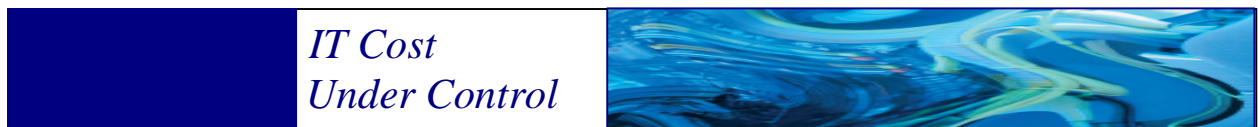




EPV for WMQ Database Layout



Supporting
EPV for WMQ V2
EPV for WMQ Plus V2

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About this manual

This manual provides a description of all databases, tables and fields provided in EPV for WMQ Version 2.

Changes

Technical changes or additions to the text are indicated by a vertical line to the left of the change.

Terminology

A “view” is an EPV report presented in an HTML page.



1. Introduction

Enterprise Performance Vision (EPV) for Websphere MQ on z/OS (WMQ) is a product designed to provide performance analysts and Database Administrators with a complete, unified vision of their company's WMQ subsystems and workloads.

EPV architecture is based on three tiers:

- Data load interface;
- Correlation and aggregation engine;
- HTML pages production engine.

The data load interface is designed to optimize performance and resource consumption during the loading phase, avoiding duplication or data loss.

The correlation and aggregation engine populates a set of databases (DBs), including the metrics used for the reporting phase, aggregated by hour, day and month.

The HTML production engine creates a set of correlated static pages which allow rapid identification of anomalies, performance problems and abnormal resource consumption.

These EPV reports will usually provide all the information needed for Performance Analysis and Capacity Planning activities, however it is sometimes useful to get information directly from the EPV DBs.

The goal of this document is to provide clear and exhaustive documentation of the DBs so that customers can fully exploit the power of EPV.



2. EPV for WMQ input

EPV for WMQ requires the following SMF records:

SOURCE	RECORD TYPE	SUBTYPE	IFCID	DESCRIPTION
SMF	30	2, 3		Address Space
SMF	70			CPU
SMF	74	4		Coupling Facility Structure
SMF	115			WMQ Statistics
SMF	116			WMQ Accounting

This data is mandatory. Without it EPV will not produce any usable output.

To produce SMF 115 the WMQ Statistic Trace, Class 1 has to be activated.

To produce SMF 116 the WMQ Accounting Trace, Class 1 has to be activated.

Using only the mandatory data will result in a subset of the EPV for WMQ views and analysis.

So you are strongly advised to provide the following additional input data:

- Record 115, by activating WMQ Statistic Trace, Class 3¹;
- QMGR parameter settings, by running a JCL that executes specific IBM WMQ commands; this information must be gathered daily from each subsystem.²

¹ Class 3 is only available for WMQ V7.1 and above.

² You have to customize and run the JEPVPARM sample JCL provided in the product library..



3. Databases

Starting from the input data described in the previous chapter EPV for WMQ, by using auto discovery techniques completely transparent to the user, aggregates and correlates the most useful metrics, producing valuable and ready to use information.

All this information is stored in a set of DBs.

A short description of each DB and its content is provided in this chapter.

QWMQS collects subsystem statistical information derived from the data produced by WMQ statistical traces (SMF 115). This DB also contains RMF Coupling Facility data details (SMF 74). The retention period of all the tables in this DB is determined by the **DETAIL** parameter. The default value is 60 days.

QWMQA collects accounting information for each thread termination or reuse derived from the data produced by WMQ accounting traces (SMF 116). The retention period of all the tables in this DB is determined by the **DETAIL** parameter. The default value is 60 days.

QWMQO collects miscellaneous information derived from SMF 30, SMF 70, queries to the WMQ parameter settings. The retention period of the **QPARCHAN** tables is unlimited. The retention period of all the other tables in this DB is determined by the **DETAIL** parameter. The default value is 60 days.

QWMQT collects all the information used to produce daily, weekly and monthly trends. The retention period of all the tables in this DB is determined by the **TREND** parameter. The default value is 25 months.



4. Tables

In this chapter a short description of each table's contents is provided.

The QWMQS DB includes:

- WMQBUFFER, buffer pool statistics;
- WMQCFMGR, coupling facility structure statistics;
- WMQCFRMF, coupling facility structure RMF statistics;
- WMQMSDT, subsystem message and data statistics;
- WMQSMDS, SMDS statistics;
- WMQSTLG, subsystem log and memory statistics.

The QWMQA DB includes:

- LASTLOAD, EPV internal use;
- MQMACCTH, thread activity.

The QWMQO DB includes:

- LASTLOAD, EPV internal use;
- MQCFSTR, coupling facility settings;
- MQPARM, queue manager settings;
- MQPGSET, pageset settings;
- MQQUEUE, queue settings;
- MQSTGCLS, storage class settings;
- MQTRACE, trace settings;
- QPARCHAN, queue manager parameter changes;
- SYSTEMS, system activity;
- WMQLOAD, WMQ system AS activity.

The QWMQT DB includes:

- WMQBUFEH, buffer pool activity trends;
- WMQCFMGH, coupling facility structure activity trends;
- WMQLOADH, WMQ system AS activity trends;
- WMQMSDTH, subsystem message and data activity trends;
- WMQSMDSH, SMDS activity trends;
- WMQSTLGH, subsystem log and memory activity trends;
- WMQWKLDH, workload activity trends.



5. Databases, Tables and Fields

In this chapter the complete list of fields by DB and table is provided. A separate section for each DB is included.

The following columns are documented:

- DB, Database name;
- TABLE, table name;
- VARIABLE, field name;
- K, set to Y if the field is an aggregation key;
- S, set to the sequence number in the sort key;
- T, field type (C=character, N=number);
- LABEL, field label;
- NOTES, field description.

The field description is provided for EPV variables only.

All the other variables are standard SMF fields so please refer to the SMF manuals and WMQ macros for their description.



QWMQA DataBase

DB	TABLE	VARIABLE	K	S	T	LABEL	NOTES
QWMQA	LASTLOAD	EPVDATE	Y	2	N	DATE	
QWMQA	LASTLOAD	SYSTEM	Y	1	C	SYSTEM	
QWMQA	MQMACCTH	EPVDATE	Y	8	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 116 statistics record.
QWMQA	MQMACCTH	EPVHOUR	Y	9	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 116 statistics record.
QWMQA	MQMACCTH	EPVMIPS			N	MIPS_USED	This metric is the CPU consumption in MIPS. The value is calculated by converting the CPU time in QMACCPUT to MIPS by using the EPV MIPS table.
QWMQA	MQMACCTH	EPVSU			N	CPU_SERVICE_UNITS	This metric is the CPU hardware service units. The value is calculated by converting the CPU time in QMACCPUT to service units by using the EPVSUSEC variable.
QWMQA	MQMACCTH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQA	MQMACCTH	QMACCPUT			N	TOTAL_CPU_USED	
QWMQA	MQMACCTH	QMACGETA			N	TOTAL_GETS_0-99_BYTES	
QWMQA	MQMACCTH	QMACGETB			N	TOTAL_GETS_100-999_BYTES	
QWMQA	MQMACCTH	QMACGETC			N	TOTAL_GETS_1000-9999_BYTES	
QWMQA	MQMACCTH	QMACGETD			N	TOTAL_GETS_>10000_BYTES	
QWMQA	MQMACCTH	QMACGETS			N	TOTAL_GETS	
QWMQA	MQMACCTH	QMACPUTA			N	TOTAL_PUTS_0-99_BYTES	
QWMQA	MQMACCTH	QMACPUTB			N	TOTAL_PUTS_100-999_BYTES	
QWMQA	MQMACCTH	QMACPUTC			N	TOTAL_PUTS_1000-9999_BYTES	
QWMQA	MQMACCTH	QMACPUTD			N	TOTAL_PUTS_>10000_BYTES	
QWMQA	MQMACCTH	QMACPUTS			N	TOTAL_PUTS	
QWMQA	MQMACCTH	QTRANS			N	TOTAL_TRANSACTIONS	This metric is calculated by summing the total PUTS in QMACPUTS and the total GETS in QMACGETS.
QWMQA	MQMACCTH	QWHCAID	Y	4	C	AUTHORIZATION_ID	
QWMQA	MQMACCTH	QWHCCN	Y	6	C	REQUESTOR_CONNECTION_NAME	
QWMQA	MQMACCTH	QWHCCVMQ	Y	5	C	CORRELATION_ID	
QWMQA	MQMACCTH	QWHCNID			C	NETWORK_ID	
QWMQA	MQMACCTH	QWHCXTYP			N	CONNECTION_TYPE	
QWMQA	MQMACCTH	RDATE			N	EPV_INTERNAL_USE	
QWMQA	MQMACCTH	SUBSYS	Y	3	C	REQUESTOR_SUBSYSTEM	
QWMQA	MQMACCTH	SYSTEM	Y	1	C	SYSTEM_ID	
QWMQA	MQMACCTH	TRANNAME	Y	7	C	REQUESTOR_TRANSACTION	



QWMQS Database

DB	TABLE	VARIABLE	K	S	T	LABEL	NOTES
QWMQS	WMQBUFER	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQBUFER	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQBUFER	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQBUFER	QPSTCBS			N	BUFFER_POOL_AVAIL_PAGES	
QWMQS	WMQBUFER	QPSTCBSL			N	BUFFER_POOL_LOW_AVAIL_PAGES	
QWMQS	WMQBUFER	QPSTDMC			N	SYNCH_WRITE_PROCESS	
QWMQS	WMQBUFER	QPSTDWT			N	ASYNCH_WRITE_PROCESS	
QWMQS	WMQBUFER	QPSTGETN			N	GETPAGE_OLD_REQUESTS	
QWMQS	WMQBUFER	QPSTGETP			N	GETPAGE_NEW_REQUESTS	
QWMQS	WMQBUFER	QPSTIMW			N	SYNCHRONOUS_WRITES	
QWMQS	WMQBUFER	QPSTNBUF			N	BUFFER_POOL_PAGES	
QWMQS	WMQBUFER	QPSTPOOL	Y	3	N	BUFFER_POOL_ID	
QWMQS	WMQBUFER	QPSTRIO			N	PAGE_READ_OPERATIONS	
QWMQS	WMQBUFER	QPSTSOS			N	NO_AVAIL_BUFFER	
QWMQS	WMQBUFER	QPSTSTL			N	BUFFER STEALS	
QWMQS	WMQBUFER	QPSTSTLA			N	HASH_CHAIN_CHANGES_DURING_STEALING	
QWMQS	WMQBUFER	QPSTSTW			N	SET_WRITE_INTENT_REQUESTS	
QWMQS	WMQBUFER	QPSTTPW			N	PAGES_WRITTEN_TO_DASD	
QWMQS	WMQBUFER	QPSTWIO			N	PAGE_WRITE_OPERATIONS	
QWMQS	WMQBUFER	RDATE			N	EPV_INTERNAL_USE	
QWMQS	WMQBUFER	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQCFMGR	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQCFMGR	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQCFMGR	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQCFMGR	QESTSFUL			N	CF_STRUCTURE_FULL	
QWMQS	WMQCFMGR	R744SNAM	Y	3	C	CF_STRUCTURE_NAME	
QWMQS	WMQCFMGR	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQCFMGR	WMQGROUP			C	EPV_INTERNAL_USE	
QWMQS	WMQCFRMF	ASYNM			N	ASYNCH_REQ_TOTAL_SERVICE_TIME	
QWMQS	WMQCFRMF	DATLCKC			N	DATA/LOCK_ELEMENTS_USED	
QWMQS	WMQCFRMF	DATLCKL			N	DATA/LOCK_ELEMENTS_USED	
QWMQS	WMQCFRMF	DMPDELTM			N	DUMP_TOTAL_DELAY_TIME	
QWMQS	WMQCFRMF	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQCFRMF	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQCFRMF	LSTDIRC			N	LIST/DIR_ENTRIES_USED	
QWMQS	WMQCFRMF	LSTDIRL			N	LIST/DIR_ENTRIES	
QWMQS	WMQCFRMF	R744CCOC			N	CASTOUTS	
QWMQS	WMQCFRMF	R744CDER			N	DIRECTORY_ENTRY_RECLAIMS	
QWMQS	WMQCFRMF	R744CRHC			N	READ_HITS	
QWMQS	WMQCFRMF	R744CWHO			N	WRITE_HITS_UNCHANGED_DATA	



QWMQS	WMQCFRMF	R744CWH1			N	WRITE_HITS_CHANGED_DATA	
QWMQS	WMQCFRMF	R744CXCI			N	XI_COMPLEMENT_INVALIDATION	
QWMQS	WMQCFRMF	R744CXDR			N	XI_DIRECTORY_RECLAIM	
QWMQS	WMQCFRMF	R744CXFW			N	XI_WRITE	
QWMQS	WMQCFRMF	R744CXNI			N	XI_NAME_INVALIDATION	
QWMQS	WMQCFRMF	R744CXRL			N	XI_LOC_CACHE_VECTOR_INDEX	
QWMQS	WMQCFRMF	R744FNAM			C	CF_NAME	
QWMQS	WMQCFRMF	R744QSIZ			N	CF_STRUCTURE_SIZE_INITIAL	
QWMQS	WMQCFRMF	R744SARC			N	ASYNC_REQUESTS	
QWMQS	WMQCFRMF	R744SCN			N	LOCK_CONTENTIONS	
QWMQS	WMQCFRMF	R744SCST			N	CF_PEER_COMPLETION_TIME	
QWMQS	WMQCFRMF	R744SCTC			N	CF_PEER_COMPLETION_WAITS	
QWMQS	WMQCFRMF	R744SDRC			N	REQUESTS_DELAYED_DUMP	
QWMQS	WMQCFRMF	R744SETM			N	CF_STRUCTURE_CPU_USED	
QWMQS	WMQCFRMF	R744SFCN			N	FALSE_LOCK_CONTENTIONS	
QWMQS	WMQCFRMF	R744SMAS			N	CF_STRUCTURE_SIZE_MAX	
QWMQS	WMQCFRMF	R744SMIS			N	CF_STRUCTURE_SIZE_MIN	
QWMQS	WMQCFRMF	R744SNAM	Y	2	C	CF_STRUCTURE_NAME	
QWMQS	WMQCFRMF	R744SPST			N	CF_PEER_SSCH_WAIT_TIME	
QWMQS	WMQCFRMF	R744SPTC			N	CF_PEER_SSCH_WAITS	
QWMQS	WMQCFRMF	R744SQRC			N	REQUESTS_QUEUED	
QWMQS	WMQCFRMF	R744SSIZ			N	CF_STRUCTURE_SIZE	
QWMQS	WMQCFRMF	R744SSRC			N	SYNC_REQUESTS	
QWMQS	WMQCFRMF	R744SSTA			N	REQUESTS_CHANGED_TO_ASYNC	
QWMQS	WMQCFRMF	R744STAC			N	LOCK_REQUESTS_DELAYED_LOCK	
QWMQS	WMQCFRMF	R744STRC			N	TOTAL_LOCK_LISTS_REQUESTS_MADE	
QWMQS	WMQCFRMF	SCHDELTM			N	SCH_TOTAL_DELAY_TIME	
QWMQS	WMQCFRMF	STRROLE			C	CF_STRUCTURE_ROLE	
QWMQS	WMQCFRMF	STRSTA			C	CF_STRUCTURE_STATUS	
QWMQS	WMQCFRMF	STRTYP			C	CF_STRUCTURE_TYPE	
QWMQS	WMQCFRMF	SYNCTM			N	SYNC_REQ_TOTAL_SERVICE_TIME	
QWMQS	WMQCFRMF	SYSPLEX			C	SYSPLEX_NAME	
QWMQS	WMQCFRMF	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQMSDT	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQMSDT	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQMSDT	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQMSDT	QISTGETB			N	GETS_MSG_FROM_BP	
QWMQS	WMQMSDT	QISTGETD			N	GETS_MSG_FROM_DISK	
QWMQS	WMQMSDT	QISTMGET			N	MSG_GET_REQUESTS	
QWMQS	WMQMSDT	QISTMPUT			N	MSG_PUT_REQUESTS	
QWMQS	WMQMSDT	QISTRABP			N	READS_AHEADS_FROM_BP	
QWMQS	WMQMSDT	QISTRAIO			N	READS_AHEADS_DOING_I/O	
QWMQS	WMQMSDT	QMSTCALH			N	CLOSE_ALL_HANDLE_REQUESTS	
QWMQS	WMQMSDT	QMSTCLOS			N	MQCLOSE_REQUESTS	
QWMQS	WMQMSDT	QMSTGET			N	MQGET_REQUESTS	
QWMQS	WMQMSDT	QMSTINQ			N	MQINQ_REQUESTS	
QWMQS	WMQMSDT	QMSTOPEN			N	MQOPEN_REQUESTS	
QWMQS	WMQMSDT	QMSTPUBS			N	PUBLISH_REQUESTS	
QWMQS	WMQMSDT	QMSTPUT			N	MQPUT_REQUESTS	
QWMQS	WMQMSDT	QMSTPUT1			N	MQPUT1_REQUESTS	
QWMQS	WMQMSDT	QMSTSET			N	MQSET_REQUESTS	



QWMQS	WMQMSDT	QMSTSTUS			N	STAT_REQUESTS	
QWMQS	WMQMSDT	QMSTSUB			N	SUBSCRIBES	
QWMQS	WMQMSDT	QMSTSUBR			N	MQSUBR_REQUESTS	
QWMQS	WMQMSDT	QMSTTCB			N	REGISTER_CALLBACK_REQUESTS	
QWMQS	WMQMSDT	QMSTTCTL			N	CONTROL_REQUESTS	
QWMQS	WMQMSDT	RDATE			N	EPV_INTERNAL_USE	
QWMQS	WMQMSDT	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQSMDS	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSMDS	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSMDS	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQSMDS	QESDBFGN			N	SMDS_NO_BUFFER	
QWMQS	WMQSMDS	QESDSMBF			N	SMDS_BLOCKS_FREE	
QWMQS	WMQSMDS	QESDSMBU			N	SMDS_BLOCKS_USED	
QWMQS	WMQSMDS	QESDSMFL			N	SMDS_FULL	
QWMQS	WMQSMDS	QESDSTR	Y	3	C	CF_STRUCTURE_NAME	
QWMQS	WMQSMDS	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQSTLG	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSTLG	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSTLG	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQSTLG	QJSTBPAG			N	LOG_BUFFER_PAGED_IN	
QWMQS	WMQSTLG	QJSTCCB1			N	COMPRESSED_BYTES	
QWMQS	WMQSTLG	QJSTCFA1			N	COMPRESSION_FAILURES	
QWMQS	WMQSTLG	QJSTCIWR			N	LOG_CI_CREATED	
QWMQS	WMQSTLG	QJSTCRQ1			N	COMPRESSION_REQUESTS	
QWMQS	WMQSTLG	QJSTCUB1			N	UNCOMPRESSED_BYTES	
QWMQS	WMQSTLG	QJSTLAMA			N	TAPE_MOUNTS_ATTEMPTED	
QWMQS	WMQSTLG	QJSTLAMAS			N	TAPE_MOUNTS_PERFORMED	
QWMQS	WMQSTLG	QJSTLLCP			N	LOGLOAD_CHECKPOINTS	
QWMQS	WMQSTLG	QJSTLOGW			N	LOG_WRITE_I/O_REQUESTS	
QWMQS	WMQSTLG	QJSTRACT			N	ACTIVE_LOG_READS	
QWMQS	WMQSTLG	QJSTRARH			N	ARCHIVE_LOG_READS	
QWMQS	WMQSTLG	QJSTRBUF			N	BUFFER_LOG_READS	
QWMQS	WMQSTLG	QJSTTVVC			N	ARCHIVE_LOG_READ_WAITS	
QWMQS	WMQSTLG	QJSTWRF			N	FORCE_LOG_WRITES	
QWMQS	WMQSTLG	QJSTWRNW			N	NOWAIT_LOG_WRITES	
QWMQS	WMQSTLG	QJSTWRW			N	WAIT_LOG_WRITES	
QWMQS	WMQSTLG	QJSTWTB			N	LOG_BUFFER_WAITS	
QWMQS	WMQSTLG	QSRSMCT			N	MSTR_USED_REAL_STOR_FRAMES	
QWMQS	WMQSTLG	QSSTABND			N	ABENDS_SHORT_ON_STORAGE	
QWMQS	WMQSTLG	QSSTCONT			N	STORAGE_CONTRACTIONS	
QWMQS	WMQSTLG	QSSTCRIT			N	CRIT_STORAGE_CONTRACTIONS	
QWMQS	WMQSTLG	RDATE			N	EPV_INTERNAL_USE	
QWMQS	WMQSTLG	SM115REL			C	WMQ_RELEASE	
QWMQS	WMQSTLG	SYSTEM	Y	1	C	SYSTEM	



QWMQO DataBase

DB	TABLE	VARIABLE	K	S	T	LABEL	NOTES
QWMQO	LASTLOAD	EPVDATE	Y	2	N	DATE	
QWMQO	LASTLOAD	SYSTEM	Y	1	C	SYSTEM	
QWMQO	MQCFSTR	CFSTRUCT	Y	4	C	CF_STRUCTURE_NAME	
QWMQO	MQCFSTR	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQCFSTR	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQCFSTR	PARAM	Y	5	C	PARAMETER_NAME	
QWMQO	MQCFSTR	SETTING			C	PARAMETER_SETTING	
QWMQO	MQCFSTR	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQPARAM	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQPARAM	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQPARAM	PARAM	Y	4	C	PARAMETER_NAME	
QWMQO	MQPARAM	SETTING			C	PARAMETER_SETTING	
QWMQO	MQPARAM	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQPGSET	BPID	Y	5	N	BUFFER_POOL_ID	
QWMQO	MQPGSET	COUNT			N	EXPANSION_COUNT	
QWMQO	MQPGSET	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQPGSET	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQPGSET	PSID	Y	4	N	PAGE_SET_ID	
QWMQO	MQPGSET	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQPGSET	TOTPAG			N	TOTAL_PAGES	
QWMQO	MQPGSET	TYPEXP			C	EXPANSION_TYPE	
QWMQO	MQQUEUE	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQQUEUE	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQQUEUE	PARAM	Y	5	C	PARAMETER_NAME	
QWMQO	MQQUEUE	QUEUE	Y	4	C	QUEUE_NAME	
QWMQO	MQQUEUE	SETTING			C	PARAMETER_SETTING	
QWMQO	MQQUEUE	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQSTGCLS	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQSTGCLS	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQSTGCLS	PARAM	Y	5	C	PARAMETER_NAME	
QWMQO	MQSTGCLS	SETTING			C	PARAMETER_SETTING	
QWMQO	MQSTGCLS	STGCLASS	Y	4	C	STORAGE_CLASS_NAME	
QWMQO	MQSTGCLS	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQTRACE	CLASS	Y	5	C	TRACE_CLASS	
QWMQO	MQTRACE	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	MQTRACE	MQMSSSID	Y	2	C	WMQ_ID	
QWMQO	MQTRACE	SYSNAME	Y	1	C	SYSNAME	
QWMQO	MQTRACE	TYPE	Y	4	C	TRACE_TYPE	



QWMQO	QPARCHAN	EPVDATE	Y	1	N	DATE	This metric is the date that EPV extracts from the file containing the WMQ parameter settings.
QWMQO	QPARCHAN	MQMSSSID	Y	3	C	WMQ_ID	
QWMQO	QPARCHAN	OSETTING			C	QPARAM_PARAMETER_OLD_SETTING	
QWMQO	QPARCHAN	PARAM	Y	4	C	PARAMETER_NAME	
QWMQO	QPARCHAN	SETTING			C	QPARAM_PARAMETER_NEW_SETTING	
QWMQO	QPARCHAN	SYSNAME	Y	2	C	SYSNAME	
QWMQO	SYSTEMS	CECSER			C	CEC_SERIAL_NUMBER	
QWMQO	SYSTEMS	CPCMODEL			C	CEC_MODEL	
QWMQO	SYSTEMS	CPUTYPE			C	CEC_TYPE	
QWMQO	SYSTEMS	DURATM			N	INTERVAL_DURATION	
QWMQO	SYSTEMS	EPVDATE	Y	2	N	DATE	This metric is the date that EPV extracts from the RMF interval start value.
QWMQO	SYSTEMS	EPVHOUR	Y	3	N	HOUR	This metric is the hour that EPV extracts from the RMF interval start value.
QWMQO	SYSTEMS	EPVSUSEC			N	CPU_SERVICE_UNITS_RATE	
QWMQO	SYSTEMS	MIPS			N	CEC_MIPS	
QWMQO	SYSTEMS	MIPSAAP			N	CEC_ZAAP_MIPS	
QWMQO	SYSTEMS	MIPSIP			N	CEC_ZIIP_MIPS	
QWMQO	SYSTEMS	NRIFACPU			N	ZAAP_IN_CEC	
QWMQO	SYSTEMS	NRZIPCPU			N	ZIIP_IN_CEC	
QWMQO	SYSTEMS	PARTNCPU			N	CPU_IN_CEC	
QWMQO	SYSTEMS	SYSPLEX			C	SYSPLEX_NAME	
QWMQO	SYSTEMS	SYSTEM	Y	1	C	SYSTEM	
QWMQO	SYSTEMS	VENDOR			C	VENDOR_CODE	
QWMQO	WMQLOAD	CECSER			C	CEC_SERIAL_NUMBER	
QWMQO	WMQLOAD	CPCMODEL			C	CEC_MODEL	
QWMQO	WMQLOAD	CPUIFETM			N	ZAAP_ELIGIBLE_TIME_ON_GCP	
QWMQO	WMQLOAD	CPUIFATM			N	ZAAP_CPU_TIME	
QWMQO	WMQLOAD	CPISRBTM			N	INIT_SRB_TIME	
QWMQO	WMQLOAD	CPUSRBTM			N	STEPS_SRB_TIME	
QWMQO	WMQLOAD	CPUTM			N	TOTAL_CPU_TIME	
QWMQO	WMQLOAD	CPUTYPE			C	CEC_TYPE	
QWMQO	WMQLOAD	CPUZIETM			N	ZIIP_ELIGIBLE_TIME_ON_GCP	
QWMQO	WMQLOAD	CPUZIPTM			N	ZIIP_CPU_TIME	
QWMQO	WMQLOAD	DURATM			N	INTERVAL_DURATION	
QWMQO	WMQLOAD	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the AS interval start value in SMF30ISS.
QWMQO	WMQLOAD	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the interval start value in SMF30ISS.
QWMQO	WMQLOAD	EPVMIPAE			N	ZAAP_ELIGIBLE_MIPS_ON_GCP	This metric is the zAAP eligible CPU consumption in MIPS. The value is calculated by converting the zAAP eligible CPU time in CPUIFETM to MIPS by using the EPV MIPS table.
QWMQO	WMQLOAD	EPVMIPIE			N	ZIIP_ELIGIBLE_MIPS_ON_GCP	This metric is the zIIP eligible CPU consumption in MIPS. The value is calculated by converting the zIIP eligible CPU time in CPUZIETM to MIPS by using the EPV MIPS table



QWMQO	WMQLOAD	EPVMIPS			N	MIPS_USED	This metric is the CPU consumption in MIPS. The value is calculated by converting the CPU time in CPUTM to MIPS by using the EPV MIPS table.
QWMQO	WMQLOAD	EPVMIPSA			N	ZAAP_MIPS_USED	This metric is the zAAP consumption in zAAP MIPS. The value is calculated by converting the zAAP CPU time in CPUIFATM to zAAP MIPS by using the EPV MIPS table.
QWMQO	WMQLOAD	EPVMIPSI			N	ZIIP_MIPS_USED	This metric is the zIIP consumption in zIIP MIPS. The value is calculated by converting the zIIP CPU time in CPUZIPTM to zIIP MIPS by using the EPV MIPS table.
QWMQO	WMQLOAD	EPVSU			N	CPU_SERVICE_UNITS	This metric is the CPU hardware service units. The value is calculated by converting the CPU time in CPUTM to service units by using the EPVSUSEC variable.
QWMQO	WMQLOAD	EPVSUAAP			N	AAP_SERVICE_UNITS	This metric is the zAAP hardware service units. The value is calculated by converting the zAAP CPU time in CPUIFATM to service units by using the EPVSUSEC variable.
QWMQO	WMQLOAD	EPVSUIIP			N	IIP_SERVICE_UNITS	This metric is the zIIP hardware service units. The value is calculated by converting the zIIP CPU time in CPUZIPTM to service units by using the EPVSUSEC variable.
QWMQO	WMQLOAD	EXCPDASD			N	DASD_EXCPS	
QWMQO	WMQLOAD	JOB	Y	2	C	ADDRESS_SPACE_NAME	
QWMQO	WMQLOAD	LSQSZHI			N	LSQA_BELOW_2GB	
QWMQO	WMQLOAD	MIPS			N	CEC_MIPS	
QWMQO	WMQLOAD	MIPSAAP			N	CEC_ZAAP_MIPS	
QWMQO	WMQLOAD	MIPSIP			N	CEC_ZIIP_MIPS	
QWMQO	WMQLOAD	NRIFACPU			N	ZAAP_IN_CEC	
QWMQO	WMQLOAD	NRZIPCPU			N	ZIIP_IN_CEC	
QWMQO	WMQLOAD	PARTNCPU			N	CPU_IN_CEC	
QWMQO	WMQLOAD	PFRATEJ			N	PAGE_FAULT_RATE	
QWMQO	WMQLOAD	PROGRAM			C	PROGRAM_NAME	
QWMQO	WMQLOAD	PVTSZHI			N	TOT_PRIVATE_BELOW_2GB	
QWMQO	WMQLOAD	RDATE			N	EPV_INTERNAL_USE	
QWMQO	WMQLOAD	SMF30SNF			N	ZIIP_NORMALIZATION_FACTOR	
QWMQO	WMQLOAD	SMF30ZNF			N	ZAAP_NORMALIZATION_FACTOR	
QWMQO	WMQLOAD	SYSPLEX			C	SYSPLEX_NAME	
QWMQO	WMQLOAD	SYSTEM	Y	1	C	SYSTEM	
QWMQO	WMQLOAD	USRSZHI			N	NONLSQA_BELOW_2GB	



QWMQT DataBase

DB	TABLE	VARIABLE	K	S	T	LABEL	NOTES
QWMQT	WMQBUFEH	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQBUFEH	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQBUFEH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQT	WMQBUFEH	QPSTCBS			N	BUFFER_POOL_AVAIL_PAGES	
QWMQT	WMQBUFEH	QPSTCBSL			N	BUFFER_POOL_LOW_AVAIL_PAGES	
QWMQT	WMQBUFEH	QPSTDMC			N	SYNCH_WRITE_PROCESS	
QWMQT	WMQBUFEH	QPSTDWT			N	ASYNCH_WRITE_PROCESS	
QWMQT	WMQBUFEH	QPSTGETN			N	GETPAGE_OLD_REQUESTS	
QWMQT	WMQBUFEH	QPSTGETP			N	GETPAGE_NEW_REQUESTS	
QWMQT	WMQBUFEH	QPSTNBUF			N	BUFFER_POOL_PAGES	
QWMQT	WMQBUFEH	QPSTPOOL	Y	3	N	BUFFER_POOL_ID	
QWMQT	WMQBUFEH	QPSTRIO			N	PAGE_READ_OPERATIONS	
QWMQT	WMQBUFEH	QPSTSOS			N	NO_AVAIL_BUFFER	
QWMQT	WMQBUFEH	QPSTSTLA			N	HASH_CHAIN_CHANGES_DURING_STEALING	
QWMQT	WMQBUFEH	QPSTWIO			N	PAGE_WRITE_OPERATIONS	
QWMQT	WMQBUFEH	RDATE			N	EPV_INTERNAL_USE	
QWMQT	WMQBUFEH	SYSTEM	Y	1	C	SYSTEM	
QWMQT	WMQCFMGH	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQCFMGH	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQCFMGH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQT	WMQCFMGH	QESTSFUL			N	CF_STRUCTURE_FULL	
QWMQT	WMQCFMGH	R744SNAM	Y	3	C	CF_STRUCTURE_NAME	
QWMQT	WMQCFMGH	SYSTEM	Y	1	C	SYSTEM	
QWMQT	WMQLOADH	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the AS interval start value in SMF30ISS.
QWMQT	WMQLOADH	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the interval start value in SMF30ISS.
QWMQT	WMQLOADH	EPVMIPAE			N	ZAAP_ELIGIBLE_MIPS_ON_GCP	This metric is the zAAP eligible CPU consumption in MIPS. The value is calculated by converting the zAAP eligible CPU time in CPUIFETM to MIPS by using the EPV MIPS table.
QWMQT	WMQLOADH	EPVMIPIE			N	ZIIP_ELIGIBLE_MIPS_ON_GCP	This metric is the zIIP eligible CPU consumption in MIPS. The value is calculated by converting the zIIP eligible CPU time in CPUZIETM to MIPS by using the EPV MIPS table



QWMQT	WMQLOADH	EPVMIPS				N	MIPS_USED	This metric is the CPU consumption in MIPS. The value is calculated by converting the CPU time in CPUTM to MIPS by using the EPV MIPS table.
QWMQT	WMQLOADH	EPVMIPSA				N	ZAAP_MIPS_USED	This metric is the zAAP consumption in zAAP MIPS. The value is calculated by converting the zAAP CPU time in CPUIFATM to zAAP MIPS by using the EPV MIPS table.
QWMQT	WMQLOADH	EPVMIPSI				N	ZIIP_MIPS_USED	This metric is the zIIP consumption in zIIP MIPS. The value is calculated by converting the zIIP CPU time in CPUZIPTM to zIIP MIPS by using the EPV MIPS table.
QWMQT	WMQLOADH	EPVSU				N	CPU_SERVICE_UNITS	This metric is the CPU hardware service units. The value is calculated by converting the CPU time in CPUTM to service units by using the EPVSUSEC variable.
QWMQT	WMQLOADH	EPVSUAAP				N	AAP_SERVICE_UNITS	This metric is the zAAP hardware service units. The value is calculated by converting the zAAP CPU time in CPUIFATM to service units by using the EPVSUSEC variable.
QWMQT	WMQLOADH	EPVSUIIP				N	IIP_SERVICE_UNITS	This metric is the zIIP hardware service units. The value is calculated by converting the zIIP CPU time in CPUZIPTM to service units by using the EPVSUSEC variable.
QWMQT	WMQLOADH	EXCPDASD				N	DASD_EXCPS	
QWMQT	WMQLOADH	JOB	Y	2	C		ADDRESS_SPACE_NAME	
QWMQT	WMQLOADH	LSQSZHI				N	LSQA_BELOW_2GB	
QWMQT	WMQLOADH	PFRATEJ				N	PAGE_FAULT_RATE	
QWMQT	WMQLOADH	PVTSZHI				N	TOT_PRIVATE_BELOW_2GB	
QWMQT	WMQLOADH	RDATE				N	EPV_INTERNAL_USE	
QWMQT	WMQLOADH	SYSTEM	Y	1	C		SYSTEM	
QWMQT	WMQLOADH	USRSZHI				N	NONLSQA_BELOW_2GB	
QWMQT	WMQMSDTH	EPVDATE	Y	3	N		DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQMSDTH	EPVHOUR	Y	4	N		HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQMSDTH	MQMSSSID	Y	2	C		WMQ_ID	
QWMQT	WMQMSDTH	QISTGETB				N	GETS_MSG_FROM_BP	
QWMQT	WMQMSDTH	QISTGETD				N	GETS_MSG_FROM_DISK	
QWMQT	WMQMSDTH	QISTMGET				N	MSG_GET_REQUESTS	
QWMQT	WMQMSDTH	QISTMPUT				N	MSG_PUT_REQUESTS	
QWMQT	WMQMSDTH	QISTRABP				N	READS_AHEADS_FROM_BP	
QWMQT	WMQMSDTH	QISTRAIO				N	READS_AHEADS_DOING_I/O	
QWMQT	WMQMSDTH	QMSTCALH				N	CLOSE_ALL_HANDLE_REQUESTS	



QWMQT	WMQMSDTH	QMSTCLOS			N	MQCLOSE_REQUESTS	
QWMQT	WMQMSDTH	QMSTGET			N	MQGET_REQUESTS	
QWMQT	WMQMSDTH	QMSTINQ			N	MQINQ_REQUESTS	
QWMQT	WMQMSDTH	QMSTOPEN			N	MQOPEN_REQUESTS	
QWMQT	WMQMSDTH	QMSTPUBS			N	PUBLISH_REQUESTS	
QWMQT	WMQMSDTH	QMSTPUT			N	MQPUT_REQUESTS	
QWMQT	WMQMSDTH	QMSTPUT1			N	MQPUT1_REQUESTS	
QWMQT	WMQMSDTH	QMSTSET			N	MQSET_REQUESTS	
QWMQT	WMQMSDTH	QMSTSTUS			N	STAT_REQUESTS	
QWMQT	WMQMSDTH	QMSTSUB			N	SUBSCRIBES	
QWMQT	WMQMSDTH	QMSTSUBR			N	MQSUBR_REQUESTS	
QWMQT	WMQMSDTH	QMSTTCB			N	REGISTER_CALLBACK_REQUESTS	
QWMQT	WMQMSDTH	QMSTTCTL			N	CONTROL_REQUESTS	
QWMQT	WMQMSDTH	RDATE			N	EPV_INTERNAL_USE	
QWMQT	WMQMSDTH	SYSTEM	Y	1	C	SYSTEM	
QWMQS	WMQSMDSH	EPVDATE	Y	4	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSMDSH	EPVHOUR	Y	5	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQS	WMQSMDSH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQS	WMQSMDSH	QESDBFGN			N	SMDS_NO_BUFFER	
QWMQS	WMQSMDSH	QESDSMBF			N	SMDS_BLOCKS_FREE	
QWMQS	WMQSMDSH	QESDSMBU			N	SMDS_BLOCKS_USED	
QWMQS	WMQSMDSH	QESDSMFL			N	SMDS_FULL	
QWMQS	WMQSMDSH	QESDSTR	Y	3	C	CF_STRUCTURE_NAME	
QWMQS	WMQSMDSH	SYSTEM	Y	1	C	SYSTEM	
QWMQT	WMQSTLGH	EPVDATE	Y	3	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQSTLGH	EPVHOUR	Y	4	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 115 statistics record.
QWMQT	WMQSTLGH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQT	WMQSTLGH	QJSTBPAG			N	LOG_BUFFER_PAGED_IN	
QWMQT	WMQSTLGH	QJSTCCB1			N	COMPRESSED_BYTES	
QWMQT	WMQSTLGH	QJSTCFA1			N	COMPRESSION_FAILURES	
QWMQT	WMQSTLGH	QJSTCIWR			N	LOG_CI_CREATED	
QWMQT	WMQSTLGH	QJSTCRQ1			N	COMPRESSION_REQUESTS	
QWMQT	WMQSTLGH	QJSTCUB1			N	UNCOMPRESSED_BYTES	
QWMQT	WMQSTLGH	QJSTLAMA			N	TAPE_MOUNTS_ATTEMPTED	
QWMQT	WMQSTLGH	QJSTLAMS			N	TAPE_MOUNTS_PERFORMED	
QWMQT	WMQSTLGH	QJSTLLCP			N	LOGLOAD_CHECKPOINTS	
QWMQT	WMQSTLGH	QJSTLOGW			N	LOG_WRITE_I/O_REQUESTS	
QWMQT	WMQSTLGH	QJSTRACT			N	ACTIVE_LOG_READS	
QWMQT	WMQSTLGH	QJSTRARH			N	ARCHIVE_LOG_READS	
QWMQT	WMQSTLGH	QJSTRBUF			N	BUFFER_LOG_READS	
QWMQT	WMQSTLGH	QJSTTVVC			N	ARCHIVE_LOG_READ_WAITS	
QWMQT	WMQSTLGH	QJSTWRF			N	FORCE_LOG_WRITES	
QWMQT	WMQSTLGH	QJSTWRNW			N	NOWAIT_LOG_WRITES	
QWMQT	WMQSTLGH	QJSTWRW			N	WAIT_LOG_WRITES	
QWMQT	WMQSTLGH	QJSTWTB			N	LOG_BUFFER_WAITS	
QWMQT	WMQSTLGH	QSRSFMCT			N	MSTR_USED_REAL_STOR_FRAMES	
QWMQT	WMQSTLGH	QSSTABND			N	ABENDS_SHORT_ON_STORAGE	



QWMQT	WMQSTLGH	QSSTCONT			N	STORAGE_CONTRACTIONS	
QWMQT	WMQSTLGH	QSSTCRIT			N	CRIT_STORAGE_CONTRACTIONS	
QWMQT	WMQSTLGH	RDATE			N	EPV_INTERNAL_USE	
QWMQT	WMQSTLGH	SM115REL			C	WMQ_RELEASE	
QWMQT	WMQSTLGH	SYSTEM	Y	1	C	SYSTEM	
QWMQT	WMQWKLHDH	EPVDATE	Y	5	N	DATE	This metric is the date that EPV extracts from the store clock time of SMF 116 statistics record.
QWMQT	WMQWKLHDH	EPVHOUR	Y	6	N	HOUR	This metric is the hour that EPV extracts from the store clock time of SMF 116 statistics record.
QWMQT	WMQWKLHDH	EPVMIPS			N	MIPS_USED	This metric is the CPU consumption in MIPS. The value is calculated by converting the CPU time QMACCPUT in MIPS of the CPU processor pool.
QWMQT	WMQWKLHDH	EPVSU			N	CPU_SERVICE_UNITS	This metric is the CPU hardware service units. The value is calculated by converting the CPU time QMACCPUT in the service units by means of EPVSUSEC variable.
QWMQT	WMQWKLHDH	MQMSSSID	Y	2	C	WMQ_ID	
QWMQT	WMQWKLHDH	QMACCPUT			N	TOTAL_CPU_USED	
QWMQT	WMQWKLHDH	QMACGETS			N	TOTAL_GETS	
QWMQT	WMQWKLHDH	QMACPUTS			N	TOTAL_PUTS	
QWMQT	WMQWKLHDH	QTRANS			N	TOTAL_TRANSACTIONS	This metric is calculated by summing the total PUTS in QMACPUTS and the total GETS in QMACGETS.
QWMQT	WMQWKLHDH	QWHCCN	Y	4	C	REQUESTOR_CONNECTION_NAME	
QWMQT	WMQWKLHDH	QWHCXTYP			N	CONNECTION_TYPE	
QWMQT	WMQWKLHDH	RDATE			N	EPV_INTERNAL_USE	
QWMQT	WMQWKLHDH	SUBSYS	Y	3	C	REQUESTOR_SUBSYSTEM	
QWMQT	WMQWKLHDH	SYSTEM	Y	1	C	SYSTEM_ID	



6. Customer support

For any technical problems or questions about EPV for WMQ please email:

epv.support@epvtech.com

For any other issue about EPV for WMQ please email:

epv.info@epvtech.com



Related documentation

The following manuals complement the information provided in this manual:

- *EPV for WMQ V2 Installation and Customization Guide*
- *EPV for WMQ Plus V2 Installation and Customization Guide*
- *EPV for WMQ V2 List of Views*
- *EPV for WMQ V2 Release Notes*
- *EPV for WMQ V2 Preparing Input for a Demo*
- *EPV V11 User Interface*