

Program Directory for DB2 UDB for OS/390 Query Management Facility High Performance Option Volume 4 of 6

Version 6

Program Number 5645-DB2

FMID HHP6601

for Use with OS/390

Document Date: June 1999

Note!				
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1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of **Query Management Facility High Performance Option Version 6**. This publication refers to Query Management Facility High Performance Option as QMF HPO. You should read all of this program directory before installing the program and then keep it for future reference.

With the delivery of DB2 UDB for OS/390 Version 6, additional features and their product specific materials and program directories are included. Please see Figure 1 on page 1 for a complete list of program directory volumes of the server features available.

This program directory is volume 4 of 6. To fully install all of the features that comprise DB2 UDB for OS/390 Version 6, please read each product's program directory carefully.

The additional features included with this delivery of DB2 UDB for OS/390 Version 6 may be installed and used on a trial basis (also known as "Try and Buy" basis) for 90 days from the date of installation of the feature "Try" except for the Query Management Facility (QMF) for Windows Feature, which may be installed and used on a trial basis for 60 days from the date of installation. There is no program directory for QMF for Windows, so refer to the QMF for Windows books for installation information. These optional, priced features are shipped with DB2 UDB for OS/390 Version 6 so that you can install and explore them and discover the value they can bring to your DB2.

A full-use license for each of the priced features may be obtained by ordering the appropriate billing feature number and media feature number, labeled as **"Buy"**, for the optional priced feature, as indicated in the announcement letter for DB2 UDB for OS/390 Version 6.

Figure 1. DB2 UDB Server for OS/390 Program Directory Set	
Program Directory Title	Volume in Set
IBM Database 2 Universal Database Server for OS/390 Version 6	1 of 6
DB2 UDB for OS/390 Version 6 DB2 Performance Monitor	2 of 6
DB2 UDB for OS/390 Version 6 Query Management Facility	3 of 6
DB2 UDB for OS/390 Version 6 Query Management Facility High Performance Option	4 of 6
DB2 UDB for OS/390 Version 6 DB2 Administration Tool	5 of 6
DB2 UDB for OS/390 Version 6 DB2 Buffer Pool Tool	6 of 6

The **QMF HPO** product consists of the following:

- QMF HPO Try tape with the QMF for Windows V6 Try CD-ROM
- QMF HPO Buy tape with the QMF for Windows V6 Buy CD-ROM

The program directory contains the following sections:

- 2.0, "Program Materials" on page 4 identifies the basic and optional program materials and documentation for QMF HPO.
- 3.0, "Program Support" on page 8 describe the IBM support available for QMF HPO.
- 4.0, "Program and Service Level Information" on page 10 lists the APARs (program level)
- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing and using QMF HPO.
- 6.0, "Installation Instructions" on page 17 provides detailed installation instructions for QMF HPO. It also describes the procedures for activating the functions of QMF HPO.
- Appendix A, "QMF HPO Try Install Logic" on page 28 provides the install logic for QMF HPO.

Before installing QMF HPO, read 3.2, "Preventive Service Planning" on page 8. This section tells you how to find any updates to the information and procedures in this program directory.

Do not use this program directory if you are installing QMF HPO with an MVS Custom-Built Installation Process Offering (CBIPO), SystemPac, or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the program directory as required.

If you are installing QMF HPO using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), use the softcopy program directory provided on the CBPDO tape. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for QMF HPO are included on the CBPDO tape.

1.1 **QMF HPO Description**

QMF HPO comprises these features:

- QMF HPO Compiler
- QMF HPO Manager

QMF HPO Compiler is a family of system utilities for generating, preparing and running report programs for IBM's Query Management Facility (QMF).

QMF HPO Manager is a family of system utilities for managing and administering IBM's Query Management Facility (QMF).

QMF HPO - Try is the fully functional product to be used for a 90 day trial basis.

QMF HPO - Buy enables the full-use license of QMF HPO V6.

1.2 QMF HPO FMIDs

Query Management Facility High Performance Option consists of the following FMIDs:

HHP6601 - QMF HPO Base Try JHP6602 - QMF HPO Compiler Try JHP6603 - QMF HPO Manager Try JHP6611 - QMF HPO Base Buy

1.3 QMF for Windows Description

The QMF for Windows product is shipped on a CD-ROM with QMF HPO. QMF for Windows V6 - Try ships with QMF HPO - Try and QMF for Windows V6 - Buy ships with QMF HPO - Buy.

QMF for Windows V6 - Try is the fully functional product to be used for a 60 day trial basis. QMF for Windows V6 - Buy enables the full-use license of QMF for Windows V6.

QMF for Windows is a multi-purpose, multi-database query engine that provides a comprehensive user environment for formulating and sharing business reports, a robust Windows-based API for automating database querying, updating, and report distribution tasks, as well as centralized control over database resource consumption.

QMF for Windows is installed on a Microsoft Windows system. Refer to the README.TXT file in the root directory of the CD-ROM for information about the CD-ROM and for detailed installation instructions. Refer to the *Installing and Managing QMF for Windows* book for information about prerequisite software, information on configuring your network environment, and documentation related to the installation and execution of QMF for Windows.

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for QMF HPO is 5645-DB2.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature code, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature codes, and are not required for the product to function.

The program announcement material describes the features supported by QMF HPO. Ask your IBM representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for QMF HPO one of the following:

- A 9-track magnetic tape (written at 6250 BPI), a 3480 cartridge, or a 4mm cartridge, and
- One CD-ROM

The tape contains all the programs and data needed for installation. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 17 for more information about how to install the program.

The CD-ROM contains all the programs and data needed for installation. Refer to the README.TXT file in the root directory of the CD-ROM for information about the CD-ROM and for detailed installation instructions.

For a description of the basic material program tape or cartridge and CD and for QMF HPO - Try, refer to Figure 2. Refer to Figure 3 on page 5 for QMF HPO - Buy. For a description of the file content of the program tape or cartridge for QMF HPO - Try, refer to Figure 4 on page 5. Refer to Figure 5 on page 5 for QMF HPO - Buy.

Note: If you are installing QMF HPO using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.

Figure 2 (Page 1 of 2). Basic Material: Program Tape & CD-ROM - QMF HPO - Try					
Feature Physical Medium Number Volume Exte		External Label Identification	VOLSER		
6250 Tape CD-ROM	5821	1 1	QMF HPO Try QMF for Windows Version 6.1 Try	HP6601	
3480 Cartridge CD-ROM	5822	1 1	QMF HPO Try QMF for Windows Version 6.1 Try	HP6601	

Figure 2 (Page 2 of 2). Basic Material: Program Tape & CD-ROM - QMF HPO - Try					
Medium	Feature Number	Physical Volume	External Label Identification	VOLSER	
4mm Cartridge CD-ROM	6270	1 1	QMF HPO Try QMF for Windows Version 6.1 Try	HP6601	

Figure 3. Basic Material: Program Tape & CD-ROM - QMF HPO - Buy						
Medium	Feature Number	Physical Volume	External Label Identification	VOLSER		
6250 Tape CD-ROM	5871	1 1	QMF HPO Buy QMF for Windows Version 6.1 Buy	HP6611		
3480 Cartridge CD-ROM	5852	1 1	QMF HPO Buy QMF for Windows Version 6.1 Buy	HP6611		
4mm Cartridge CD-ROM	5855	1 1	QMF HPO Buy QMF for Windows Version 6.1 Buy	HP6611		

Figure 4. I	Program	Tape(s): File Content - QMF HPO - Try				
VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
HP6601	1	SMPMCS	N/A	FB	80	8800
	2	IBM.HHP6601.F1	N/A (JCLIN)	FB	80	8800
	3	IBM.HHP6601.F2	ARAALOAD	U	0	6144
	4	IBM.HHP6601.F3	ARAASRCE	FB	80	8800
	5	IBM.JHP6602.F1	N/A (JCLIN)	FB	80	8800
	6	IBM.JHP6602.F2	ARAALOAD) U	0	6144
	7	IBM.JHP6602.F3	ARAASRCE	FB	80	8800
	8	IBM.JHP6603.F1	N/A (JCLIN)	FB	80	8800
	9	IBM.JHP6603.F2	ARAALOAD	U	0	6144
	10	IBM.JHP6603.F3	ARAASRCE	FB	80	8800

Figure 5 (Figure 5 (Page 1 of 2). Program Tape(s): File Content - QMF HPO - Buy					
VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
HP6611	1	SMPMCS	N/A	FB	80	8800

Figure 5 (I	Figure 5 (Page 2 of 2). Program Tape(s): File Content - QMF HPO - Buy					
VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
	2	IBM.JHP6611.F1	N/A (JCLIN)	FB	80	8800
	3	IBM.JHP6611.F2	ARAALOAD) U	0	6144
	4	IBM.JHP6611.F3	ARAASRCE	FB	80	8800

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for QMF HPO.

2.3 Program Publications

The following sections identify the basic and optional publications for QMF HPO.

2.3.1 Basic Program Publications

Figure 6 identifies the basic unlicensed program publications for QMF HPO. One copy of each of these publications is included with the basic materials for QMF HPO - Try. For additional copies, contact your IBM representative.

Note: No additional publications are sent with QMF HPO - Buy orders.

Figure 6. Basic Material: Unlicensed Publications - QMF HPO	
Publication Title	Form Number
QMF HPO User's Guide for OS/390	SC26-9581
Getting Started with QMF for Windows	SC26-9582
Installing and Managing QMF for Windows	GC26-9583

2.3.2 Optional Program Publications

No optional publications are provided for QMF HPO.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for QMF HPO.

2.5 Publications Useful During Installation

Refer to QMF HPO User's Guide for OS/390 for additional information related to the installation and execution of QMF HPO.

Refer to the README.TXT file in the root directory on the CD-ROM for information about the CD-ROM and for detailed installation instructions. Refer to the Installing and Managing QMF for Windows manual for information about prerequisite software, information on configuring your network environment, and documentation related to the installation and execution of QMF for Windows.

Additionally, the publications listed in Figure 7 may be useful during the installation of QMF HPO. To order copies, contact your IBM representative.

Figure 7. Publications Useful During Installation	
Publication Title	Form Number
Any one of the following:	
SMP/E User's Guide	SC28-1302
SMP/E Reference	SC28-1107
SMP/E Messages and Codes	SC28-1108
OS/390 SMP/E User's Guide	SC28-1740
OS/390 SMP/E Reference	SC28-1806
OS/390 SMP/E Messages and Codes	SC28-1738

3.0 Program Support

This section describes the IBM support available for QMF HPO.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

3.2 Preventive Service Planning

Before installing QMF HPO, you should review the current Preventive Service Planning (PSP) information. If you obtained QMF HPO as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained QMF HPO on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for QMF HPO are:

Figure 8. PSF	Figure 8. PSP Upgrade and Subset ID							
UPGRADE	SUBSET	Description						
DB2610	HHP6601	QMF HPO Base Try						
DB2610	JHP6602	QMF HPO Compiler Try						
DB2610	JHP6603	QMF HPO Manager Try						
DB2610	JHP6611	QMF HPO Base Buy						

3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 9 identifies the component IDs (COMPID) for QMF HPO.

Figure 9. Component IDs								
FMID	COMPID	Component Name	RETAIN Release					
HHP6601	5668HPO00	QMF HPO Base Try	601					
JHP6602	5668HPO00	QMF HPO Compiler Try	602					
JHP6603	5668HPO00	QMF HPO Manager Try	603					
JHP6611	5668HPO00	QMF HPO Base Buy	611					

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of QMF HPO. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

This new version of QMF HPO has incorporated all closed APARS from previous versions/releases which were closed prior to May 1, 1999.

4.2 Service Level Information

Check the DB2610 PSP bucket for any additional PTFs that should be installed or any additional install information.

4.3 Cumulative Service Tape

There is no cumulative service tape for QMF HPO.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating QMF HPO. The following terminology is used:

- Driving system: the system used to install the program.
- · Target system: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI datasets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old
 one. By installing onto a separate target system, you can test the new product while still keeping the
 old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can
 disrupt the other products. Installing onto a test system or clone will allow you to assess these
 impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install QMF HPO.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements

Figure 10.	Figure 10. Driving System Software Requirements - QMF HPO						
Program Number	Product Name and Minimum VRM/Service Level						
5645-001	OS/390 Version 1 Release 3 or higher						

5.1.2.1 Required Toleration PTFs: In order to avoid syntax errors on the DESCRIPTION operand, introduced with OS/390 Version 2 Release 7, during the SMP/E installation of QMF HPO, you are required to install one of the following:

Toleration PTFs -

- OS/390 Version 1 Release 3 and Version 2 Release 4:
 - PTF UR51067
- OS/390 Version 2 Release 5 and Release 6:
 - PTF UR51068

5.2 Target System Requirements

This section describes the environment of the target system required to install and use QMF HPO.

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requisites

5.2.2.1 Minimum Requisites: A minimum requisite is defined as one of the following:

- 1. Installation Requisite: A product that is required at installation time. i.e. this product will not install successfully unless this requisite is met. This includes products that are specified as REQs, PREs, or CALLLIBs.
- 2. Run Time Requisite: A product that is not required for the successful installation of this product, but is needed at run time in order for this product to work.

Figure 11. Minimum Requisites for QMF HPO - Try							
Program Number	Product Name and Minimum VRM/Service Level	Install Req?					
5645-DB2	QMF for OS/390 Version 6 Release 1	No					

Figure 12. Mini	Figure 12. Minimum Requisites for QMF HPO - Buy								
Program Number	Product Name and Minimum VRM/Service Level	Install Req?							
5645-DB2	QMF HPO - Try	Yes							

5.2.2.2 Functional Requisites: A functional requisite is defined as a product that is *not* required for the successful installation of this product or for the base function of the product, but is needed at run time for a specific function of this product to work. This includes products that are specified as IF REQs.

There are no functional requisites for QMF HPO.

5.2.2.3 Toleration/Coexistence Requisites: A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multi-system environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at difference time intervals.

There are no toleration/coexistence requisites for QMF HPO.

5.2.2.4 Incompatibility (Negative) Requisites: A negative requisite identifies products which must not be installed on the same system as this product.

There are no negative requisites for QMF HPO.

5.2.3 DASD Storage Requirements

QMF HPO libraries can reside on 3380 or 3390 DASD.

Figure 13 lists the total space required for each type of library on a 3390 DASD.

Figure 13. T	Figure 13. Total DASD Space Required by QMF HPO							
Library Type	Total Space Required							
Target	365 Tracks							
Distribution	260 Tracks							

Notes:

- 1. The dataset sizes specified contain at least 15% extra space. You may wish to revise these numbers based on your plans for adding additional function or service.
- 2. IBM recommends use of system determined blocksizes for efficient DASD utilization for all non-RECFM U datasets. For RECFM U datasets, IBM recommends a blocksize of 32760, which is the most efficient from a performance and DASD utilization perspective.
 - If you choose not to use system determined blocksizes, use the blocksizes and numbers of blocks specified to allocate the datasets. Datasets can be reblocked to a larger size. Please note that the maximum allowable blocksize will depend on the type of DASD on which the dataset will reside; for example, the blocksize of datasets on a 3350 DASD cannot exceed 19,069.
- 3. Abbreviations used for the dataset type are:

- U Unique dataset used by only the FMIDs listed. In order to determine the correct storage needed for this dataset, this table provides all required information; no other tables (or program directories) need to be referenced for the dataset size.
- S Shared dataset used by more than the FMIDs listed. In order to determine the correct storage needed for this dataset, the storage size given in this table needs to be added to other tables (perhaps in other program directories). If the dataset already exists, it must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of required datasets, please refer to 6.3.2, "Step 2—Allocate Distribution and Target Libraries" on page 19.

The following figure lists the storage requirements for the SMP/E work datasets for QMF HPO. Please note that these are temporary datasets, so they will only be needed during installation, not permanently.

QMF HPO uses the same SMP/E datasets from the QMF V6 Base installation. These are the SMPLOG, SMPMTS, SMPPTS, SMPSCDS and SMPSTS DDNAMEs. No additional space is allocated for these SMP/E datasets during installation of QMF HPO.

	т	D S	R E	L R			No. of	No.	No.
	Ϋ́	Ö	C	E	No.		3380/	of	of
Library DDNAME	P E	R G	F M	C L	of Blks	BLK SIZE	9345 Trks	3390 Trks	DIR BIks
SMPWRK1	S	РО	FB	80			180	150	250
SMPWRK2	S	РО	FB	80			180	150	250
SMPWRK3	S	РО	FB	80			180	150	250
SMPWRK4	S	РО	FB	80			180	150	250
SMPWRK6	S	РО	FB	80			180	150	250

The following figures list the target and distribution libraries (datasets) and their attributes required to install QMF HPO - Try. The storage requirements of QMF HPO - Try must be added to the storage required by other programs having data in the same dataset (library).

QMF HPO - Buy uses the same target and distribution libraries as QMF HPO - Try. No additional space is required for the installation of QMF HPO - Buy.

Figure 15. Storage Requirements for Target Libraries for QMF HPO												
Library DDNAME	T Y P E	D S O R G	R E C F	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR BIks			
SRAACLST	U	РО	FB	80		8800	6	5	5			
SRAADBRM	U	РО	FB	80		8800	12	10	5			
SRAAEXEC	U	РО	FB	80		8800	6	5	5			
SRAAISPM	U	РО	FB	80		8800	12	10	10			
SRAAISPP	U	РО	FB	80		8800	48	40	50			
SRAALOAD	U	РО	U	0		6144	229	200	25			
SRAASAMP	U	РО	FB	80		8800	24	20	10			
SRAASKEL	U	РО	FB	80		8800	90	75	10			

Figure 16. Storage Req	quirements for D	istributi	on Librari	es for QI	MF HPO				
		D	R	L			No.		
	T	S	Ε	R			of	No.	No.
	Υ	0	С	Ε	No.		3380/	of	of
Library	Р	R	F	С	of	BLK	9345	3390	DIR
DDNAME	E	G	M	L	Blks	SIZE	Trks	Trks	Blks
ARAALOAD	U	РО	U	0		6144	189	165	15
ARAASRCE	- 11	PO	FB	80		8800	114	95	30

5.3 FMIDs Deleted

Installing QMF HPO - Try will result in the deletion of the following FMIDs:

Figure 17.	Figure 17. FMIDs Deleted								
Deleted FMID	Deleting FMID	Description							
HHP3100	HHP6601	QMF HPO V3R1M1							
HHP3201	HHP6601	QMF HPO V3R2							
HHP320A	HHP6601	QMF HPO V3R2 Refresh							
HHP3301	HHP6601	QMF HPO V3R3							

5.4 Special Considerations

QMF HPO has no special considerations for the target system.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of QMF HPO.

Please note the following:

- If you want to install QMF HPO into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control datasets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing QMF HPO

6.1.1 SMP/E Considerations for Installing QMF HPO

This release of QMF HPO is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

- Important Note

The SMP/E Modification Control Statements (MCS) for QMF HPO - Try delete the previous versions of QMF HPO during the APPLY step. If you want to retain both versions, you need to install QMF HPO - Try using different SMP/E zones and SMP/E datasets.

Sample jobs are provided to assist you in installing QMF HPO. After the SMP/E RECEIVE step has been completed, the sample jobs can be found in SMPTLIB *QMFHPO.HHP6601.F3* for QMF HPO - Try and in SMPTLIB *QMFHPO.JHP6611.F3* for QMF HPO - Buy. Make a copy of these jobs in your own library, follow the instructions in the comment section of the jobs and in this program directory, and modify the sample jobs accordingly to use during the installation of QMF HPO - Try and QMF HPO - Buy. You may find additional information in the PSP bucket (described in 3.2, "Preventive Service Planning" on page 8). If conflicts exist, the PSP bucket takes precedence over this program directory and any other QMF HPO documentation.

6.2 SMP/E Installation Procedures and Jobs for QMF HPO - Try

6.2.1 QMF HPO SMP/E Installation Steps

Refer to 6.3, "SMP/E Installation Procedures and Jobs for QMF HPO - Try" on page 18 or 6.5, "SMP/E Installation Procedures and Jobs for QMF HPO - Buy" on page 23 for the appropriate SMP/E installation instructions. Remember, QMF HPO - Try is a pre-requisite for QMF HPO - Buy.

6.3 SMP/E Installation Procedures and Jobs for QMF HPO - Try

The provided sample jobs for QMF HPO - Try are:

RAA1EJAL Sample job to allocate target and distribution libraries

RAA1EDEF Sample job to define SMP/E DDDEFs for QMF HPO

RAA1EJRC Sample RECEIVE job

RAA1EJAP Sample APPLY job

RAA1EJAC Sample ACCEPT job

In the sample SMP/E jobs provided, the name of the SMP/E CSI is QMF610.SMPCSI.CSI. The global zone name in the SMP/E CSI is GLOBAL. The distribution zone name is DSQDLIB. The target zone name is DSQTARG. The sample jobs should be updated to reflect the CSI and zone names used at your organization.

6.3.1 Step 1—Unload Sample JCL From Tape - Try

The following sample JCL will copy QMF HPO - Try sample jobs from the installation tape (Figure 18 on page 19). Additionally, it will print the sample jobs.

Modify the parameters in boldface to values which conform to your site's requirements before submitting the job.

```
//RAA1EHAA JOB MSGLEVEL=(2,1),CLASS=K
//*
//*
       STEP UNLOAD: RETRIEVE JCL SAMPLES FOR QMF HPO - Try
//*
//UNLOAD
         EXEC PGM=IEBCOPY
               SYSOUT=A
//SYSPRINT DD
                DSN=IBM.HHP6601.F3,DISP=(OLD,KEEP),UNIT=tunit,
//INTAPE DD
            VOL=(PRIVATE,,SER=HP6601),LABEL=(4,SL)
//
//OUTDS
                DSN=jcl-library-name,
            DISP=(,CATLG,DELETE),
//
//
            VOL=SER=dasdvol, UNIT=dunit,
//
            DCB=*.UNLOAD.INTAPE,
//
            SPACE=(TRK, (15, 10, 5))
//SYSUT3
                UNIT=SYSALLDA, SPACE=(CYL, (1,1))
//SYSUT4
                UNIT=SYSALLDA, SPACE=(CYL, (1,1))
           DD
           DD *
//SYSIN
  COPY INDD=INTAPE,OUTDD=OUTDS
  SELECT MEMBER=(RAA1EJAL, RAA1EDEF, RAA1EJAC, RAA1EJAP, RAA1EJRC)
/*
//*
//*
       STEP PRINT: PRINT THE SAMPLE JCL FOR QMF HPO - Try
//*
//PRINT
           EXEC PGM=IEBPTPCH
//SYSPRINT DD
                SYSOUT=A
                DSN=jcl-library-name, DISP=OLD
//SYSUT1
           DD
//SYSUT2
           DD
                SYSOUT=A
//SYSIN
           DD *
  PRINT TYPORG=PO, MAXFLDS=9
  RECORD FIELD=(80)
/*
```

Figure 18. Sample JCL to Unload Sample JCL from Tape - Try.

where tunit is the unit value matching the product tape or cartridge, jcl-library-name is the name of the dataset where the sample jobs will reside, dasdvol is the volume serial of the DASD device where the dataset will reside, and dunit is the DASD unit type of the volume.

Expected Return Codes and Messages: You will get a return code of 0 if the job runs correctly.

6.3.2 Step 2—Allocate Distribution and Target Libraries

The installation sample jobs shipped with QMF HPO - Try refer to private libraries. If you choose system libraries as your target libraries, you must modify the installation jobs to reflect the names of the system libraries used at your site.

To allocate and catalog distribution and target libraries for QMF HPO - Try, edit and submit RAA1EJAL.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.3.3 Step 3—Create DDDEF Entries for Product Libraries

To create DDDEF entries for the target and distribution libraries for QMF HPO, edit and submit RAA1EDEF.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.3.4 Step 4—Perform SMP/E RECEIVE - Try

To perform the SMP/E RECEIVE for QMF HPO - Try, edit and submit RAA1EJRC.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Note: If you obtained QMF HPO as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB dataset to RECEIVE QMF HPO FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

If the SMP/E RECEIVE operation is run on an earlier level of OS/390 than Version 2 Release 7, the following informational message is issued:

GIM50050I RECEIVE PROCESSING FOR SYSMOD fmid

ENCOUNTERED THE DESCRIPTION OPERAND ON THE HEADER MCS. THIS OPERAND IS IGNORED SINCE IT IS SUPPORTED ONLY BY OS/390 RELEASE 7 SMP/E, OR HIGHER.

The fmid value (shown in boldface in the above sample) depends on the FMID which you are RECEIVEing:

fmid

```
HHP6601 - QMF HPO Try Base
JHP6602 - QMF HPO Try Compiler
JHP6603 - QMF HPO Try Manager
```

6.3.5 Step 5—Perform SMP/E APPLY CHECK - Try

Edit and submit sample job RAA1EJAP to perform an SMP/E APPLY CHECK for QMF HPO - Try.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODs might be applicable to other functions.

For CHECK processing on APPLY, change the APPLY SELECT statement to match the following:

APPLY S(HHP6601 JHP6602 JHP6603) CHECK GROUPEXTEND FORFMID (HHP6601 JHP6602 JHP6603) BYPASS (HOLDSYS, HOLDUSER, HOLDCLASS (UCLREL, ERREL)).

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.3.6 Step 6—Perform SMP/E APPLY - Try

Edit and submit sample job RAA1EJAP to perform an SMP/E APPLY for QMF HPO - Try. Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.3.7 Step 7—Perform SMP/E ACCEPT CHECK - Try

Edit and submit job RAA1EJAC to perform an SMP/E ACCEPT CHECK for QMF HPO - Try.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

For CHECK processing on ACCEPT, change the ACCEPT SELECT statement to the following:

ACCEPT S(HHP6601 JHP6602 JHP6603) CHECK GROUPEXTEND FORFMID(HHP6601 JHP6602 JHP6603) BYPASS (HOLDSYS, HOLDUSER, HOLDCLASS (UCLREL, ERREL)).

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.3.8 Step 8—Perform SMP/E ACCEPT - Try

Edit and submit sample job RAA1EJAC to perform the SMP/E ACCEPT for QMF HPO - Try. Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Important Information

Do not run the ACCEPT job unless you are certain that, after performing the final installation steps described in QMF HPO User's Guide for OS/390, your system functions correctly.

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

6.4 Activating QMF HPO

Once you have successfully installed QMF HPO - Try using SMP/E refer to the QMF HPO User's Guide for OS/390, SC26-9581, which contains the step-by-step procedures to activate the functions of QMF HPO.

6.5 SMP/E Installation Procedures and Jobs for QMF HPO - Buy

The provided sample jobs for QMF HPO - Buy are:

RAA1BJRC Sample RECEIVE job **RAA1BJAP** Sample APPLY job **RAA1BJAC** Sample ACCEPT job

In the sample SMP/E jobs provided, the name of the SMP/E CSI is QMF610.SMPCSI.CSI. The global zone name in the SMP/E CSI is GLOBAL. The distribution zone name is DSQDLIB. The target zone name is DSQTARG. The sample jobs should be updated to reflect the CSI and zone names used at your organization.

6.5.1 Step 1—Unload Sample JCL From Tape - Buy

The following sample JCL will copy QMF HPO - Buy sample jobs necessary for the SMP/E installation from the installation tape (Figure 19 on page 24). Additionally, it will print the sample jobs.

Modify the parameters in boldface to values which conform to your site's requirements before submitting the job.

```
//RAA1BBAA JOB MSGLEVEL=(2,1),CLASS=K
//*
//*
       STEP UNLOAD: RETRIEVE JCL SAMPLES FOR QMF HPO - Buy
//*
//UNLOAD
           EXEC PGM=IEBCOPY
//SYSPRINT DD
               SYSOUT=A
                DSN=IBM.JHP6611.F3,DISP=(OLD,KEEP),UNIT=tunit,
//INTAPE
             VOL=(PRIVATE,,SER=HP6611),LABEL=(4,SL)
//
//OUTDS
                DSN=jcl-library-name,
             DISP=(,CATLG,DELETE),
//
//
             VOL=SER=dasdvol, UNIT=dunit,
//
             DCB=*.UNLOAD.INTAPE,
//
             SPACE=(8800,(15,10,5))
//SYSUT3
                UNIT=SYSALLDA, SPACE=(CYL, (1,1))
           DD
//SYSUT4
           DD
                UNIT=SYSALLDA, SPACE=(CYL, (1,1))
           DD *
//SYSIN
  COPY INDD=INTAPE, OUTDD=OUTDS
  SELECT MEMBER=(RAA1BJAC, RAA1BJAP, RAA1BJRC)
/*
//*
//*
       STEP PRINT: PRINT THE SAMPLE JCL FOR QMF HPO - Buy
//*
//PRINT
           EXEC PGM=IEBPTPCH
//SYSPRINT DD
                SYSOUT=A
           DD
                DSN=jcl-library-name, DISP=OLD
//SYSUT1
//SYSUT2
           DD
                SYSOUT=A
//SYSIN
           DD *
  PRINT TYPORG=PO, MAXFLDS=9
  RECORD FIELD=(80)
```

Figure 19. Sample JCL to Unload Sample JCL from Tape - Buy.

where tunit is the unit value matching the product tape or cartridge, jcl-library-name is the name of the dataset where the sample jobs will reside, dasdvol is the volume serial of the DASD device where the dataset will reside, and dunit is the DASD unit type of the volume.

Expected Return Codes and Messages: You will get a return code of 0 if the job runs correctly.

6.5.2 Step 2—Perform SMP/E RECEIVE - Buy

To perform the SMP/E RECEIVE for QMF HPO - Buy, edit and submit RAA1BJRC.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Note: If you obtained QMF HPO as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB dataset to RECEIVE QMF HPO FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly. If the SMP/E RECEIVE operation is run on an earlier level of OS/390 than Version 2 Release 7, the following informational message is issued:

GIM50050I RECEIVE PROCESSING FOR SYSMOD JHP6611 ENCOUNTERED THE DESCRIPTION OPERAND ON THE HEADER MCS. THIS OPERAND IS IGNORED SINCE IT IS SUPPORTED ONLY BY OS/390 RELEASE 7 SMP/E, OR HIGHER.

6.5.3 Step 3—Perform SMP/E APPLY CHECK - Buy

Edit and submit sample job RAA1BJAP to perform an SMP/E APPLY CHECK for QMF HPO - Buy.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

For CHECK processing on APPLY, change the APPLY SELECT statement to match the following:

APPLY S(JHP6611) CHECK GROUPEXTEND FORFMID (JHP6611) BYPASS (HOLDSYS, HOLDUSER, HOLDCLASS (UCLREL, ERREL)).

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.5.4 Step 4—Perform SMP/E APPLY - Buy

Edit and submit sample job RAA1BJAP to perform an SMP/E APPLY for QMF HPO - Buy. Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.5.5 Step 5—Perform SMP/E ACCEPT CHECK - Buy

Edit and submit job RAA1BJAC to perform an SMP/E ACCEPT CHECK for QMF HPO - Buy.

Note: Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

For CHECK processing on ACCEPT, change the ACCEPT SELECT statement to the following:

ACCEPT S(JHP6611) CHECK GROUPEXTEND FORFMID (JHP6611) BYPASS (HOLDSYS, HOLDUSER, HOLDCLASS (UCLREL, ERREL)).

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.5.6 Step 6—Perform SMP/E ACCEPT - Buy

Edit and submit sample job RAA1BJAC to perform the SMP/E ACCEPT for QMF HPO - Buy. Consult the instructions in the sample job for detailed information on which values to change. Modify the default job card. Additionally, modify all default values listed in the instructions of the sample job to conform to your site's requirements before submitting the job.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.5.7 Step 7—Activating QMF HPO - Buy

Congratulations! You have completed the installation of QMF HPO - Buy. You can now use QMF HPO indefinitely.

Appendix A. QMF HPO - Try Install Logic

The SMP/E Modification Control Statements (SMPMCS) for QMF HPO - Try are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVEd. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

The entire set of SMP/E modification control statements for the installation can be obtained by printing the first file of QMF HPO - Try program tape.

A.1 HHP6601 - QMF HPO - Try Base

A.2 JHP6602 - QMF HPO - Try Compiler

```
++FUNCTION(JHP6602) FILES(3) REWORK(1999030) RFDSNPFX(IBM)
  DESCRIPTION(QMF High Performance Option Compiler Try)
/*
"Licensed Material -
5645-DB2 Copyright (C) 1999 IBM Corp. All Rights Reserved.
         Copyright (C) 1990, 1999 Rocket Software, Inc.
         All Rights Reserved.
US Government Users Restricted Rights
 - Use, duplication, or disclosure
restricted by GSA ADP Schedule Contract with IBM Corp."
++VER(P115) FMID(HHP6601)
++JCLIN RELFILE(1).
```

JHP6603 - QMF HPO - Try Manager **A.3**

```
++FUNCTION(JHP6603) FILES(3) REWORK(1999030) RFDSNPFX(IBM)
   DESCRIPTION(QMF High Performance Option Manager Try)
/*
"Licensed Material -
 5645-DB2 Copyright (C) 1999 IBM Corp. All Rights Reserved.
          Copyright (C) 1990, 1999 Rocket Software, Inc.
          All Rights Reserved.
US Government Users Restricted Rights
 - Use, duplication, or disclosure
restricted by GSA ADP Schedule Contract with IBM Corp."
++VER(P115) FMID(HHP6601)
++JCLIN RELFILE(1).
```

Appendix B. QMF HPO - Buy Install Logic

The SMP/E Modification Control Statements (SMPMCS) for QMF HPO - Buy are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVEd. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

The entire set of SMP/E modification control statements for the installation can be obtained by printing the first file of QMF HPO - Try program tape.

B.1 JHP6611 - QMF HPO - Buy

The entire set of SMP/E modification control statements for the installation can be obtained by printing the first file of QMF HPO - Buy program tape.

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Reader's Comments

Program Directory for Query Management Facility High Performance Option Version 6

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RATING SCALE —											
	very				very	not					
1	satisfied	<=====	<======>		dissatisfied	applicable					
	1	2	3	4	5	N					

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	Ν
Installation Verification Programs	1	2	3	4	5	Ν
Time to install the product	1	2	3	4	5	Ν
Readability and organization of program directory tasks	1	2	3	4	5	Ν
Necessity of all installation tasks	1	2	3	4	5	Ν
Accuracy of the definition of the installation tasks	1	2	3	4	5	Ν
Technical level of the installation tasks	1	2	3	4	5	Ν
Ease of getting the system into production after installation	1	2	3	4	5	N

How d	id you order this product?
	CBIPO CBPDO CustomPac ServerPac Independent Other
Is this	the first time your organization has installed this product?
_	Yes No

Were the people who did the installation experienced with the installation of \ensuremath{MV}	'S products?
Yes No	
If yes, how many years?	
If you have any comments to make about your ratings above, or any other aspelist them below:	ect of the product installation, please
Please provide the following contact information:	
Name and Job Title	
Organization	
Address	
Telephone	

Thank you for your participation.

Please send the completed form to (or give to your IBM representative who will forward it to the Query Management Facility High Performance Option Development group):

IBM Corporation P. O. Box 49023 San Jose, CA 95161-9023 Attention: QMF Department, J49

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