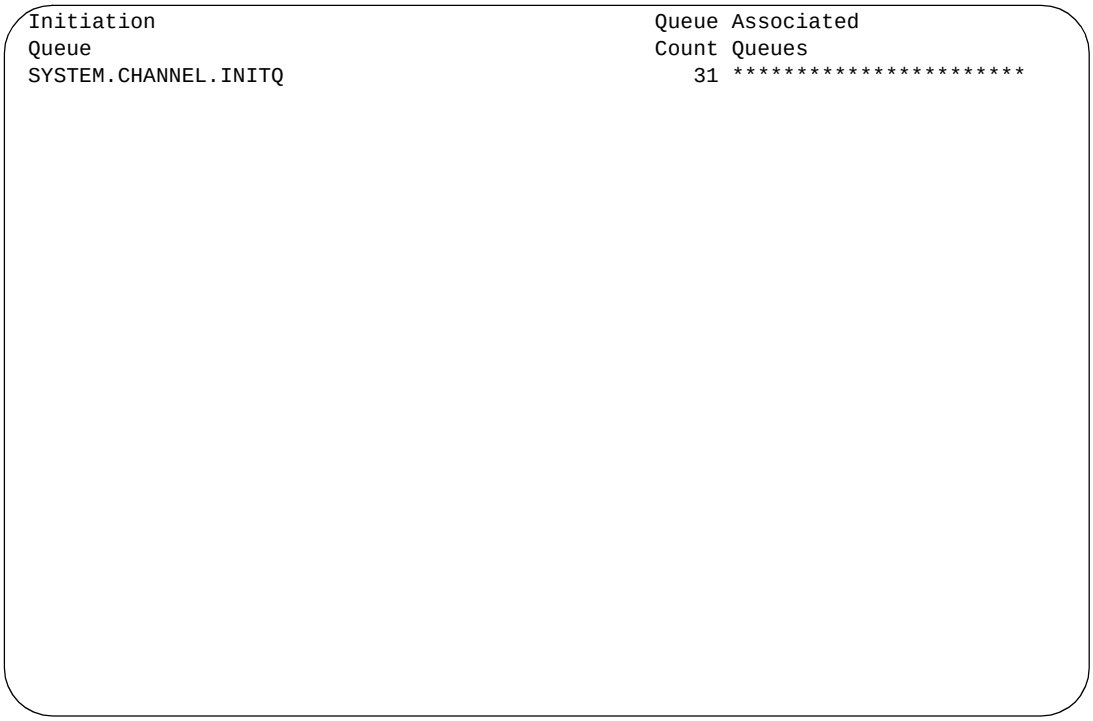
Table 13-2 IQD View Hyperlink

Field	View	Information
Queue	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.
Cur Depth	EZLQMSG	Indicates the current number of messages in the queue. **Note**: If you use expiry times in messages, the actual number of messages may be larger than the number that can be browsed. Expired messages are not deleted until a successful get is issued to the queue.
Process	PROC	The name of the process definition that is invoked when a message is placed on the initiation queue. This attribute can be altered if you have appropriate authorization.

IQZ: Initiation Queue Summary

The IQZ view, shown in Figure 13-2, is displayed when you type **IQZ** on the **COMMAND** line, or when you hyperlink from Initiation Queues on the EZQQI menu.

Figure 13-2 IQZ View



There are no primary commands or overtype fields for this view.

IQZ View Hyperlink

Table 13-3 lists the IQZ view fields from which you can hyperlink and the destination for the links.

Table 13-3 IQZ View Hyperlink

Field	View	Information
Initiation Queue	IQD	The name of the queue that will be used to send trigger messages.
Associated Queues	XQ LQ IQZ	The name of the queue that uses the initiation queue. If there are multiple queues associated with the initiation queue, the hyperlink will expand the view so all associated queues are shown on a separate line.

Chapter 14 Local Queues

The local queue views provide information about the operation and performance of the local queues you are monitoring.

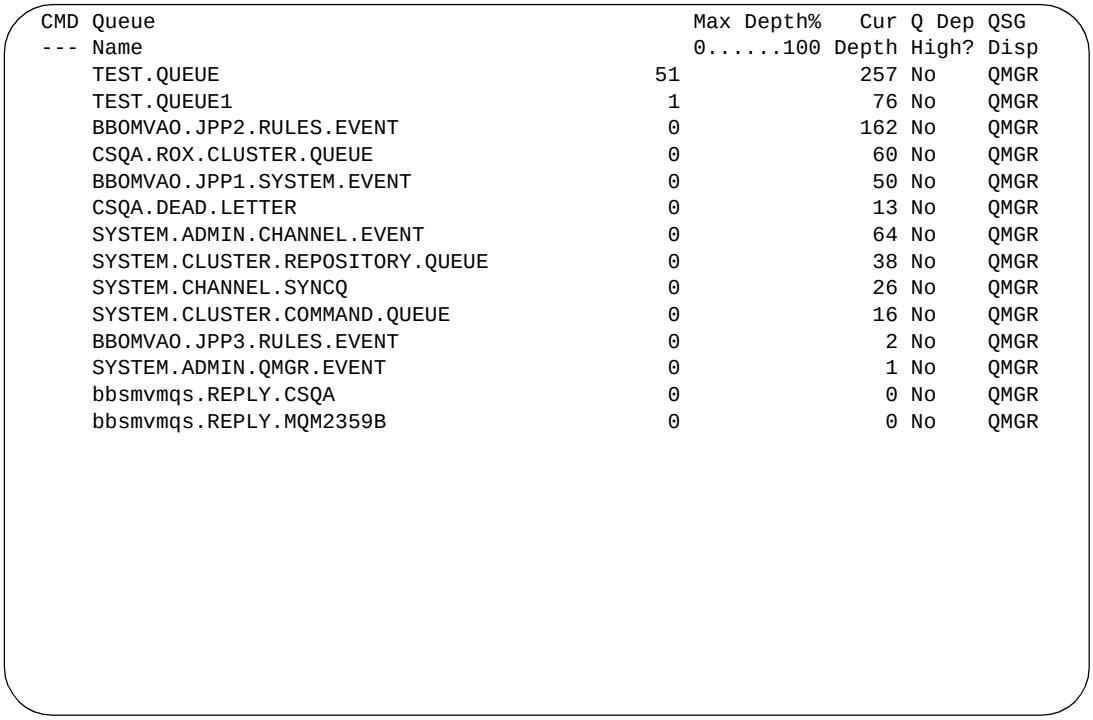
This chapter discusses the following topics:

LQ: Local Queues

The LQ view provides an overview of activity for all local queues with normal usage in the current context. System views, such as the dead-letter queue and the event queues, are included in the LQ view. Transmission queues, which display on the XQ view, are not included in the LQ view. For a description of the transmission queue views, Chapter 34, “Transmission Queues.”

The LQ view, shown in Figure 14-1, is displayed when you select Local Queues from the EZQI or EZQQI views, or when you enter **LQ** on the **COMMAND** line.

Figure 14-1 LQ View



CMD	Queue Name	Max Depth% 0.....100	Cur Depth	Q Dep High?	QSG Disp
	TEST.QUEUE	51	257	No	QMGR
	TEST.QUEUE1	1	76	No	QMGR
	BBOMVAO.JPP2.RULES.EVENT	0	162	No	QMGR
	CSQA.ROX.CLUSTER.QUEUE	0	60	No	QMGR
	BBOMVAO.JPP1.SYSTEM.EVENT	0	50	No	QMGR
	CSQA.DEAD.LETTER	0	13	No	QMGR
	SYSTEM.ADMIN.CHANNEL.EVENT	0	64	No	QMGR
	SYSTEM.CLUSTER.REPOSITORY.QUEUE	0	38	No	QMGR
	SYSTEM.CHANNEL.SYNCQ	0	26	No	QMGR
	SYSTEM.CLUSTER.COMMAND.QUEUE	0	16	No	QMGR
	BBOMVAO.JPP3.RULES.EVENT	0	2	No	QMGR
	SYSTEM.ADMIN.QMGR.EVENT	0	1	No	QMGR
	bbsmvmqs.REPLY.CSQA	0	0	No	QMGR
	bbsmvmqs.REPLY.MQM2359B	0	0	No	QMGR

LQ View Primary Commands

Table 14-1 lists the primary commands you can enter on the command line to delete queues from the LQ view.

Table 14-1 LQ View Primary Commands

Command	Action
DELete queuename DELete queue pattern	deletes the queue from the queue manager The queue must be ***empty.***
DEPurge queuename DEPurge queue pattern	deletes the queue and purge the messages from it
PURge queuename PURge queue pattern	purges the messages from the queue

LQ View Line Commands

Table 14-2 shows the line commands you can use to perform actions against an entity on an LQ view line.

Table 14-2 LQ View Line Commands

Command	Action
ADD	overtype the queue name to create a new queue with identical characteristics
DEL	deletes an ***empty*** queue
DEP	deletes a queue and purge all of its messages
PUR	purge all the messages on the queue

LQ View Overtype Fields

Table 14-3 lists the fields you can overtype on the LQ view and the values you can use.

Table 14-3 LQ View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Delivery Sequence	message delivery sequence, ‘f’ or ‘fifo’ or ‘p’ or ‘prior’
Trigger Control	trigger control, ‘n’ or ‘on’ or ‘f’ or ‘off’
Trigger Type	Trigger type, ‘n’ or ‘none’ or ‘f’ or ‘first’ or ‘e’ or ‘every’ or ‘d’ or ‘depth’

Table 14-3 LQ View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Process	up to 48-character string MAINVIEW for WebSphere MQ will not verify the name.
Trigger Depth	decimal integer up to 999999999
Trigger Priority	trigger message priority, 1-digit decimal integer

LQ View Hyperlinks

Table 14-4 lists the LQ view fields from which you can hyperlink and the destination for each link.

Table 14-4 LQ View Hyperlinks

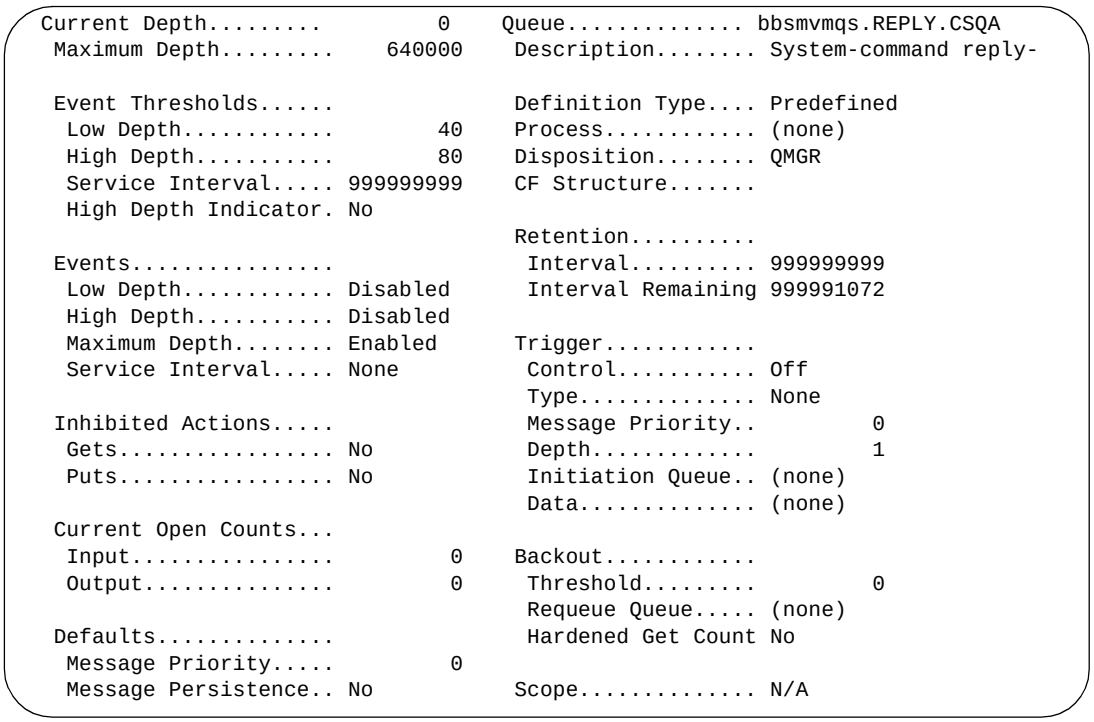
Field	View	Information
Queue Name	LQD	details for the local queue
Cur Depth	EZLQMSG	Message Browse Menu
Process	PROCD	details on the process

LQD: Local Queue Details

The LQD view provides information about the definition and usage of a local queue.

The LQD view, shown in Figure 14-2, is displayed when you hyperlink from the LQ or XQ view or when you type **LQD** on the **COMMAND** line.

Figure 14-2 LQD View



LQD View Primary Commands

Table 14-5 lists the primary commands you can enter on the command line to add a queue identical to the queue or to delete the queue displayed in the LQD view.

Table 14-5 LQD View Primary Commands

Command	Action
ADD new queuename	creates a new local queue with characteristics identical to those displayed To give the new local queue a different QSG group disposition, overtype the QSGDISP field.[1]
DELete *	deletes the queue The queue must be empty.
DEPurge *	deletes the queue and purge its messages
PURge	purges all messages from the queue
[1]Valid only if using MVS Queue Managers 5.2 and above.	

LQD View Overtype Fields

Table 14-6 lists the fields you can overtype on the LQD view and the values you can use.

Table 14-6 LQD View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Maximum Depth	decimal integer up to 999999999
Low Depth Event Threshold	decimal integer up to 100
High Depth Event Threshold	decimal integer up to 100
Service Interval Event Threshold	decimal integer up to 999999999
Low Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
High Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Maximum Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Service Interval Events	‘h’ or ‘high’ or ‘o’ or ‘okay’ or ‘d’ or ‘disabled’
Inhibited Actions, Gets	‘y’ or ‘yes’ or ‘n’ or ‘no’
Inhibited Actions, Puts	‘y’ or ‘yes’ or ‘n’ or ‘no’
Default Message Priority	decimal integer up to 9

Table 14-6 LQD View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Default Message Persistence	‘y’ or ‘yes’ or ‘n’ or ‘no’
Default Open for Input Option	‘e’ or ‘exclusive’ or ‘s’ or ‘shared’
Shareable	‘y’ or ‘yes’ or ‘n’ or ‘no’
Message Deliv Sequence	‘f’ or ‘fifo’ or ‘p’ or ‘prior’
Storage Class	up to 8-character string
Maximum Message Length	decimal integer up to 4194304
Index Type	‘n’ or ‘none’ ‘m’ or ‘msgid’ ‘c’ or ‘correlid’
Archive	‘none’ or ‘all’ (UNIX only)
Description	up to 64-character string
Process	up to 48-character string MAINVIEW for WebSphere MQ does not verify the value.
Retention Interval	decimal integer up to 999999999
Trigger Control	‘n’ or ‘on’ or ‘f’ or ‘off’
Trigger Type	‘n’ or ‘none’ or ‘f’ or ‘first’ or ‘e’ or ‘every’ or ‘d’ or ‘depth’
Trigger Message Priority	1-digit integer
Trigger Depth	decimal integer up to 999999999
Trigger Initiation Queue	up to 48-character string
Trigger Data	up to 64-character string
Backout Threshold	decimal integer up to 999999999
Backout Requeue Queue	up to 48-character String MAINVIEW for WebSphere MQ does not verify the name.
Backout Hardened Get Count	‘y’ or ‘yes’ or ‘n’ or ‘no’
Scope	‘q’ or ‘qmgr’ or ‘c’ or ‘cell’ When the queue manager is an MVS Queue Manager, Scope is not applicable and the value must by ‘N/A’.
Distribution Lists	‘y’ or ‘yes’ ‘n’ or ‘no’
Queue Usage	‘n’ or ‘normal’ or ‘t’ or ‘x’ or ‘transmission’
Cluster Name	up to 48-character string
Cluster Namelist	up to 48-character string
Default Bind	‘On Open’ or ‘Not Fixed’

LQD View Hyperlinks

Table 14-7 lists the LQD view fields from which you can hyperlink and the destination for each link.

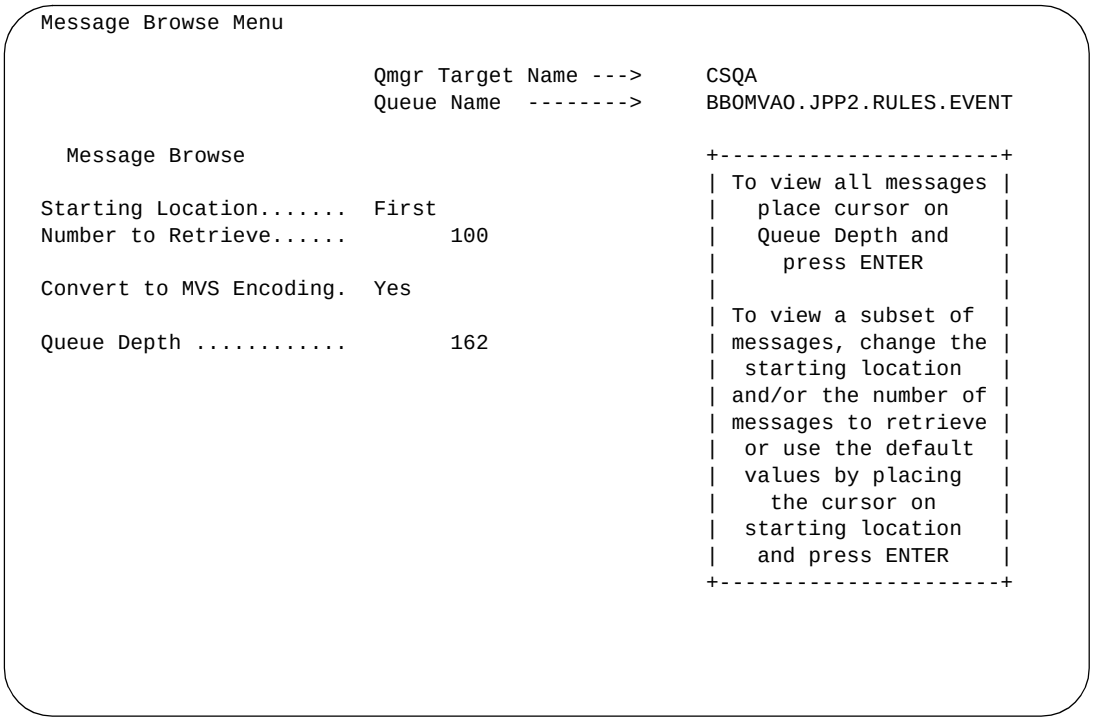
Table 14-7 LQD View Hyperlinks

Field	View	Information
Current Depth	EZLQMSG	displays Message Browse Menu
Storage Class	STCD	details about the storage class
Process	PROCD	details about the process
Initiation Queue	LQD	details about the initiation queue
Requeue Queue	LQD	details about the requeue queue

EZLQMSG: Primary Message Browse Menu

The primary Message Browse Menu allows you to view all messages in the queue or to select a subset of messages. To access the EZLQMSG menu hyperlink from the Cur Depth field on the LQ or XQ view or type **EZLQMSG *queuename*** on the **COMMAND** line. Figure 14-3 shows the Message Browse Menu view.

Figure 14-3 EZLQMSG View



EZLQMSG View Overtype Fields

Table 14-8 lists the fields you can overtype on the EZLQMSG view and the values you can use.

Table 14-8 EZLQMSG View Overtype Fields

Overtype Field	Value
Starting Location	First: the first message in the queue
	Last: the last message in the queue
Number to Retrieve	number of messages you want to view
Convert to MVS Encoding	indicates whether the message text should be converted to the MVS character set (takes a value of yes or no)

EZLQMSG View Hyperlinks

Table 14-9 lists the EZLQMSG view fields from which you can hyperlink and the destination for each link.

Table 14-9 EZLQMSG View Hyperlinks

Field	View	Information
Queue Depth	LQM XQM	for all messages on a queue
Starting Location	LQM XQM	subset of the local queues messages, based on Starting Location and number to retrieve

LQZ: Local Queue Summary

The LQZ view provides a summarized list of all local queues. This view is listed by the queue name. To access the LQZ view, shown in Table 14-4, type **LQZ** on the **COMMAND** line.

Figure 14-4 LQZ View

```
CMD Queue                                        Max Depth%   Cur Open
--- Name                                         0......100 Depth  Inp
    TEST.QUEUE                                 51           257
    TEST.QUEUE1                                 1            76
    BBOMVAO.JPP2.RULES.EVENT                    0           162
    BBOMVAO.JPP1.SYSTEM.EVENT                   0           145    1
    CSQA.ROX.CLUSTER.QUEUE                      0            60
    CSQA.DEAD.LETTER                            0            27    1
    BMC.LISTENER.COM                            0             1    1
    SYSTEM.CLUSTER.REPOSITORY.QUEUE             0            38
    SYSTEM.CLUSTER.COMMAND.QUEUE                0            35
    SYSTEM.CHANNEL.SYNCQ                        0            26    2
    BBOMVAO.JPP3.RULES.EVENT                    0             2
    BBOMVAO.JPP1.RULES.INITIALIZE               0             0
    BBOMVAO.EXEC.REPLY.JB41.CSQA                0             0    1
    CSQA.LOCAL.X                                0             0
    BBOMVAO.JPP1.RULES.EVENT                    0             0
    BBOMVAO.JB41.RULES.CMDREPLY                 0             0
    BBOMVAO.EXEC.REPLY.EP01.CSQA                0             0    1
    target.queue                                0             0
    BBSMVMQS.REPLY.CSQA                         0             0    2
    BBOMVAO.EXEC.REPLY.KMZ1.CSQA                0             0    1
    BBOMVAO.YXP.QUEUE2                          0             0    1
    BBSMVMQS.REPLY.ROXQMP                       0             0
    MCM.EVENT.PYXISGM.CSQA                      0             0
    BMC.LISTENER.SUB                            0             0    1
```

There are no primary commands or overtype fields for the LQZ view.

LQZ View Line Commands

Table 14-10 shows the line commands you can use to perform actions against an entity on an LQZ view line.

Note: In the summary views, each line may represent more than one queue. Any overtypes or line commands will affect all queues represented by that line.

Table 14-10 LQZ View Line Commands

Command	Action
ADD	overtype the queue name to create a new queue with identical characteristics
DEL	deletes an empty queue
DEP	deletes a queue and purge all of its messages
PUR	purge all the messages on the queue

LQZ View Hyperlinks

Table 14-11 shows the LQZ view fields from which you can hyperlink and the destination for each link.

Table 14-11 LQZ View Hyperlink

Field	View	Information
Queue Name	LQ	overview of the local queue
Cur Depth	LQD	details of the local queue

Chapter 15 Log Manager

The log manager views provide information about the queue manager's log manager. The log manager manages the writing and archiving of the log records.

This chapter discusses the following topics:

LM: Log Manager

The LM view provides an overview of the activity and overall health of the queue manager's log manager. You can access the LM view by hyperlinking from the EZQMVS or EZQMMVS views, or by typing **LM** on the **COMMAND** line. Figure 15-1 provides a sample Log Manager view.

Figure 15-1 LM View

```
CMD Qmgr     Intvl   Total   Total  No Buf    BackO  BackOut  ArchLog
--- Name     Time-  Writes   Reads   Waits Efficien     Work    Ratio
    CSQA     15:12       0       0       0     0.00     0.00     0.00
```

There are no primary commands, line commands, or overtype fields for the LM view.

LM View Hyperlink

Table 15-1 shows the LM view field from which you can hyperlink and the destination for the link.

Table 15-1 LM View Hyperlink

Field	View	Information
QMgr Name	LMD	Log Manager details

LMD: Log Manager Details

The LMD view, shown in Figure 15-2, provides detailed information on the queue manager's log manager displayed when you hyperlink from the LM view or when you type **LMD** on the **COMMAND** line. The LMD view provides detailed information about the activity of the queue manager's log manager and the log manager's overall health. The LMD shows metrics as well as counts and rates related to the writing, reading, and archiving of log records. The counts and rates are displayed in three time frames. These time frames are explained in Table 15-2.

Table 15-2 LMD Time Frames

Time Frame	Description
Realtime	collected every ten seconds from the SMF115 record created by the queue manager
Interval	accumulated from the real time data for a period of time defined by the IRRI value in the BBIISP00 member in BBPARM It is reset to 0 at the end of the IRRI.
Session	accumulated from the real-time data over a 24-hour period It is reset to 0 at 12:00 midnight (local time).

Figure 15-2 LMD View

```
Queue Manager...... CSQA
                              Realtime           Interval           Session
  Performance Metrics
    BackOut Effiency.     0.00               0.00               0.00
    BackOut Work.....     0.00               0.00               0.00
    Archive Log......     0.00               0.00               0.00
  Writes.............
    Total............        0     0.00        65     0.14      5376     0.72
      With Wait......        0     0.00         0     0.00         0     0.00
      No Wait........        0     0.00        65     0.14      5368     0.72
      With Force.....        0     0.00         0     0.00         8     0.00
    Wait - No Bufs...        0     0.00         0     0.00         0     0.00
    Log Buf Writes...        0     0.00        13     0.03       925     0.12
    Write I/O Rqsts..        0     0.00         0     0.00         0     0.00
    Log CIs Writes...        0     0.00         0     0.00         0     0.00
    Serial Log Writes        0     0.00         0     0.00         0     0.00
    Threshold Reached        0     0.00         0     0.00         0     0.00
    Buffers Paged....        0     0.00         0     0.00         0     0.00
    Suspended Rqsts..        0     0.00         0     0.00         0     0.00
  Reads..............
    Total............        0     0.00         0     0.00         6     0.00
      In-storage Bufs        0     0.00         0     0.00         6     0.00
      Active Log.....        0     0.00         0     0.00         0     0.00
      Archive Log....        0     0.00         0     0.00         0     0.00
    Delayed..........        0     0.00         0     0.00         0     0.00
    Resources........        0     0.00         0     0.00         0     0.00
```

There are no primary commands, line commands, overtype fields, or hyperlinks for the LMD view.

Chapter 16 Messages

The messages views list formatted messages that have been displayed during MAINVIEW for WebSphere MQ operation.

Note: The message views are not available for distributed queue managers that are being managed by proxy.

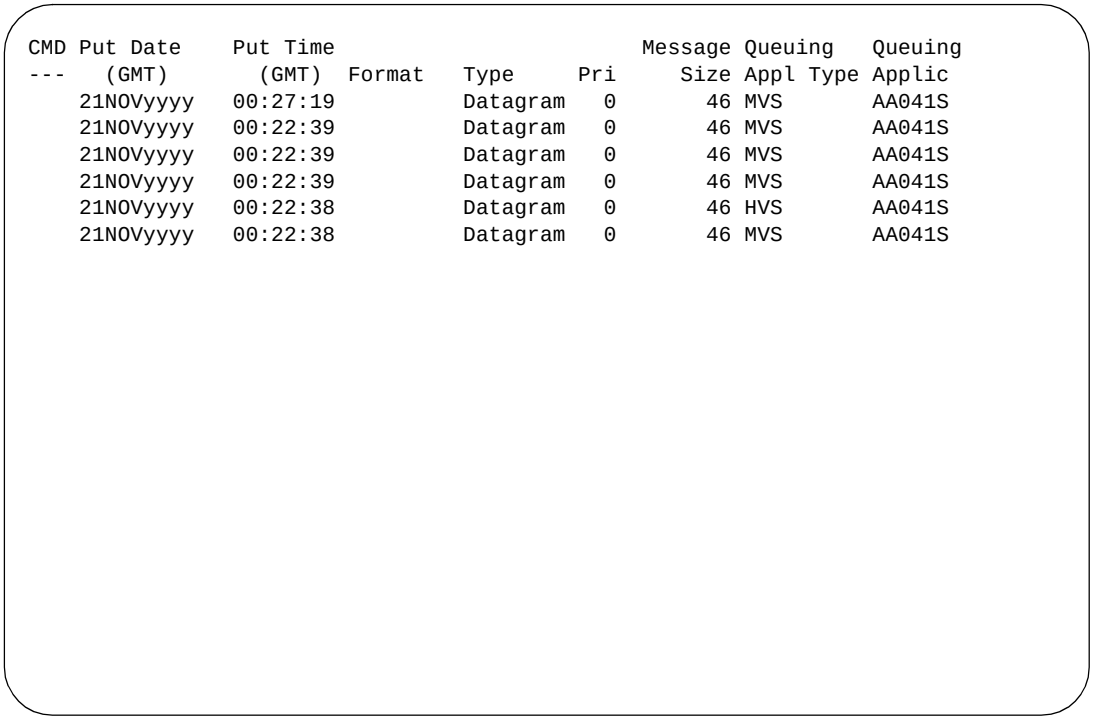
This chapter discusses the following topics:

LQM: Local Queue Messages

The LQM view provides information about the messages on one or more local queues that are in the current context, that you are monitoring, and that have normal usage.

The LQM view, shown in Figure 16-1, is displayed when you hyperlink from the EZLQMSG view. If you want to display information about messages on a specific queue, you must specify the queue name with the command (LQM queuename)

Figure 16-1 LQM View



CMD	Put Date (GMT)	Put Time (GMT)	Format	Type	Pri	Message Size	Queuing Appl Type	Queuing Applic
	21NOVyyyy	00:27:19		Datagram	0	46	MVS	AA041S
	21NOVyyyy	00:22:39		Datagram	0	46	MVS	AA041S
	21NOVyyyy	00:22:39		Datagram	0	46	MVS	AA041S
	21NOVyyyy	00:22:39		Datagram	0	46	MVS	AA041S
	21NOVyyyy	00:22:38		Datagram	0	46	HVS	AA041S
	21NOVyyyy	00:22:38		Datagram	0	46	MVS	AA041S

Note: You can view the messages on a local queue only if the queue is enabled for MQGET requests and you are authorized to view messages from the queue.

LQM View Primary Commands

Table 16-1 lists the primary commands you can enter on the **COMMAND** line to delete or requeue messages on the LQM view.

Table 16-1 LQM View Primary Commands

View	Action
REQueue queue	requeues the message to the specified queue **Note:** REQueue can be used only when the value in the Format field is MQDEAD.
REQueue queuename	

LQM View Line Commands

Table 16-2 lists the line commands you can use to perform actions against an entity on an LQM view line.

Table 16-2 LQM View Line Commands

Command	Action
DEL	deletes the message from the queue specified in the Queue Name field
REQ	requeues the message(s) to the queue specified in the Queue Name field **Note:** REQ can be used only when the value in the Format field is MQDEAD.

LQM View Overtype Field

Table 16-3 shows the field you can overtype on the LQM view and the value you can use.

Table 16-3 LQM View Overtype Field

Overtype Field	Value
Queue	name of the queue to which the message is to be queued
Note: You can scroll to the right to display the entire queue field.	

LQM View Hyperlinks

Table 16-4 lists the LQM view fields from which you can hyperlink and the destination for each link.

Table 16-4 LQM View Hyperlinks

Field	View	Information
Put Date	EZMSGBR	displays Message Browse Menu
MQDEAD (in format field)	DLQMD	details about a message on a dead-letter queue
MQXMIT (in format field)	XQMD	details about a message on a transmission queue
MQEVENT (in format field)	EVTxxxx	formatted details about the selected event message
Any other value or blanks (in format field)	LQMD	details about a message on a local queue
Message Size	MB	unformatted dump of the first thousand bytes of a message on a local queue

LQMD: Local Queue Message Details

The LQMD view shows the detailed statistics and usage information contained in the original message descriptor of a message.

The LQMD view, shown in Figure 16-2, is displayed when you hyperlink from the LQM view.

Figure 16-2 LQMD View

```
Format.............                 Queue Manager...... CSQ4
Type............... Datagram        Queue.............. BBOMVAO.QUEUE1

Report Options.....                 Reply to Queue.....
  Exception........ No                Queue Manager.... CSQ4
  Expiration....... No                Queue............
  Arrival Confirm.. No
  Delivery Confirm. No              Queuing Application
  Message ID....... New MsgId         Type.............. MVS
  Correlation ID... Copy MsgId        Name.............. AA041SA

Priority...........           0     Put Date........... ddmmmyyyy
Expiry Time........ 429496576.0     Put Time........... 00:27:19.00
Backout Count......           0
Length.............          46     Feedback Code......
                                    Feedback Symbol.... MQFB_NONE
Data Encoding...... Native
Coded Char Set ID.. 0000001F4       Message ID.........
Persistence........ Yes             Correlation ID.....
                                    User ID............ JOB3

<Show Message Text>                 Accounting Token... 04F3F9F1F1000
                                    Appl ID Data.......
                                    Appl Origin Data...
```

There are no line commands for the LQMD view.

LQMD View Primary Commands

Table 16-5 lists the primary commands you can enter on the **COMMAND** line to delete or requeue the message described in the LQMD view.

Table 16-5 LQMD View Primary Commands

Command	Action
DELete	deletes the message
REQueue	requeues the message to the specified queue and queue manager **Note:** REQueue can be used only when the value in the Format field is MQDEAD.

LQMD View Overtype Field

Table 16-6 shows the field you can overtype on the LQMD view and the value you can use.

Table 16-6 LQMD View Overtype Field

Overtype Field	Value
Queue	name of the queue to which the message is to be queued
Note: You can scroll to the right to display the entire queue field.	

LQMD View Hyperlinks

Table 16-7 lists the LQMD view fields from which you can hyperlink and the destination for each link.

Table 16-7 LQMD View Hyperlinks

Field	View	Information
Length	MB	length
Show Message Text	MB	show message text
Queue Manager	EZMQS	queue manager
Queue	LQD	details about the queue
Reply to Queue Manager	QM	details about the queue manager
Reply to Queue	Queues	type of queue
Format MQEVENT	EVTxxxx	formatted details about the selected event message
All other	MB	text of the message

EZMSGBR: Message Browse Menu

You can use the EZMSGBR Message Browse Menu to view all messages in a queue or to select a subset, based on starting location and the number of messages you want to retrieve. Table 16-8 on page 16-8 shows the overtype options for the Starting Location field. You can access the Message Browse Menu by hyperlinking to it from a Put Date field on the LQM view.

Figure 16-3 shows the EZMSGBR Message Browse Menu for CSQ2.

Figure 16-3 EZMSGBR Message Browse Menu

```
                          Message Browse Menu

                        Qmgr Target Name --->     CSQ2
                       Queue Name  -------->     BOLJEB.TEST1

  Message Browse                                 +----------------------+
                                                 | To view all messages |
Starting Location.......  FIRST                  | place cursor on All  |
Number to Retrieve......        100              |  Messages On Queue   |
                                                 |   and press ENTER    |
Convert to MVS Encoding.  YES                    |                      |
                                                 |                      |
  Message Views                                  | To view a subset of  |
                                                 | messages, change the |
. All Messages On Queue                          |  starting location   |
. Current List in Hex                            | and/or the number of |
. Current List in Char                           | messages to retrieve |
                                                 |  or use the default  |
  Detail Message Views                           |  values by placing   |
                                                 |    the cursor on     |
. Message Descriptor                             |  starting location   |
. Message Text                                   |   and press ENTER    |
. Transmission Header                            +----------------------+
. Dead Letter Header
```

There are no primary or line commands for the EZMSGBR Message Browse Menu.

EZMSGBR Overtype Fields

Table 16-8 lists the fields you can overtype and their values.

Table 16-8 EZMSGBR Overtype Fields

Overtype Field	Value
Starting Location	**First:** begins with the first message in the database
	Last: begins with the last message in the database
	Next: begins with the next message based on your current position within the queue
	Previous: begins with the message previous to your current position within the queue
Number to Retrieve	number of messages you want to view
Convert to MVS Encoding	indicates whether the message text should be converted to the MVS character set (takes a value of yes or no).

EZMSGBR Hyperlinks

Table 16-9 lists the fields from which you can hyperlink and the destination of each link.

Table 16-9 EZMSGBR Hyperlinks

Field	View	Information
Queue Name	LQD	details on the queue
Starting Location	LQM	lists messages based on starting location and number to retrieve
All Messages on Queue	LQM	lists all messages on the queue
Current List in Hex	MLX	Current list of message text is displayed in hexadecimal format
Current list in Char	ML	current list of message text displayed in character format
Message Descriptor	LQMD	details about the message delivery
Message Text	MB	dump of message text
Transmission Header	DLQMD	details on why message is MQDEAD

MB: Message Browser View

The MB view provides an unformatted dump of the first thousand bytes of a message on an WebSphere MQ local queue. The MB view, shown in Figure 16-4, is displayed when you hyperlink from a message view.

If you are authorized to view message headers, but not authorized to view the data, a message indicating you are not authorized is returned in the data area.

Figure 16-4 MB View

```
Queue Manager.   CSQ3                                SYSTEM.ADMIN.PERFM.EVENT
Put Date......   01/30/97
Put Time......   15:31:27.00
Message Length       192

                                                     Character
        Offset   Hexadecimal Representation           Representation
      00000000   00000007 00000024 00000001 0000002D  ................
      00000010   00000001 00000001 00000001 000008B0  ................
      00000020   00000006 00000004 00000018 000007DF  ................
      00000030   00000000 00000004 C3E2D8F3 00000004  ........CSQ3....
      00000040   00000044 000007D2 00000000 00000030  .......K........
      00000050   C2C2D6D4 E5C1D64B D3C9E5C5 4BD8E4C5  BBOMVAO.LIVE.QUE
      00000060   E4C5F140 40404040 40404040 40404040  UE1
      00000070   40404040 40404040 40404040 40404040
      00000080   00000003 00000010 00000023 00000E1B  ................
      00000090   00000003 00000010 00000024 00000032  ................
      000000A0   00000003 00000010 00000025 00000032  ................
      000000B0   00000003 00000010 00000026 00000000  ................
      000000C0   00000000 00000000 00000000 00000000  ................
      000000D0   00000000 00000000 00000000 00000000  ................
      000000E0   00000000 00000000 00000000 00000000  ................
      000000F0   00000000 00000000 00000000 00000000  ................
```

There are no line commands for the MB view.

MB View Primary Commands

Table 16-10 lists the primary commands you can enter on the **COMMAND** line to delete or requeue the message.

Table 16-10 MB View Primary Commands

Command	Action
DELete *	deletes the message
REQueue *	requeues the message to its original destination (when the message is from the dead-letter queue)

MB View Overtype Field

Table 16-11 shows the field you can overtype on the MB view and the value you can use.

Table 16-11 MB View Overtype Field

Overtype Field	Value
Queue	name of the local or dead-letter queue (other than a transmission queue) to which the message is to be queued

MB View Hyperlink

Table 16-12 shows the MB view field from which you can hyperlink and the destination for the link.

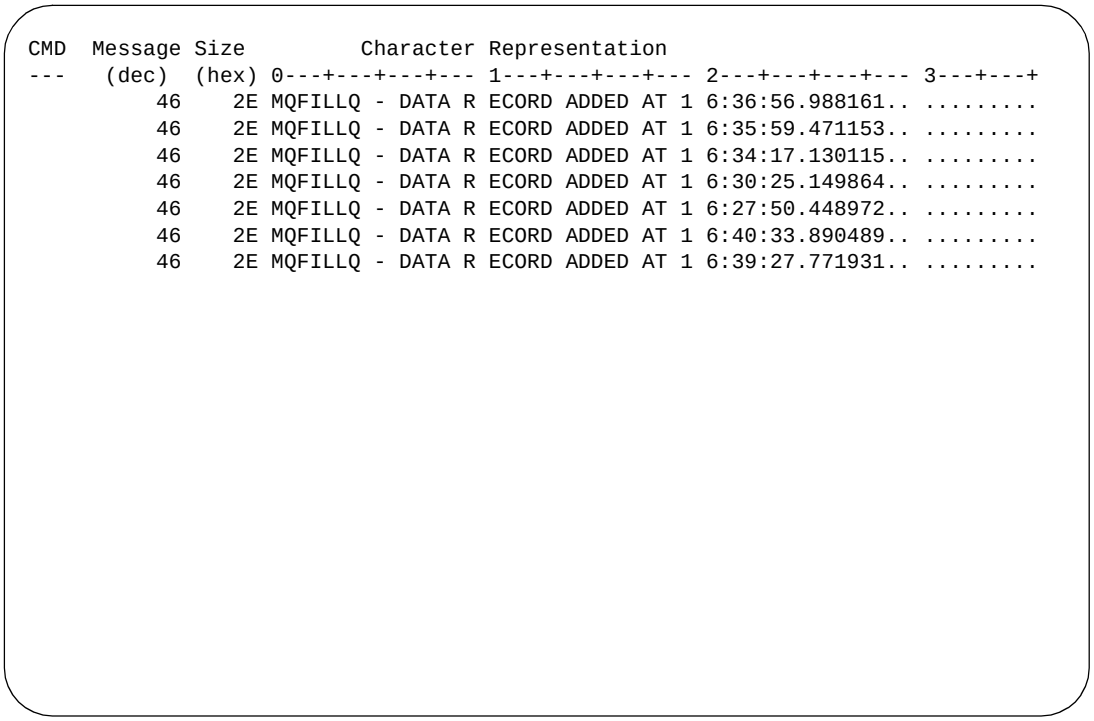
Table 16-12 MB View Hyperlink

Field	View	Information
Queue	LQD	details about the queue

ML: Message Information View in Character Format

The ML view provides message information in character-list format. The ML view, shown in Figure 16-5, is displayed when you hyperlink from the Current List in Char field in the EZMSGBR message browse menu.

Figure 16-5 ML View



```
CMD  Message Size         Character Representation
---   (dec)  (hex) 0---+---+---+--- 1---+---+---+--- 2---+---+---+--- 3---+---+
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:36:56.988161.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:35:59.471153.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:34:17.130115.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:30:25.149864.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:27:50.448972.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:40:33.890489.. .........
          46    2E MQFILLQ - DATA R ECORD ADDED AT 1 6:39:27.771931.. .........
```

There are no primary commands or overtype fields for the ML view.

ML View Line Commands

Table 16-13 lists the line commands that can be entered on the ML view.

Table 16-13 ML View Line Commands

Command	Action
DEL	deletes message
REQ	requeues message to its original destination (when the message is from the dead-letter queue)

ML View Hyperlinks

Table 16-14 lists the Message Information view fields from which you can hyperlink and the destinations of each link.

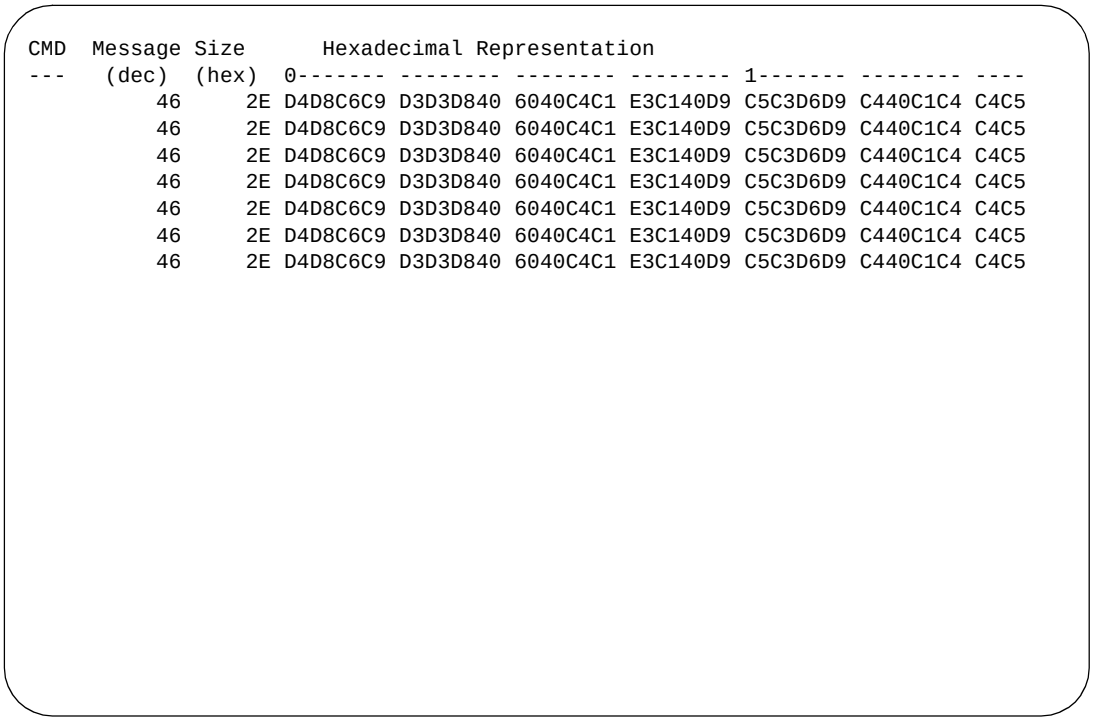
Table 16-14 ML View Hyperlinks

Field	View	Information
Message (dec)	MB	hex dump of message text
Size (hex)	MB	hex dump of message text
Queue	LQD	details of queue

MLX: Message Information in Hexadecimal Format

The MLX view provides message information in hexadecimal format. The MLX view, shown in Figure 16-6, is displayed when you hyperlink from the Current List in Hex field in EZMSGBR message browse menu.

Figure 16-6 MLX View



```
CMD  Message Size      Hexadecimal Representation
---   (dec)  (hex)  0------- -------- -------- -------- 1------- -------- ----
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
          46     2E D4D8C6C9 D3D3D840 6040C4C1 E3C140D9 C5C3D6D9 C440C1C4 C4C5
```

There are no primary commands or overtype fields for the MLX view.

MLX View Line Commands

Table 16-15 lists the line commands you can enter on the MLX view.

Table 16-15 MLX View Line Commands

Command	Action
DEL	deletes message
REQ	requeues message to its original destination (when the message is from the dead-letter queue)

MLX View Hyperlinks

Table 16-16 lists the MLX view fields from which you can hyperlink and the destination of each link.

Table 16-16 MLX View Hyperlinks

Field	View	Information
Message (dec)	MB	hex dump of message text
Size (hex)	MB	hex dump of message text
Queue	LQD	details of queue

Chapter 17 Model Queues

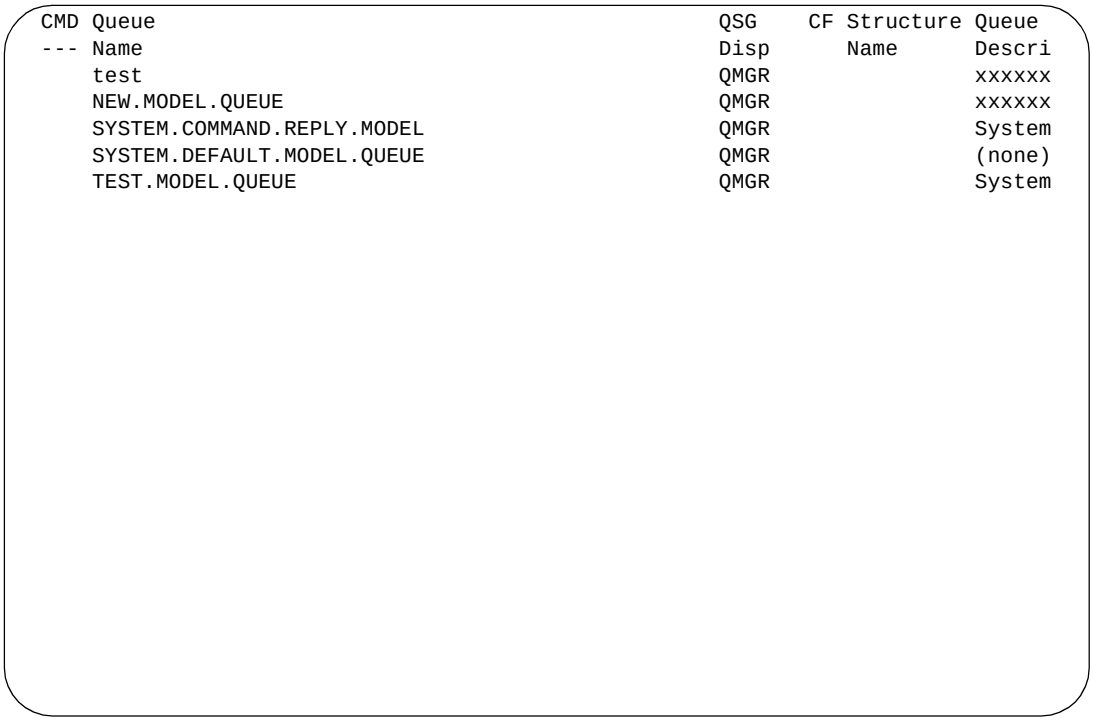
The model queue views provide information about the templates used when queue managers create dynamic queues. Dynamic queues are requested by applications, and they can be temporary or permanent.

This chapter discusses the following topics:

MQ: Model Queues

The MQ view, shown in Figure 17-1, is displayed when you hyperlink from the EZQI view or when you type **MQ** on the **COMMAND** line. The MQ view provides information about all model queues.

Figure 17-1 MQ View



```
CMD Queue                                          QSG    CF Structure Queue
--- Name                                           Disp      Name      Descri
    test                                           QMGR                xxxxxx
    NEW.MODEL.QUEUE                                QMGR                xxxxxx
    SYSTEM.COMMAND.REPLY.MODEL                     QMGR                System
    SYSTEM.DEFAULT.MODEL.QUEUE                     QMGR                (none)
    TEST.MODEL.QUEUE                               QMGR                System
```

MQ View Primary Command

Table 17-1 shows the primary command you can enter on the **COMMAND** line to delete the queue shown in the MQ view.

Table 17-1 MQ View Primary Command

Command	Action
DELete queuename	deletes the queue
DELete queuename pattern	

MQ View Line Commands

Table 17-2 lists the line commands you can use to perform actions on an entity on an MQ view line.

Table 17-2 MQ View Line Commands

Command	Action
ADD	overtype the queue name to create a new queue with identical characteristics To give the new model queue a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	delete the queue
[1]Valid only if using MVS Queue Managers 5.2 and above.	

MQ View Overtype Field

Table 17-3 shows the field you can overtype on the MQ view and the value you can use.

Table 17-3 MQ View Overtype Field

Overtype Field	Value
Queue Description	up to 48-character string

MQ View Hyperlink

Table 17-4 shows the MQ view field from which you can hyperlink and the destination for the link.

Table 17-4 MQ View Hyperlink

Field	View	Information
Queue Name	MQD	details about the model queue

MQD: Model Queue Details

The MQD view provides detailed information about the definition and usage of a single model queue. The MQD view, shown in Figure 17-2, displays when you hyperlink from the MQ view or when you type **MQD *modelqueuename*** on the **COMMAND** line.

Figure 17-2 MQD View

```
Maximum Depth......... 999999999    Queue.............. NEW.MODEL.QUEUE
                                      Description........ xxxxxxxxxx
  Event Thresholds......
   Low Depth............        40    Definition Type.... Permament Dynamic
   High Depth...........        80    Disposition........ QMGR
   Service Interval..... 999999999    CF Structure.......
                                      Process............ (none)
  Events................
   Low Depth............ Disabled     Retention..........
   High Depth........... Disabled      Interval.......... 999999999
   Maximum Depth........ Enabled
   Service Interval..... None         Trigger............
                                       Control........... Off
  Inhibited Actions.....               Type.............. None
   Gets................. No           Message Priority..         0
   Puts................. No           Depth.............         1
                                       Initiation Queue.. (none)
  Defaults..............               Data.............. (none)
   Message Priority.....         0
   Message Persistence.. No           Backout............
   Open for Input Option Shared        Threshold.........         0
                                       Requeue Queue..... (none)
  Shareable.............. Yes          Hardened Get Count No
  Message Deliv Sequence FIFO
  Storage Class......... DEFAULT     Distribution Lists. No
  Maximum Message Length   4194304   Queue Usage........ Normal
```

MQD View Primary Commands

Table 17-5 lists the primary commands you can enter on the **COMMAND** line to delete the queue shown in the MQD view or to add a new queue modeled on the queue.

Table 17-5 MQD View Primary Commands

Command	Action
ADD new queuename	creates a new model queue with characteristics identical to those displayed
DELete *	deletes the queue

MQD View Overtype Fields

Table 17-6 lists the fields you can overtype on the MQD view and the values you can use.

Table 17-6 MQD View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Maximum Depth	decimal integer up to 999999999
Low Depth Event Threshold	decimal integer up to 100
High Depth Event Threshold	decimal integer up to 100
Service Interval Event Threshold	decimal integer up to 999999999
Low Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
High Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Maximum Depth Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Service Interval Events	‘h’ or ‘high’ or ‘o’ or ‘okay’ or ‘d’ or ‘disabled’
Inhibited Actions, Gets	‘y’ or ‘yes’ or ‘n’ or ‘no’
Inhibited Actions, Puts	‘y’ or ‘yes’ or ‘n’ or ‘no’
Default Message Priority	decimal integer up to 9
Default Message Persistence	‘y’ or ‘yes’ or ‘n’ or ‘no’
Default Open for Input Option	‘e’ or ‘exclusive’ or ‘s’ or ‘shared’
Shareable	‘y’ or ‘yes’ or ‘n’ or ‘no’
Message Deliv Sequence	‘f’ or ‘fifo’ or ‘p’ or ‘prior’
Storage Class	Up to 8-character string
Maximum Message Length	decimal integer up to 4194304
Index type	‘n’, ‘none’, ‘m’, ‘msgid’, ‘c’, or ‘correlid’
Description	up to 64-character string
Model Definition Type	‘tempdyn’ or ‘t’ or ‘permdyn’ or ‘p’
CF Structure	up to a 12-character string
Process	up to 48-character string MAINVIEW for WebSphere MQ does not verify the value.
Retention Interval	decimal integer up to 999999999
Trigger Control	‘n’ or ‘on’ or ‘f’ or ‘off’
Trigger Type	‘n’ or ‘none’ or ‘f’ or ‘first’ or ‘e’ or ‘every’ or ‘d’ or ‘depth’
Trigger Message Priority	1-digit integer
Trigger Depth	Decimal integer up to 999999999
Trigger Initiation Queue	up to 48-character string

Table 17-6 MQD View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Trigger Data	up to 64-character string
Backout Threshold	decimal integer up to 999999999
Backout Requeue Queue	up to 48-character string MAINVIEW for WebSphere MQ does not verify the name.
Backout Hardened Get Count	‘y’ or ‘yes’ or ‘n’ or ‘no’
Distribution Lists	‘y’, ‘yes’, ‘n’, or ‘no’
Queue Usage	‘n’ or ‘normal’ or ‘t’ or ‘x’ or ‘transmission’

MQD View Hyperlink

Table 17-7 shows the MQM view field from which you can hyperlink and the destination for the link.

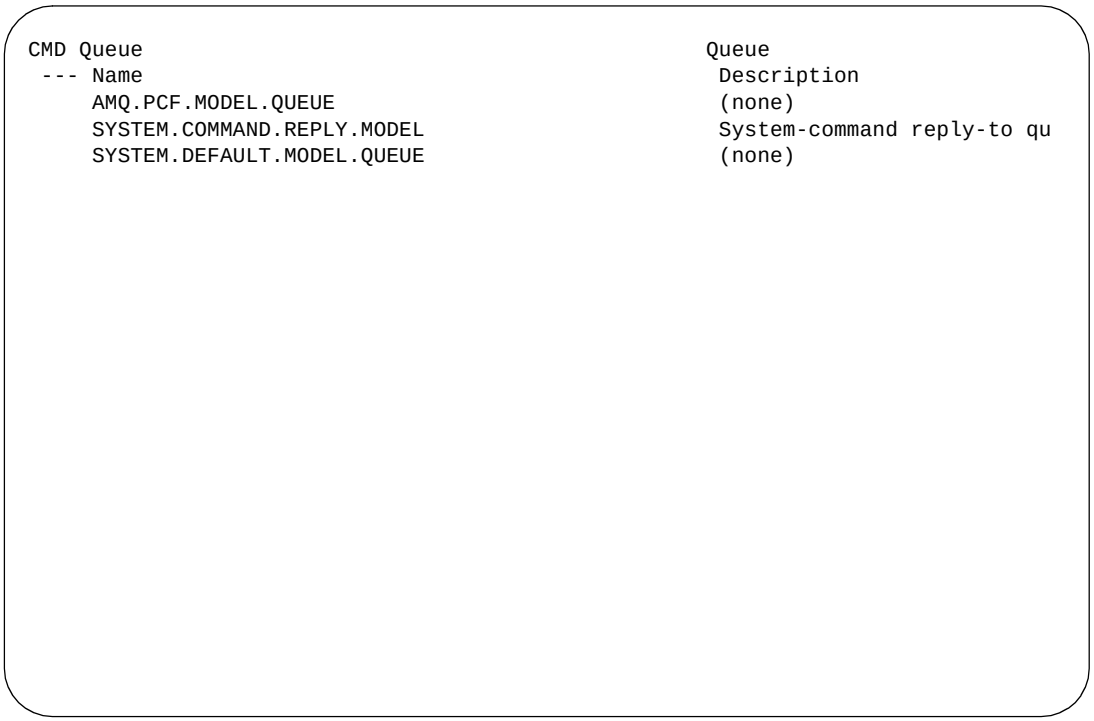
Table 17-7 MQD View Hyperlink

Field	View	Information
Storage Class	STCD	details about the storage class

MQZ: Model Queue Summary

The MQZ view provides a summary of all model queues. The model queues are listed by queue name. The MQZ view, shown in Figure 17-3, is displayed when you hyperlink from the EZQQI view, or when you type **MQZ** on the **COMMAND** line.

Figure 17-3 MQZ View



There are no primary commands or overtype fields for the MQZ view.

MQZ View Hyperlink

Table 17-8 shows the MQZ view field from which you can hyperlink and the destination for the link.

Table 17-8 MQZ View Hyperlink

Field	View	Information
Queue Name	MQ	displays information on the queue

Chapter 18 WebSphere MQ Tuning Wizard

The WebSphere MQ Tuning Wizard view provides an overview of the current health of the queue manager and its major components.

This chapter discusses the following topics:

W2OVER: WebSphere MQ Tuning Wizard

The W2OVER view provides an overview of the overall health of the queue manager. The W2OVER view shows the following:

- current status of the queue manager, channel initiator, and the channel listeners
- how many channels are active and how many channels are retrying
- how many messages are on the dead-letter queue
- how many queues are at maximum depth or at the maximum high threshold
- some of the indicators for buffer pools and MVS logs

The W2OVER view, shown in Figure 18-1, is displayed when you hyperlink from the EZMQS or EZQSSI view, or when you type **W2OVER** on the **COMMAND** line.

Figure 18-1 W2OVER View

Queue Manager	Queue Mgr Status	Channels Retrying	Local Qs MaxDepHi	Xmit Qs MaxDepHi	Dead Msg Count	PageSet0 % Free	E
BCLA	Active	2	1	0	23	100	
BCLB	Active	2	0	0	1	100	
BCL0	Unresponsi	0	0	0	0		
BCL1	Unresponsi	0	0	0	0		
BCL5	Active	0	0	0	0	100	
BCL6	Active	0	0	0	0	100	

There are no primary commands, line commands, or overtype fields for the W2OVER view.

W2OVER View Hyperlinks

Table 18-1 lists the W2OVER view fields from which you can hyperlink and the destination for each link.

Table 18-1 W2OVER View Hyperlinks

Field	View	Information
Queue Manager	W2OVERD	provides details on overall health of the queue manager and its major components
Queue Mgr Status	QMD	provides detailed analysis of the queue manager
Channels Retrying	CHANNELS	provides a list of all channels, their current status, and their significant attributes
Local Qs MaxDepHi	LQ	provides a list of all the local queues
XmitQs MaxDepHi	XQ	provides a list of all the local transmission queues
Dead Msg Count	DLQM	provides a list of all messages in the dead-letter queue
Page Set0 % Free	PS	displays information about the current state of page sets

W2OVERD: WebSphere MQ Tuning Wizard Detail

The W2OVERD provides detailed information on the queue manager and its major components. These details includes communication information, queues operating at maximum depth, logging information, and buffer pool information. The W2OVERD view, shown in Figure 18-2, is displayed when you type **W2OVERD** on the **COMMAND** line, or when you hyperlink from **Queue Manager Health** on the EZMQS menu.

Figure 18-2 W2OVERD View

```
Queue Manager            MCARPENT                  Inactive

   Communication
    Initiator               Status                   Inactive
    LU Listener             Status                   Inactive
    TCP/IP Listener         Status                   Inactive
    Channels                RUNNING                         0
                            RETRYING                        0

   Messages & Queues
    Gets                    Rate                         0.00
    Puts                    Rate                         0.00
    Local Queues            At max depth                    0
                            At queue depth high             0
    Transmission Queues     At max depth                    0
                            At queue depth high             0
    Dead Letter Queue       Message Count                   0

   Logging/Buffer Pools
    Buffer Pool Usage       No buffers available            0
    Page Set 0 Usage        Percent Free                    0
    Remaining Page Sets     Percent Free                    0
    Log Manager             Writes with Wait                0
    Threads                 Indoubt                         0

   Queue Manager Events
```

There are no primary commands, line commands, or overtype fields for the W2OVERD view.

W2OVERD View Hyperlinks

Table 18-2 lists the W2OVERD view fields from which you can hyperlink and the destination for each link.

Table 18-2 W2OVERD View Hyperlinks

Field	View	Information
Channels	CHANNELS	provides an overview of all the WebSphere MQ channels, showing current status, messages, and other significant attributes
Gets/Puts	QMVSS	provides detailed information on a single MVS queue manager
Local Queues	LQ	provides information about the operation and performance of the local queues you are monitoring
Transmission Queues	XQ	provides a summarized list of all local queues that are using the transmission queue
Dead Letter Queue	DLQM	lists the messages on the dead-letter queue
Buffer Pool Usage	BP	provides statistical information about the buffer pools serving the MVS queue managers
Page Set Usage/Remaining Page Sets	PSU	provides information about the relationship between queues and page sets
Log Manager	LMD	provides detailed information on the queue manager's log manager
Threads	THRDZ	summarizes all the active and inactive threads
All Queue Manager Events	EVTZ	provides summary of events

Chapter 19 Namelists

The namelist views provide information about the queues assigned to each namelist.

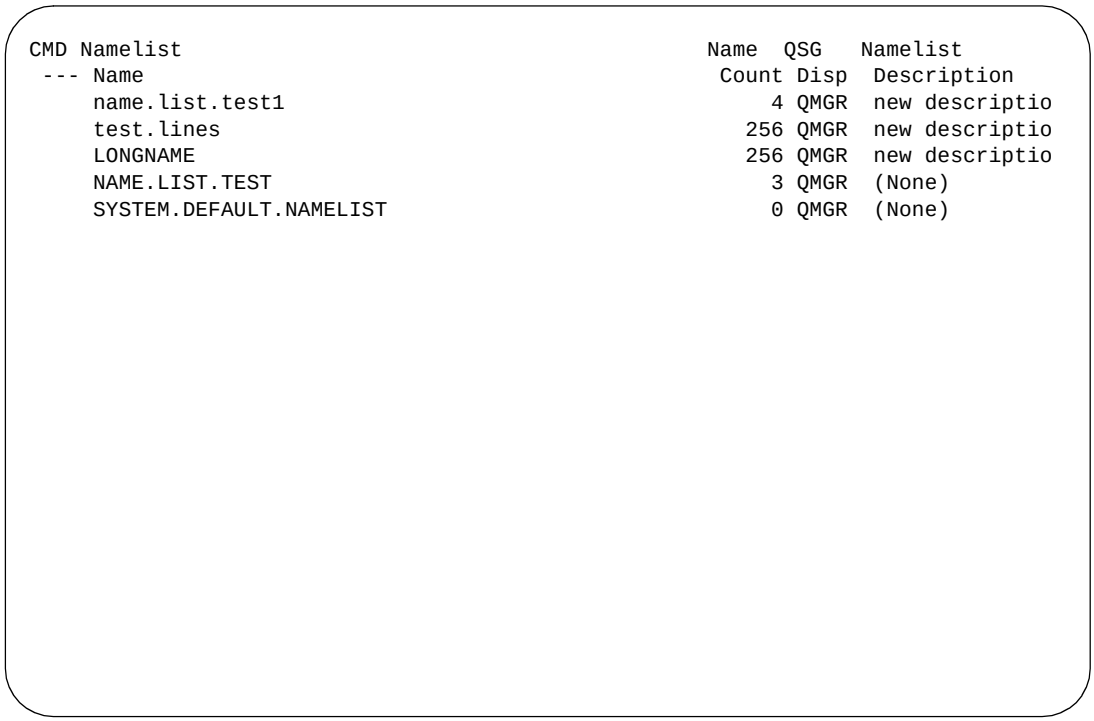
This chapter discusses the following topics:

NL: Namelists

The NL view provides a list of all namelists in the current context.

The NL view, shown in Figure 19-1, is displayed when you select Namelists from the EZMQS view or when you type **NL** on the **COMMAND** line.

Figure 19-1 NL View



NL View Primary Commands

Table 19-1 lists the primary commands you can enter on the **COMMAND** line on the NL view.

Table 19-1 NL View Primary Commands

Command	Action
DELete namelistname	deletes the specified namelist

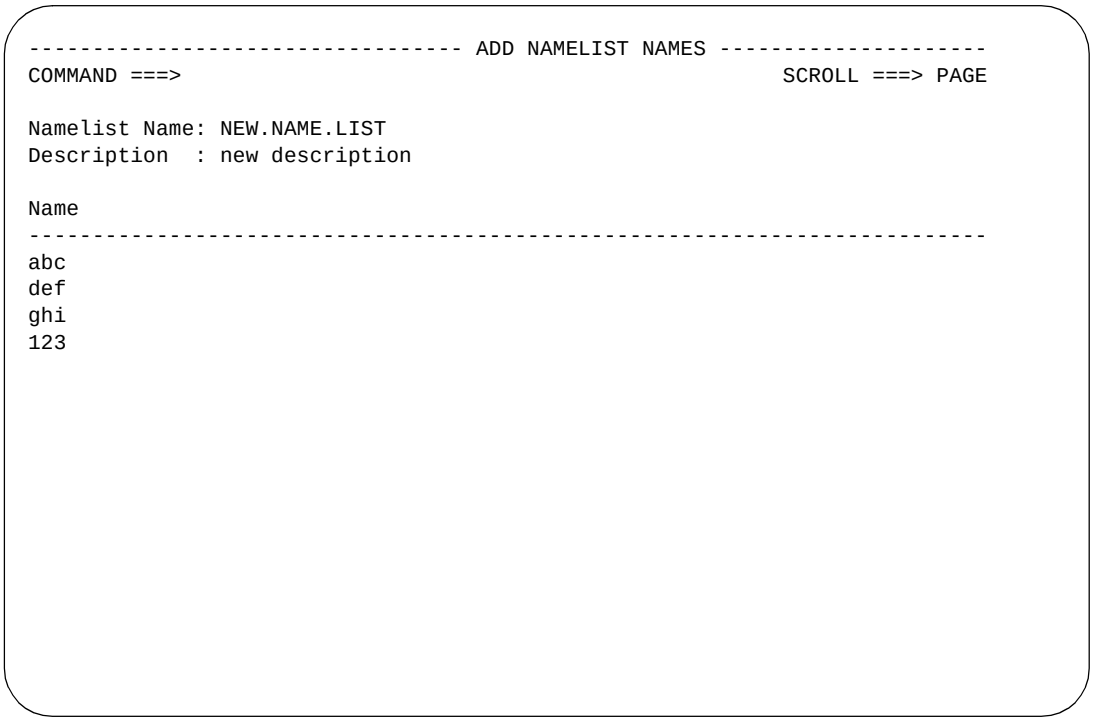
NL View Line Commands

Table 19-2 lists the line commands you can use to perform actions against an entity on an NL view line.

Table 19-2 NL View Line Commands

Command	Action
ADD	displays a panel to add a namelist with the specified name (see Figure 19-2) The initial values are copied from the namelist on the line where you enter the command. You can then change the namelist description and the list of queue names. To give the new namelist a different QSG group disposition, overtype the QSGDISP field.[1]
CHA	displays a panel to change the namelist description or the list of queue names (similar to Figure 19-2)
DEL	deletes the namelist
REP	replaces the specified namelist with the values from the namelist on the line where you enter the command If the specified namelist does not exist, a new namelist is created.
[1]Valid only if using MVS Queue Managers 5.2 and above.	

Figure 19-2 Add Namelist Panel



NL View Hyperlinks

Table 19-3 lists the NL view field from which you can hyperlink and the destination for the link.

Table 19-3 NL View Hyperlinks

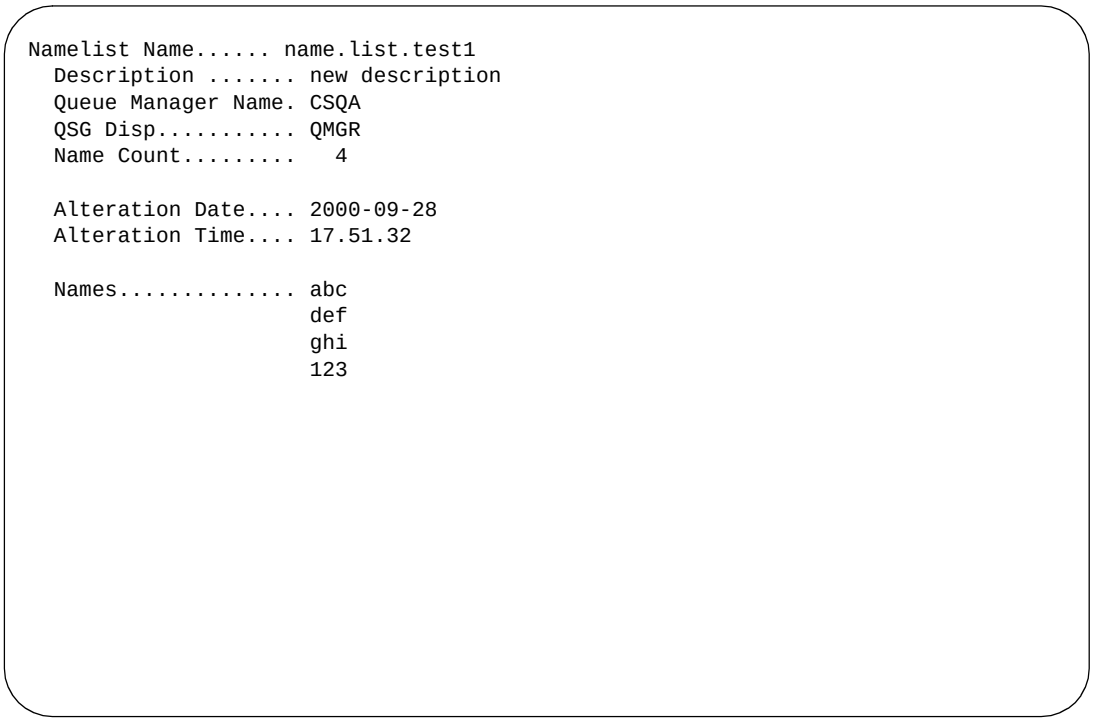
Field	View	Information
Namelist Name	NLD	displays namelist details

NLD: Namelist Details

The NLD view provides information about the contents of a single namelist.

The NLD view, shown in Figure 19-3, is displayed when you select a namelist from the NL view or when you type **NLD** on the **COMMAND** line.

Figure 19-3 NLD View



NLD View Primary Commands

Table 19-4 lists the primary commands you can enter on the **COMMAND** line on the NLD view.

Table 19-4 NLD View Primary Commands (Part 1 of 2)

Command	Action
ADD namelistname	displays a panel to add a namelist with the specified name (see Figure 19-2) The initial values are copied from the namelist displayed on the NLD view. You can then change the namelist description and the list of queue names.
Change	displays a panel where you can change the namelist description and the list of queue names

Table 19-4 NLD View Primary Commands (Part 2 of 2)

Command	Action
DELete	deletes the displayed namelist
REP namelistname	replaces the specified namelist with the values from the displayed namelist If the specified namelist does not exist, a new namelist is created.

NLD View Overtype Fields

Table 19-5 lists the field you can overtype on the NLD view and the values you can use. Use the Change command to change the list of queue names.

Table 19-5 NLD View Overtype Fields

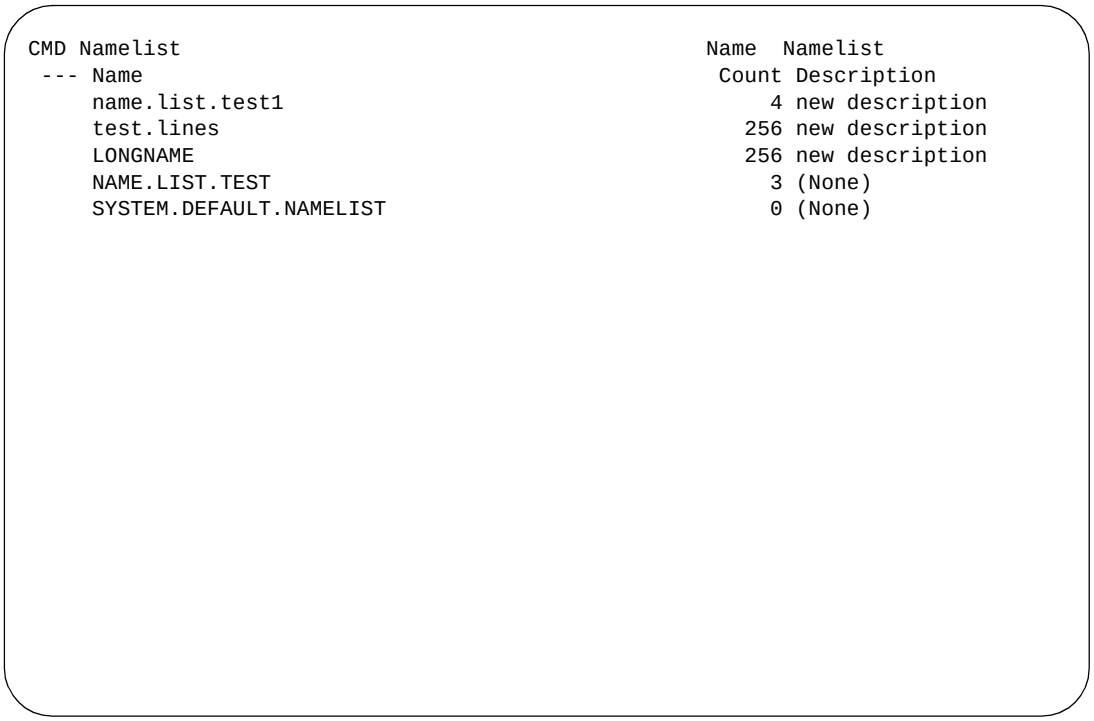
Overtype Field	Value
Description	up to 64-character string
Names	up to 256 names of 1–48 bytes

NLZ: Namelist Summary

The NLZ view provides summary information about the contents of all the namelists in the current context.

The NLZ view, shown in Figure 19-4, is displayed when you hyperlink from the EZQSSI view, or when you type **NLZ** on the **COMMAND** line.

Figure 19-4 NLZ View



NLZ View: Line Commands

Table 19-6 lists the line commands you can use to perform actions against an entity on an NLZ view line.

Note: In the summary views, each line may represent more than one namelist. Any overtypes or line commands will affect all namelists represented by that line.

Table 19-6 NLZ View Line Commands

Command	Action
DEL	deletes the namelist
REP	replaces the specified namelist with the values from the namelist on the line where you enter the command If the specified namelist does not exist, a new namelist is created.

NLZ View Hyperlink

Table 19-7 lists the NLZ view field from which you can hyperlink and the destination for the link.

Table 19-7 NLZ View Hyperlinks

Field	View	Information
Namelist Name	NL	namelist details

Chapter 20 OTMA IMS Bridge

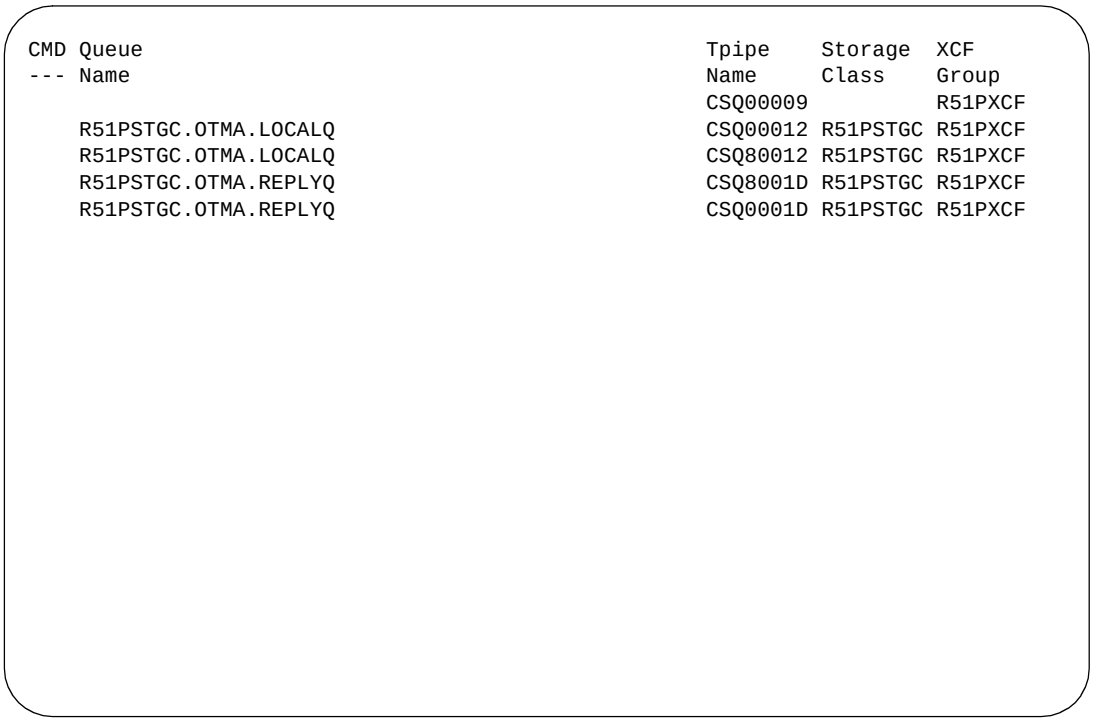
The Open Transaction Manager Access (OTMA) IMS views allow you to view the transaction pipes (Tpipes) between your IMS system and MQSeries.

This chapter discusses the following topics:

OTMA: OTMA IMS Bridge

The OTMA view provides a list of all Tpipes and the related queue and storage class. Tpipes are logical connections between the OTMA client and IMS. The OTMA view, shown in Figure 20-1, is displayed when you type **OTMA** on the **COMMAND** line.

Figure 20-1 OTMA View



```
CMD Queue                                          Tpipe    Storage  XCF
--- Name                                           Name     Class    Group
                                                   CSQ00009          R51PXCF
    R51PSTGC.OTMA.LOCALQ                           CSQ00012 R51PSTGC R51PXCF
    R51PSTGC.OTMA.LOCALQ                           CSQ80012 R51PSTGC R51PXCF
    R51PSTGC.OTMA.REPLYQ                           CSQ8001D R51PSTGC R51PXCF
    R51PSTGC.OTMA.REPLYQ                           CSQ0001D R51PSTGC R51PXCF
```

OTMA View Line Commands

Table 20-1 shows the line commands you can use to perform actions against an entity on an OTMA view line.

Table 20-1 OTMA View Line Commands

Command	Action
CMT	commits any recovery associated with the selected Tpipe
BKT	backs out of any recovery associated with the selected Tpipe

OTMA View Hyperlinks

Table 20-2 shows the OTMA view fields from which you can hyperlink and the destination for the links.

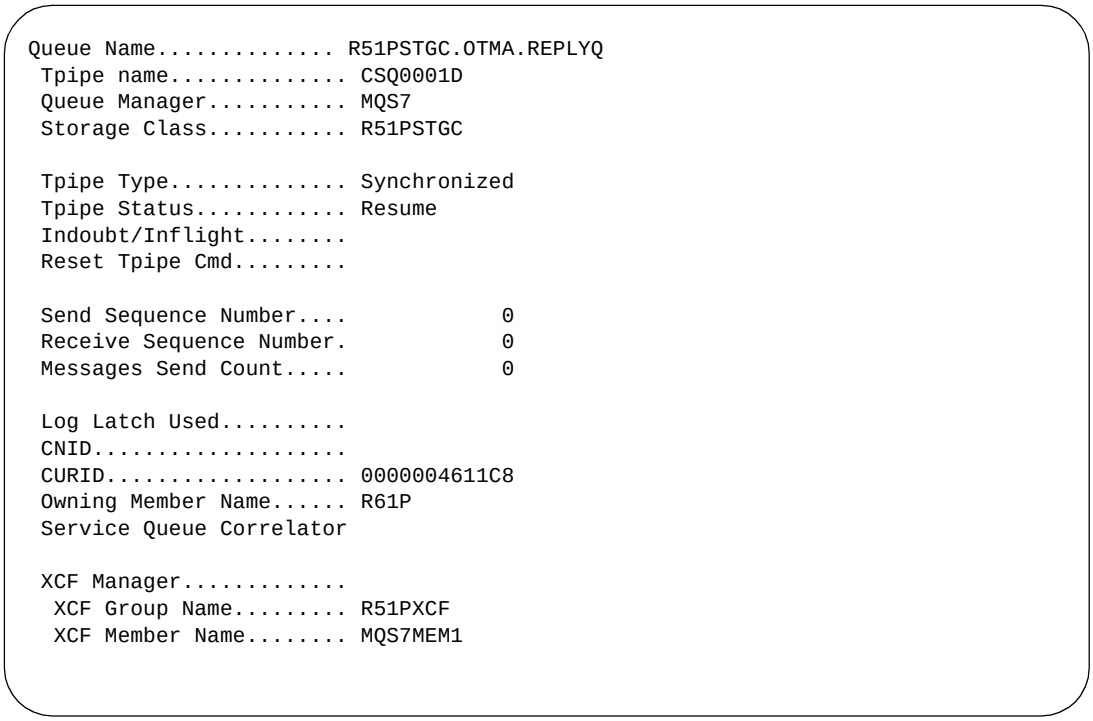
Table 20-2 OTMA View Hyperlinks

Field	View	Information
Queue Name	OTMAD	details of the Tpipe
Storage Class	STCD	details about the storage class
XCF Group	STC	storage class definitions list

OTMAD: OTMA IMS Bridge Detail

The OTMAD view provides detail information on the Tpipe. The OTMAD view, shown in Figure 20-2, is displayed when you hyperlink from the OTMA view or when you type **OTMAD** on the **COMMAND** line.

Figure 20-2 OTMAD View



OTMAD View Overtype Fields

Table 20-3 shows the fields you can overtype on the OTMAD view and the values you can use.

Table 20-3 OTMAD View Overtype Fields

Overtype Field	Value
Send Sequence Number	integer up to 999999999
Receive Sequence Number	integer up to 999999999
Note: You can only use these overtype fields with the CMT command.	

Chapter 21 Page Sets

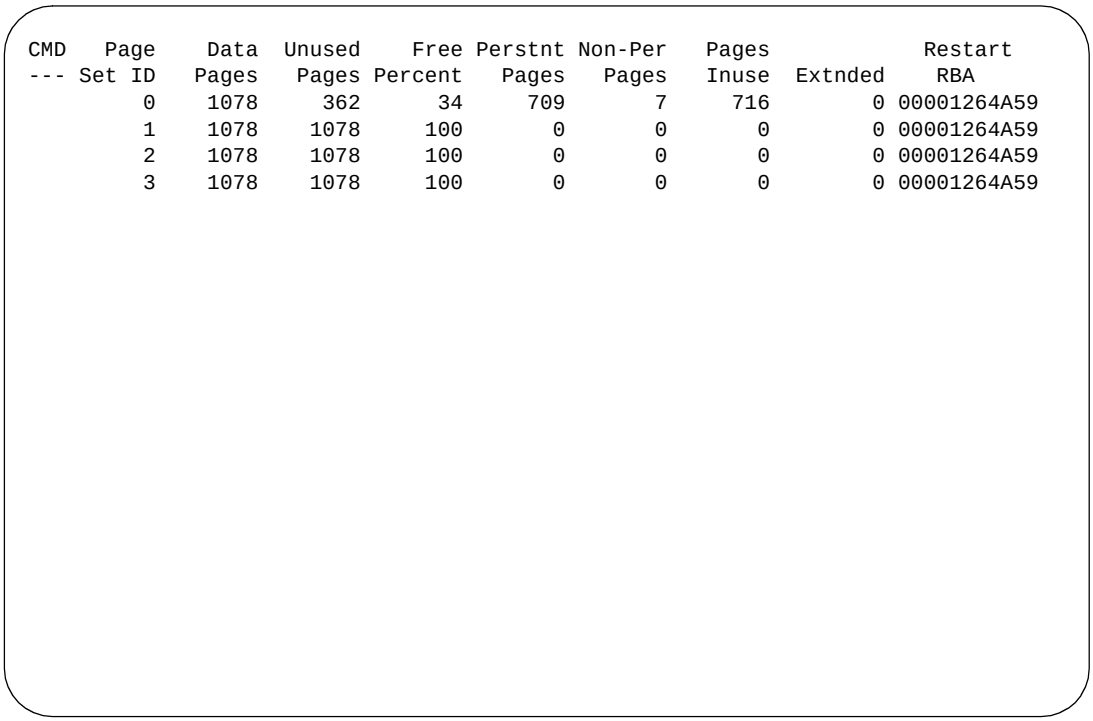
The Page Sets views provide information about the MVS WebSphere MQ page sets.

This chapter discusses the following topics:

PS: Page Sets

The Page Sets (PS) view provides information about the definition and current state of the listed page sets. The view is displayed when you hyperlink from the EZQMVS or EZQMMVS views, or when you type **PS** on the **COMMAND** line. An example of the view is shown in Figure 21-1.

Figure 21-1 PS View



```
CMD   Page    Data  Unused    Free Perstnt Non-Per   Pages           Restart
--- Set ID   Pages   Pages Percent   Pages   Pages   Inuse  Extnded    RBA
         0    1078     362      34     709       7     716        0 00001264A59
         1    1078    1078     100       0       0       0        0 00001264A59
         2    1078    1078     100       0       0       0        0 00001264A59
         3    1078    1078     100       0       0       0        0 00001264A59
```

There are no primary commands, line commands, or overtype fields for the PS view.

PS View Hyperlink

Table 21-1 shows the PS view field from which you can hyperlink and the destination for the link.

Table 21-1 PS View Hyperlink

Field	View	Information
Page Set ID	STC	details about the storage class

PSU: Page Set Usage

The page set usage view provides information about the relationship between queues and page sets. For each page set in use, it shows the storage classes defined to it and the queues defined to the storage classes. The only queues displayed are the queues that currently have messages.

From the PSU view, you can purge all the messages on a queue, move the messages to a new queue, or change the storage class to which a queue is defined.

The PSU view, shown in Figure 21-2, is displayed when you type **PSU** on the **COMMAND** line.

Figure 21-2 PSU View

```
CMD   Page Object                              Object   Current STC      QMgr
--- Set ID Name                                Type     Depth   Name     Target
         4 DEFAULT                             STC              N/A      BCL6
         4  SYSTEM.ADMIN.CHANNEL.EVENT         QLOCAL        68 DEFAULT  BCL6
         4  BCL.SHARED.QUEUE4                  QLOCAL        10 DEFAULT  BCL6
         4  SYSTEM.ADMIN.QMGR.EVENT            QLOCAL         7 DEFAULT  BCL6
         4  BCL.SHARED.QUEUE2                  QLOCAL         5 DEFAULT  BCL6
         4 NODEFINE                            STC              N/A      BCL6
         3 REMOTE                              STC              N/A      BCL6
         2 SYSLNGLV                            STC              N/A      BCL6
         1 SYSTEM                              STC              N/A      BCL6
         1  SYSTEM.CLUSTER.REPOSITORY.QUEUE    QLOCAL        59 SYSTEM   BCL6
         1  SYSTEM.CHANNEL.SYNCQ               QLOCAL         4 SYSTEM   BCL6
         1 SYSTEMST                            STC              N/A      BCL6
         3 SYSVOLAT                            STC              N/A      BCL6
```

There are no primary commands for the PSU view.

PSU View Line Command

Table 21-2 shows the PSU view line command you can use to delete all the messages from the target queue.

Table 21-2 PSU View Line Command

Command	Action
Pur	purges all messages from the target queue

PSU View Hyperlinks

Table 21-3 shows the PSU view fields from which you can hyperlinks and the destination for the links.

Table 21-3 PSU View Hyperlinks

Field	View	Information
Page Set ID	PS	displays information about the current state of the page sets
Object Name	LQD	provides details on the target queue
Current Depth	EZLQMSG	If the object is a queue, provides details on the current depth of the queue.
STC Name	STCD	details about the storage class

PSU View Overtype Fields

Table 21-4 shows the fields you can overtype on the PSU view and the values you can use.

Table 21-4 PSU View Overtype Fields

Overtype Field	Value
Queue Name	moves all messages on an existing queue to a new queue up to a 48-byte character string
Storage Class Name	moves queue to a new storage class up to a 48-byte character string

Chapter 22 Processes

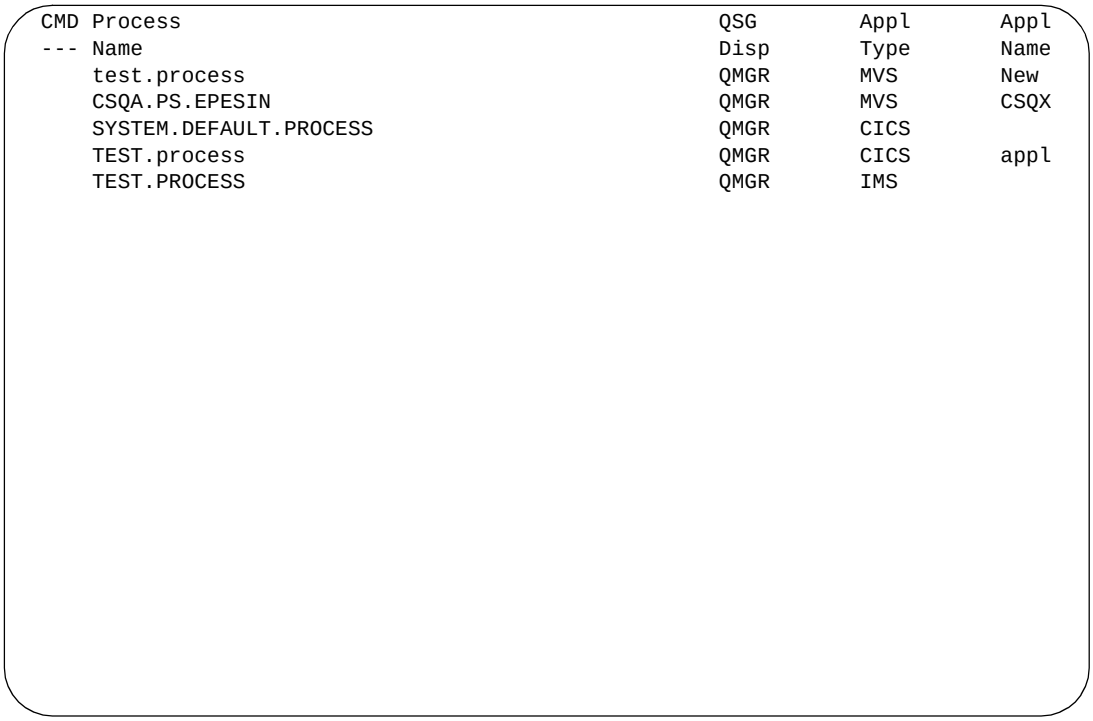
The process views provide process definition information for queue managers and queues.

This chapter discusses the following topics:

PROC: Processes

The PROC view provides information about all of the defined processes. The PROC view, shown in Figure 22-1, is displayed when you hyperlink from the EZMQS view or when you type **PROC** on the **COMMAND** line.

Figure 22-1 PROC View



```
CMD Process                                        QSG       Appl      Appl
--- Name                                           Disp      Type      Name
    test.process                                   QMGR      MVS       New
    CSQA.PS.EPESIN                                 QMGR      MVS       CSQX
    SYSTEM.DEFAULT.PROCESS                         QMGR      CICS
    TEST.process                                   QMGR      CICS      appl
    TEST.PROCESS                                   QMGR      IMS
```

PROC View Primary Command

Table 22-1 lists the primary command you can type on the **COMMAND** line to delete a process.

Table 22-1 PROC View Primary Command

Command	Action
DELete processname	deletes a process definition from the queue manager

PROC View Line Commands

Table 22-2 lists the line commands you can use to perform actions on an entity on a PROC view line.

Table 22-2 PROC View Line Commands

Command	Action
ADD	creates a new process definition with identical characteristics To give the new process definition a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	deletes a process definition from the queue manager
[1]Valid only if using MVS Queue Managers 5.2 and above.	

PROC View Overtype Fields

Table 22-3 lists the fields you can overtype on the PROC view and the values you can use.

Table 22-3 PROC View Overtype Field

Overtype Field	Value
Application Type	If MQSeries-defined, this is the application type of the process, which can be one of the following: • CICS • DOS • IMS • MVS • OS/2 • OS400 • UNIX • Windows • Windows NT If user-defined, this value must be a number within the range 65536 through 999999999.
Application Name	up to 256-byte character string

PROC View Hyperlink

Table 22-4 shows the PROC view field from which you can hyperlink and the destination for the link.

Table 22-4 PROC View Hyperlink

Field	View	Information
Process Name	PROCD	details about the process

PROCD: Process Details

The PROCD view provides detailed information about single process definition.The PROCD view, shown in Figure 22-2, is displayed when you hyperlink from the PROC view.

Figure 22-2 PROCD View

```
Process Name. CSQ4SAMP.B2.INQUIRY.PROCESS
Description.. MQM/ESA SAMPLES - CREDIT APPLICATION MANAGER
QMGR Name.... MQM2
QSG Disp..... QMGR

Appl Name....
 Bytes  1-64. MVB2
       65-128
      129-192
      193-256
Appl Type.... CICS

Env Data..... (none)
  Bytes 1-64.
       65-128
User Data.... (none)
  Bytes 1-64.
       65-128

Alter Date... 2001-10-05
Alter Time... 11.13.03
```

There are no line commands or hyperlink fields for the PROCD view.

PROCD View Primary Commands

Table 22-5 lists the primary commands you can use on the **COMMAND** line to add or delete a process.

Table 22-5 PROCD View Primary Commands

Command	Action
ADD new processname	creates a new process definition with identical characteristics
DELete*	deletes the process definition

PROCD View Overtype Fields

Table 22-6 lists the fields you can overtype on the PROCD view and the values you can use.

Table 22-6 PROCD View Overtype Fields

Overtype Field	Value
Description	up to 64-character string
Application Type	If MQSeries-defined, this is the application type of the process, which can be one of the following: • CICS • DEF • DOS • IMS • MVS • OS/2 • OS400 • UNIX • Windows • Windows NT If user-defined, this value must be a number within the range 65536 through 999999999.
Application Name	up to 256-byte character string. This is a multi-line field. You can enter or change data on all the fields.
Environment Data	up to 128-byte character string. This is a multi-line field. You can enter or change data on all the fields.
User Data	up to 128-byte character string. This is a multi-line field. You can enter or change data on all the fields.

PROCZ: Processes Summary

The PROCZ view provides information about The PROCZ view provides a list of the processes defined to the queue manager(s). This list is summarized by the process name. The PROCZ view, shown in Figure 22-3, is displayed when you hyperlink from the EZQSSI view or when you type **PROCZ** on the **COMMAND** line.

Figure 22-3 PROCZ View

```
CMD Process                                          Appl       Application
--- Name                                             Type       Name
    CSQ4IVP1                                         MVS        CSQ4IVP1
    CSQ4SAMP.B2.INQUIRY.PROCESS                      CICS       MVB2
    CSQ4SAMP.B3.MESSAGES.PROCESS                     CICS       MVB3
    CSQ4SAMP.B4.MESSAGES.PROCESS                     CICS       MVB4
    CSQ4SAMP.B5.MESSAGES.PROCESS                     CICS       MVB5
    SYSTEM.DEFAULT.PROCESS                           CICS
```

PROCZ View Primary Command

Table 22-7 lists the primary command you can type on the **COMMAND** line to delete a process.

Table 22-7 PROCZ View Primary Command

Command	Action
ADD new processname	On a detail view, adds a new process definition with attributes identical to the attributes of the current process.
DELete *	On a detail view, deletes the process definition for which information is displayed.

PROCZ View Line Commands

Table 22-8 lists the line commands you can use to perform actions on an entity on a PROCZ view line.

z

Table 22-8 PROCZ View Line Commands

Command	Action
ADD	On tabular views, overtype the process you would like identical attributes of &this command will create the new process definition. For those queue managers which support queue sharing groups, you may additionally overtype the QSGDISP value. Note, all fields must be overtyped with the same command. Scroll the view if necessary. [1]
DEL	On a tabular view, deletes the process definition displayed on the line where you enter the command.
[1]Valid only if using MVS Queue Managers 5.2 and above.	

PROCZ View Overtype Fields

Table 22-9 lists the fields you can overtype on the PROCZ view and the values you can use.

Table 22-9 PROCZ View Overtype Field

Overtype Field	Value
Application Type	If MQSeries-defined, this is the application type of the process, which can be one of the following: • CICS • DOS • IMS • MVS • OS/2 • OS400 • UNIX • Windows • Windows NT If user-defined, this value must be a number within the range 65536 through 999999999.
Application Name	up to 256-byte character string. Indicates the name of the application to be started by the process. This attribute can be altered if you have appropriate authorization.

PROCZ View Hyperlink

Table 22-10 shows the PROCZ view field from which you can hyperlink and the destination for the link.

Table 22-10 PROCZ View Hyperlink

Field	View	Information
Process Name	PROC	The name assigned to the Process. Process names can be up to 48 characters in length. When process names are assigned, it is important to use a naming convention that simplifies process management. Asterisks may appear in this field indicating multiple non-matching values or names.

Chapter 23 Queue Managers

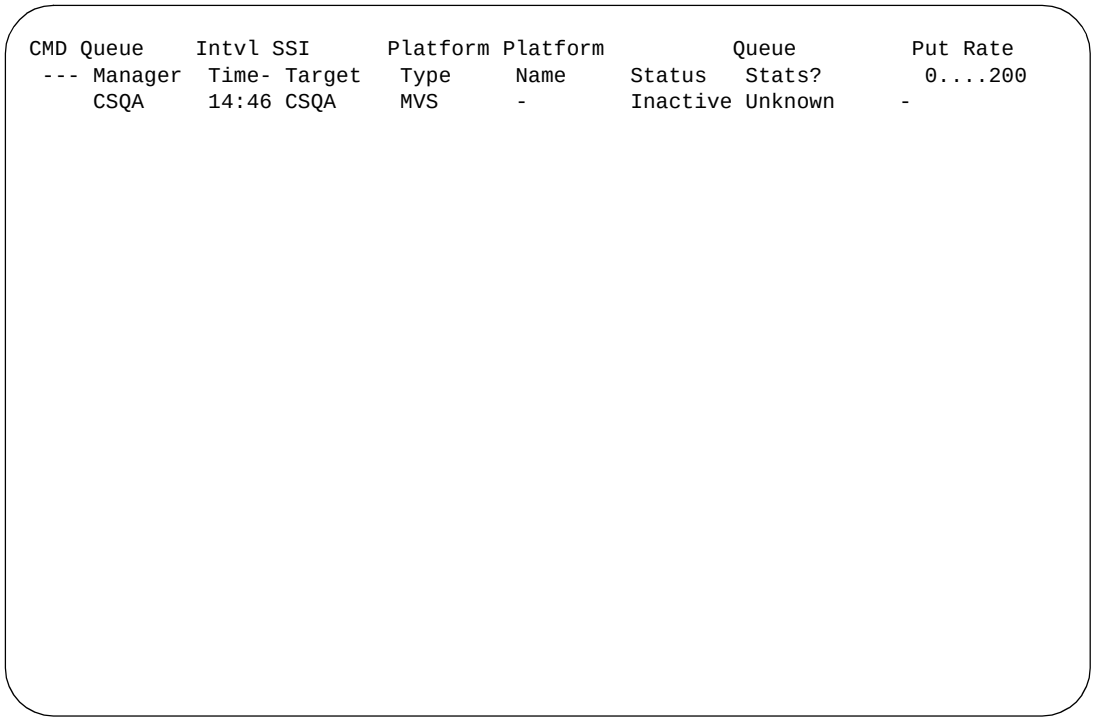
The queue manager views provide information about the operations and performance of all the queue managers you are monitoring in the current context. This chapter discusses the following topics:

QM: Queue Managers

The QM view provides an overview of all the queue managers that are being monitored, and it can be the starting point when you want more information about specific queue manager activities.

The QM view, shown in Figure 23-1, is displayed when you hyperlink from the EZQSSI view, or when you type **QM** on the **COMMAND** line.

Figure 23-1 QM View



There are no Overtype fields for this view.

QM View Primary Commands

Table 23-1 lists the QM view primary commands.

Table 23-1 QM View Primary Commands

Command	Description
MODEForc	Force changes to overtype fields, even when using the Queue Manager. The MODEForc command remains in effect for the view until one of the following is occurs: • the MODENorm command is run • a new view is displayed
MODENorm	Reset the update mode to normal after running the MODEForc command. **Note**: After running the MODENorm command, overtype changes to fields will not take effect if the Queue Manager is in use.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QM View Line Commands

Table 23-2 lists the QM view line commands.

Table 23-2 QM View Line Commands

Command	Description
PQP	Stop collecting Statistics. **Note**: On z/OS, this command does not delete the dataspace, history or intercept code. Previously collected data is still accessible.
SQP	Start collecting Statistics. Statistics must have been stopped previously for this command to work. **Note**: For the SQP command to have any effect in distributed queue managers, stats collection must be activated using the MQXAPPLY function distributed with PATROL.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QM View Hyperlinks

Table 23-3 lists the QM view fields from which you can hyperlink and the destination for each link.

Table 23-3 QM View Hyperlinks

Field	View	Information
Queue Manager	EZMQS	MAINVIEW for WebSphere MQ menu
Platform type – MVS	QMMVS	list of MVS queue managers
Status – MVS	QMMVSD	details about the queue manager
Status – not MVS	QMD	details about the queue manager
Queue Stats?	QP	queue manager performance. Indicates whether MQ Extensions are installed for the queue manager.
Put Rate	QMMVSS	queue manager put rate statistics
Get Rate	QMMVSS	queue manager get rate statistics
Norm Msgs	LQ	queue manager normal local queue messages
Xmit Msgs	XQ	queue manager transmission queue messages
Note: You can scroll to the right to display the last few fields in the list.		

QMD: Queue Manager Detail

The QMD view provides detailed analysis information about a specified non-MVS queue manager. You can find information about the queues running on the queue manager and about the messages on those queues.

The QMD view, shown in Figure 23-2, is displayed when you select a non-MVS queue manager on the QM view or when you type **QMD** on the **COMMAND** line.

Figure 23-2 QMD View

```
Queue Manager Target...... BCL6          Queue Manager........... BCL6
 Status................... Active         Description............. BCL6, IBM MQ

 Normal Local Queues.......                Platform Type........... MVS
   Number..................        29      Command Level...........       520
   Number at Maximum Depth.         0      Queue Manager Identifier
   Number of Messages......      2155
                                           Queues Names............
 Xmit Queues...............                  Command Input......... SYSTEM.COMMA
   Number..................         4       Dead Letter........... BCL6.DEAD.QU
   Number at Maximum Depth.         0       Default Xmit.......... N/A
   Number of Messages......         0
                                           Events..................
 Alias Queues..............         3       Authority.............. Disabled
 Model Queues..............         3       Inhibit................ Disabled
 Remote Queues.............         1       Local.................. Disabled
 Cluster Queues............         1       Remote................. Disabled
                                           Start/Stop............. Enabled
 Channels..................                Performance............ Disabled
   Number..................        10       Channel Auto-Def...... Disabled
   Number Running..........         0
                                           Channel Auto-Def........ Disabled
 Cluster Channels..........         4     Channel Auto-Def Exit... (None)

 Maximums..................                Distribution Lists...... No
   Message Length.......... 104857600
```

There are no line commands for this view.

QMD View Primary Commands

Table 23-4 lists the QMD view primary commands.

Table 23-4 QMD View Primary Commands

Command	Description
MODEForc	Force changes to overtype fields, even when using the Queue Manager. The MODEForc command remains in effect for the view until one of the following is occurs: • the MODENorm command is run • a new view is displayed
MODENorm	Reset the update mode to normal after running the MODEForc command. **Note**: After running the MODENorm command, overtype changes to fields will not take effect if the Queue Manager is in use.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QMD View Overtype Fields

Table 23-5 lists the fields you can overtype on the QMD view and the values you can use.

Table 23-5 QMD View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Authority Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Channel Auto-Def	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Channel Auto-Def Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Channel Auto-Def Exit	up to 128-character name of the auto-definition exit
Cluster Workload Exit Name	up to 128-character string
Cluster Workload Message Length	decimal integer up to 999999999
Cluster Workload User Data	up to 32-character string
Dead Letter Queue Name	up to 48-character string MAINVIEW for WebSphere MQ does not verify the name.
Default Xmit Queue Name	up to 48-character string MAINVIEW for WebSphere MQ does not verify the name.
Description	up to 64-character string
Inhibit Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’

Table 23-5 QMD View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Local Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Maximum Handles	decimal integer up to 999999999
Maximum Message Length	decimal integer up to 4194304
Maximum Messages in Syncpoint (LUOW)	decimal integer up to 10000
Performance Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Remote Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Repository Name	up to 48 characters
Repository Namelist	up to 48 characters
Start/Stop Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
SSL Crypto Hardware	up to 32 characters
SSL Key Repository	up to 48 characters See the MQSC Command Reference Manual for a list of valid values.
Trigger Message Interval	decimal integer up to 999999999

QMD View Hyperlinks

Table 23-6 lists the QMD view fields from which you can hyperlink and the destination for each link.

Table 23-6 QMD View Hyperlinks (Part 1 of 2)

Field	View	Information
Status	QMMVSS	queue manager's statistics
Normal Local Queues, Number	LQ	all queue manager local queues
Normal Local Queues, Number at Maximum Depth	LQ	local queues at maximum depth
Normal Local Queues, Number of Messages	LQ	local queues with messages
Xmit Queues, Number	XQ	all queue manager transmission queues
Xmit Queues, Number at Maximum Depth	XQ	transmission queues at maximum depth
Xmit Queues, Number of Messages	XQM	transmission queues with messages
Alias Queues	AQ	queue manager's alias queues
Model Queues	MQ	queue manager's model queues

Table 23-6 QMD View Hyperlinks (Part 2 of 2)

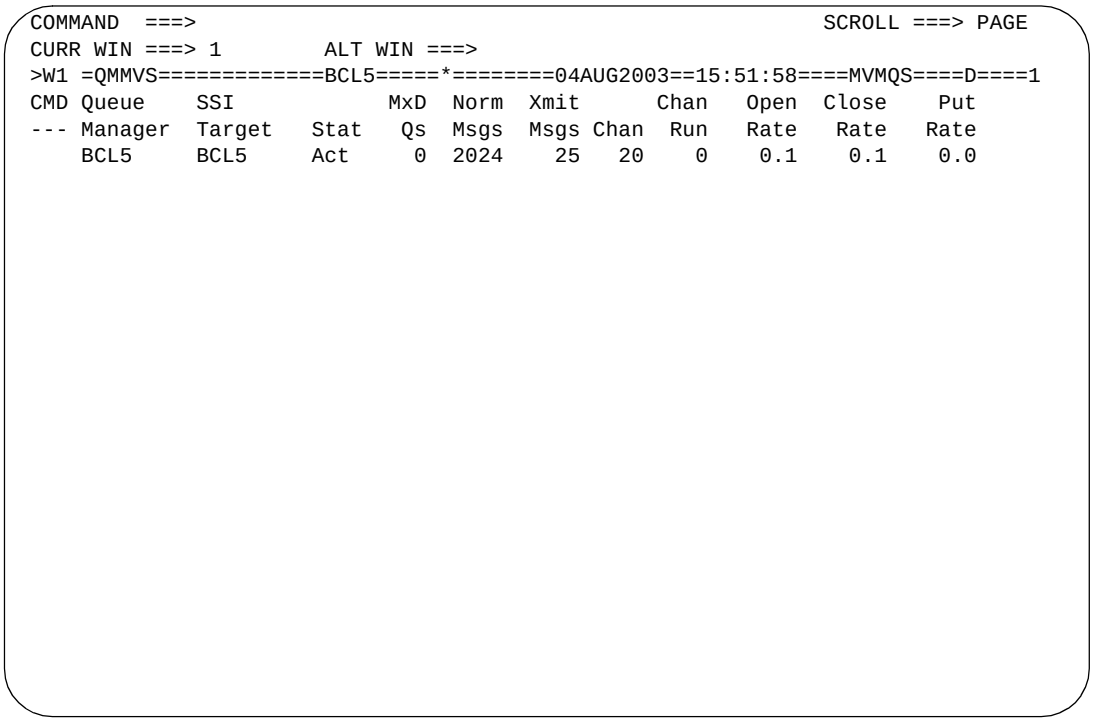
Field	View	Information
Remote Queues	RQ	queue manager's remote queues
Channels, Number	CHANNELS	queue manager's channels
Channels, Number Running	CHANNELS	queue manager's active channels
Command Input Queue Name	LQD	command input queue's details
Dead Letter Queue Name	LQD	dead-letter queue's details
Default Xmit Queue Name	LQD	default transmission queue's details
Cluster Channels	CHANNELS	queue manager cluster channels
Clusters Information	CQM	cluster queue managers

QMMVS: MVS Queue Managers

The QMMVS view provides an overview of all active queue managers executing on MVS or OS/390, shows information about queue manager activity and about MVS resource consumption, and allows you to compare activities of multiple queue managers.

The QMMVS view, shown in Figure 23-3, is displayed when you type **QMMVS** on the **COMMAND** line.

Figure 23-3 QMMVS View



There are no primary commands or overtype fields for the QMMVS view.

QMMVS View Line Commands

Table 23-7 lists the QMMVS view line commands.

Table 23-7 QMMVS View Line Commands

Command	Description
PQP	Stop collecting Statistics. **Note**: On z/OS, this command does not delete the dataspace, history or intercept code. Previously collected data is still accessible.
SQP	Start collecting Statistics. Statistics must have been stopped previously for this command to work. **Note**: For the SQP command to have any effect in distributed queue managers, stats collection must be activated using the MQXAPPLY function distributed with PATROL.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QMMVS View Hyperlinks

Table 23-8 lists the QMMVS view fields from which you can hyperlink and the destination for each link.

Table 23-8 QMMVS View Hyperlinks

Field	View	Information
Queue Manager	EZMQS	list of MAINVIEW for WebSphere MQ views
Status	QMMVSD	details about a queue manager
MxD Qs	LQ	queue manager normal local queues at maximum depth
Norm Msgs	LQ	queue manager normal local queues
Xmit Msgs	XQ	queue manager transmission queues
Put Rate	QMMVSS	queue manager statistics
Put1 Rate	QMMVSS	queue manager statistics
Chan	CHANNELS	queue manager channels
Run Chan	CHANNELS	queue manager running channels
Open Rate	QMMVSS	queue manager statistics
Close Rate	QMMVSS	queue manager statistics
Get Rate	QMMVSS	queue manager statistics
Inq Rate	QMMVSS	queue manager statistics

Table 23-8 QMMVS View Hyperlinks (continued)

Field	View	Information
Set Rate	QMMVSS	queue manager statistics
ClsH Rate	QMMVSS	queue manager statistics

QMMVSD: MVS Queue Manager Detail

The QMMVSD view provides details about a single queue manager executing on MVS and information about the defined attributes of the queue manager.

The QMMVSD view, shown in Figure 23-4, is displayed when you hyperlink from the QMMVS view or when you type **QMMVSD** on the **COMMAND** line.

Figure 23-4 QMMVSD View

```
Queue Manager..... BCL6          Queue Manager Identifier
 Status..... Active               Description..... BCL6, IBM MQ
 Platform Type..... MVS
 Command Level.....        520    Intra-Group Queuing.....
 Platform Name..... SYSM            Status..... Disabled
 Queue Sharing Group.......         Authority.....
                                    Userid.....
 Normal Local Queues.......
   Number.....                29    Queues Names.....
   Number at Maximum Depth.    0      Command Input..... SYSTEM.COMMA
   Number of Messages......  2155      Dead Letter..... BCL6.DEAD.QU
                                      Default Xmit..... (None)
 Xmit Queues.............
   Number.....                4    Events.....
   Number at Maximum Depth.    0      Authority..... Disabled
   Number of Messages......    0      Inhibit..... Disabled
                                      Local..... Disabled
 Alias Queues.............     3      Remote..... Disabled
 Model Queues.............     3      Start/Stop..... Enabled
 Remote Queues............     1      Performance..... Disabled
 Cluster Queues...........     1      Channel Auto-Def..... N/A

 Channels.....                      Buffer Pools.....          4
   Number.....                10    Page Sets.....             5
   Number Running.....         0
   Cluster Channels........    4    Address Space.....
```

QMMVSD View Primary Commands

Table 23-9 lists the QMMVSD view primary commands.

Table 23-9 QMMVSD View Primary Commands

Command	Description
MODEForc	Force changes to overtype fields, even when using the Queue Manager. The MODEForc command remains in effect for the view until one of the following is occurs: • the MODENorm command is run • a new view is displayed
MODENorm	Reset the update mode to normal after running the MODEForc command. **Note**: After running the MODENorm command, overtype changes to fields will not take effect if the Queue Manager is in use.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QMMVSD View Line Commands

Table 23-10 lists the QMMVSD view line commands.

Table 23-10 QMMVSD View Line Commands

Command	Description
PQP	Stop collecting Statistics. **Note**: On z/OS, this command does not delete the dataspace, history or intercept code. Previously collected data is still accessible.
SQP	Start collecting Statistics. Statistics must have been stopped previously for this command to work. **Note**: For the SQP command to have any effect in distributed queue managers, stats collection must be activated using the MQXAPPLY function distributed with PATROL.
STA	Start the Queue Manager.
STO	Stop the Queue Manager. The default stop mode is Quiesce. **Note**: To stop the Queue Manager using MODE(FORCE), use the MODEF command to set the force option before issuing the STO command.

QMMVSD View Overtype Fields

Table 23-11 lists the fields you can overtype on the QMMVSD view and the values you can use.

Table 23-11 QMMVSD View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Authority Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Channel Auto-Def Exit	up to 8-character string (used only for cluster-sender and cluster-receiver channels in MVS)
Cluster Workload Exit Name	up to 128-character string
Cluster Workload Message Length	decimal integer up to 999999999
Cluster Workload User Data	up to 32-character string
Configuration Event	‘e’ or ‘enabled’ or ‘d’ or ‘disabled’
Dead Letter Queue Name	up to 48-character string MAINVIEW for WebSphere MQ does not verify the name.
Default Xmit Queue Name	up to 48-character string
Description	up to 64-character string
Inhibit Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Intra-group Queuing Status	‘enable’ or ‘disable’ **Note**: z/OS QSG only
Intra-group Queuing Authority	‘DEF’ or ‘CTX’ or ‘OnlyIQG’ or ‘ALTIGQ’ **Note**: z/OS QSG only
Intra-group Queuing User ID	Blanks or a specific user ID **Note**: z/OS QSG only
Local Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Maximum Handles	decimal integer up to 999999999
Maximum Message Length	TBD
Maximum Messages in Syncpoint (LUOW)	decimal integer up to 10000
Performance Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Remote Event	‘e’ or ‘enable’ or ‘d’ or ‘disable’
Repository Name	up to 48 characters
Repository Namelist	valid namelist
Start/Stop Events	‘e’ or ‘enable’ or ‘d’ or ‘disable’
SSL CRL Namelist	valid AuthInfo object

Table 23-11 QMMVSD View Overtype Fields (Part 2 of 2)

Overtype Field	Value
SSL Crypto Hardware	up to 256 characters **Note**: See the *MQ MQSC Command Reference Manual* for valid values.
SSL Key Repository	up to 256 characters
SSL Tasks	0 – 9999
Trigger Message Interval	decimal integer up to 999999999

QMMVSD View Hyperlinks

Table 23-12 lists the QMMVSD view fields from which you can hyperlink and the destination for each link.

Table 23-12 QMMVSD View Hyperlinks (Part 1 of 2)

Field	View	Information
Status	QMMVSS	queue manager's statistics
Normal Local Queues, Number	LQ	all queue manager local queues
Normal Local Queues, Number at Maximum Depth	LQ	local queues at maximum depth
Normal Local Queues, Number of Messages	LQ	local queues with messages
Xmit Queues, Number	XQ	all queue manager transmission queues
Xmit Queues, Number at Maximum Depth	XQ	transmission queues at maximum depth
Xmit Queues, Number of Messages	XQ	transmission queues with messages
Alias Queues	AQ	queue manager's alias queues
Model Queues	MQ	queue manager's model queues
Remote Queues	RQ	queue manager's remote queues
Channels, Number	CHANNELS	queue manager's channels
Channels, Number Running	CHANNELS	queue manager's running channels
Cluster Queues	CQ	the number of Cluster Queues defined to the queue manager.
Cluster Channels	CHANNELS	the number of Cluster Channels defined to the queue manager.
Command Input Queue Name	LQD	command input queue's details
Dead Letter Queue Name	LQD	dead letter queue's details

Table 23-12 QMMVSD View Hyperlinks (Part 2 of 2)

Field	View	Information
Default Xmit Queue Name	LQD	default Transmission queue details
Buffer Pools	BP	details about the buffer pools
Page Sets	PS	details about the page sets
Disp Priority Address Space	QMMVSS	queue Manager Statistics

QMMVSS: MVS Queue Manager Statistics

The QMMVSS view provides detailed statistical analysis for a single queue manager executing on MVS.

Information from three time frames is provided for both the queue manager activity and the corresponding MVS resource consumption. Table 23-13 describes the time frames.

Table 23-13 QMMVSS Time Frames

Time Frame	Description
Realtime	10 seconds
Interval	the IRRI value in member BBIISP00 in your parameter library
Session	1 day (reset at midnight)

The QMMVSS view, shown in Figure 23-5, is displayed when you hyperlink from the QMMVS view or when you type the **QMMVSS** command on the **COMMAND** line.

Figure 23-5 QMMVSS View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =QMMVSS============BCL5=====*========04AUG2003==15:53:49====MVMQS====D====1
  Queue Manager Name BCL5

  Address Space.....          Realtime          Interval          Session
    CPU Time/Percent    0.01     0.10      0.56    0.24      52.30    0.23
    I/O Count/Rate..       0     0.00        17    0.07      34051    1.49
    Real Storage....   10668             10448              15006
    Paging Rate.....            0.00              0.20              0.02

  Request Count/Rate
    Open............       0     0.00        23    0.10       3787    0.17
    Close...........       0     0.00        23    0.10       3787    0.17
    Put.............       0     0.00       161    0.70       6231    0.27
    Put1............       0     0.00         1    0.00         36    0.00
    Get.............       0     0.00       253    1.10      10693    0.47
    Inquire.........       0     0.00         7    0.03        286    0.01
    Set.............       0     0.00         0    0.00          0    0.00
    Close Handles...       0     0.00         0    0.00          0    0.00
    Object Create...       0     0.00         0    0.00          0    0.00
```

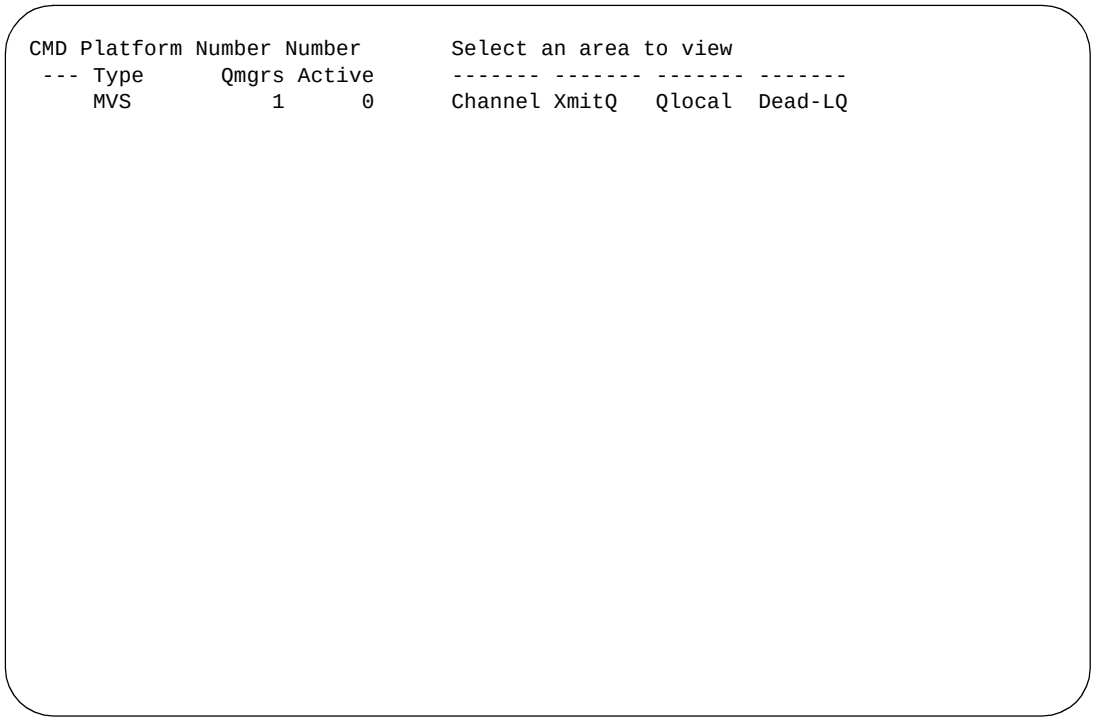
There are no primary commands, line commands, overtype fields, or hyperlink fields for the QMMVSS view.

QMZ: Queue Manager Summary

The QMZ view provides information about the number and types of queue managers on each platform. From the QMZ view, you can select the type of queue managers to get more specific information about it.

The QMZ view, shown in Figure 23-6, is displayed when you type the **QMZ** command on the **COMMAND** line.

Figure 23-6 QMZ View



There are no primary commands, line commands, or overtype fields for the QMZ view.

QMZ View Hyperlinks

Table 23-14 lists the QMZ view fields from which you can hyperlink and the destination for each link.

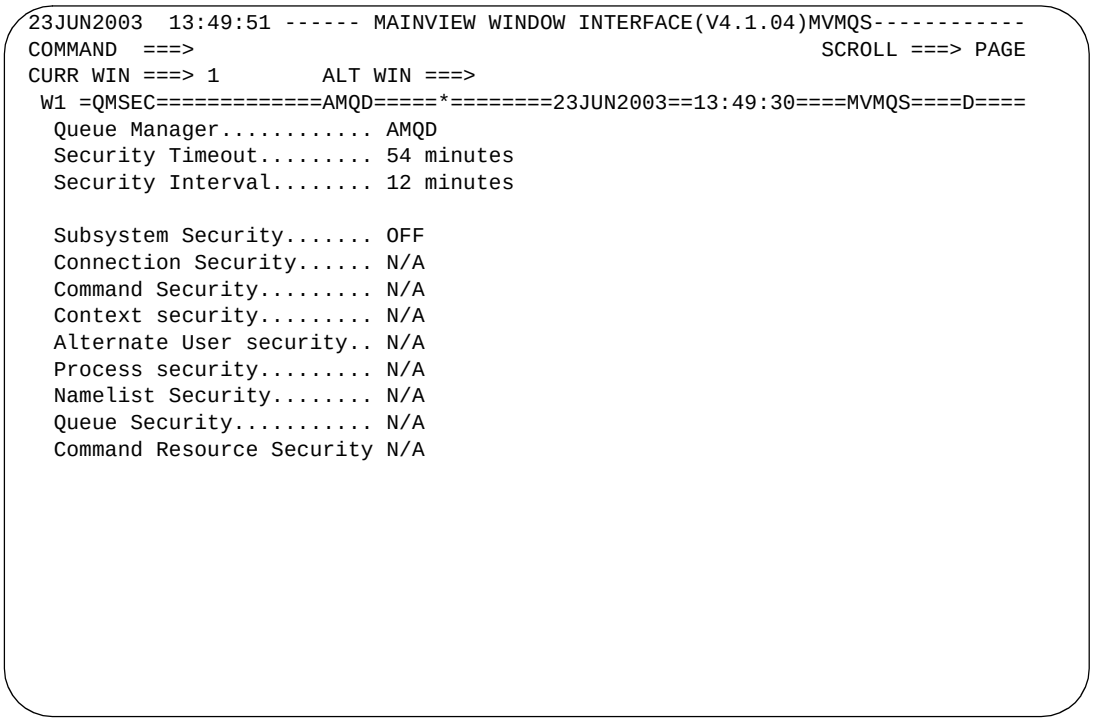
Table 23-14 QMZ Hyperlinks

Field	View	Information
Platform Type	QM	overview of queue managers
Number Qmgrs	QM	overview of queue managers
Number Active	QM	overview of active queue managers
Channel	CHANNELS	all channels in the current context
XmitQ	XQ	all transmission queues in the current context
Qlocal	LQ	all local queues in the current context
Dead-LQ	DLQM	all messages in the dead-letter queues in the current context

QMSEC: Queue Manager Security Status

The QMSEC view, shown in Figure 23-7, provides a detail view for Qmgr security status records and enables modification of system-wide security options. This view is displayed when you hyperlink from the MVS resource menu or when you type QMSEC from the Command Line.

Figure 23-7 QMSEC View



There are no line commands or hyperlinks for this view.

QMSEC View Primary Commands

Table 23-15 lists the QMSEC view primary commands.

Table 23-15 QMSEC View Primary Commands

Command	Description
REFresh *Security_Resource*	On detail views, refresh the queue manager resource. The resource classes are **MQADMIN**, **MQNLIST**, **MQPROC**, **MQQUEUE** or *****. For all resource classes, if nothing is specified, the default is *****.
RVERify *userid*	On detail views, set the re verification flag for the specified user. The user is reverified the next time that that user's security is checked.

QMSEC View Overtype Fields

Table 23-15 lists the QMSEC view overtype fields.

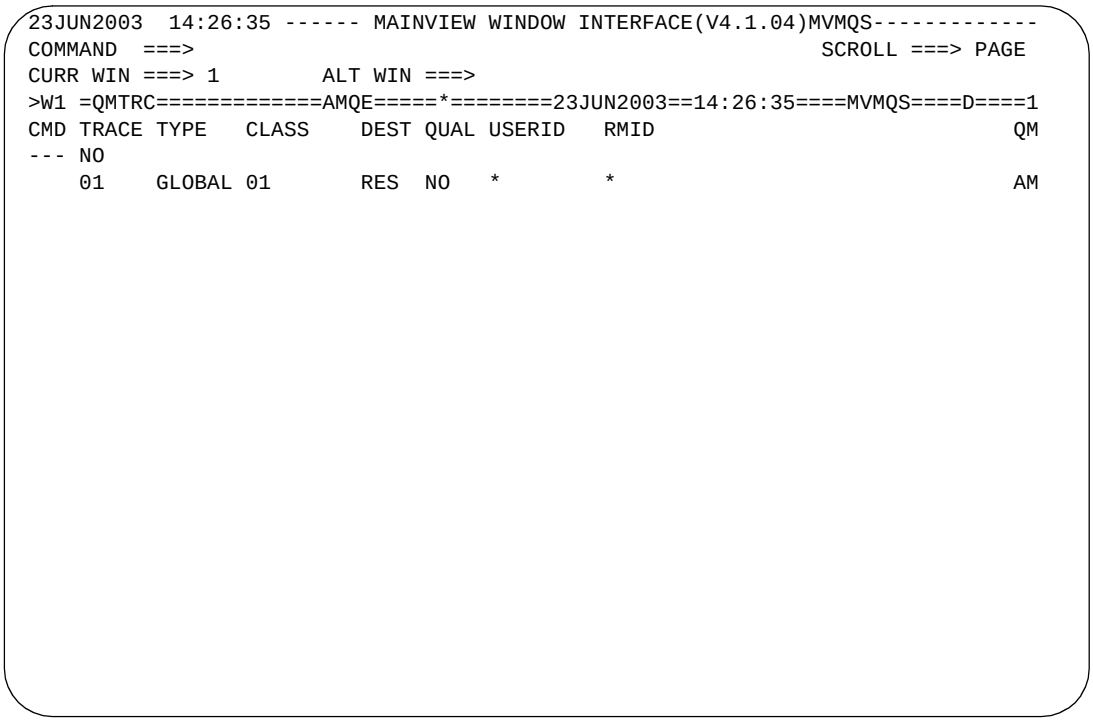
Table 23-16 QMSEC View Overtype Fields

Overtype field	Value
Security Timeout Value	Range: **0-10080** (minutes)
Security Interval Value	Range: **0-10080** (minutes)

QMTRC: Queue Manager Trace Status

The QMTRC view, shown in Figure 23-8, provides a detailed view of Qmgr trace status records and allows execution of trace records. This view is displayed when you hyperlink from the MVS resource menu or when you type QMTRC from the Command Line.

Figure 23-8 QMTRC View



There are no primary commands for this view.

QMTRC View Line Commands

Table 23-17 lists the QMTRC view line commands.

Table 23-17 QMTRC View Line Commands

Command	Description
ALT	On tabular views, change the attribute of the queue manager trace on the line where the command is entered. The attribute can be modified by overtyping the field. You can modify the **Trace Type** and **Trace Class** attributes.
STA	On tabular views, overtype the Trace whose attributes you want to copy to start a new Queue Manager trace. You can specify the **Trace Type**, **Trace Class**, **Trace Dest**, **Trace Userid**, and **Trace Rmid** attributes. **Note**: All fields must be overtyped using the same command. Scroll the view if necessary.
STO	On tabular views, stop the Queue Manager trace on the line where you enter the command.

QMTRC View Overtype Fields

Table 23-18 lists the QMTRC view line commands.

Table 23-18 QMTRC View Overtype Fields

Overtype Field	Value
Trace Class	a range of classes can be specified as m:n, or an asterisk (*****) can be specified to activate all classes
Trace Dest	**GTF**, **RES**, **SMF**, or **SRV**
Trace Rmid	an asterisk (*****) or a valid integer
Trace Type	**GLOBAL**, **STAT**, or **ACCTG**
Trace Userid	an asterisk (*****) or a valid user ID

QMTRC View Hyperlinks

Table 23-19 lists the QMTRC view hyperlinks.

Table 23-19 QMTRC View Hyperlinks

Hyperlink	Destination
QMGR	QMD view

Chapter 24 Queue Sharing Group

The queue sharing group views provide information about queue sharing.

This chapter discusses the following topics:

QSG: Queue Sharing Group

The QSG view shows the following:

- queue sharing groups in the SSI context
- the queue managers defined to the groups
- the DB2s to which the queue managers are connected
- the coupling facility structures currently being used

The QSG view, shown in Figure 24-1, is displayed when you type **QSG** on the **COMMAND** line or when you hyperlink from the MVS resource menu.

Figure 24-1 QSG View

```
CMD QSG   Object        Object      DB2   DB2 Grp  DB2 Conn    QMGR Cmd  QMGR
 --- Name  Name          Status      Name  Name     Status      Prefix    Ver
     QSH2  AMQF          ACTIVE      DBW2  DSNDBW   ACTIVE      (AMQF     520
     QSH2  BCL6          ACTIVE      DBW2  DSNDBW   ACTIVE      (BCL6     520
     QSH2  MCMD          ACTIVE      DBW2  DSNDBW   ACTIVE      (MCMD     520
     QSH2  BCL5          ACTIVE      DBW2  DSNDBW   ACTIVE      (BCL5     520
     QSH2  SHAREDQ2A     VALID
     QSH2  SHAREDQ02     VALID
```

There are no primary commands, line commands, or overtype fields for the QSG view.

QSG View Hyperlink

Table 24-1 shows the QSG view field from which you can hyperlink and the destination of the link.

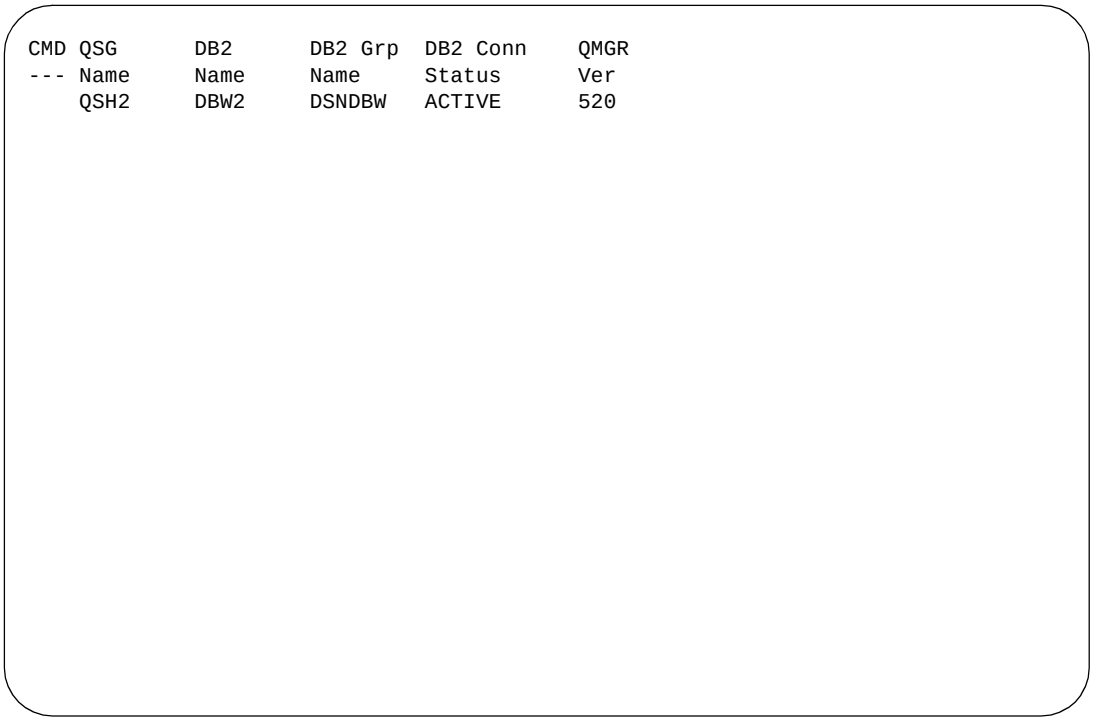
Table 24-1 QSG View Hyperlink

Field	View	Information
Object Name	QMMVSD	provides details of a single queue manager

QSGZ: Queue Sharing Group Summary

The QSGZ view provides a summary of the queue sharing groups active in the SSI context. The QSGZ view, shown in Figure 24-2, is displayed when you type **QSGZ** on the **COMMAND** line.

Figure 24-2 QSGZ View



There are no primary commands, line commands, or overtype fields for the QSGZ view.

QSGZ View Hyperlink

Table 24-2 shows the QSGZ view field from which you can hyperlink and the destination of the link.

Table 24-2 QSGZ View Hyperlink

Field	View	Information
QSG Name	QSG	displays a list of queue managers defined to that group

Chapter 25 Queue Usage

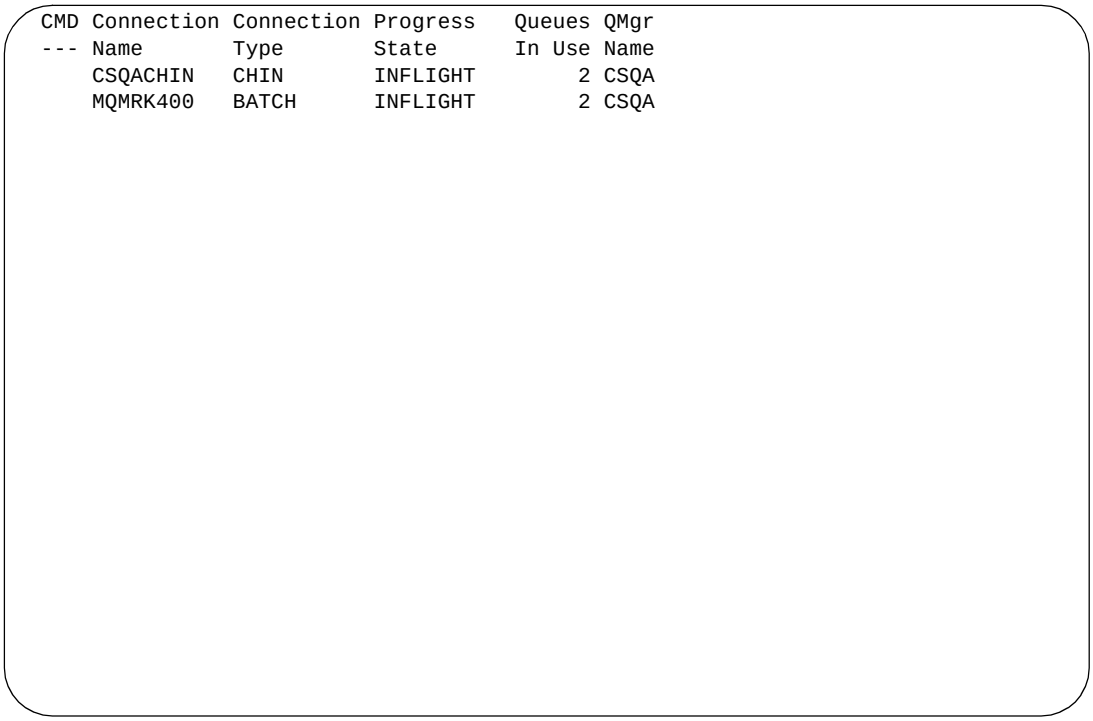
The queue usage views provide information about queue usage. Queue usage shows which applications have open queues. Queue usage is available for MVS and for distributed queue managers with MQ Extensions installed and Node Manager running.

This chapter discusses the following topics:

QUSZ: Queue Usage Summary

The QUSZ view provides an overview of queue usage by tasks. To display the QUSZ view, type **QUSZ** on the **COMMAND** line or hyperlink from the EZQSSI menu.

Figure 25-1 QUSZ View



```
CMD Connection Connection Progress   Queues QMgr
--- Name       Type       State      In Use Name
    CSQACHIN   CHIN       INFLIGHT        2 CSQA
    MQMRK400   BATCH      INFLIGHT        2 CSQA
```

There are no primary commands, line commands, or overtype fields for the QUSZ view.

QUSZ View Hyperlink

Table 25-1 shows the QUSZ view field from which you can hyperlink and the destination for the link.

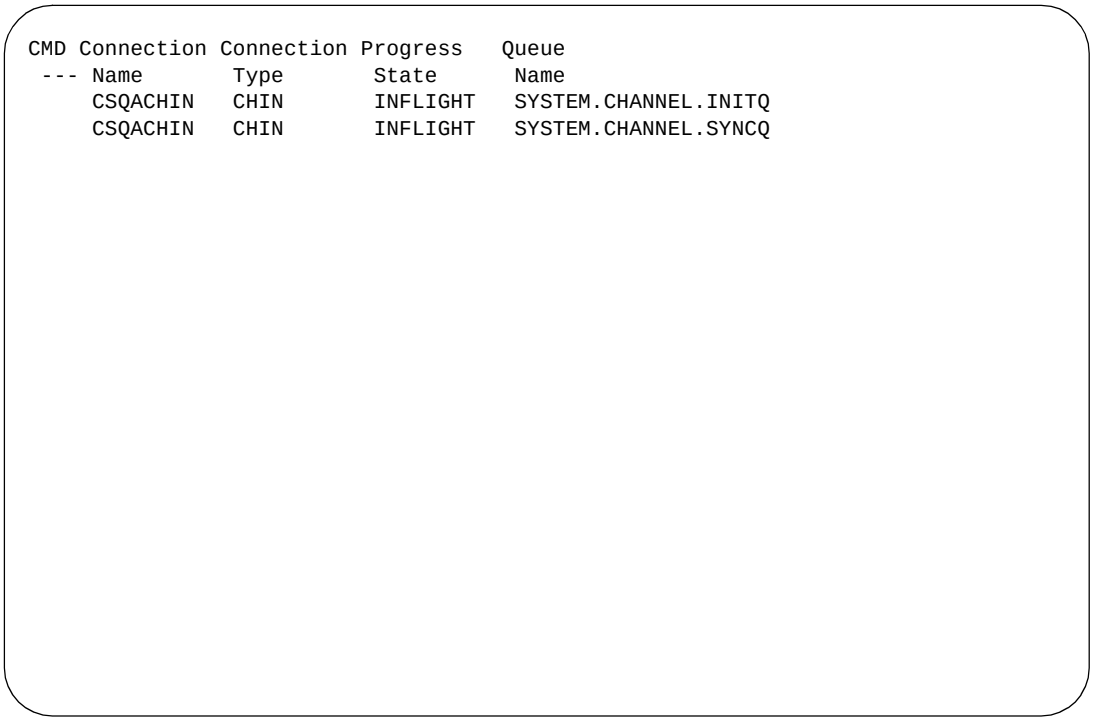
Table 25-1 QUSZ Hyperlink

Field	View	Description
Queues In Use	QUSAGEB	lists queues currently in use by a batch job, TSO user, or a CHINIT address space

QUSAGEB: Queue Usage by Batch

The QUSAGEB view provides a list of queues currently in use by a batch job, TSO user, or a CHINIT address space. To display the QUSAEB view, hyperlink from the QUSZ view or type **QUSAGEB** on the **COMMAND** line.

Figure 25-2 QUSAGEB View



```
CMD Connection Connection Progress   Queue
 --- Name       Type       State      Name
     CSQACHIN   CHIN       INFLIGHT   SYSTEM.CHANNEL.INITQ
     CSQACHIN   CHIN       INFLIGHT   SYSTEM.CHANNEL.SYNCQ
```

There are no primary commands, line commands, or overtype fields for the QUSAGEB view.

QUSAGEB Hyperlink

Table 25-2 shows the QUSAGEB view field from which you can hyperlink and the destination for the link.

Table 25-2 QUSAGEB View Hyperlink

Field	View	Description
Queue Name	QUSAGED	details about the queue usage by current task

QUSAGED: Queue Usage Detail

The QUSAGED view provides details about the queue usage by current task. To display the QUSAGED view, hyperlink from the QUSAGEB view or type **QUSAGED** on the **COMMAND** line.

Figure 25-3 QUSAGED View

```
Queue.................. SYSTEM.CHANNEL.INITQ
 Connection Name........ CSQACHIN
 Connection Type........ CHIN
 Progress State......... INFLIGHT
 Userid................. MQSSTC
 Queue Manager Name..... CSQA

 Transaction Id......... N/A
 Task number............      N/A
 Logical Unit Of Work ID 000000000000000000000000000000000000000000000000

 Reply to Queue......... (none)
 Reply to QMgr.......... CSQA

 QMgr/Alias queue.......
 Transmission queue.....
 Message Id............. 00000000000000000000000000000000000000000000000000
 Correlation Id......... 00000000000000000000000000000000000000000000000000

 Open options........... INPUT_SHARED
                         SAVE_ALL_CONTEXT
```

There are no primary commands, line commands, or overtype fields for the QUSAGED view.

QUSAGED Hyperlinks

Table 25-3 shows the QUSAGED view fields from which you can hyperlink and the destination for the links.

Table 25-3 QUSAGED View Hyperlink (Part 1 of 2)

Field	View	Description
Reply to Queue	LQD	details of the local queue
Reply to QMgr	QMMVSD	details of the queue manager

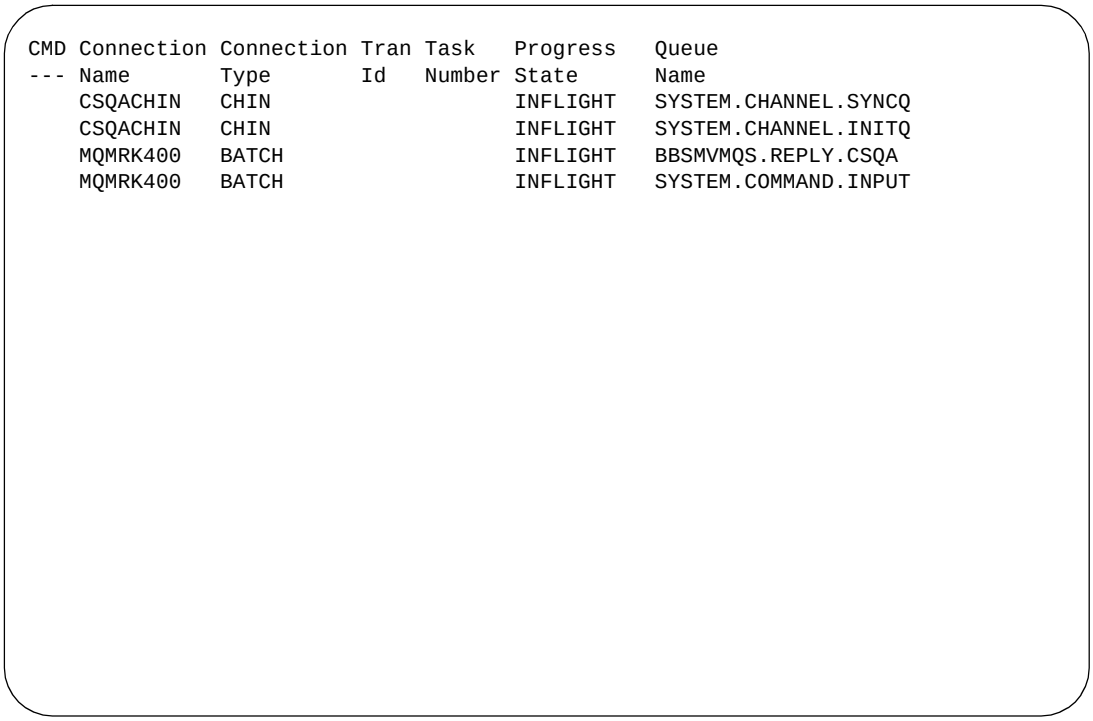
Table 25-3 QUSAGED View Hyperlink (Part 2 of 2)

Field	View	Description
QMgr/Alias queue	AQ	a list of the alias queues
Transmission queue	XQ	provides a list of all local queues where USAGE=XMITQ

QUSAGEO: Queue Usage by OLTP

The QUSAGEO view provides a list of queues currently in use by a CICS or IMS task. To display the QUSAGEO view, type **QUSAGEO** on the **COMMAND** line.

Figure 25-4 QUSAGEO View



```
CMD Connection Connection Tran Task   Progress   Queue
--- Name       Type       Id   Number State      Name
    CSQACHIN   CHIN                  INFLIGHT   SYSTEM.CHANNEL.SYNCQ
    CSQACHIN   CHIN                  INFLIGHT   SYSTEM.CHANNEL.INITQ
    MQMRK400   BATCH                 INFLIGHT   BBSMVMQS.REPLY.CSQA
    MQMRK400   BATCH                 INFLIGHT   SYSTEM.COMMAND.INPUT
```

There are no primary commands, line commands, or overtype fields for the QUSAGEO view.

QUSAGEO Hyperlink

Table 25-4 shows the QUSAGEO view field from which you can hyperlink and the destination for the link.

Table 25-4 QUSAGEO View Hyperlink

Field	View	Description
Queue Name	QUSAGED	details about the queue usage by current task

Chapter 26 Queues

The queues views provide information about all the queues in the current context.

This chapter discusses the following topics:

QUEUES: Queues

The QUEUES view shown in Figure 26-1 lists the queues known to MAINVIEW for WebSphere MQ. The Queues view shows the type of queue and provides an easy way to locate and display a queue.

To display the QUEUES view, type **QUEUES** on the **COMMAND** line or hyperlink from the EZQI menu.

Figure 26-1 Queues View

```
CMD Queue    QSG    Queue                                          Queue
--- Type     Disp   Name                                           Descriptio
    XMITQ    QMGR   CSQA                                           (none)
    QLOCAL   QMGR   MCM.REPLY.MQMRK4002000102418135000             (none)
    QLOCAL   QMGR   MCM.REPLY.MQMRK4002000102418184912             (none)
    QLOCAL   QMGR   MCM.REPLY.MQMRK4002000102418273550             (none)
    QLOCAL   QMGR   MICKEY.MOUSE                                   (none)
    QREMOTE  QMGR   RQ.TO.CSQA                                     (none)
    QLOCAL   QMGR   SYSTEM.ADMIN.CHANNEL.EVENT                     MQSeries C
    QLOCAL   QMGR   SYSTEM.ADMIN.COMMAND.QUEUE                     MQSeries a
    QLOCAL   QMGR   SYSTEM.ADMIN.PERFM.EVENT                       MQSeries p
    QLOCAL   QMGR   SYSTEM.ADMIN.QMGR.EVENT                        MQSeries Q
    QLOCAL   QMGR   SYSTEM.CHANNEL.INITQ                           MQSeries C
    QLOCAL   QMGR   SYSTEM.CHANNEL.SYNCQ                           MQSeries C
    QLOCAL   QMGR   SYSTEM.CICS.INITIATION.QUEUE                   MQSeries D
    QLOCAL   QMGR   SYSTEM.CLUSTER.COMMAND.QUEUE                   (none)
    QLOCAL   QMGR   SYSTEM.CLUSTER.REPOSITORY.QUEUE                (none)
    XMITQ    QMGR   SYSTEM.CLUSTER.TRANSMIT.QUEUE                  (none)
    QLOCAL   QMGR   SYSTEM.DEAD.LETTER.QUEUE                       MQSeries d
    QALIAS   QMGR   SYSTEM.DEFAULT.ALIAS.QUEUE                     (none)
    QLOCAL   QMGR   SYSTEM.DEFAULT.INITIATION.QUEUE                MQSeries D
    QLOCAL   QMGR   SYSTEM.DEFAULT.LOCAL.QUEUE                     (none)
    QMODEL   QMGR   SYSTEM.DEFAULT.MODEL.QUEUE                     (none)
    QREMOTE  QMGR   SYSTEM.DEFAULT.REMOTE.QUEUE                    (none)
    QMODEL   QMGR   SYSTEM.MQSC.REPLY.QUEUE                        MQSC reply
    QLOCAL   QMGR   TESTQ                                          (none)
```

No primary commands, line commands, or overtype fields are available for this view.

QUEUES View Hyperlink

Table 26-1 shows the QUEUES view field from which you can hyperlink and the destination of the link.

Table 26-1 Queues View Hyperlinks

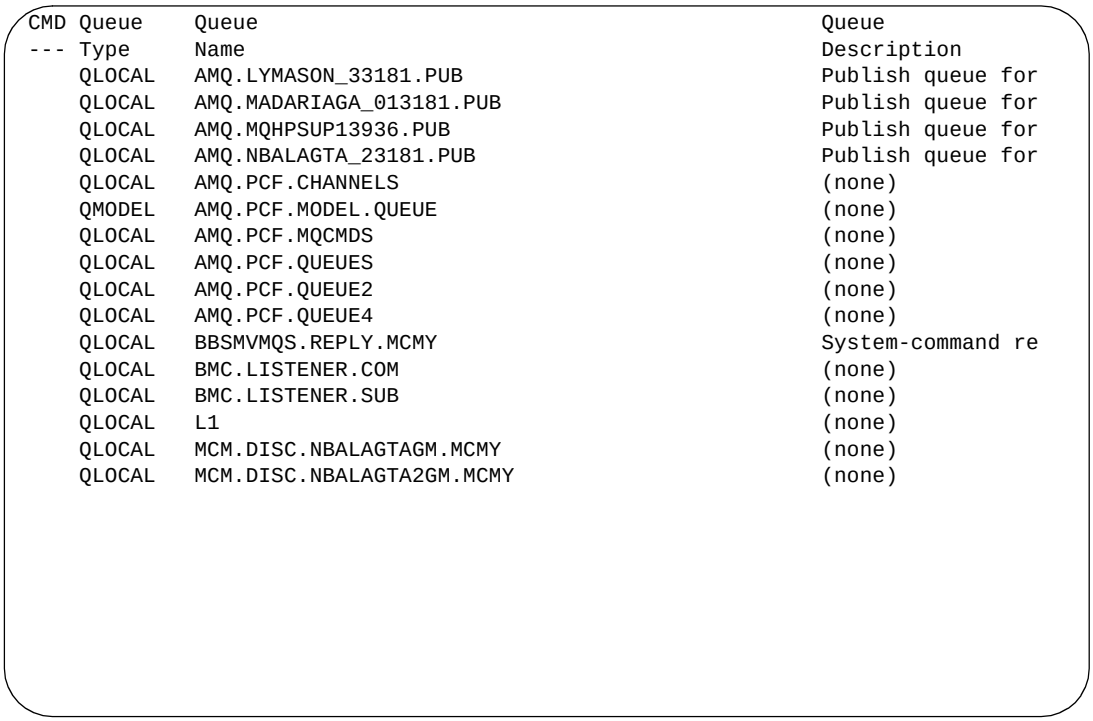
Field	View	Information
Queue Name	LQD, RQD, or AQD	details on the queue

You can hyperlink from the name of a queue to access a detail view that provides more information about the queue.

QUEUEZ View

The QUEUEZ view shown in Figure 26-2 provides a list of all queues in the current context. The list is summarized by queue name. To display the QUEUEZ view, type **QUEUEZ** on the **COMMAND** line or hyperlink from the EZQQI menu.

Figure 26-2 Queuez View



```
CMD Queue    Queue                                          Queue
--- Type     Name                                           Description
    QLOCAL   AMQ.LYMASON_33181.PUB                          Publish queue for
    QLOCAL   AMQ.MADARIAGA_013181.PUB                       Publish queue for
    QLOCAL   AMQ.MQHPSUP13936.PUB                           Publish queue for
    QLOCAL   AMQ.NBALAGTA_23181.PUB                         Publish queue for
    QLOCAL   AMQ.PCF.CHANNELS                               (none)
    QMODEL   AMQ.PCF.MODEL.QUEUE                            (none)
    QLOCAL   AMQ.PCF.MQCMDS                                 (none)
    QLOCAL   AMQ.PCF.QUEUES                                 (none)
    QLOCAL   AMQ.PCF.QUEUE2                                 (none)
    QLOCAL   AMQ.PCF.QUEUE4                                 (none)
    QLOCAL   BBSMVMQS.REPLY.MCMY                            System-command re
    QLOCAL   BMC.LISTENER.COM                               (none)
    QLOCAL   BMC.LISTENER.SUB                               (none)
    QLOCAL   L1                                             (none)
    QLOCAL   MCM.DISC.NBALAGTAGM.MCMY                       (none)
    QLOCAL   MCM.DISC.NBALAGTA2GM.MCMY                      (none)
```

No primary commands, line commands, or overtype fields are available for this view.

QUEUEZ View Hyperlink

Table 26-2 shows the QUEUEZ view field from which you can hyperlink and the destination of the link.

Table 26-2 Queuez View Hyperlinks

Field	View	Information
Queue Name	QUEUES	details on the queue

Chapter 27 Remote Queues

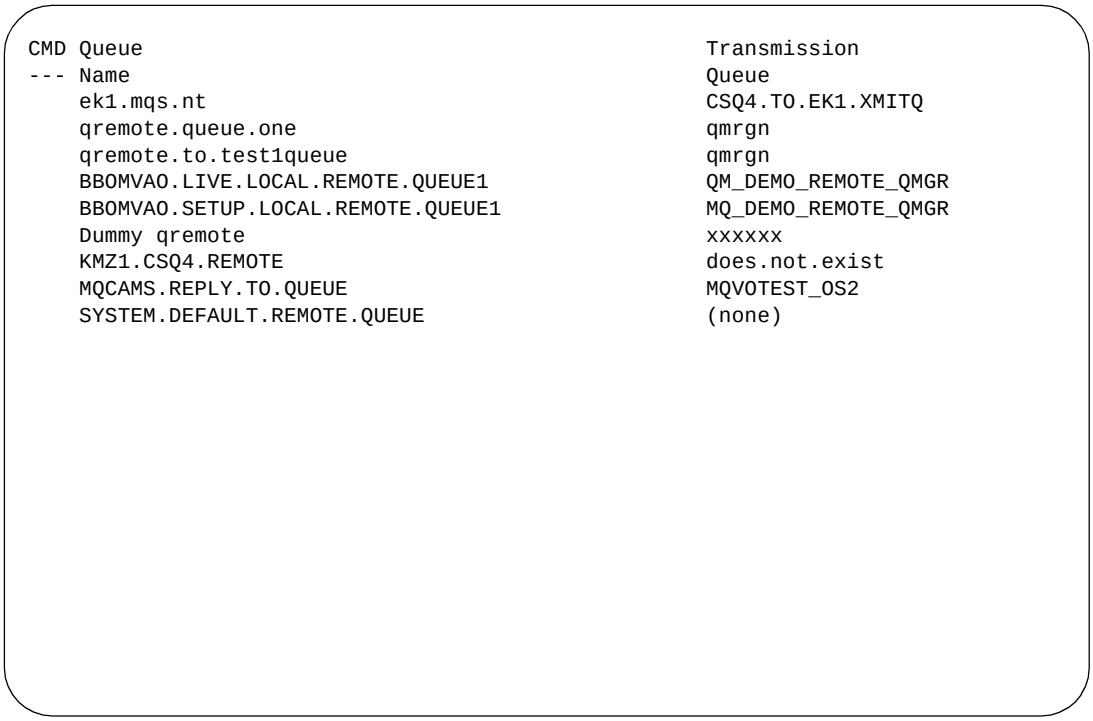
The remote queue views provide information about a queue or queues that belong to a queue manager other than the one connected to your application.

This chapter discusses the following topics:

RQ: Remote Queues

The RQ view provides information on the remote queues. The RQ view, shown in Figure 27-1, is displayed when you hyperlink from the EZMQS, QMD, or QMMVSD view or when you type **RQ** on the **COMMAND** line.

Figure 27-1 RQ View



```
CMD Queue                                              Transmission
--- Name                                               Queue
    ek1.mqs.nt                                         CSQ4.TO.EK1.XMITQ
    qremote.queue.one                                  qmrgn
    qremote.to.test1queue                              qmrgn
    BBOMVAO.LIVE.LOCAL.REMOTE.QUEUE1                   QM_DEMO_REMOTE_QMGR
    BBOMVAO.SETUP.LOCAL.REMOTE.QUEUE1                  MQ_DEMO_REMOTE_QMGR
    Dummy qremote                                      xxxxxx
    KMZ1.CSQ4.REMOTE                                   does.not.exist
    MQCAMS.REPLY.TO.QUEUE                              MQVOTEST_OS2
    SYSTEM.DEFAULT.REMOTE.QUEUE                        (none)
```

RQ View Primary Commands

Table 27-1 shows the primary commands you can enter on the **COMMAND** line to delete queues from the RQ view.

Table 27-1 RQ View Primary Command

Command	Action
DELete queuename	delete the queue from the queue manager
DELete queuename pattern	

RQ View Line Commands

Table 27-2 lists the line commands you can use to perform actions against an entity on an RQ view line.

Table 27-2 RQ View Line Commands

Command	Action
ADD	create a new remote queue with identical characteristics To give the new remote queue a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	delete a queue
[1]Valid only if using MVS Queue Managers 5.2 and above.	

RQ View Overtype Fields

Table 27-3 lists the fields you can overtype on the RQ view and the values you can use.

Table 27-3 RQ View Overtype Fields

Overtype Field	Value
Transmission Queue	up to 48-character string MAINVIEW for WebSphere MQwill not verify the name.
Remote Qmgr	up to 48-character string MAINVIEW for WebSphere MQwill not verify the name.
Remote Queue	up to 48-character string MAINVIEW for WebSphere MQwill not verify the name.
Note: You can scroll to the right to display the last two fields in the list.	

RQ View Hyperlinks

Table 27-4 lists the RQ view fields from which you can hyperlink and the destination for each link.

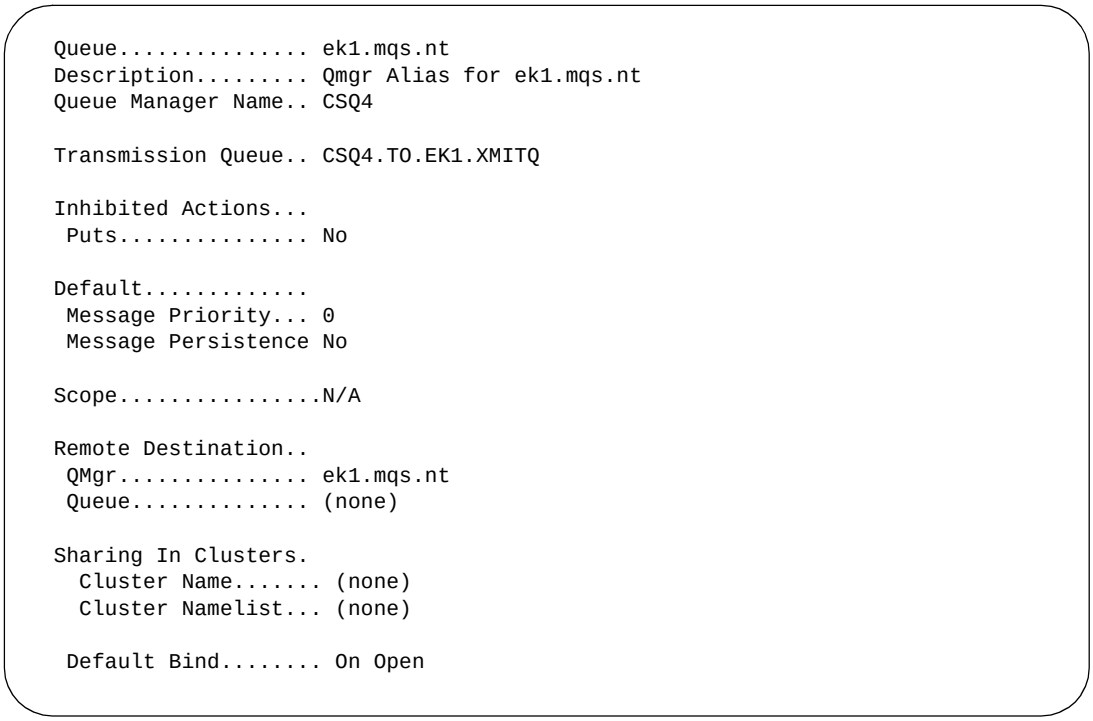
Table 27-4 RQ View Hyperlinks

Field	View	Information
Queue Name	RQD	details about the remote queue
Transmission Queue	LQD	details about the transmission queue

RQD: Remote Queue Detail

The RQD view provides details on a single remote queue. The RQD view, shown in Figure 27-2, is displayed when you hyperlink from the EZMQS or when you type **RQD** on the **COMMAND** line.

Figure 27-2 RQD View



RQD Primary Commands

Table 27-5 lists the primary commands you can enter on the **COMMAND** line to delete a queue.

Table 27-5 RQD View Primary Commands

Command	Action
ADD new queuename	create a new remote queue with characteristics identical to those displayed
DELete *	delete the queue

RQD View Overtype Fields

Table 27-6 lists the fields you can overtype on the RQD view and the values you can use.

Table 27-6 RQD View Overtype Fields

Overtype Field	Value
Description	up to 64-character string
Transmission Queue	up to 48-character string MAINVIEW for WebSphere MQ will not verify the name.
Inhibited Actions, Puts	‘y’ or ‘yes’ or ‘n’ or ‘no’
Default Message Priority	decimal integer up to 9
Default Message Persistence	‘y’ or ‘yes’ or ‘n’ or ‘no’
Scope	‘q’ or ‘qmgr’ or ‘c’ or ‘cell’ When the definition is of an MVS Queue Manager, Scope is not applicable and the value must be ‘N/A’.
Remote Destination, QMgr	up to 48-character string MAINVIEW for WebSphere MQ will not verify the name.
Remote Destination, Queue	up to 48-character string MAINVIEW for WebSphere MQ will not verify the name.
Cluster Name	up to 48-character string
Cluster Namelist	up to 48-character string
Default Bind	‘On Open’ or ‘Not Fixed’

RQD View Hyperlink

Table 27-7 shows the RQD view field from which you can hyperlink and the destination for the link.

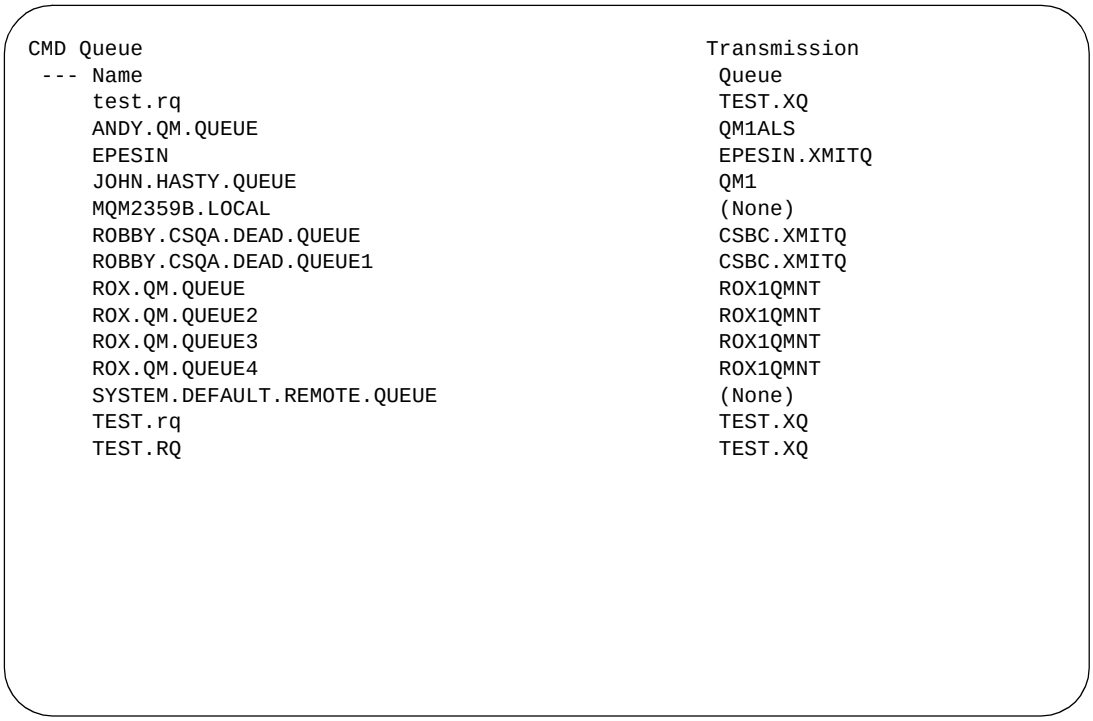
Table 27-7 RQD View Hyperlink

Field	View	Information
Transmission Queue	LQD	details about the transmission queue

RQZ: Remote Queue Summary

The RQZ view provides summary information on all remote queues. The RQZ view, shown in Figure 27-3, is displayed when you hyperlink from the EZQQI menu, or when you type **RQZ** on the **COMMAND** line.

Figure 27-3 RQZ View



```
CMD Queue                                                Transmission
 --- Name                                                 Queue
     test.rq                                              TEST.XQ
     ANDY.QM.QUEUE                                        QM1ALS
     EPESIN                                               EPESIN.XMITQ
     JOHN.HASTY.QUEUE                                     QM1
     MQM2359B.LOCAL                                       (None)
     ROBBY.CSQA.DEAD.QUEUE                                CSBC.XMITQ
     ROBBY.CSQA.DEAD.QUEUE1                               CSBC.XMITQ
     ROX.QM.QUEUE                                         ROX1QMNT
     ROX.QM.QUEUE2                                        ROX1QMNT
     ROX.QM.QUEUE3                                        ROX1QMNT
     ROX.QM.QUEUE4                                        ROX1QMNT
     SYSTEM.DEFAULT.REMOTE.QUEUE                          (None)
     TEST.rq                                              TEST.XQ
     TEST.RQ                                              TEST.XQ
```

There are no primary commands or overtype fields for the RQZ view.

RQZ View Line Commands

Table 27-8 lists the line commands you can use to perform actions against an entity on an RQZ view line.

Note: In the summary views, each line may represent more than one queue. Any overtypes or line commands will affect all queues represented by that line.

Table 27-8 RQZ View Line Commands

Command	Action
ADD	create a new remote queue with identical characteristics
DEL	delete a queue

RQZ View Hyperlinks

Table 27-9 lists the RQZ view fields from which you can hyperlink and the destination for each link.

Table 27-9 RQZ View Hyperlinks

Field	View	Information
Queue Name	RQ	overview of the remote queue
Transmission Queue	LQD	details about the transmission queue

Chapter 28 Select View

The All Views view shows a list of all MAINVIEW for WebSphere MQ views.

This chapter discusses the following topics:

Views: Views Summary

The All Views view, shown in Figure 28-1, is displayed when you type **VIEWS** on the **COMMAND** line.

Figure 28-1 All Views View

```
ADMIN     MVMQS    Overview Admin View
APST      MVMQS    Overview applicationion stats
AQ        MVMQS    Overview Alias Queues
AQD       MVMQS    Detail   Alias Queues Detail
AQZ       MVMQS    Overview Alias Queues Summary
BKR390    MVMQS    Overview WMQI S390 Broker Overview
BKR390D   MVMQS    Detail   WMQI S390 Broker Detail
BP        MVMQS    Overview Buffer Pools
BPD       MVMQS    Detail   Buffer Pool Detail
BROKER    MVMQS    Overview WMQI Broker Overview
BROKERD   MVMQS    Detail   WMQI Broker Detail
CCHNL     MVMQS    Overview CICS Channels
CCHNLD    MVMQS    Detail   CICS Channels Detail
CF        MVMQS    Overview Coupling Facility Mgr Data
CFD       MVMQS    Detail   Coupling Facility Mgr Detail
CFGMGR    MVMQS    Overview WMQI Config Manager Overview
```

There are no primary commands, line commands, overtype fields, or hyperlinks for this view.

Chapter 29 Statistics

Detailed Statistics and Application Statistics are only available on MVS. Detailed Statistics show queue manager and current values as opposed to session and interval data that is shown for records with history. Queue manager data is collected from the time the queue manager is started. The current value is the data since the last IRRI reset.

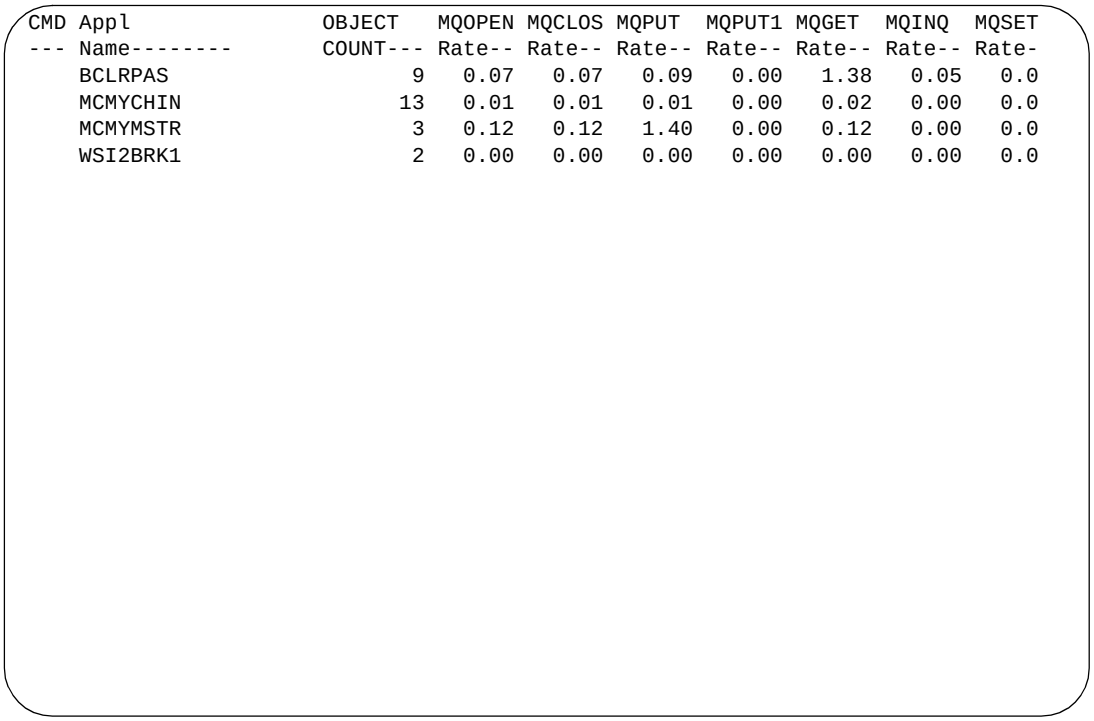
The Queue Performance statistics views provide information about queues and their performance. Queue performance data is available for any MVS queue managers running with MQ Extensions and any distributed systems queue running with the WebSphere MQ Extensions that is monitored with Node Manager. When installed and enabled, MQ Extensions and queue performance statistics collection give detailed information about connection and queue activity.

This chapter discusses the following topics:

APST: Application Stats

The APST view, shown in Figure 29-1, is displayed when you type **APST** on the **COMMAND** line, or hyperlink from the EZST or EZQST viewS.

Figure 29-1 APST View



```
CMD Appl              OBJECT   MQOPEN MQCLOS MQPUT  MQPUT1 MQGET  MQINQ  MQSET
--- Name--------      COUNT--- Rate-- Rate-- Rate-- Rate-- Rate-- Rate-- Rate-
    BCLRPAS                 9   0.07   0.07   0.09   0.00   1.38   0.05   0.0
    MCMYCHIN               13   0.01   0.01   0.01   0.00   0.02   0.00   0.0
    MCMYMSTR                3   0.12   0.12   1.40   0.00   0.12   0.00   0.0
    WSI2BRK1                2   0.00   0.00   0.00   0.00   0.00   0.00   0.0
```

There are no primary commands, line commands, or overtype fields for this view.

APST View Hyperlink

Table 29-1 lists the APST view fields from which you can hyperlink and the destination for the links.

Table 29-1 APST View Hyperlink

Field	View	Information
Appl Name	APSTD	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Object Count	MQENZ	the number of objects

APSTD: Application Stats Detail

The APSTD view, shown in Figure 29-2, is displayed when you type **APSTD** on the **COMMAND** line or hyperlink from an Application Name on the APST view.

Figure 29-2 APSTD View

```
Application Name.                          MQM2MSTR
Queue Manager....                          MQM2

                          Interval          Session            Last
API Counts.......
 MQOPEN..........       10     0.06       72     0.03           12:01:05.
 MQPUT...........      121     0.72     1072     0.42           12:01:05.
 MQPUT1..........        0     0.00        0     0.00           11:12:06.
 MQGET...........       10     0.06       72     0.03           12:01:05.
 MQCLOSE.........       10     0.06       72     0.03           12:01:05.
 MQINQ...........        0     0.00        0     0.00
 MQSET...........        0     0.00        0     0.00
 Failed MQOPEN...        0     0.00        0     0.00
 Failed MQPUT....        0     0.00        0     0.00
 Failed MQPUT1...        0     0.00        0     0.00
 Failed MQGET....        0     0.00        0     0.00
 Failed MQCLOSE..        0     0.00        0     0.00

Bytes............
 MQPUT Msg Bytes.    23017   137.21   509048   198.22
 MQPUT1 Msg Bytes        0     0.00        0     0.00
 MQGET Msg Bytes.     1089     6.49     6566     2.56

Min/Max Messages.
 Longest Get.....                             324
 Longest Put.....                            1670
```

There are no primary commands, line commands, or overtype fields for this view.

APSTD View Hyperlink

Table 29-2 lists the APSTD view fields from which you can hyperlink and the destination for the links.

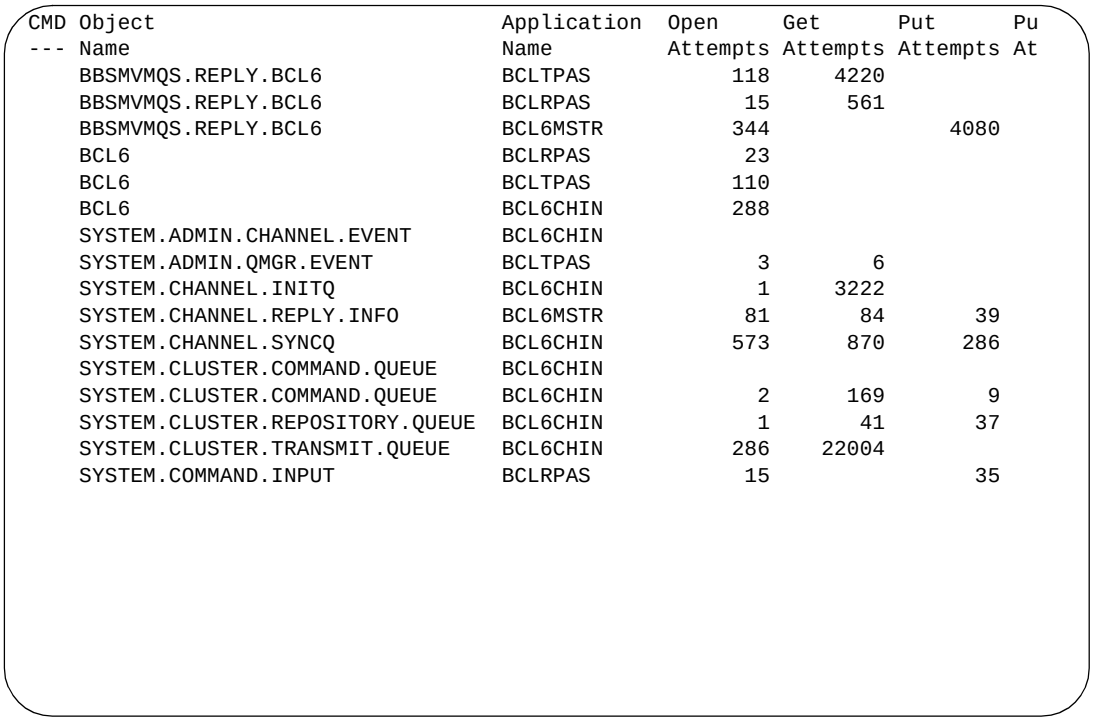
Table 29-2 APSTD View Hyperlink

Field	View	Information
Application Name	MQITRACE	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.

MQEST: MQE Detail Stats

The MQEST view contains the raw data collected by the queue manager running with MQ Extensions. The MQEST view, shown in Figure 29-3, is displayed when you type **MQEST** on the **COMMAND** line, or hyperlink from the EZQST or EZST menus. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-3 MQEST View



CMD	Object Name	Application Name	Open Attempts	Get Attempts	Put Attempts	Pu At
	BBSMVMQS.REPLY.BCL6	BCLTPAS	118	4220		
	BBSMVMQS.REPLY.BCL6	BCLRPAS	15	561		
	BBSMVMQS.REPLY.BCL6	BCL6MSTR	344		4080	
	BCL6	BCLRPAS	23			
	BCL6	BCLTPAS	110			
	BCL6	BCL6CHIN	288			
	SYSTEM.ADMIN.CHANNEL.EVENT	BCL6CHIN				
	SYSTEM.ADMIN.QMGR.EVENT	BCLTPAS	3	6		
	SYSTEM.CHANNEL.INITQ	BCL6CHIN	1	3222		
	SYSTEM.CHANNEL.REPLY.INFO	BCL6MSTR	81	84	39	
	SYSTEM.CHANNEL.SYNCQ	BCL6CHIN	573	870	286	
	SYSTEM.CLUSTER.COMMAND.QUEUE	BCL6CHIN				
	SYSTEM.CLUSTER.COMMAND.QUEUE	BCL6CHIN	2	169	9	
	SYSTEM.CLUSTER.REPOSITORY.QUEUE	BCL6CHIN	1	41	37	
	SYSTEM.CLUSTER.TRANSMIT.QUEUE	BCL6CHIN	286	22004		
	SYSTEM.COMMAND.INPUT	BCLRPAS	15		35	

There are no primary commands, line commands, or overtype fields for this view.

MQEST View Hyperlink

Table 29-3 lists the MQEST view fields from which you can hyperlink and the destination for the links.

Table 29-3 MQEST View Hyperlink

Field	View	Information
Open Attempts	MQEOPEN	The number of Opens Attempted for this object by this Application.
Put Attempts	MQEPUT	The number of Puts Attempted for this object by this Application.
Get Attempts	MQEGET	The number of Gets Attempted for this object by this Application.
Put1 Attempts	MQEPUT	The number of Put1s Attempted for this object by this Application.
Close Attempts	MQECLOS	The number of Closes Attempted for this object by this Application.
Inquire Attempts	MQEINQ	The number of Attempted MQINQ requests by this Application.
Set Attempts	MQEINQ	The number of Attempted MQSET requests by this Application.
Resource Backed	MQECMIT	The number of resources covered by all MQBACK requests.
Committed	MQCMIT	The number of resources covered by all MQCMIT requests.

MQEAZ: Application Summary

The MQEAZ view, shown in Figure 29-4, is displayed when you type **MQEAZ** on the **COMMAND** line, or hyperlink the EZST or EZQST menus.

Figure 29-4 MQEAZ View

```
CMD Appl Name    Job Name Appl Type  Resolved object Name
--- ------------ -------- ---------- --------------------
    BCLRPAS      BCLRPAS  MVS        ****************************************
    BCLTPAS      BCLTPAS  MVS        ****************************************
    BCL6CHIN     BCL6CHIN MVS        ****************************************
    BCL6MSTR              No context
    BCL6MSTR     BCL6MSTR No context ****************************************
```

There are no primary commands, line commands, or overtype fields for this view.

MQEAZ View Hyperlink

Table 29-4 lists the MQEAZ view fields from which you can hyperlink and the destination for the links.

Table 29-4 MQEAZ View Hyperlink

Field	View	Information
Appl Name	APST	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Job Name	MQEJZ	The last jobname to access this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Resolved Object	MQEST	The actual object the QMGR is using. Asterisks may appear in this field indicating multiple non-matching values or names.

MQEJZ: Jobname Summary

The MQEJZ view, shown in Figure 29-5, is displayed when you type **MQEJZ** on the **COMMAND** line, or hyperlink from the EZQST or EZST menus.

Figure 29-5 MQEJZ View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQEJZ============(ALL======*=======)09SEP2003==12:33:55====MVMQS====D===1
CMD Job Name Appl Name    Appl Type  Resolved object Name
--- -------- ------------ ---------- --------------------
    AMQDMSTR AMQDMSTR     No context ****************************************
    AMQECHIN AMQECHIN     ********** ****************************************
    AMQEMSTR AMQEMSTR     No context ****************************************
    BCLCCHIN BCLCCHIN     MVS        ****************************************
    BCLCMSTR BCLCMSTR     No context ****************************************
    BCLUPAS  BCLUPAS      MVS        ****************************************
    BCL5CHIN BCL5CHIN     ********** ****************************************
    BCL5MSTR BCL5MSTR     No context ****************************************
    MCM4101  MCM4101      MVS        ****************************************
    MQM2MSTR MQM2MSTR     No context ****************************************
```

There are no primary commands, line commands, or overtype fields for this view.

MQEJZ View Hyperlink

Table 29-5 lists the MQEJZ view fields from which you can hyperlink and the destination for the links.

Table 29-5 MQEJZ View Hyperlink

Field	View	Information
Appl Name	APST	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Resolved Object	MQEST	The actual object the QMGR is using. Asterisks may appear in this field indicating multiple non-matching values or names.
Job Name	MQEST	The last jobname to access this object. Asterisks may appear in this field indicating multiple non-matching values or names.

MQENZ: Named Object Summary

The MQENZ view, shown in Figure 29-6, is displayed when you type **MQENZ** on the **COMMAND** line, or hyperlink from the EZQST or EZST menus.

Figure 29-6 MQENZ View

```
CMD Object Name                                  Resolved object
--- -----------                                  ---------------
    BBSMVMQS.REPLY.BCL6                          BBSMVMQS.REPLY.BCL6
    BCL6                                         BCL6
    SYSTEM.ADMIN.CHANNEL.EVENT                   SYSTEM.ADMIN.CHANNEL.EVENT
    SYSTEM.ADMIN.QMGR.EVENT                      SYSTEM.ADMIN.QMGR.EVENT
    SYSTEM.CHANNEL.INITQ                         SYSTEM.CHANNEL.INITQ
    SYSTEM.CHANNEL.REPLY.INFO                    SYSTEM.CHANNEL.REPLY.INFO
    SYSTEM.CHANNEL.SYNCQ                         SYSTEM.CHANNEL.SYNCQ
    SYSTEM.CLUSTER.COMMAND.QUEUE                 SYSTEM.CLUSTER.**********
    SYSTEM.CLUSTER.REPOSITORY.QUEUE              SYSTEM.CLUSTER.REPOSITORY.
    SYSTEM.CLUSTER.TRANSMIT.QUEUE                SYSTEM.CLUSTER.TRANSMIT.QU
    SYSTEM.COMMAND.INPUT                         SYSTEM.COMMAND.INPUT
    SYSTEM.QSG.TRANSMIT.QUEUE
    TO.BCL5                                      TO.BCL5
    TO.BCL6                                      TO.BCL6
    TO.CHER                                      TO.CHER
    TO.LYMASON                                   TO.LYMASON
```

There are no primary commands, line commands, or overtype fields for this view.

MQENZ View Hyperlink

Table 29-6 lists the MQENZ view fields from which you can hyperlink and the destination for the links.

Table 29-6 MQENZ View Hyperlink

Field	View	Information
Appl Name	APST	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Resolved Object	MQERZ	The actual object the QMGR is using. Asterisks may appear in this field indicating multiple non-matching values or names.
Object Name	MQEST	The Named Object used by the caller. Asterisks may appear in this field indicating multiple non-matching values or names.

MQERZ: Resolved Name Summary

The MQERZ view, shown in Figure 29-7, is displayed when you type **MQERZ** on the **COMMAND** line, or hyperlink from the EZQST or EZST menus. Hyperlinking from the Could Not Resolve field displays all objects that failed to open because it could not resolve the object name.

Figure 29-7 MQERZ View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQERZ============(ALL======*=======)09SEP2003==12:36:05====MVMQS====D===34
CMD Resolved object Name                                Object   Type     Appl Nam
--- --------------------                                -------- -------- --------
    Could Not Resolve                                   Unknown  ******** ********
    AMQD                                                Qmgr     Local    BCLUPAS
    AMQE                                                Qmgr     Local    ********
    AMQE.ERROR.SENDER                                   Channel  Local    AMQECHIN
    AMQH                                                Queue    Local    BCL5CHIN
    BBSMVMQS.REPLY.AMQD                                 Queue    Local    ********
    BBSMVMQS.REPLY.AMQE                                 Queue    Local    ********
    BBSMVMQS.REPLY.BCLC                                 Queue    Local    BCL*****
    BBSMVMQS.REPLY.BCL5                                 Queue    Local    BCL*****
    BBSMVMQS.REPLY.MQM2                                 Queue    Local    ********
    BCLC                                                Qmgr     Local    BCL*****
    BCL5                                                Qmgr     Local    BCL*****
    MCM.DISC.LYMASONHOU74GM.BCL5                        Queue    Local    ********
    MCM.DISC.LYMASONHOU74GM.QSH2                        Queue    Local    ********
    MCM.DISC.LYMASONHOU74GMB9FF86894A210E49             Queue    Local    MCM4101
    MCM.RPLY.LYMASONHOU74GM.BCL5                        Queue    Local    ********
```

There are no primary commands, line commands, or overtype fields for this view.

MQERZ View Hyperlink

Table 29-7 lists the MQERZ view fields from which you can hyperlink and the destination for the links.

Table 29-7 MQERZ View Hyperlink

Field	View	Information
Appl Name	APST	The Application using this object. Asterisks may appear in this field indicating multiple non-matching values or names.
Resolved Object	MQEST	The actual object the QMGR is using. Asterisks may appear in this field indicating multiple non-matching values or names.

MQECLOS: Close Detail Records

The MQECLOS view, shown in Figure 29-8, is displayed when you hyperlink from Close Attempts on the MQEST view.

Figure 29-8 MQECLOS View

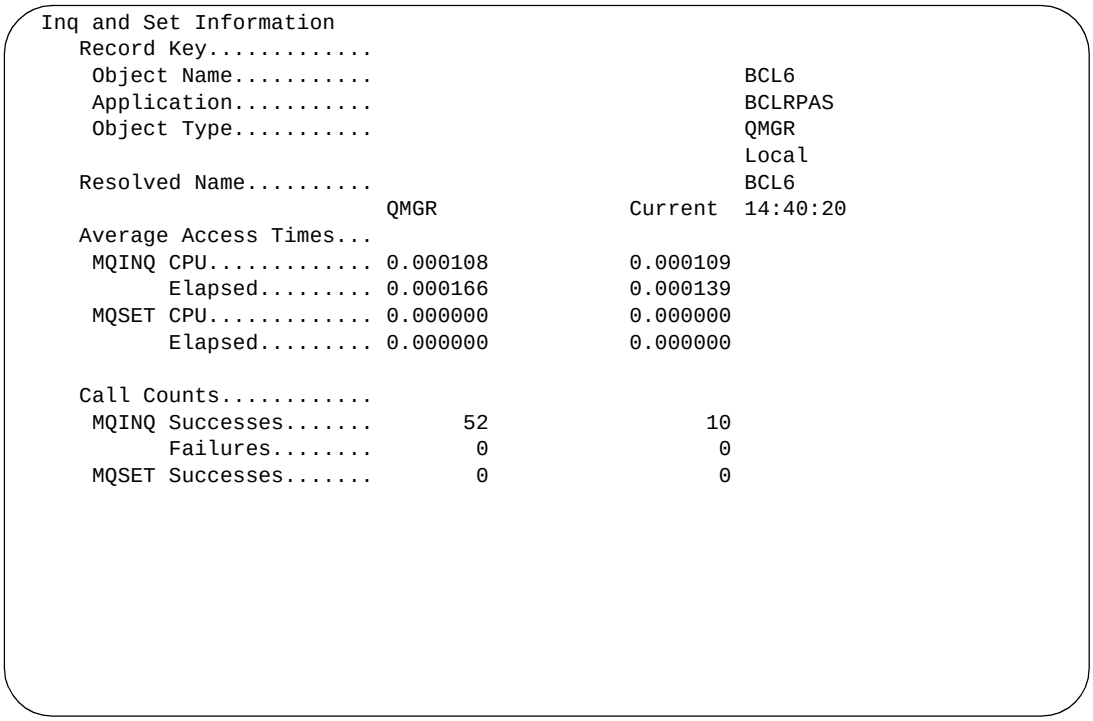
```
Close Information...
   Record Key..........
    Object Name........                              BBSMVMQS.REPLY.BCL6
    Application........                              BCLRPAS
    Object Type........                              Queue
                                                     Local
   Resolved Name.......                              BBSMVMQS.REPLY.BCL6
                       QMGR                Current   14:41:05
   Average Access Times
    CPU................ 0.000306           0.000297
    Elapsed............ 0.000388           0.000535

   Call Counts.........
    Successes..........       15                  2
    Failures...........        0                  0
    No Close...........        0                  0

   Last Access Info....
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQECMIT: cmit/back Detail Records

The MQECMIT view, shown in Figure 29-9, is displayed when you hyperlink from Inquire or Set Attempts on the MQEST view.

Figure 29-9 MQECMIT View

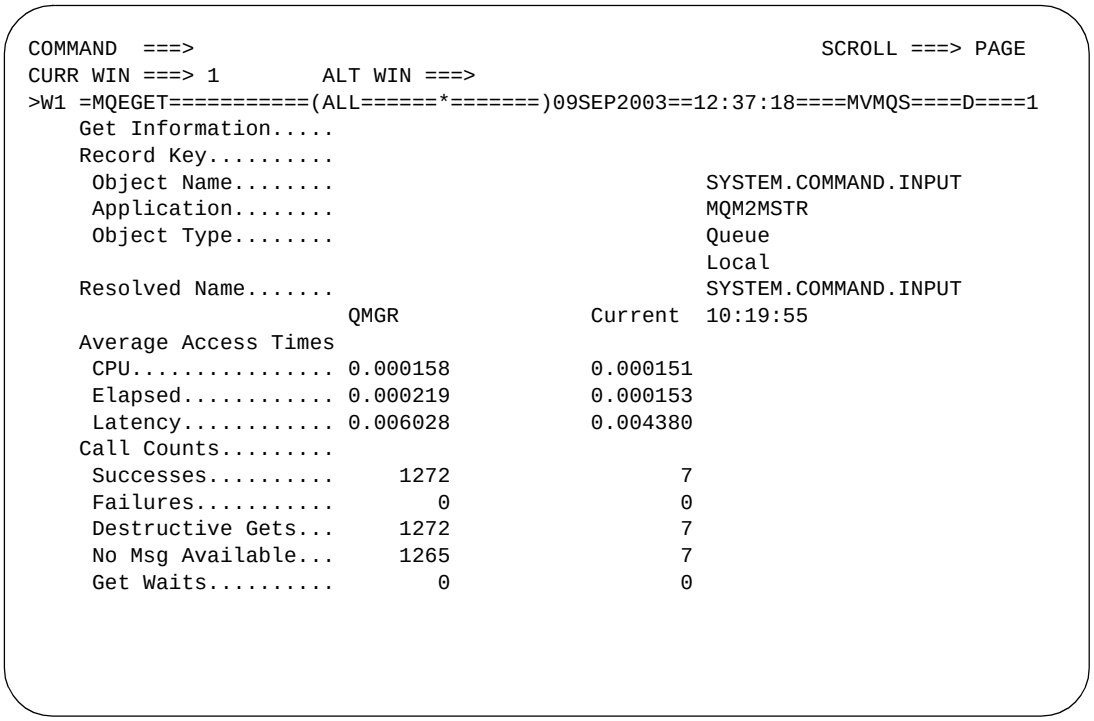


There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQEGET: Get Detail Records

The MQEGET view, shown in Figure 29-10, is displayed when you hyperlink from Get Attempts on the MQEST view.

Figure 29-10 MQEGET View



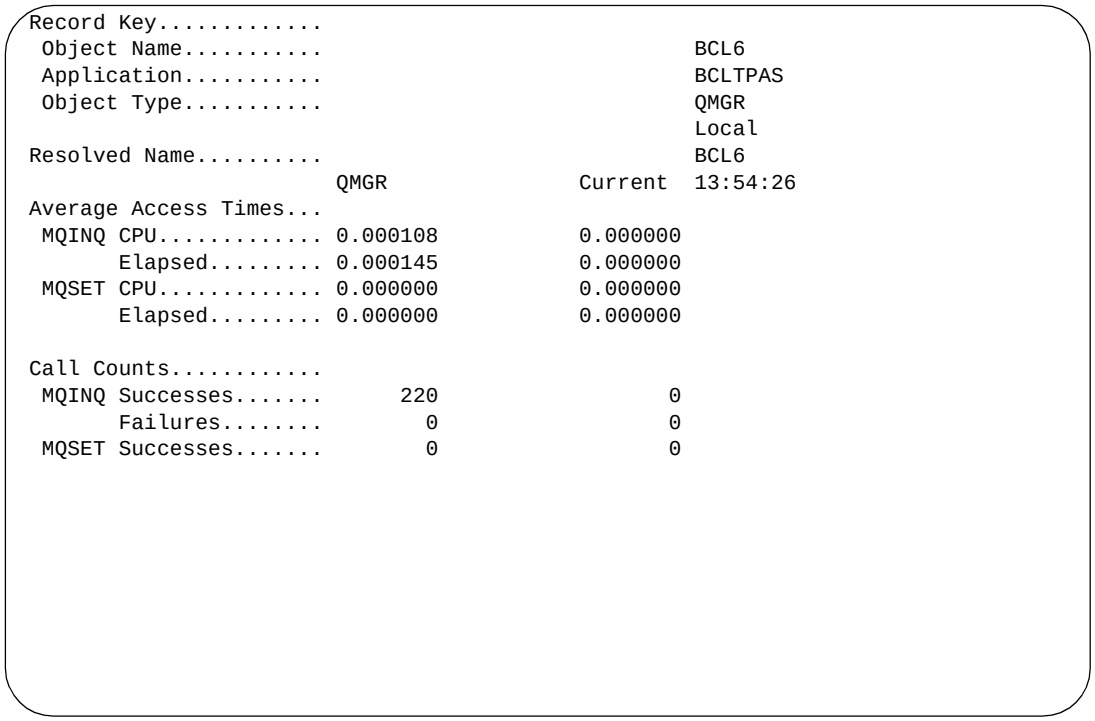
```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQEGET===========(ALL======*=======)09SEP2003==12:37:18====MVMQS====D====1
    Get Information.....
    Record Key..........
     Object Name........                            SYSTEM.COMMAND.INPUT
     Application........                            MQM2MSTR
     Object Type........                            Queue
                                                    Local
    Resolved Name.......                            SYSTEM.COMMAND.INPUT
                        QMGR              Current   10:19:55
    Average Access Times
     CPU................ 0.000158          0.000151
     Elapsed............ 0.000219          0.000153
     Latency............ 0.006028          0.004380
    Call Counts.........
     Successes..........     1272                7
     Failures...........        0                0
     Destructive Gets...     1272                7
     No Msg Available...     1265                7
     Get Waits..........        0                0
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQEINQ: inq/set Detail Records

The MQEINQ view, shown in Figure 29-11, is displayed when you hyperlink from Inquire or Set Attempts on the MQEST view.

Figure 29-11 MQEINQ View



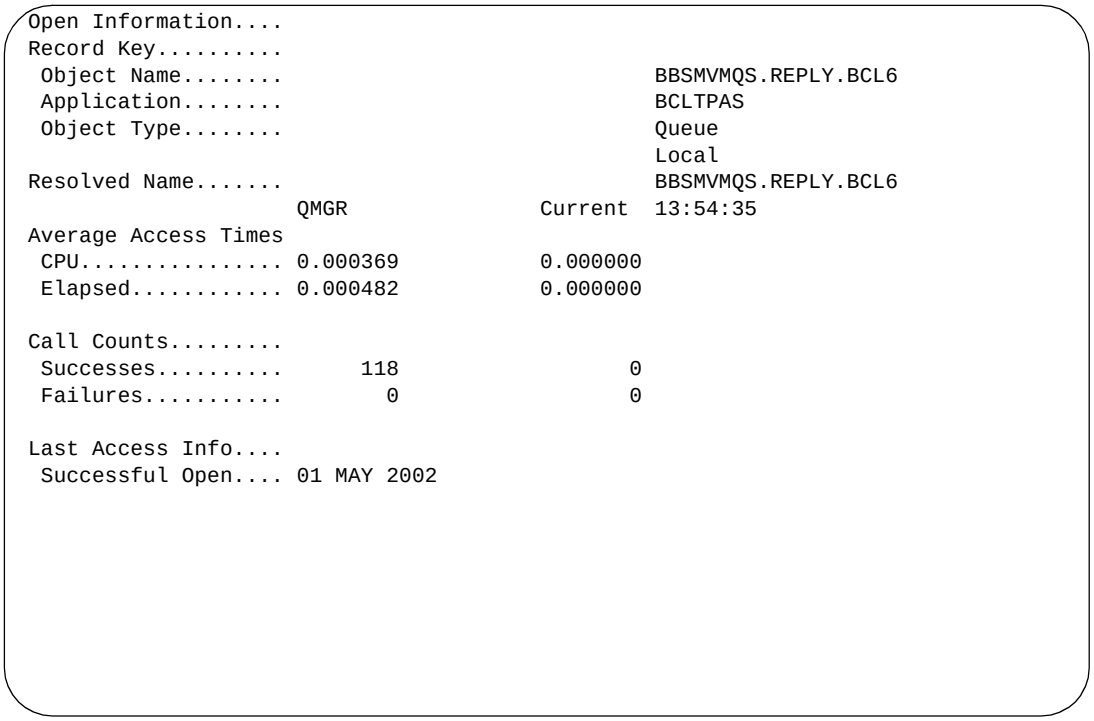
```
Record Key.............
 Object Name...........                              BCL6
 Application...........                              BCLTPAS
 Object Type...........                              QMGR
                                                     Local
Resolved Name..........                              BCL6
                       QMGR                 Current  13:54:26
Average Access Times...
 MQINQ CPU.............. 0.000108           0.000000
       Elapsed......... 0.000145           0.000000
 MQSET CPU.............. 0.000000           0.000000
       Elapsed......... 0.000000           0.000000

Call Counts............
 MQINQ Successes.......      220                  0
       Failures........        0                  0
 MQSET Successes.......        0                  0
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQEOPEN: Open Detail Records

The MQEOPEN view, shown in Figure 29-1, is displayed when you type **MQEOPEN** on the **COMMAND** line, or hyperlink from Open Attempts on the MQEST view.

Figure 29-12 MQEOPEN View



There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQEPUT: Put Detail Records

The MQEPUT view, shown in Figure 29-13, is displayed when you type **MQEPUT** on the **COMMAND** line or hyperlink from Put Attempts on the MQEST view.

Figure 29-13 MQEPUT View

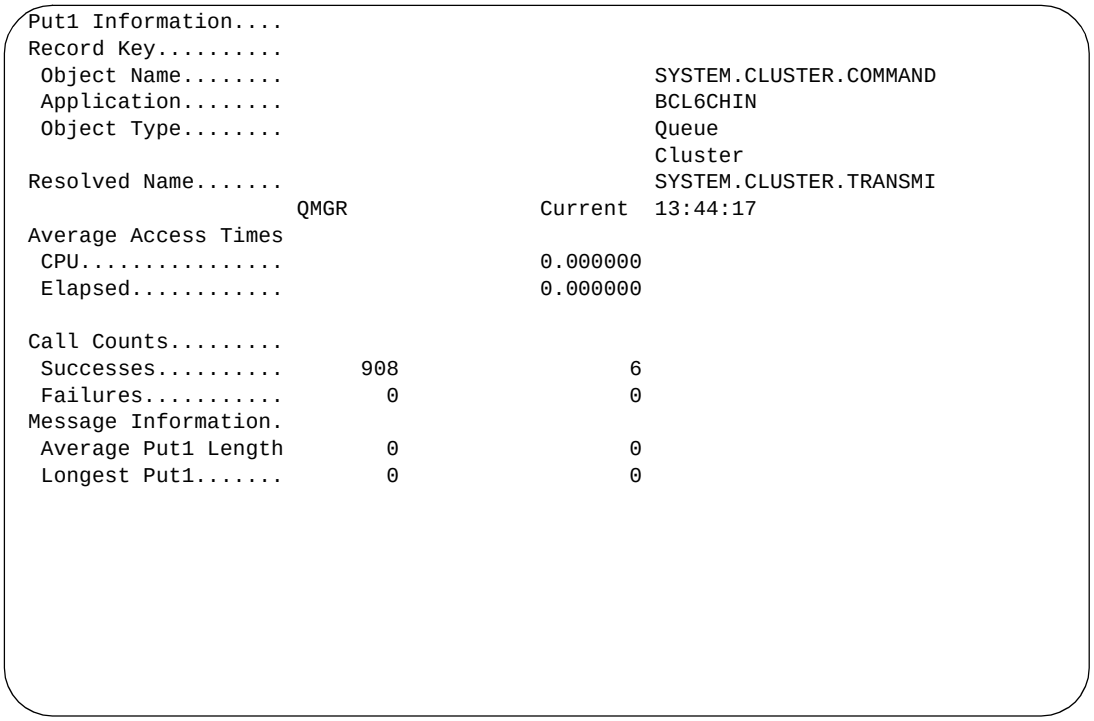
```
Put Information.....
Record Key..........
 Object Name........                              SYSTEM.CHANNEL.SYNCQ
 Application........                              BCL6CHIN
 Object Type........                              Queue
                                                  Local
Resolved Name.......                              SYSTEM.CHANNEL.SYNCQ
                     QMGR               Current  13:44:17
Average Access Times
 CPU................ 0.000630           0.000722
 Elapsed............ 0.003818           0.003402

Call Counts.........
 Successes..........      288                  2
 Failures...........        0                  0
Message Information.
 Average Put Length.        0                428
 Longest Put........      428                428
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQEPUT1: Put1 Detail Records

The MQEPUT1 view, shown in Figure 29-14, is displayed when you type **MQEPUT1** on the **COMMAND** line or hyperlink from Put1 Attempts on the MQEST view.

Figure 29-14 MQEPUT1 View



```
Put1 Information....
Record Key.........
 Object Name........                          SYSTEM.CLUSTER.COMMAND
 Application........                          BCL6CHIN
 Object Type........                          Queue
                                              Cluster
Resolved Name.......                          SYSTEM.CLUSTER.TRANSMI
                     QMGR              Current  13:44:17
Average Access Times
 CPU................                  0.000000
 Elapsed............                  0.000000

Call Counts.........
 Successes..........      908                6
 Failures...........        0                0
Message Information.
 Average Put1 Length        0                0
 Longest Put1.......        0                0
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQESTGLD: Get Latency Detail

The MQESTGLD view, shown in Figure 29-15, provides Get Latency Detail from the MQEGET view.

To access the MQESTGLD view, type **MQEST** on the COMMAND line to display the MQEST view. Hyperlink from the **MQEGET** field. From the MQEGET view, hyperlink from the **Latency** field.

Figure 29-15 MQESTGLD View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQESTGLD=========(ALL======*=======)09SEP2003==12:38:41====MVMQS====D====1
    Get Latency Info........
    Record Key..............
     Object Name............                                  BBSMVMQS.REP
     Application............                                  BCLUPAS
     Object Type............                                  Queue
                                                             Local
                                          % of                % of
    Get latency Distribution              QMGR Total  Current Total
     Period 1..............     1.00      22831   100       126   100
     Period 2..............     2.00          0  0.00         0  0.00
     Period 3..............     5.00          0  0.00         0  0.00
     Period 4..............    15.00          0  0.00         0  0.00
     Period 5..............    60.00          0  0.00         0  0.00
     Period 6..............  No limit         0  0.00         0  0.00

    Average Access Times....           0.008678        0.008653
```

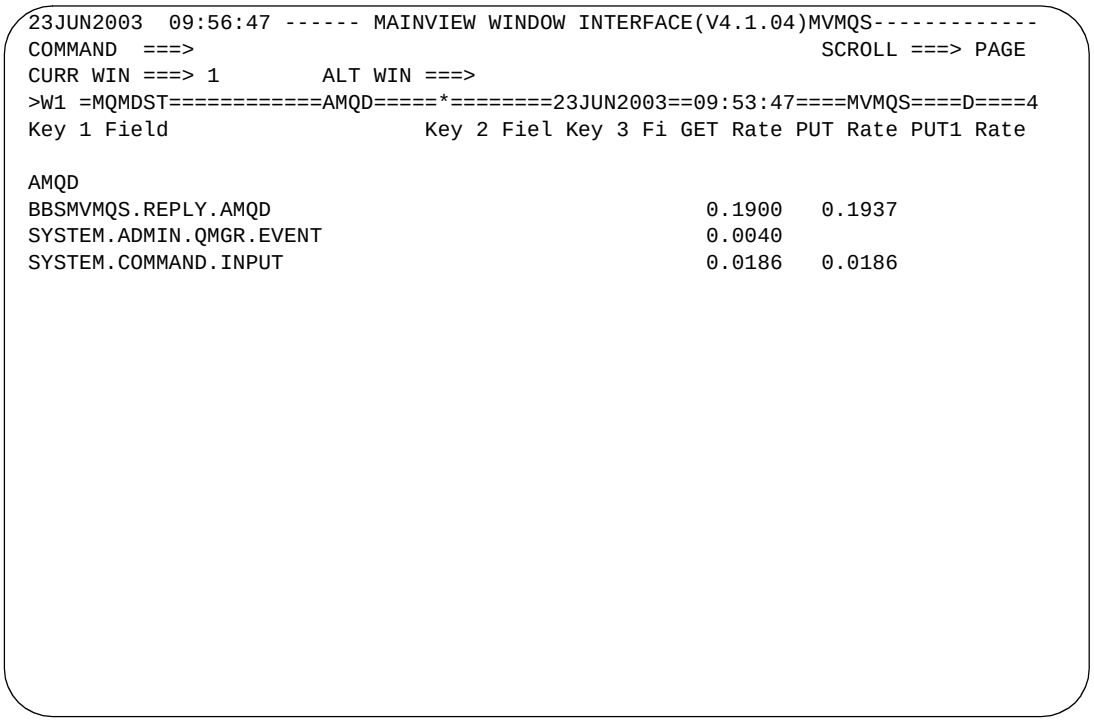
There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

MQMDST: Alternate Key Statistics

When MQMD* stats are active, an overview of data collected by MQE with rates over the current interval for alternate keys specified in EXITOPT DD is displayed in this view. The MQMDST view is shown in Figure 29-16.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-16 MQMDST View



There are no primary commands, line commands, or overtype fields for this view.

MQMDST View Hyperlinks

Table 29-8 lists the MQMDST view hyperlinks.

Table 29-8 MQMDST View Hyperlinks

Hyperlink	Destination
Key 1 Field	MQMDSTD view
GET Rate	MQMDSTGD view
PUT Rate	MQMDSTPD view
PUT 1 Rate	MQMDSTD view

MQMDSTD: Alternate Key Statistics Detail

The MQMDSTD view, shown in Figure 29-17, displays detail counts and averages on MQGET, MQPUT and MQPUT1 for alternate keys specified in EXITOPT DD.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-17 MQMDSTD View

```
20JUN2003  13:21:14 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS------------
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQMDSTD==========AMQD=====*========20JUN2003==13:21:13====MVMQS====D====1
    Record Key.......... Field Name                           Field Value
      KEY1.............. NAMED OBJECT                        SYSTEM.COMMAND
      KEY2.............. NONE
      KEY3.............. NONE                                00000000

                            QMGR          Current
    Call Info...........                                     Last Success
      MQGET.............          47                47       13:20:05.97
      MQPUT.............          47                47       13:20:05.97
      MQPUT1............           0                 0

    Averages............
      Elapsed Get Time..    0.000074          0.000074
      Elapsed Put Time..    0.000306          0.000306
      Elapsed Put1 Time.                      0.000000

      Get bytes Consumed          37                37
      Put bytes.........          37                37
```

The MQMDSTD view does not include any primary commands, line commands, or overtype fields.

MQMDSTD View Hyperlinks

The MQMDSTD view hyperlinks are listed in Table 29-9.

Table 29-9 MQMDST View Hyperlinks

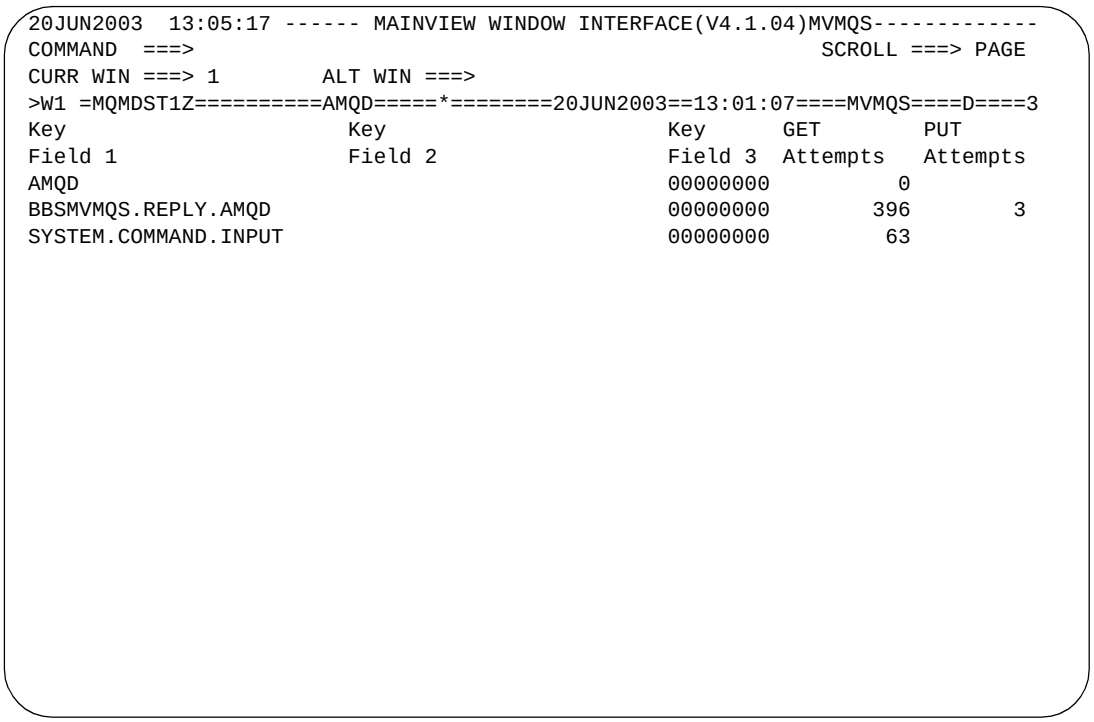
Hyperlink	Destination
MQGET	The MQMDSTGD view
MQPUT	The MQMDSTPD view
MQPUT1	The MQMDST1Z view

MQMDST1Z: Summary by Key 1

The MQMDST1Z view, shown in Figure 29-18, displays MQMD Statistics summarized by Alternate Key One, as specified in EXITOPT DD parameters. This view is useful when collecting statistics while using more than one alternate key.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-18 MQMDST1Z View



```
20JUN2003  13:05:17 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS-------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQMDST1Z==========AMQD=====*========20JUN2003==13:01:07====MVMQS====D====3
Key                     Key                     Key      GET        PUT
Field 1                 Field 2                 Field 3  Attempts   Attempts
AMQD                                            00000000          0
BBSMVMQS.REPLY.AMQD                             00000000        396        3
SYSTEM.COMMAND.INPUT                            00000000         63
```

The MQMDST1Z view does not include any primary commands, line commands, or overtype fields.

MQMDST1Z View Hyperlinks

The MQMDST1Z view hyperlinks are listed in Table 29-10.

Table 29-10 MQMDST1Z View Hyperlinks

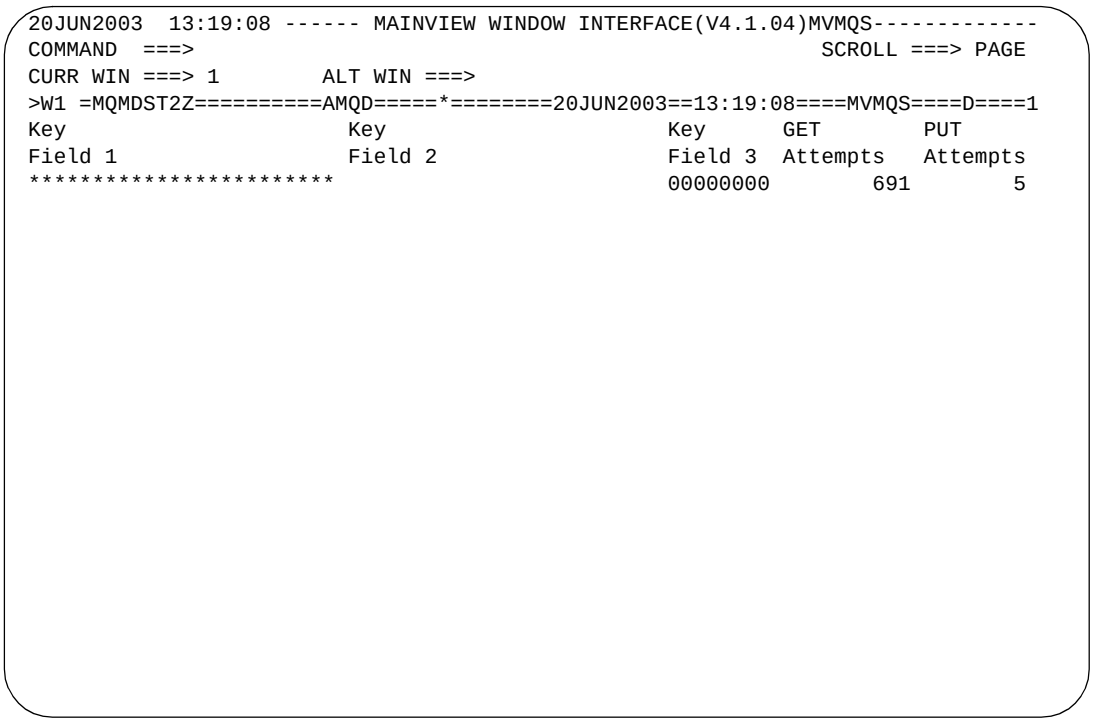
Hyperlink	Destination
Key Field 1	MQMDST view

MQMDST2Z: Summary by Key 2

The MQMDST2Z view, shown in Figure 29-18, displays MQMD Statistics summarized by Alternate Key Two, as specified in EXITOPT DD parameters. This view is useful when collecting statistics while using more than one alternate key.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-19 MQMDST2Z View



The MQMDST2Z view does not include any primary commands, line commands, or overtype fields.

MQMDST2Z View Hyperlinks

The MQMDST2Z view hyperlinks are listed in Table 29-11.

Table 29-11 MQMDST2Z View Hyperlinks

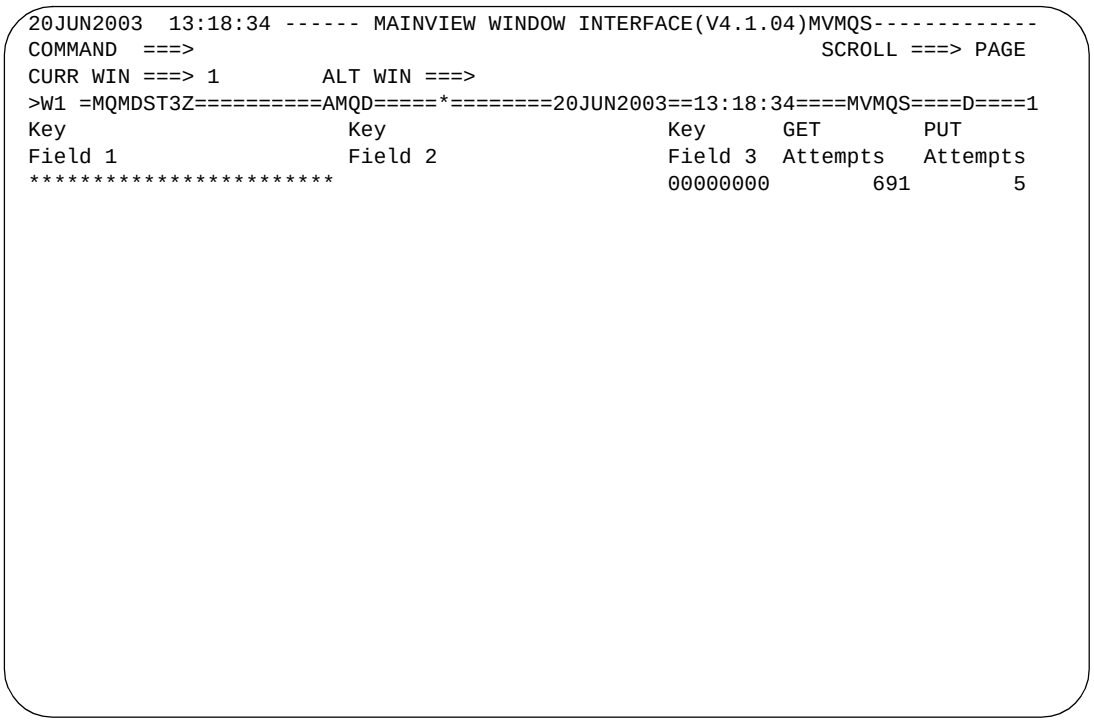
Hyperlink	Destination
Key Field 2	MQMDST view

MQMDST3Z: Summary by Key 3

The MQMDST3Z view, shown in Figure 29-18, displays MQMD Statistics summarized by Alternate Key Three, as specified in EXITOPT DD parameters. This view is useful when collecting statistics while using more than one alternate key.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-20 MQMDST3Z View



The MQMDST3Z view does not include any primary commands, line commands, or overtype fields.

MQMDST3Z View Hyperlinks

The MQMDST3Z view hyperlinks are listed in Table 29-12.

Table 29-12 MQMDST3Z View Hyperlinks

Hyperlink	Destination
Key Field 3	MQMDST view

MQMDSTGD: Alternate Key Get Detail

The MQMDSTGD view, shown in Figure 29-21, provides detailed alternate key get detail information about the current open activity on the queue.

This view is accessed by entering MQMDST on the COMMAND LINE of the EZQSSI menu, placing the cursor on an entry in the Get Rate column, and pressing **Enter**.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-21 MQMDSTGD View

```
23JUN2003  09:27:27 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS-----------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQMDST===MQMDSTGD=AMQD=====*========23JUN2003==09:18:01====MVMQS====D====
    Record Key.......... Field Name                                Field Val
      KEY1.............. NAMED OBJECT                              BBSMVMQS.
      KEY2.............. NONE
      KEY3.............. NONE

    Get Information.....      QMGR              Current
    Average Access Times
     CPU................       0.000064               0.000064
     Elapsed............       0.000239               0.000239
     Get Latency........       0.013645               0.013645

    Call Counts.........
     Successes..........            541                    541
     Failures...........              0                      0
     Destructive Gets...            541                    541
     No Msg Available...            109                    109
     Get Waits..........            494                    494
     Truncated Accepted.              0                      0
```

There are no primary commands, line commands, or overtype fields for the MQMDSTGD view.

MQMDSTGD View Hyperlinks

The MQMDSTGD view hyperlinks are listed in Table 29-13.

Table 29-13 MQMDSTDGD View Hyperlinks

Hyperlink	Destination
Get Latency	MQMDGLD view

MQMDGLD: Get Latency Detail

The MQMDGLD view, shown in Figure 29-22, provides detailed access to the MQMDGLD view from MQMDSTGD hyperlink.

This view is accessed by clicking on the **Get Latency** hyperlink in the MQMDSTGD view.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-22 MQMDGLD View

```
23JUN2003  09:32:11 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS-------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQMDST===MQMDGLD==AMQD=====*========23JUN2003==09:18:01====MVMQS====D====1
    Record Key.............. Field Name                          Field Va
      KEY1.................. NAMED OBJECT                        BBSMVMQS
      KEY2.................. NONE
      KEY3.................. NONE

                            Upper Bound            % of           % of
    Get latency Distribution  (seconds)       QMGR  Total  Current  Total
     Period 1..............     1.00          541 100.00      541   100.00
     Period 2..............     2.00            0   0.00        0     0.00
     Period 3..............     5.00            0   0.00        0     0.00
     Period 4..............    15.00            0   0.00        0     0.00
     Period 5..............    60.00            0   0.00        0     0.00
     Period 6..............  No limit           0   0.00        0     0.00

     Average Get Latency....              0.013645        0.013645
```

There are no primary commands, line commands, hyperlinks, or overtype fields for this view.

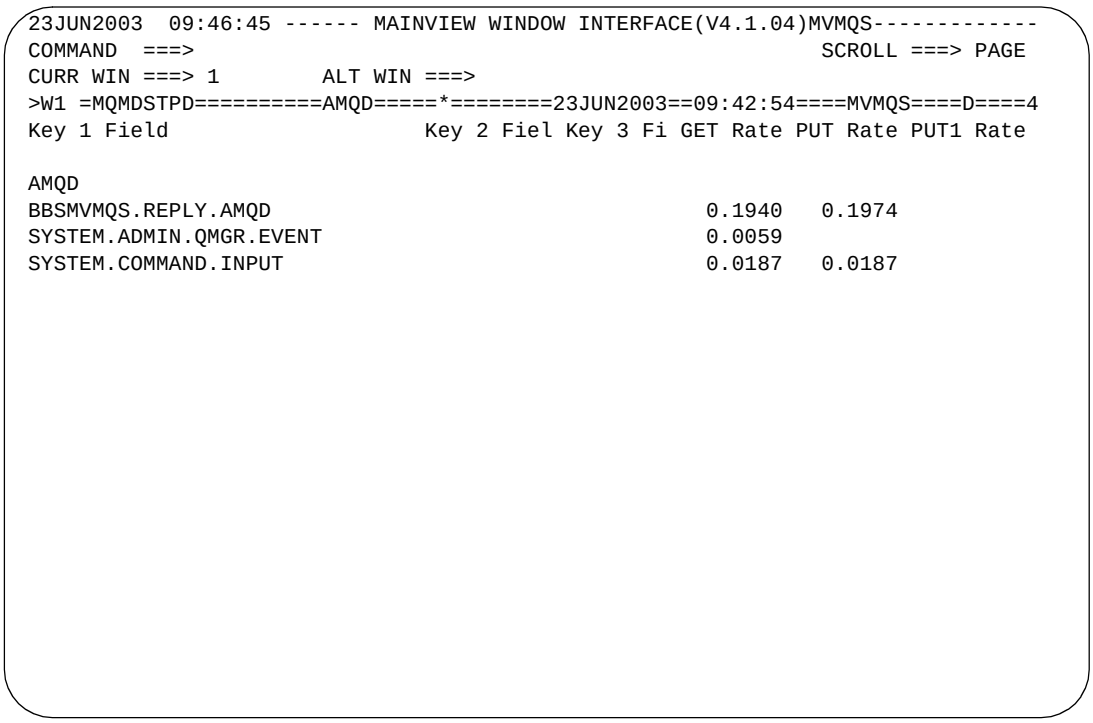
MQMDSTPD: Alternate Key Put Detail

The MQMDSTPD view, shown in, provides detailed statistical information about the current open activity on the queue.

To access the MQMDSTPD view, enter MQMDST on the COMMAND line. The MQMDST view is displayed. Place the cursor on an entry in the PUT Rate column and click **Enter**.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-23 MQMDSTPD View



There are no primary commands, line commands, hyperlinks, or overtype fields for the MQMDSTPD view.

MQMDST1D: Alternate Key Put 1 Detail

The MQMDST1D view, shown in, provides detailed statistical information about the current open activity on the queue.

To access the MQMDST1D view, enter MQMDST on the COMMAND line. The MQMDST view is displayed. Place the cursor on an entry in the PUT 1 Rate column and click **Enter**.

The MQMD* views require an EXITOPT DD coded in queue manager stc to access alternate key information. For more information, see “EXITOPT DD” on page 2-14.

Figure 29-24 MQMDST1D View

```
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQMDST1D=========(ALL======*=======)09SEP2003==16:11:53====MVMQS====D====1
    Record Key......... Field Name                            Field Value
      KEY1............. NAMED OBJECT                          MCM.DISC.LYMASO
      KEY2............. MSGID
      KEY3............. MSGTYPE                               00000002

    Put Information....      QMGR          Current
     CPU..............    0.000000           0.000000
     Elapsed..........    0.000000           0.000000
    Call Counts........
     Successes.........          0                  0
     Failures..........          0                  0
    Message Information
     Avg Put bytes.....          0                  0
     Longest Put.......          0                  0
     Shortest Put......          0                  0
    Last Access Info...
     Successful Put....
```

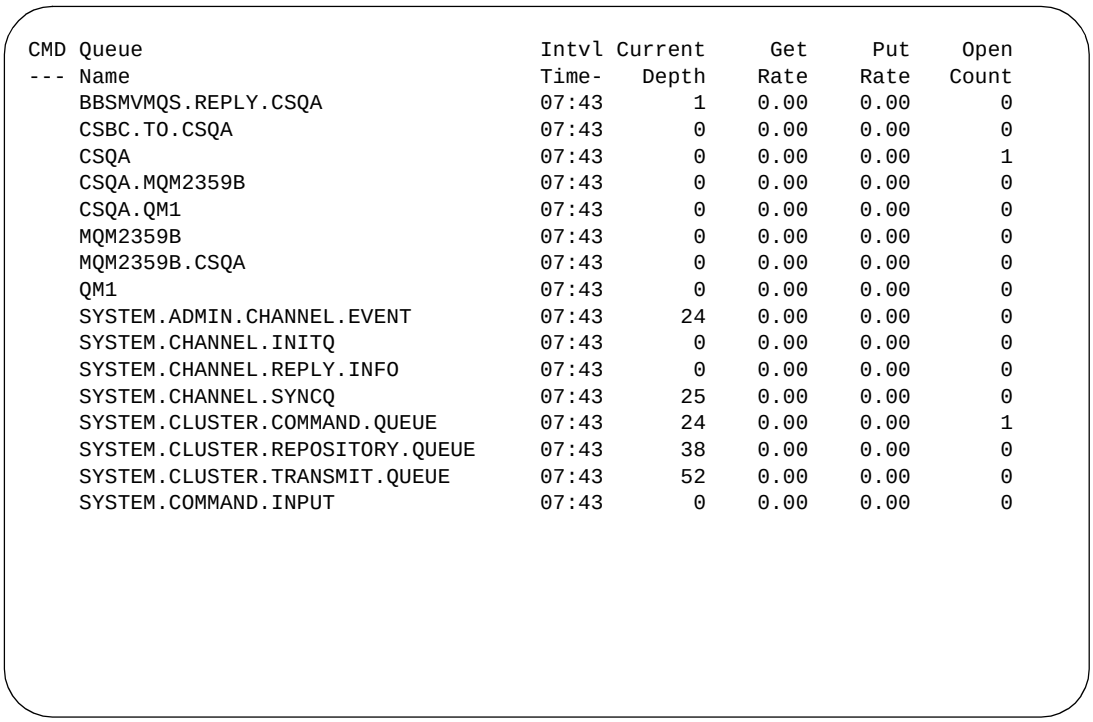
There are no primary commands, line commands, hyperlinks, or overtype fields for the MQMDST1D view.

QP: Queue Performance Overview

The queue performance views provide information about queues and their performance. Queue performance data is available for any MVS queue managers running with WebSphere MQ Extensions and any distributed systems queue running with the WebSphere MQ Extensions that is monitored with Node Manager.

The QP view provides a list of queues and an overview of their performance. The QP view, shown in Figure 29-25, is displayed when you type **QP** on the **COMMAND** line or hyperlink from EZST or EZQST menus.

Figure 29-25 QP View



CMD	Queue Name	Intvl Time-	Current Depth	Get Rate	Put Rate	Open Count
	BBSMVMQS.REPLY.CSQA	07:43	1	0.00	0.00	0
	CSBC.TO.CSQA	07:43	0	0.00	0.00	0
	CSQA	07:43	0	0.00	0.00	1
	CSQA.MQM2359B	07:43	0	0.00	0.00	0
	CSQA.QM1	07:43	0	0.00	0.00	0
	MQM2359B	07:43	0	0.00	0.00	0
	MQM2359B.CSQA	07:43	0	0.00	0.00	0
	QM1	07:43	0	0.00	0.00	0
	SYSTEM.ADMIN.CHANNEL.EVENT	07:43	24	0.00	0.00	0
	SYSTEM.CHANNEL.INITQ	07:43	0	0.00	0.00	0
	SYSTEM.CHANNEL.REPLY.INFO	07:43	0	0.00	0.00	0
	SYSTEM.CHANNEL.SYNCQ	07:43	25	0.00	0.00	0
	SYSTEM.CLUSTER.COMMAND.QUEUE	07:43	24	0.00	0.00	1
	SYSTEM.CLUSTER.REPOSITORY.QUEUE	07:43	38	0.00	0.00	0
	SYSTEM.CLUSTER.TRANSMIT.QUEUE	07:43	52	0.00	0.00	0
	SYSTEM.COMMAND.INPUT	07:43	0	0.00	0.00	0

There are no primary commands, line commands, or overtype fields for the QP view.

QP View Hyperlinks

Table 29-14 QP View Hyperlinks

Field	View	Information
Queue Name	QPD	provides statistical details about queue usage
Current Depth	QPDC	provides detailed information about the current queue activity

QPD: Queue Performance Detail

The QPD view provides detailed statistical information about the usage of a queue. The interval statistics are gathered over the IRRI period and the session statistics are accumulated over a 24-hour period which is reset at 12:00 midnight local time.

The QPD view, shown in Figure 29-25, is displayed when you hyperlink from the Queue Name field of the QP view, or type **QPD** on the **COMMAND** line.

Figure 29-26 QPD View

```
Queue..............                              BBSMVMQS.REPLY.BCL6
 Queue Manager.....                               BCL6
 Current Depth.....                                      2
 Max Depth Ever....                                     29

 Min/Max Messages....
  Longest Get.......                                  1674
  Longest Put.......                                  1674
  Shortest Get......                                    23
  Shortest Put......                                    23

                             Interval            Session
 API Counts.........
  MQOPEN............       30     0.10        572      0.05
  MQPUT.............      276     0.96       4390      0.36
  MQPUT1............        0     0.00          0      0.00
  MQGET.............      299     1.04       4879      0.40
  MQCLOSE...........       30     0.10        571      0.05
  Failed MQOPEN.....        0     0.00          0      0.00
  Failed MQPUT......        0     0.00          0      0.00
  Failed MQPUT1.....        0     0.00          0      0.00
  Failed MQGET......       18     0.06        369      0.03
  Failed MQCLOSE....        0     0.00          0      0.00

 Bytes..............
  Max Depth.........       22                   29
```

There are no primary commands, line commands, hyperlinks, or overtype fields for the QPD view.

QPDC: Queue Performance Current Activity

The QPDC view provides detailed information about the current activity on the queue. This information includes such things as the last application to touch the queue, the last time an Application Program Interface (API) call was done, as well as current depth.

The QPDC view, shown in Figure 29-27, is displayed when you hyperlink from the Last Depth field of the QP view, or type **QPDC** on the **COMMAND** line.

Figure 29-27 QPDC View

```
COMMAND  ===>                                                SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
 W1 =QP=======QPDC====(ALL======BCL5====)09SEP2003==12:40:23====MVMQS====D====1
  Current Data........                              API Calls.....
   Queue.............. BBSMVMQS.REPLY.BCL5           MQOPEN Date.. 09 SEP 2003
   Queue Manager...... BCL5                         MQOPEN Time.. 12:40:05.62
   Current Depth......      199                     MQPUT Date... 09 SEP 2003
                                                    MQPUT Time... 12:40:05.62
  Most Recent Activity                              MQGET Date... 09 SEP 2003
   Application........ BCLUPAS                      MQGET Time... 12:40:05.63
   Appl Type.......... MVS                          MQCLOSE Date. 09 SEP 2003
   Job Name........... BCLUPAS                      MQCLOSE Time. 12:40:05.63
   Userid............. CMGALL
                                                    Failed Calls..
  Min/Max Messages....                              MQOPEN Date..
   Longest MQGET......     1674                     MQOPEN Time..
   Shortest MQGET.....        9                     MQPUT Date...
   Longest MQPUT......     1674                     MQPUT Time...
   Shortest MQPUT.....        9                     MQGET Date...
  Seconds since Last..                              MQGET Time...
   Successful Get.....    27.67                     MQCLOSE Date.
```

There are no primary commands, line commands, hyperlinks, or overtype fields for the QPDC view.

Chapter 30 Storage Classes

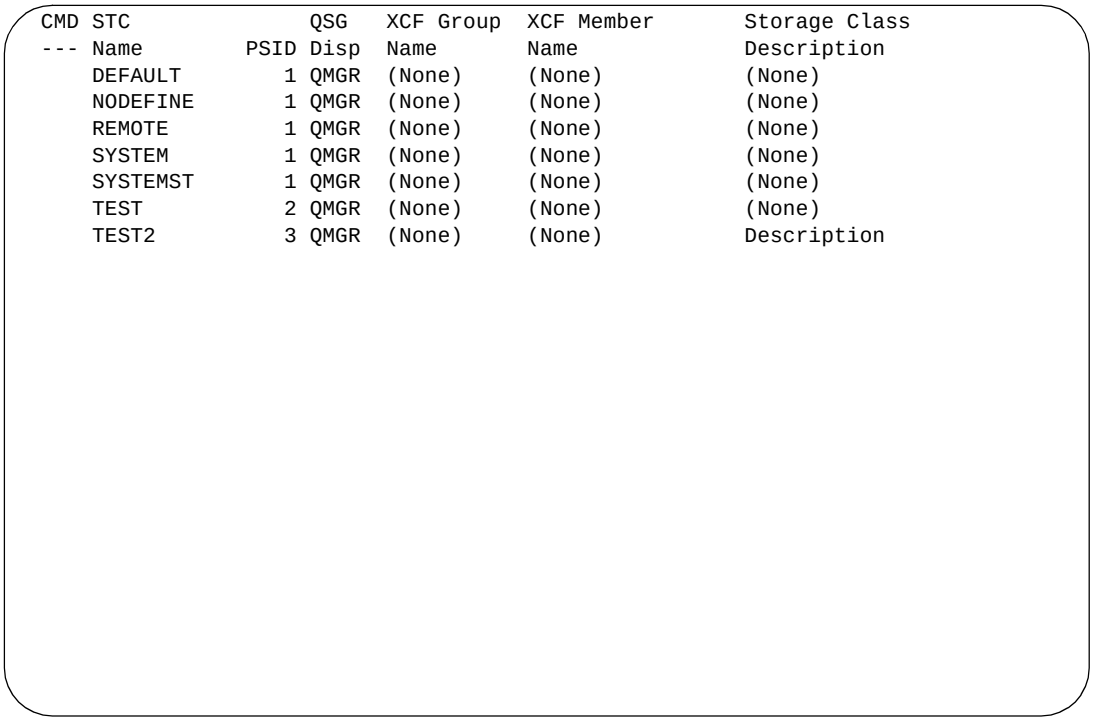
The storage class views provide information about how the storage classes are mapped to the page sets.

This chapter discusses the following topics:

STC: Storage Classes

The STC view lists the storage class definitions. The STC view, shown in Figure 30-1, is displayed when you hyperlink from the EZQMMVS view, or when you type **STC** on the **COMMAND** line.

Figure 30-1 STC View



```
CMD STC              QSG   XCF Group  XCF Member       Storage Class
--- Name        PSID Disp  Name       Name             Description
    DEFAULT        1 QMGR  (None)     (None)           (None)
    NODEFINE       1 QMGR  (None)     (None)           (None)
    REMOTE         1 QMGR  (None)     (None)           (None)
    SYSTEM         1 QMGR  (None)     (None)           (None)
    SYSTEMST       1 QMGR  (None)     (None)           (None)
    TEST           2 QMGR  (None)     (None)           (None)
    TEST2          3 QMGR  (None)     (None)           Description
```

STC View Primary Commands

Table 30-1 lists the primary commands you can enter on the **COMMAND** line to delete storage classes from the STC view.

Table 30-1 STC View Primary Commands

Command	Action
DELete storageclassname	delete the storage class
DELete storageclassname pattern	

STC View Line Commands

Table 30-2 lists the line commands you can use to perform actions on an entity in an STC view line.

Table 30-2 STC View Line Commands

Command	Action
ADD	create a new storage class with identical characteristics To give the new storage class a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	delete the storage class
[1]Valid only if using MVS Queue Managers 5.2 and above.	

STC View Overtype Fields

Table 30-3 lists the fields you can overtype on the STC view.

Table 30-3 STC View Overtype Fields

Overtype Field	Value
PSID	page set identifier to which the storage class is mapped
XCF Group Name	name of the XCF group to which the IMS system belongs. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
XCF Member Name	XCF member name of the IMS system. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
Storage Class Description	comments describing the storage class. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
Note: The XCF Group Name and XCF Member Name fields can be overtyped only when the IMS Bridge is used.	

STC View Hyperlinks

Table 30-4 lists the STC view fields from which you can hyperlink and the destinations for each link.

Table 30-4 STC View Hyperlinks

Field	View	Information
STC Name	STCD	details about the storage class
PSID	PS	information about page set usage
Storage Class Description	LQ	details about queues assigned to this storage class

STCD: Storage Class Details

The STCD view provides detailed information about a storage class definition. The STCD view, shown in Figure 30-2, is displayed when you hyperlink from the STC view or when you type **STCD** on the **COMMAND** line.

Figure 30-2 STCD View

```
Descr.......... (None)
QSG Disp....... QMGR

PSID...........       1

XCF............
  Group........ (None)
  Member....... (None)

Alteration Date yyyy-mm-dd
Alteration Time 14.13.46
```

There are no line commands for the STCD view.

STCD View Primary Commands

Table 30-5 lists the primary commands you can enter on the **COMMAND** line to add or delete a storage class.

Table 30-5 STCD View Primary Command

Command	Action
ADD new storageclassname	create a new storage class with identical characteristics
DELete *	delete the storage class

STCD View Overtype Fields

Table 30-6 lists the fields you can overtype on the STCD view.

Table 30-6 STCD View Overtype Fields

Overtype Field	Value
Descr	comments describing the storage class
PSID	page set identifier to which the storage class is mapped. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
XCF Group	name of the XCF group to which the IMS system belongs. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
XCF Member	XCF member name of the IMS system. Values are valid up to a 48-character string. MAINVIEW for WebSphere MQ will not verify the name.
Note: The XCF Group Name and XCF Member Name fields can be overtyped only when the IMS Bridge is used.	

STCD View Hyperlink

Table 30-7 shows the STC view field from which you can hyperlink and the destination for the link.

Table 30-7 STCD View Hyperlink

Field	Destination	Information
PSID	PS	information about page set usage

Chapter 31 Threads

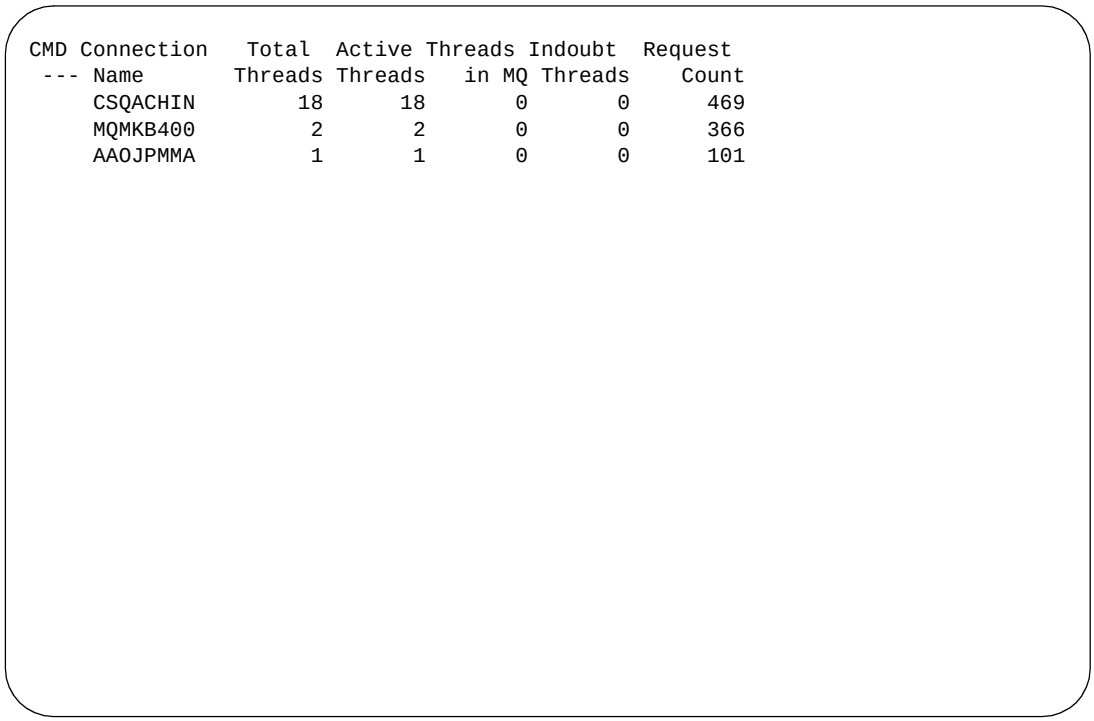
The thread views provide information about the threads that are active and inactive in MQSeries.

This chapter discusses the following topics:

THRDZ: Thread Summary

The THRDZ view is a summary of all the active and inactive threads. The THRDZ view, shown in Figure 31-1, is displayed when you hyperlink from the EZQMVS or EZQMMVS views, or when you type **THRDZ** on the **COMMAND** line.

Figure 31-1 THRDZ View



CMD	Connection Name	Total Threads	Active Threads	Indoubt in MQ	Request Threads	Count
---	CSQACHIN	18	18	0	0	469
	MQMKB400	2	2	0	0	366
	AAOJPMMA	1	1	0	0	101

There are no primary commands, line commands, or overtype fields for the THRDZ view.

THRDZ View Hyperlinks

Table 31-1 lists the THRDZ view fields from which you can hyperlink and the destinations for the links.

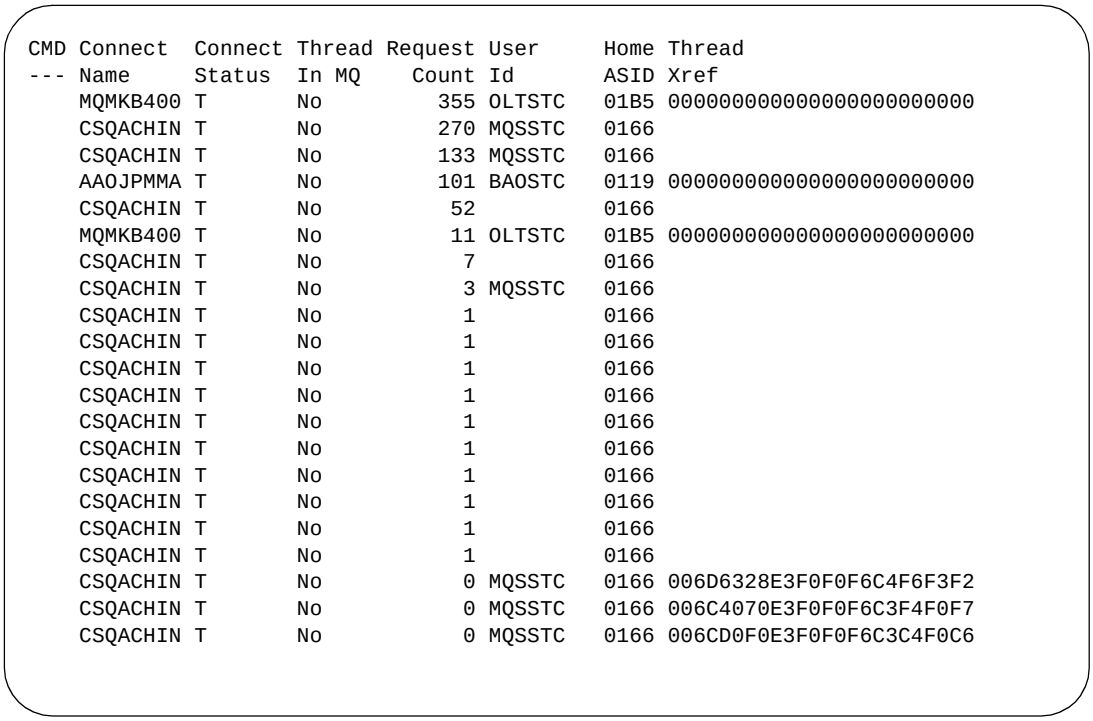
Table 31-1 THRDZ View Hyperlinks

Field	Destination	Information
Active Threads	THRDA	Details about the active threads in the connection specified in the Connection Name field
Indoubt Threads	THRDI	Details about the indoubt threads in the connection specified in the Connection Name field

THRDA: Active Threads

The THRDA view provides detailed information about active threads. The THRDA view, shown in Figure 31-2, is displayed when you hyperlink from the THRDZ view or when you type **THRDA** on the **COMMAND** line.

Figure 31-2 THRDA View



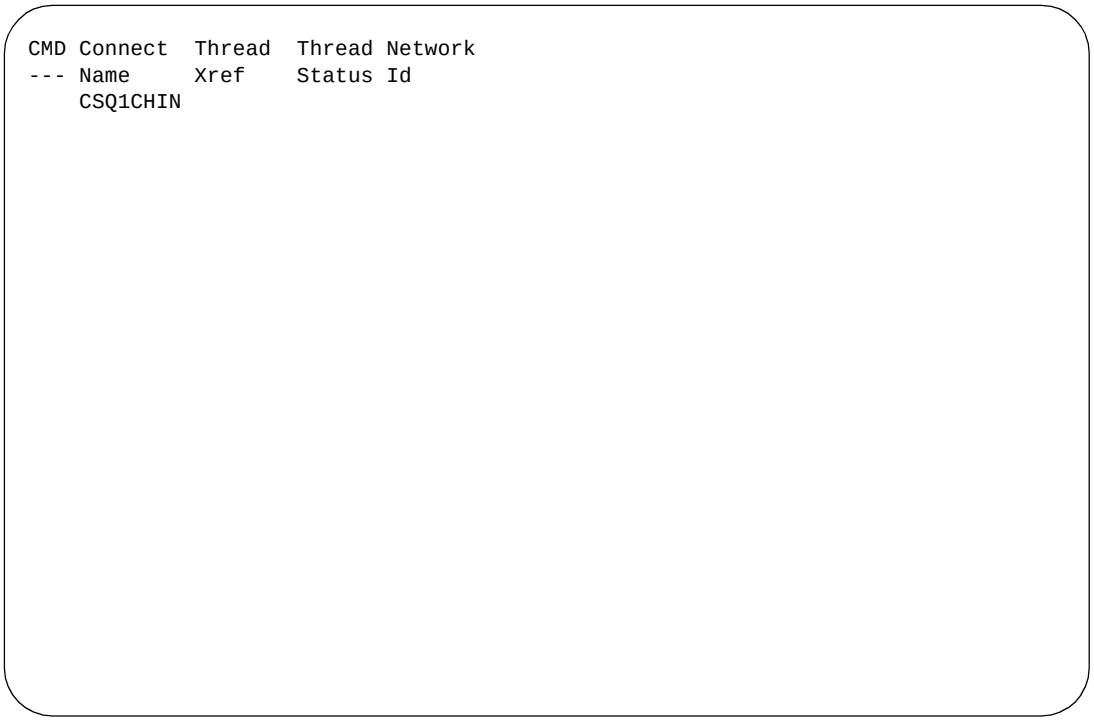
```
CMD Connect  Connect Thread Request User     Home Thread
--- Name     Status  In MQ    Count Id       ASID Xref
    MQMKB400 T       No         355 OLTSTC   01B5 00000000000000000000000000
    CSQACHIN T       No         270 MQSSTC   0166
    CSQACHIN T       No         133 MQSSTC   0166
    AAOJPMMA T       No         101 BAOSTC   0119 00000000000000000000000000
    CSQACHIN T       No          52          0166
    MQMKB400 T       No          11 OLTSTC   01B5 00000000000000000000000000
    CSQACHIN T       No           7          0166
    CSQACHIN T       No           3 MQSSTC   0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           1          0166
    CSQACHIN T       No           0 MQSSTC   0166 006D6328E3F0F0F6C4F6F3F2
    CSQACHIN T       No           0 MQSSTC   0166 006C4070E3F0F0F6C3F4F0F7
    CSQACHIN T       No           0 MQSSTC   0166 006CD0F0E3F0F0F6C3C4F0C6
```

There are no primary commands, line commands, overtype fields, or hyperlink fields for the THRDA view.

THRDI: Indoubt Threads

The THRDI view provides detailed information about inactive threads. The THRDI view, shown in Figure 31-3, is displayed when you hyperlink from the THRDZ view or when you type **THRDI** on the **COMMAND** line.

Figure 31-3 THRDI View



There are no line commands, overtype fields, or hyperlinks for the THRDI view.

THRDI View Primary Command

Table 31-2 shows the primary command you can enter on the **COMMAND** line to resolve an indoubt thread.

Table 31-2 THRDI View Primary Command

Command	Action
RESolve	Resolve an indoubt thread
Note: You must also type either COMMIT or BACKOUT in the Resolve Action field for the indoubt thread.	

Chapter 32 Topology

The topology views provide information about the resources defined to WebSphere MQ. The topology views allow you to do the following:

- get clear information about the relationships of objects in WebSphere MQ
- isolate information about exceptions that reflect inconsistencies between objects or their performance
- hyperlink to related displays, for example, you can display a list of objects when you are trying to locate one or when you know that some object has been given a name that does not meet the conventions for that object type
- directly access the actions required to change or fix an object or a relationship between objects

Note: For information about topology exceptions, see "Topology Exceptions" on page B-1.

This chapter discusses the following topics:

TOPOLOGY: Topology

The TOPOLOGY view provides an overview of all queue manager object definitions. This view is a summarized view listing all queue managers in the current context. The TOPOLOGY view, shown in Figure 32-1, is displayed when you hyperlink from the EZMQS view or when you type **TOPOLOGY** on the **COMMAND** line.

Figure 32-1 TOPOLOGY View

```
C Receive Sending Cluster   Local    Xmit  Remote   Alias Cluster Exception Queue
-   Chnls   Chnls   Chnls  Queues  Queues  Queues  Queues  Queues     Count
Manager
        4       5       4      17       1       1       1       1         1 CSQ1
        4       5       4      15       1       1       2       1         2 CSQ2
```

There are no primary commands, line commands, or overtype fields for the TOPOLOGY view.

TOPOLOGY View Hyperlinks

Table 32-1 lists the TOPOLOGY view fields from which you can hyperlink and the destination for each link.

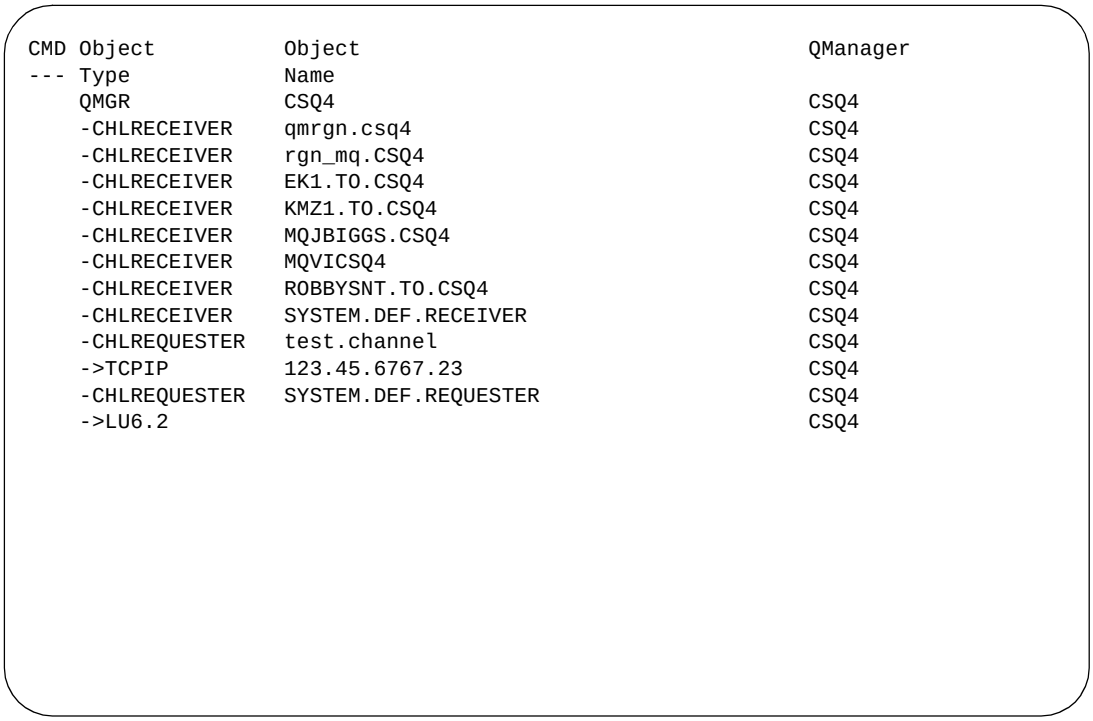
Table 32-1 TOPOLOGY View Hyperlinks

Field	View	Information
Any channels or queues	TOPLIST	topological details for the selected channels or queues
Exception Count	TOPEXCP	topology exceptions for the queue managers
Queue Manager	TOPLIST	entire topology for the queue manager

TOPLIST: Topology Details

The TOPLIST view provides details about WebSphere MQ resources. The TOPLIST view, shown in Figure 32-2, is displayed when you hyperlink from the TOPOLOGY view or when you type **TOPLIST** on the **COMMAND** line.

Figure 32-2 TOPLIST View



```
CMD Object          Object                                  QManager
--- Type            Name
    QMGR            CSQ4                                    CSQ4
    -CHLRECEIVER    qmrgn.csq4                              CSQ4
    -CHLRECEIVER    rgn_mq.CSQ4                             CSQ4
    -CHLRECEIVER    EK1.TO.CSQ4                             CSQ4
    -CHLRECEIVER    KMZ1.TO.CSQ4                            CSQ4
    -CHLRECEIVER    MQJBIGGS.CSQ4                           CSQ4
    -CHLRECEIVER    MQVICSQ4                                CSQ4
    -CHLRECEIVER    ROBBYSNT.TO.CSQ4                        CSQ4
    -CHLRECEIVER    SYSTEM.DEF.RECEIVER                     CSQ4
    -CHLREQUESTER   test.channel                            CSQ4
    ->TCPIP         123.45.6767.23                          CSQ4
    -CHLREQUESTER   SYSTEM.DEF.REQUESTER                    CSQ4
    ->LU6.2                                                 CSQ4
```

There are no primary commands, line commands, or overtype fields for the TOPLIST view.

TOPLIST View Hyperlink

Table 32-2 shows the TOPLIST view field from which you can hyperlink and the destination for the link.

Table 32-2 TOPLIST View Hyperlink

Field	View	Information
Object Name	related object view	information about the object

TOPEXCP: Topology Exceptions

The TOPEXCP view lists objects that do not conform to all the elements of the definitions for their object types. The TOPEXCP view, shown in Figure 32-2, is displayed when you hyperlink from the TOPOLOGY view or when you type **TOPEXCP** on the **COMMAND** line.

For information about topology exceptions, see the online help or “Topology Exceptions” on page B-1

Figure 32-3 TOPEXCP View

```
CMD Object          Object                                  Exception
--- Type            Name                                    Type
    QMGR            CSQ4
    <-XMITQ         not.an.xmitq                            XmitQ not defined
    <-XMITQ         Just.a.queue.to.hold                    XmitQ not defined
    <-XMITQ         BMVPCC1                                 XmitQ not defined
    ->LU6.2         (none)                                  Network ID is blank
    ->PROCESS       testing.Michelle                        Process not defined
    ->INITQ         (none)                                  InitiationQ is blank
    ->PROCESS       not.a.process                           Process not defined
    ->INITQ         not.an.initq                            InitQ not defined
    ->PROCESS       (none)                                  Process is blank
    ->XMITQ         MQ_DEMO_REMOTE_QMGR                     XmitQ not defined
    ->XMITQ         MQ_DEMO_REMOTE_QMGR                     XmitQ not defined
    ->XMITQ         xxxxxx                                  XmitQ not defined
    -->QMGR         (none)                                  RQMNAME is blank
    ->XMITQ         does.not.exist                          XmitQ not defined
    ->QUEUE         (none)                                  Tgt Queue is blank
    ->QUEUE         (none)                                  Tgt Queue is blank
```

There are no primary commands, line commands, or overtype fields for the TOPEXCP view.

TOPEXCP Hyperlinks

Table 32-3 lists the TOPEXCP view fields from which you can hyperlink and the destination for each link.

Table 32-3 TOPEXCP View Hyperlinks

Field	View	Information
Object Name	TOPLIST	entire related definition
Exception Type	TOPLIST	entire related definition

TOPOVER: Topology Overview

The TOPOVER view is an overview of all of the WebSphere MQ resources and is an alternative to the TOPOLOGY view. The TOPOVER view, shown in Figure 32-4, is displayed when you type **TOPOVER** on the **COMMAND** line

Figure 32-4 TOPOVER View

```
C Object   Object Exception
- Type      Count     Count
  QManager                 CSQ1
  ChlRcvr       6
  ChlRqstr      1
  ChlrClnt      1
  ChlClRcv      3
  ChlSdr       15
  ChlSvr        1
  ChlSvrC       3
  ChlClSdr      2
  QLocal       76
  QRemote      11         1
  QAlias        2         1
  XmitQ        16         2
  QCluster      3
```

There are no primary commands, line commands, or overtype fields for the TOPOVER view.

TOPOVER Hyperlinks

Table 32-4 lists the TOPOVER view fields from which you can hyperlink and the destination for each link.

Table 32-4 TOPOVER View Hyperlinks (Part 1 of 2)

Field	View	Information
Object Type	TOPOVER	overview

Table 32-4 TOPOVER View Hyperlinks (Part 2 of 2)

Field	View	Information
Object Count	TOPLIST	topology details for the selected type
Exception Count	TOPEXCP	exceptions for the selected type

Chapter 33 MQITrace

MQITrace data is available for any MVS queue managers running with MQ Extensions.

The MQITRACE view provides a tabular view of all data currently residing in the MQ Extensions dataspace. The dataspace is owned by the queue manager and is named *qmgr*MQTR where *qmgr* is the SSID of the queue manager.

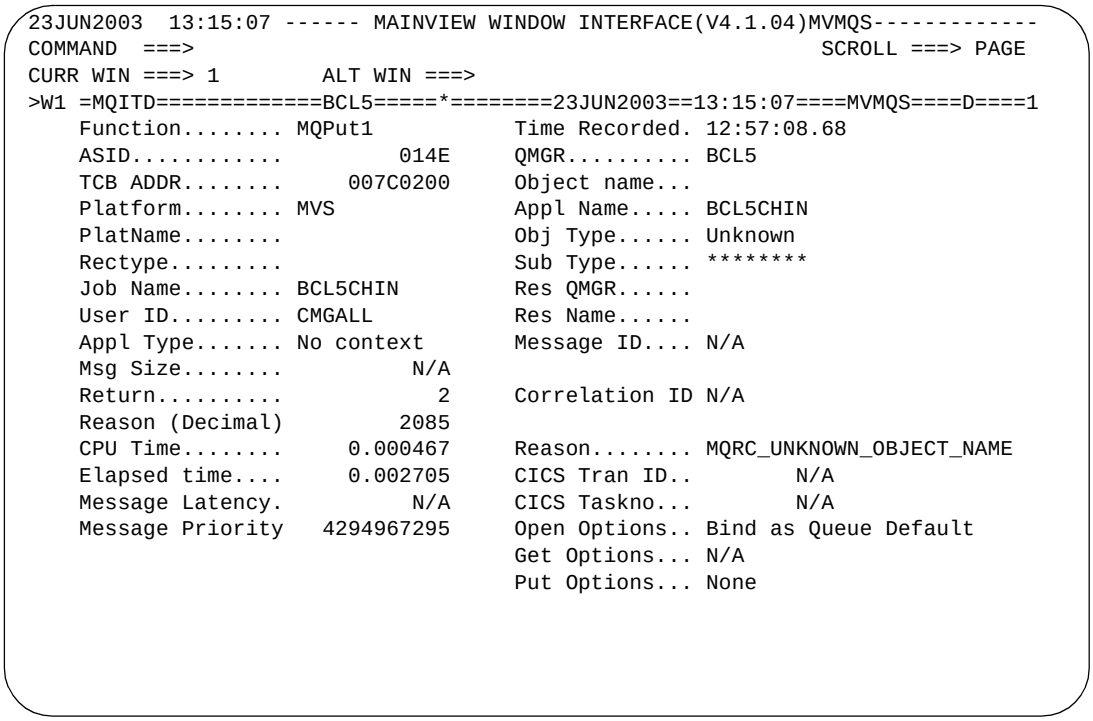
By default, only return codes >= 2 from API calls are traced unless there is a Get No Msg reason code. Defaults can be changed for each queue manager by adding EXITOPT DD to the MMAHINIT MQ Extensions Initialization step and saving the defaults in that dataset. For more information, see “EXITOPT DD” on page 2-14. Trace conditions statements use the Boolean OR operator, and if any trace condition is met, a record is written. For example, if you set TRJOB = *, every API call will be traced. For more information, see “Installing BMC Software WebSphere MQ Extensions” on page 2-11.

This chapter discusses the following topics:

MQITD: API Trace Detail

The MQITD view, shown in Figure 33-1, is displayed when you hyperlink from the **MQTRACE** view.

Figure 33-1 MQITD View



There are no primary commands, line commands, or overtype fields for this view.

MQITD View Hyperlinks

Table 33-1 lists the MQITD view hyperlinks.

Table 33-1 MQITD View Hyperlinks

Hyperlink	Destination
QMGR	MQEST view
Object Name	MQEST view
Appl Name	MQEST view
CICS Trans ID	MQEST view
CICS Transno	MQEST view

MQITRACE: WebSphere MQ API Trace

The MQITRACE view, shown in Figure 33-2, is displayed when you type **MQITRACE** on the **COMMAND** line, or when you hyperlink from WS MQ API Trace on the EZMQS menu.

The MQITRACE view provides a tabular view of all data currently residing in the MQExtensions dataspace. The dataspace is owned by the QMGR and is named **qmgrMQTR** - where qmgr is the SSID of the QMGR. MQ Extensions must be installed in the QMGR target.

Figure 33-2 MQITRACE View

```
23JUN2003  13:24:29 ------ MAINVIEW WINDOW INTERFACE(V4.1.04)MVMQS-------------
COMMAND  ===>                                                 SCROLL ===> PAGE
CURR WIN ===> 1        ALT WIN ===>
>W1 =MQITRACE==========BCL5=====*========23JUN2003==13:24:28====MVMQS====D===72
CMD Time         Function Application  Object
--- Recorded     ~        Name         Name
    12:57:08.68  MQPut1   BCL5CHIN
    12:57:08.70  MQPut1   BCL5CHIN
    12:57:08.71  MQPut1   BCL5CHIN
    12:57:08.72  MQPut1   BCL5CHIN
    12:57:08.73  MQPut1   BCL5CHIN
    12:57:08.74  MQPut1   BCL5CHIN
    12:57:08.75  MQPut1   BCL5CHIN
    12:57:08.75  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:08.75  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:08.75  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:08.75  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:08.76  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:08.76  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
    12:57:09.00  MQOpen   BCL5CHIN     AMQH
    12:57:09.00  MQClose  BCL5CHIN
    12:57:09.00  MQOpen   BCL5MSTR     SYSTEM.COMMAND.REPLY.DUMMY
```

There are no line commands, or overtype fields for this view.

MQITRACE View Primary Commands

Table 33-2 shows the primary command you can enter on the **COMMAND** line to filter the message displayed in the MQITRACE view. If no filters are set all records are traced. If filters are set, the record is traced if any filter matches.

These parameters can also be set using EXITOPT DD in the Queue Manager started tasks JCL.

Table 33-2 MQITRACE View Primary Command

Command	Action
TRJOB jobname	Change the Jobname to be traced if no operand is specified list trace options
TRRESOLVED objectName	Change the Resolved object name to be traced if no operand is specified list trace options
TRNAMED objectName Or TRQUEUE objectname	Change the named object to be traced if no operand is specified list trace options
TRAPPL applicationName	Change the Application to be traced if no operand is specified list trace options
TREXCPTION *exceptionValue*	Change the Exception values • On - trace any RC=2 • Off - don't use exceptions as a trace criteria • Any|All - trace any non-zero reason or return code • Warn - trace any RC > 1 if no operand is specified list trace options • IGNORENOMSG - will not trace NOMSG found condition unless one of the
TRCLEAR	Clear all trace records

MQITRACE View Hyperlink

Table 33-3 lists the MQITRACE view fields from which you can hyperlink and the destination for the links.

Table 33-3 MQITRACE View Hyperlink

Field	View	Information
Function or Reason Code	MQITD	shows detailed trace record data
Application Name	MQEAZ	shows detailed stats application summary
Object Name	MQEST	shows detailed stats for this named object by application

Chapter 34 Transmission Queues

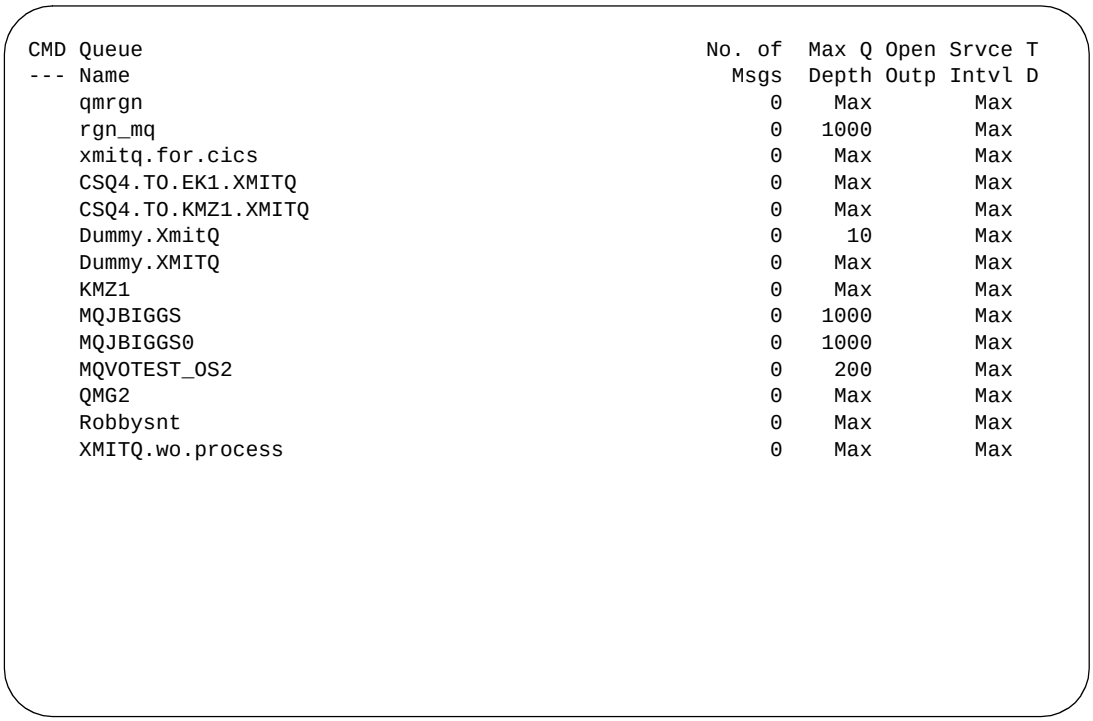
The transmission queues views provide information about all transmission queues.

This chapter discusses the following topics:

XQ: Transmission Queues

The XQ view lists the transmission queues in the current context. The XQ view, shown in Figure 34-1, is displayed when you select Transmission Queues from the EZQI view, hyperlink from the QMD or QMMVSD view, or type **XQ** on the **COMMAND** line.

Figure 34-1 XQ View



```
CMD Queue                                          No. of  Max Q Open Srvce T
--- Name                                             Msgs  Depth Outp Intvl D
    qmrgn                                             0    Max        Max
    rgn_mq                                            0   1000        Max
    xmitq.for.cics                                    0    Max        Max
    CSQ4.TO.EK1.XMITQ                                 0    Max        Max
    CSQ4.TO.KMZ1.XMITQ                                0    Max        Max
    Dummy.XmitQ                                       0     10        Max
    Dummy.XMITQ                                       0    Max        Max
    KMZ1                                              0    Max        Max
    MQJBIGGS                                          0   1000        Max
    MQJBIGGS0                                         0   1000        Max
    MQVOTEST_OS2                                      0    200        Max
    QMG2                                              0    Max        Max
    Robbysnt                                          0    Max        Max
    XMITQ.wo.process                                  0    Max        Max
```

There are no overtype fields for the XQ view.

XQ View Primary Commands

Table 34-1 lists the primary commands you can enter on the **COMMAND** line to delete queues from the XQ view.

Table 34-1 XQ View Primary Commands (Part 1 of 2)

Command	Action
DELete queuename	delete an *empty* queue
DELete queuename pattern	

Table 34-1 XQ View Primary Commands (Part 2 of 2)

Command	Action
DEPurge queuename	delete the queue and purge the messages from it
DEPurge queuename pattern	
PURge queuename	purge all messages from queue
PURge queuename pattern	

XQ View Line Commands

Table 34-2 lists the line commands you can use to perform actions against an entity on an XQ view line.

Table 34-2 XQ View Line Commands

Command	Action
ADD	create a new transmission queue with identical characteristics
DEL	delete an *empty* queue
DEP	delete a queue and purge all of its messages
PUR	purge all messages from queue

XQ View Hyperlinks

Table 34-3 lists the XQ view fields from which you can hyperlink and the destination for each link.

Table 34-3 XQ View Hyperlinks

Field	View	Information
Queue Name	LQD	details about a local queue
No. of Msgs	EZLQMSG	message Browse Menu
Process	PROCD	details about a process

XQM: Transmission Queue Messages

The XQM view lists identifying information for all messages on a transmission queue. The XQM view, shown in Figure 34-2, is displayed when you hyperlink from the EZLQMSG view or when you type **XQM** on the **COMMAND** line.

Figure 34-2 XQM View

```
CMD               Mesg User
--- Put Time    Length Identifier   Remote Queue Name   Remote Queue Man
    22:30:38.00   1452              TEST1.QUEUE         CSQ3
    18:45:07.00   1452              TEST1.QUEUE         CSQ3
    18:33:48.00   1452              TEST1.QUEUE         CSQ3
    18:12:35.00   1452              TEST1.QUEUE         CSQ3
```

Note: You can view the messages on a transmission queue only if the queue has been enabled for MQGET requests.

There are no primary commands, or overtype fields for the XQM view.

XQM View Line Command

Table 34-4 shows the line command you can use to perform actions against an entity on an XQM view line.

Table 34-4 XQM View Line Command

Command	Action
DEL	delete the message

XQM View Hyperlinks

Table 34-5 lists the XQM view fields from which you can hyperlink and the destination for each link.

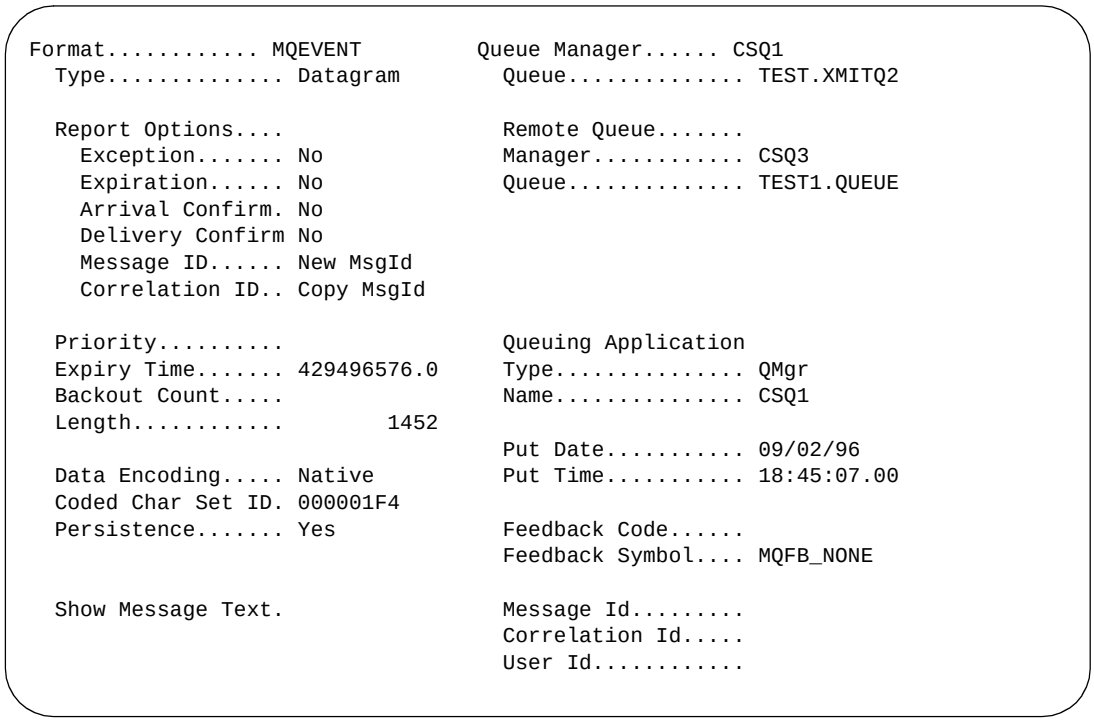
Table 34-5 XQM View Hyperlinks

Field	View	Information
Put Time	EZMSGBR	Message Browse menu
Mesg Length	MB	content of the message
Transmission Queue	LQD	details about the transmission queue

XQMD: Transmission Queue Message Details

The XQMD view provides details about a single message on a transmission queue. The XQMD view, shown Figure 34-3, is displayed when you hyperlink from the XQM view or when you type **XQMD** on the **COMMAND** line.

Figure 34-3 XQMD View



There are no line commands, or overtype fields for the XQMD view.

XQMD View Primary Command

Table 34-6 shows the primary command you can enter on the **COMMAND** line to delete the message displayed in the XQMD view.

Table 34-6 XQMD View Primary Command

Command	Action
DELete	delete the message from the transmission queue

XQMD View Hyperlinks

Table 34-7 lists the XQMD view fields from which you can hyperlink and the destination for each link.

Table 34-7 XQMD View Hyperlinks

Field	Destination	Information
Show Message Detail	LQMD	details about the message
Length	MB	content of the message

XQZ: Transmission Queue Summary

The XQZ view provides a summarized list of all local queues that are using the transmission queue (USAGE=XMITQ). The XQZ view, shown in Figure 34-4, is listed by queue name. The XQZ view is displayed when you hyperlink from the EZQQI menu, or when you type **XQZ** on the **COMMAND** line.

Figure 34-4 XQZ View

```
CMD Queue                                          No. of  Max Q Open Srvce T
--- Name                                             Msgs  Depth Outp Intvl D
    CSBC.XMITQ                                          0 640000        Max
    CSQA.DEFXMIT.QUEUE                                  0 640000        Max
    CSQ1.XMITQ                                          0 640000        Max
    DEAD                                                0   5000
    EPESIN.XMITQ                                        0 640000        Max
    JBURKE.XMITQ                                        0 640000        Max
    MQM2359B                                            0 640000        Max
    PERRYMAN.XMITQ                                      0 640000        Max
    QM1                                                 0  80000        Max
    QM1ALS                                              5  80000        Max
    ROX1QMNT                                            0  80000        Max
    ROX1QMNT1                                           0  80000        Max
    ROX1QMNT2                                           0  80000        Max
    ROX1QMNT3                                           0  80000        Max
    SYSTEM.CLUSTER.TRANSMIT.QUEUE                      52    Max    1   Max
```

There are no primary commands, or hyperlinks for XQZ view.

XQZ Line Commands

Table 34-8 shows the line commands you can use to perform actions against an queue on an XQZ view line.

Note: In the summary views, each line may represent more than one queue. Any overtypes or line commands will affect all queues represented by that line.

Table 34-8 XQZ Line Commands

Command	Action
ADD	creates a new queue definition with identical attributes as the queue represented on the line where you typed the command To give the new transmission queue a different QSG group disposition, overtype the QSGDISP field.[1]
DEL	deletes the queue
PUR	deletes the messages in the queue
[1]Valid only if using MVS Queue Managers 5.2 and above.	

XQZ View Overtype Fields

Table 34-9 lists the fields you can overtype on the XQZ view and the values you can use.

Table 34-9 XQZ View Overtype Fields

Overtype Field	Value
Maximum Q Depth	decimal integer up to 999999999
Open Output	‘e’ or ‘exclusive’ or ‘s’ or ‘shared’
Service Interval	decimal integer up to 999999999
Trigger Depth	decimal integer up to 999999999

Chapter 35 Workflow

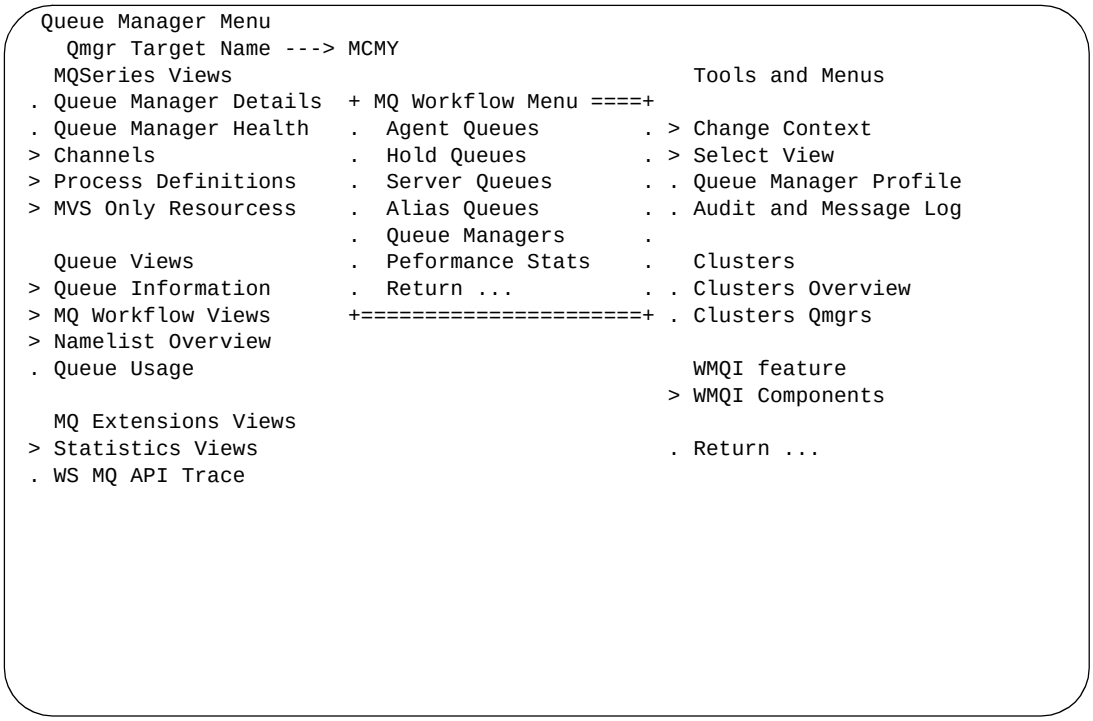
WebSphere MQ Workflow provides business process management. Workflow runs on AIX, HP-UX, OS/2, OS/390, Solaris, Windows 2000, Windows 95, Windows NT and Windows 98. The queues can be monitored with PATROL for MQ Operator, MAINVIEW for WebSphere MQ, and Patrol for MQ Administrator.

This chapter discusses the following topics:

EZWF: Easy Menu - Workflow

The EZWF view, shown in Figure 35-1, is displayed when you type **EZWF** on the **COMMAND** line, or when you hyperlink from MQ Workflow Views on the EZQSSI menu.

Figure 35-1 EZWF View

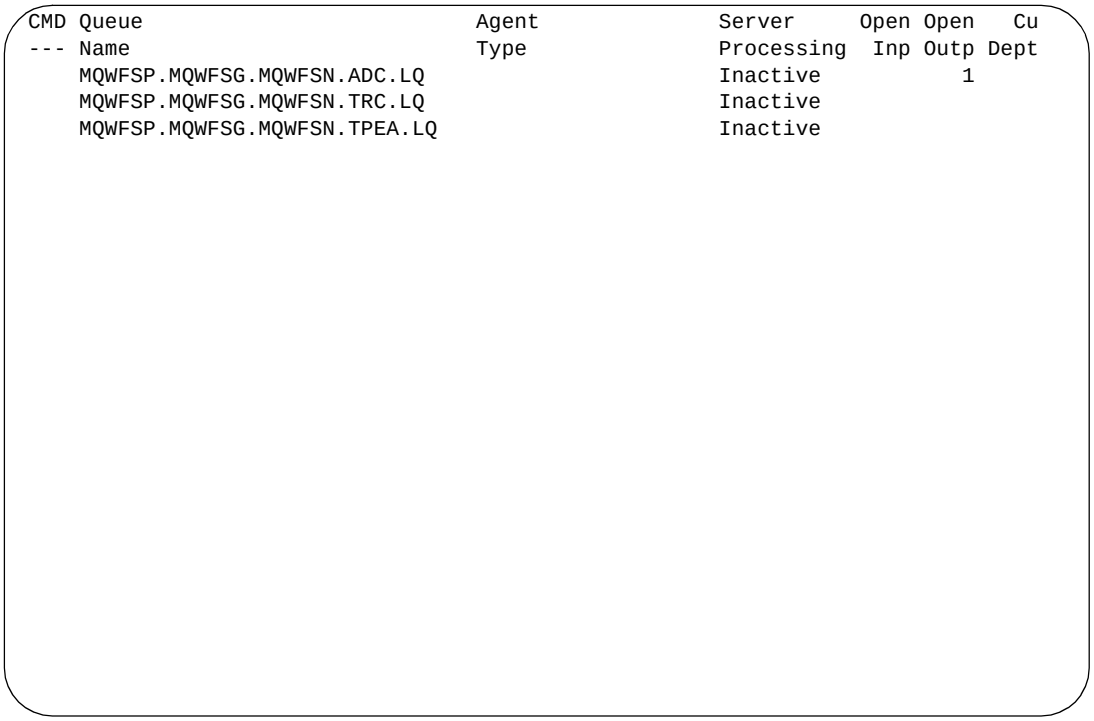


There are no primary commands, line commands, or overtype fields for this view.

WFAGENT: Workflow Agents Overview

The WFAGENT view, shown in Figure 35-2, is displayed when you type **WFAGENT** on the **COMMAND** line, or when you hyperlink from Agent Queues on the EZWF menu.

Figure 35-2 WFAGENT View



There are no primary commands, line commands, or overtype fields for this view.

WFAGENT View Hyperlink

Table 35-1 lists the WFAGENT view fields from which you can hyperlink and the destination for the links.

Table 35-1 WFAGENT View Hyperlink

Field	View	Information
Queue Name	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.
Cur Depth	EZLQMSG	Indicates the current number of messages in the queue. **Note:** If you use expiry times in messages, the actual number of messages may be larger than the number that can be browsed. Expired messages are not deleted until a successful get is issued to the queue.

WFALIAS: Workflow Alias Queues

The WFALIAS view, shown in Figure 35-3, is displayed when you type **WFALIAS** on the **COMMAND** line, or when you hyperlink from Alias Queues on the EZWF menu.

Figure 35-3 WFALIAS View

```
CMD Queue                                    Target
--- Name                                     Queue
    MQWFSP.CLIENT.ADC                        MQWFSP.MQWFSG.MQWFSN.ADC.LQ
    MQWFSP.MQWFSG.MQWFSN.ADC                 MQWFSP.MQWFSG.MQWFSN.ADC.LQ
    MQWFSP.MQWFSG.ADM                        MQWFSP.MQWFSG.MQWFSN.ADM.LQ
    MQWFSP.MQWFSG.MQWFSN.ADM                 MQWFSP.MQWFSG.MQWFSN.ADM.LQ
    MQWFSP.MQWFSG.MQWFSN.BOOT.REPLY          MQWFSP.MQWFSG.MQWFSN.BOOT.REPLY.LQ
    MQWFSP.MQWFSG.MQWFSN.BOOT.REQUEST        MQWFSP.MQWFSG.MQWFSN.BOOT.REQUEST.
    MQWFSP.MQWFSG.CLE                        MQWFSP.MQWFSG.MQWFSN.CLE.LQ
    MQWFSP.MQWFSG.MQWFSN.CLE                 MQWFSP.MQWFSG.MQWFSN.CLE.LQ
    MQWFSP.CLIENT.EXC                        MQWFSP.MQWFSG.MQWFSN.EXC.LQ
    MQWFSP.MQWFSG.MQWFSN.EXC                 MQWFSP.MQWFSG.MQWFSN.EXC.LQ
    MQWFSP.MQWFSG.EXE                        MQWFSP.MQWFSG.MQWFSN.EXE.LQ
    MQWFSP.MQWFSG.MQWFSN.EXE                 MQWFSP.MQWFSG.MQWFSN.EXE.LQ
    MQWFSP.MQWFSG.EXE.XML                    MQWFSP.MQWFSG.MQWFSN.EXE.XML.LQ
    MQWFSP.MQWFSG.MQWFSN.EXE.XML             MQWFSP.MQWFSG.MQWFSN.EXE.XML.LQ
    MQWFSP.MQWFSG.MQWFSN.EXEHOLD             MQWFSP.MQWFSG.MQWFSN.EXEHOLD.LQ
    MQWFSP.CLIENT.MDC                        MQWFSP.MQWFSG.MQWFSN.MDC.LQ
```

There are no primary commands, line commands, or overtype fields for this view.

WFALIAS View Hyperlink

Table 35-2 lists the WFALIAS view fields from which you can hyperlink and the destination for the links.

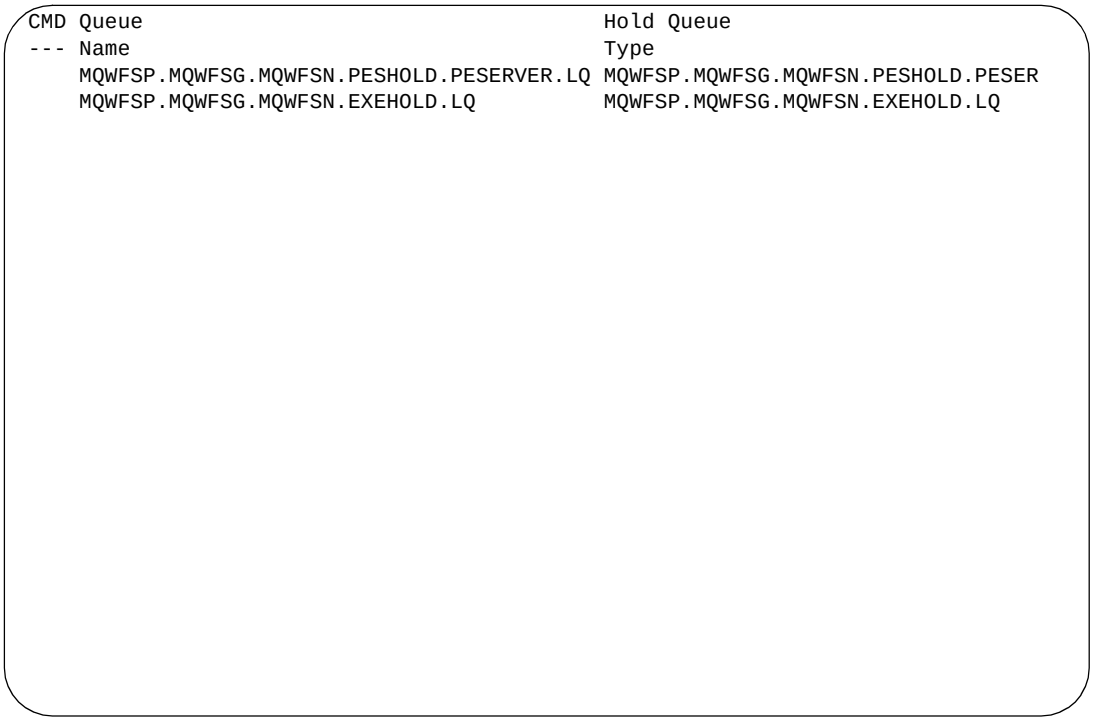
Table 35-2 WFALIAS View Hyperlink

Field	View	Information
Queue Name	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.
Target Queue	Queues	The local name of the base queue being aliased. This must be a local queue (not a dynamic queue) or a local definition of a remote queue. This attribute can be altered if you have appropriate authorization.

WFHOLDQ: Workflow Hold Queues

The WFHOLDQ view, shown in Figure 35-4, is displayed when you type **WFHOLDQ** on the **COMMAND** line, or when you hyperlink from Hold Queues on the EZWF menu.

Figure 35-4 WFHOLDQ View



There are no primary commands, line commands, or overtype fields for this view.

WFHOLDQ View Hyperlink

Table 35-3 lists the WFHOLDQ view fields from which you can hyperlink and the destination for the links.

Table 35-3 WFHOLDQ View Hyperlink

Field	View	Information
Queue Name	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.
Cur Depth	EZLQMSG	Indicates the current number of messages in the queue. **Note:** If you use expiry times in messages, the actual number of messages may be larger than the number that can be browsed. Expired messages are not deleted until a successful get is issued to the queue.

WFPERF: Workflow Performance

The WFPERF view, shown in Figure 35-5, is displayed when you type **WFPERF** on the **COMMAND** line, or when you hyperlink from Performance Stats on the EZWF menu.

Figure 35-5 WFPERF View

```
CMD Resolved                                    Queue
--- Queue                                       Name
                                                MQWFSP.MQWFSG.MQWFSN.ADM.LQ
                                                MQWFSP.MQWFSG.MQWFSN.ADC
                                                MQWFSP.MQWFSG.MQWFSN.ADC.LQ
                                                MQWFSP.MQWFSG.MQWFSN.EXEHOLD
                                                MQWFSP.MQWFSG.MQWFSN.EXEHOLD.LQ
                                                MQWFSP.MQWFSG.MQWFSN.PESHOLD.PES
                                                MQWFSP.MQWFSG.MQWFSN.PESHOLD.PES
                                                MQWFSP.MQWFSG.MQWFSN.BOOT.REQUES
                                                MQWFSP.MQWFSG.MQWFSN.BOOT.REQUES
                                                MQWFSP.MQWFSG.MQWFSN.EXE
                                                MQWFSP.MQWFSG.MQWFSN.EXE.LQ
                                                MQWFSP.MQWFSG.MQWFSN.EXE.XML
                                                MQWFSP.MQWFSG.MQWFSN.EXE.XML.LQ
                                                MQWFSP.MQWFSG.MQWFSN.CLE
                                                MQWFSP.MQWFSG.MQWFSN.CLE.LQ
                                                MQWFSP.MQWFSG.MQWFSN.SCH
```

There are no primary commands, line commands, or overtype fields for this view.

WFPERF View Hyperlink

Table 35-4 lists the WFPERF view fields from which you can hyperlink and the destination for the links.

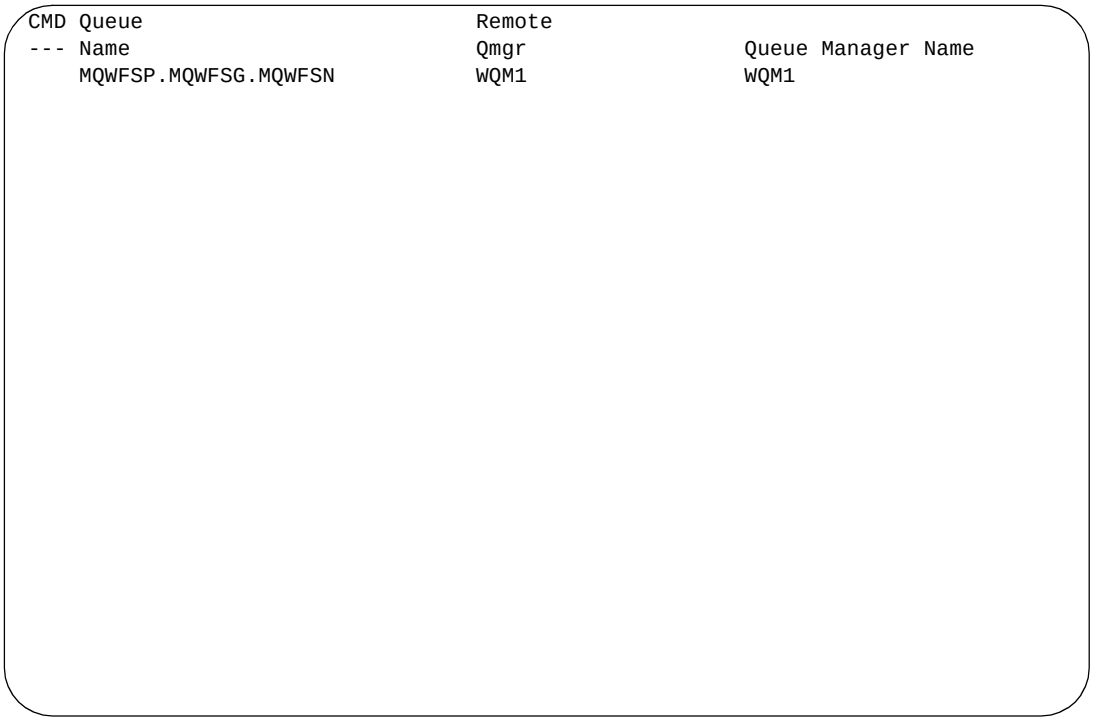
Table 35-4 WFPERF View Hyperlink

Field	View	Information
Resolved Name	Queues	The name of the queue to which this queue record resolves to.
Queue Name	LQD	The name of the queue for which the queue performance statistics are valid.
Cur Depth	EZLQMSG	The current depth of the queue

WFQMGRS: Workflow Qmgr Aliases

The WFQMGRS view, shown in Figure 35-6, is displayed when you type **WFQMGRS** on the **COMMAND** line, or when you hyperlink from Queue Managers on the EZWF menu.

Figure 35-6 WFQMGRS View



There are no primary commands, line commands, or overtype fields for this view.

WFQMGRS View Hyperlink

Table 35-5 lists the WFQMGRS view fields from which you can hyperlink and the destination for the links.

Table 35-5 WFQMGRS View Hyperlink

Field	View	Information
Queue Name	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.

WFSERV: Workflow Server Overview

The WFSERV view, shown in Figure 35-7, is displayed when you type **WFSERV** on the **COMMAND** line, or when you hyperlink from Server Queues on the EZWF menu.

Figure 35-7 WFSERV View

```
CMD Queue                                Server          Server     Open Open
--- Name                                 Type            Processing  Inp Outp
    MQWFSP.MQWFSG.MQWFSN.PES.PESERVER.L                  Active        5    5
    MQWFSP.MQWFSG.MQWFSN.EXE.LQ                          Active        4    4
    MQWFSP.MQWFSG.MQWFSN.EXE.XML.LQ                      Active        4
    MQWFSP.MQWFSG.MQWFSN.SCH.LQ                          Active        1    1
    MQWFSP.MQWFSG.MQWFSN.CLE.LQ                          Active        1    1
    MQWFSP.MQWFSG.MQWFSN.ADM.LQ                          Active        1    1
```

There are no primary commands, line commands, or overtype fields for this view.

WFSERV View Hyperlink

Table 35-6 lists the WFSERV view fields from which you can hyperlink and the destination for the links.

Table 35-6 WFSERV View Hyperlink

Field	View	Information
Queue Name	LQD	The name assigned to the queue. Queue names can be up to 48 characters in length. Queue names must be unique across all queue types (qlocal, qremote, qalias, and qmodel). When queue names are assigned, it is important to use a naming convention that simplifies queue management.
Cur Depth	EZLQMSG	Indicates the current number of messages in the queue. **Note:** If you use expiry times in messages, the actual number of messages may be larger than the number that can be browsed. Expired messages are not deleted until a successful get is issued to the queue.

Chapter 36 ZPARMS

The ZPARMS view displays initial and set values for the queue manager systems parameter and enables dynamic modification of the values.

This chapter discusses the following topics:

ZPARMS: Queue Manager System Parameters

This ZPARMS view displays initial and set values for the queue manager systems parameter and enables dynamic modification of the values. You can change the Archive (CSQ6ARVP) values, System (CSQ6SYSP) values, and LOG (CSQ6LOGP) values.

The QP view, shown in Figure 36-1, is displayed when you type **ZPARMS** on the **COMMAND** line

Figure 36-1 ZPARMS View

```
COMMAND  ===>                                                SCROLL ===> PAG
CURR WIN ===> 1        ALT WIN ===>
 W1 =ZPARMS===========(ALL======*=======)27AUG2003==13:32:17====MVMQS====D===
System Values..........          Current Setting             Initial Valu
 Command Userid.........
 Maximum Connections....                      300                       30
 Exit Maxtime...........                       30                        3
 Exit Tasks.............                        8
 Background Connections.                       20                        2
 Foreground Connections.                      100                       10
 Log Load...............                   500000                    50000
 QMGR CCSID.............
 Wait for Index Build...                     WAIT                      WAI
 OTMACON Values.........
  XCF Group.............
  XCF Member............
  User Exit Name........                  DFSYDRU0                  DFSYDRU
  Age...................                2147483647                214748364
  Tpipe Prefix..........                       CSQ                       CS
 QSGDATA Values.........
  QSG Name..............
```

There are no primary commands, line commands, or hyperlinks in this view.

ZPARMS View Overtype Fields

Table 36-1 lists the ZPARMS view overtype fields.

Table 36-1 ZPARMS View Overtype Fields (Part 1 of 2)

Overtype Field	Value
Maximum number of connections	decimal integers from 1 – 32767
Maximum number of background connections	decimal integers from 1 – 32767
Maximum number of foreground connections	decimal integers from 1 – 32767
# of log records written between checkpoints	decimal integers from 200 – 16,000,000
Idle time before an archive unit is deallocated	decimal integers from 1 – 999
Maximum number of archive log volumes	decimal integers from 1 – 1000
Max concurrent tape units for read	decimal integers from 1 – 99
Units in which space allocations are made	**cye**, **trk**, or **Blk**
Prefix for first archive log data set name	a valid DSN prefix
Prefix for second archive log data set name	a valid DSN prefix
Retention period of archive log data set	0 – 9999 days
Operator route codes	decimal integers from 1 – 16
Whether to wait for a reply before mounting an archive log?	**yes** or **no**
Block size of archive log data set	4097 – 28672 (range)
Whether to catalog in the ICF	**yes** or **no**
Whether to compact datasets	**yes** or **no**
Primary space allocation for DASD data sets	the value must be greater than zero (**0**)
Whether to protect archive log data by ESM profiles	**yes** or **no**
Maximum quiesce time for ARCHIVE LOG with MODE(QUIESCE)	decimal integers from 1 – 999

Table 36-1 ZPARMS View Overtype Fields (Part 2 of 2)

Overtype Field	Value
Secondary space allocation for DASD data sets	the value must be greater than zero (**0**)
Whether archive data set name includes a time stamp	**yes**, **no**, or **ext**
Device type / unit name for first copy arc log	1 – 8 characters
Device type / unit name for second copy arc log	1 – 8 characters

Appendix A Problem Determination for Return Code 07F1 when using a Proxy

Problems encountered in the user interface for distributed queue managers are typically reported by a return code 07F1, which is the hex value for the decimal equivalent 2033.

Follow the steps in this appendix to identify and resolve problems reported by a 07F1 return code, keeping the following considerations in mind:

- The steps are sequential. If a step is not completed in order, subsequent steps will not work.
- WebSphere MQ is case sensitive. For that reason, it is important that the text you type matches the case shown in the steps.

Step 1 Set CONTEXT to the target name associated with the remote queue manager (which you established in member BBIJNT00 of your copy of the BBPARM library).

1.A Display the QMPROF view.

1.B Verify that a target name is displayed.

1.C Hyperlink from the target name to the QMPROFDR view.

1.D Fill in the following information:

Queue Manager Name
Local Queue Manager
Remote Queue Manager Alias
Local Queue Manager Alias

Step 2 Set CONTEXT to the name you recorded for Local Queue Manager.

Step 3 On the **COMMAND** line, type **QUEUES *xmit***.

The variable *xmit* is one of the following:

- If the Remote Queue Manager Alias is specified, *xmit* is the Remote Queue Manager Alias as you recorded it. The QUEUES view displays information about the queue.
- If the Remote Queue Manager Alias is not specified (is blank), *xmit* is the Queue Manager Name. The QUEUES view displays information about the queue.

Step 4 Hyperlink from the name of the queue to the LQD view.

- If QUEUES displayed a transmission queue name, the LQD view is immediately displayed.
- If QUEUES displayed a remote queue name, the RQD view is immediately displayed. From the transmission queue name shown on the RQD view, hyperlink to the LQD view.

This queue should not be GET inhibited.

- If the queue is GET inhibited, overtype the GET value, changing it to NO.
- If the queue is GET enabled and if the current depth is not zero, there is a channel problem.
- If the queue is GET enabled and if the current depth is zero, skip to Step 8.

Step 5 On the **COMMAND** line, type the following command:

```
CHANNELS;WHERE CHLXMITQ = xmit
```

The variable *xmit* is either the Remote Queue Manager Alias or the Queue Manager Name (used in Step 3).

- The CHANNELS view displays information about a channel.
- The Status of the channel should be RUNNING.
- If the channel is not running, type the START command to start it.

- If the channel does not start, confirm that a START CHINIT command has been entered. The channel initiator address space (qmgrCHIN) displays other useful messages.

- If you are unable to achieve RUNNING status for the channel, contact your WebSphere MQ administrator.

- If the channel stays in a BINDING or RETRY status, verify the connection name and make sure that the channel listener has been started on the remote platform.

Step 6 through Step 12 require access to the distributed platform.

Step 6 Verify security access. (This step applies to OS/2 when either installable services or customer-implemented security is active.)

6.A Verify that the user associated with the BBI-SS PAS has access to this queue manager.

6.B To determine the ID that is in effect, use SDSF or its equivalent on MVS to display the JES log for the PAS.

6.C Look for the following message:

IEF695I PROCEDURE MQMPASRN IS ASSIGNED TO USER OLTSTC

In this example, the ID in use is OLTSTC.

If the user is ++++++++, an ID has not been assigned, in which case you should contact your MVS security administrator.

6.D Verify that the identified ID exists and is assigned to the mqm security group.

After you alter security, you must stop and restart the distributed queue manager.

If you are unable to change the security environment, contact your WebSphere MQ administrator.

Step 7 Use RUNMQSC or its equivalent to enter the following command:

```
DISPLAY Q('SYSTEM.ADMIN.COMMAND.QUEUE') CURDEPTH
```

If the value for depth is zero (which it should be), skip to Step 9.

Step 8 Determine the status of the command server by typing the following command:

```
DSPMQCSV qmgr
```

The variable *qmgr* is the Queue Manager Name you recorded in Step 1.

The result should be an indication that the command server is running. If the command server is not running, type the following command:

```
STRMQCSV qmgr
```

The variable *qmgr* is the Queue Manager Name you recorded in Step 1.

If you are unable to start the command server, contact your WebSphere MQ administrator.

Step 9 Use RUNMQSC or its equivalent to type the following command:

```
DISPLAY Q('xmitq') CURDEPTH GET PUT
```

The variable *xmitq* is either of the following names (which you recorded in Step 1):

- Local Queue Manager Alias, if it is specified
- Local Queue Manager Name, if the Local Queue Manager Alias is not specified

The specified queue must meet the following conditions:

- exist
- be GET enabled
- be PUT enabled
- have zero messages

If the message depth is not zero, skip to Step 11.

Step 10 Check the dead-letter queue. Use RUNMQSC or its equivalent to enter the following commands:

```
DISPLAY QMGR DEADQ
DISPLAY Q('deadletter.queue.name') CURDEPTH
```

The variable *dead.letter.queue.name* is taken from the DISPLAY QMGR DEADQ command.

- If the current depth is zero (which it should be), skip to Step 11.
- If the current depth is not zero, send another request from the platform to MAINVIEW for WebSphere MQ:

10.A Set the context to the related target name

10.B Access a view.

10.C Use MQSC to display the queue depth. If the depth increases, messages are being sent here.

10.D Clear existing messages from the dead-letter queue.

10.E Ensure that no dead-letter queue handler is active.

10.F Display a MAINVIEW for WebSphere MQ view for your distributed platform. A message should now be present in the dead-letter queue. Use a facility such as the sample program AMQSBCG to view the dead letter queue, and then type the following command (using appropriate values for the dead-letter queue name and qmgr):

```
amqsbcg dead.letter.queue.name qmgr
```

The result will be a character and hex dump of the dead-letter message. At offset 8 in the hex portion (the line should begin DLH), find a value such as 07F3. This return code (MQRC) indicates why the message was put to the dead-letter queue. If your platform is PC-based, the 2 bytes may be reversed (for example, it may be F307).

Look up the resulting code in the application programmer's reference manual for your platform.

Step 11 Using RUNMQSC, enter the following command:

```
DISPLAY CHS(*) STATUS
```

11.A Verify that the channel associated with the XMITQ channel is running.

11.B If the associated channel is not running, type the following command:

```
START CHL(chnl)
```

11.C If the channel still does not start, verify that the associated TCP or LU62 listener is started in MVS.

There are no specific commands to check listener status, but you can enter a START LISTENER command and observe the response.

If you are unable to get the channel to a running status, contact your WebSphere MQ administrator.

Step 12 View the error log for the queue manager. You can find the error log in this directory:

[*var*\]mqm\qmgrs*qmgr*\errors\Amqerr01.log

The variable *var* is used only on UNIX systems.

The variable *qmgr* is the queue manager name.

The log may contain messages that identify the problem. New messages are at the end of the message log.

If you have completed the procedure in this appendix without a successful resolution of the problem, contact BMC Software. For information about how to contact Customer Support, see “Customer Support” on page -iii.

Appendix B Topology Exceptions

The Topology views provide information about the resources defined to WebSphere MQ. This appendix explains the meanings of the topology exceptions. For more information, see Chapter 32, “Topology.”

This chapter discusses the following topics:

Channel exceptions

Exception	Definition
XmitQ not defined MQCompExcXQund	Indicates that the transmission queue name contained in the channel definition is not defined to WebSphere MQ. (SENDER/SERVER Channels)
Network ID is blank MQCompExcChnlConnUnk	Indicates that the network identifier has been left blank in the channel definition.

Transmission queue exceptions

Exception	Definition
No Chnl for XmitQ MQCompExcXQnoChl	Indicates that no channel has been defined to service the transmission queue. If messages are put to this queue, they will not be transmitted.
InitQ not defined MQCompExcXQNoInitq	Indicates that an initiation queue has been defined in the transmission queue definition and that queue is not defined to WebSphere MQ.
Process not defined MQCompExcXQNoProc	Indicates that a process has been defined in the transmission queue definition and that process is not defined to WebSphere MQ.
Suspect CICS process MQCompExcXQOddCics	Indicates that a CICS process has been defined in the transmission queue definition and that process does not match the requirements of a CICS Channel definition.
Suspect MVS process MQCompExcXQOddMvs	Indicates that an MVS process has been defined in the transmission queue definition and that process does not match the requirements of a MVS Channel definition.
Channel not defined MQCompExcXQChnlUnd	Indicates that an MVS process has been defined in the transmission queue definition and that the channel referenced in the user data is not defined to WebSphere MQ.
Channel is blank MQCompExcXQChnlUnk	Indicates that an MVS process has been defined in the transmission queue definition and that the user data field is blank.
Chnl/XmitQ mismatch MQCompExcXQChnlInc	Indicates that an MVS process has been defined in the transmission queue definition and that the user data field specifies a channel name that is different than the name of the channel that is defined to service this queue.
Process is blank MQCompExcXQProcUnk	Indicates that an initiation queue has been defined for transmission queue definition and the process is blank.
InitiationQ is blank MQCompExcXQInitqUnk	Indicates that a process has been defined in the transmission queue definition and the initiation queue field is blank.

Alias queue exceptions

Exception	Definition
Tgt Queue not define MQCompExcQAlTgt	Indicates that an alias queue definition references a target queue that is not defined to WebSphere MQ.
Tgt Queue is XmitQ MQCompExcQAlXQ	Indicates that a remote queue definition has a remote queue manager name that is not defined. This can also be caused if the transmission queue name is unintentionally left blank.
Tgt Queue is blank MQCompExcAQTgtUnk	Indicates that an alias queue definition has a blank target queue name.

Remote queue exceptions

Exception	Definition
XmitQ not defined MQCompExcRQXQund	Indicates that a remote queue definition specifies a transmission queue that is not defined to WebSphere MQ.
RQMNAME not defined MQCompExcRqmUnd	Indicates that a remote queue definition has a remote queue manager name that is not defined. This can also be caused if the transmission queue name is unintentionally left blank.
RQMNAME is blank MQCompExcRqmBlank	Indicates that a remote queue definition has a blank remote queue manager (and has specified a remote queue name).

Local queue exceptions

Exception	Definition
Process not defined MQCompExcLQNoProc	Indicates that a process has been defined in the transmission queue definition and the process is not defined to WebSphere MQ.
InitQ not defined MQCompExcLQNoInitq	Indicates that an initiation queue has been defined for local queue definition and the initiation queue is not defined to WebSphere MQ.
Process is blank MQCompExcLQProcUnk	Indicates that an initiation queue has been defined for local queue definition and the process is blank.
InitiationQ is blank MQCompExcLQInitqUnk	Indicates that a process has been defined in the transmission queue definition and the initiation queue field is blank.

Appendix C MVS Problem Diagnosis and Data Gathering

This appendix provides information used to diagnose problems and collect data that technical support needs to resolve problems.

Note: In this document, MVS is used to describe the MVS component of z/OS or OS/390.

This chapter discusses the following topics:

Search Resolutions, Cases, and Failures for Matching Symptoms

Search the BMC Software Support web page at http://www.bmc.com for resolutions, cases, and failures for matching symptoms. If a match is found, verify you have the appropriate fix on your system. If after searching the resolution database you have not found a solution to your problem, or the fix is already applied to your system, contact technical support.

Contacting Technical Support

In the United States and Canada, if you need technical support, call 800 537 1813. Outside the United States and Canada, please contact your local support center for assistance. To find telephone and contact information for the BMC Software support center that services your location, refer to the Contact Customer Support section of the Support page on the BMC Software web site at http://www.bmc.com.

Gathering Data

In order to resolve your problem, technical support may ask you to perform one of the following procedures. The following procedures include example commands that you can use to gather information. Depending on your specific problem, technical support may require different procedures to collect the information needed to resolve your problem.

Loop / High CPU Diagnosis:

If available and running on your system, use BMC Software's InTune™ product to diagnose the problem. For more information, see the *InTune User Guide*. If you do not have InTune available, issue the following commands to turn on Branch tracing.

Step 1 Turn on Branch tracing before taking a dump.

```
TRACE ST,999K,BR=ON
```

Step 2 Take an SVC Dump. For more information, see "Collecting an SVC Dump:" on page C-3.

Step 3 Because Branch tracing adds overhead to your system, issue the following command to turn off Branch tracing after the dump is captured.

```
TRACE BR=OFF
```

Collecting an SVC Dump:

The following is an example dump of the queue manager and other jobs when having problems with statistics or trace data:

Step 1 Dump the queue manager, statistics dataspace, and the caller (MMASRV, MQPAS).

```
DUMP COMM=(dump title)
```

MVS issues the following message:

```
*nnnn IEE094D SPECIFY OPERAND(S) FOR DUMP COMMAND
```

Step 2 Issue the following command to complete where *xxxx* = queue manager ssid.

```
nnnn,JOBNAME=(xxxxMSTR,otherjobnames),DSPNAME=('xxxxMSTR'
.xxxxMQTR),SDATA=(ALLNUC,CSA,LPA,LSQA,PSA,RGN,SQA,SUM,SWA
,TRT)
```

Abend with a Dump:

Send the JOBLOGS for the address spaces associated with the problem (ex: PAS and queue manager). Retrieve the Dump, JOBLOG, and any other documentation (an excerpt of the SYSLOG around the time of errors). Verify whether a known fix will resolve the problem.

Abend but no Dump:

Collect the LOGREC, SYSLOG, and JOBLOGS before calling technical support. Technical support may request that you set a SLIP trap.

For example:

Example

```
SLIP SET,ID=aaaa,COMP=ccc,J=xxxxxxxx,

JOBLIST=(xxxxxxxx,yyyyyyyy,zzzzzzzz),

ML=n,

SDATA=(CSA,LSQA,PSA,RGN,SQA,SUM,TRT),END
```

Substitute the placeholder characters with the following information:

Placeholder	Information needed
aaaa	slip id
xxxxxxx	the job that is abending
xxxxxxx *yyyyyyyy* *zzzzzzzz:*	jobs to dump
ccc	• system abend code like - 0C1, 0C6, 878 • user abend code like - U1808
n	number of matches before turning off dump

If the problem is related to statistics or trace

Add the following to the SLIP command:

Example

```
SLIP SET,ID=aaaa,COMP=ccc,J=xxxxxxxx,

JOBLIST=(xxxxxxxx,yyyyyyyy,zzzzzzzz),

ML=n,

SDATA=(CSA,LSQA,PSA,RGN,SQA,SUM,TRT),END

DSPNAME=('xxxxMSTR'.xxxxMQTR)
```

If the dump is for an S0C4 set the following SLIPs:

For example:

Example

```
SLIP SET,ID=xxx,J=jobname,COMP=0C4,ACTION=IGNORE,

mmmmmm=nnnnnnn, SDATA=(CSA,RGN,TRT),END
```

The slip can be set multiple times with "*mmmmmmm=nnnnnnn*" of:

```
LPAMOD=IGC0005A,

LPAMOD=IGC0101C,

NUCMOD=IEAVTR1A,

NUCMOD=IEAVERMF,
```

and

```
NUCMOD=IEAVEVAL.
```

Then recreate the problem. Collect all data as if the dump was taken automatically.

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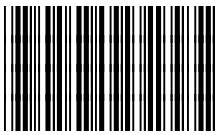

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