IBM

IBM MERVA for ESA Version 4 Release 1 Program Number 5648-B29

The IBM licensed program IBM Message Entry and Routing with Interfaces to Various Applications for ESA Version 4 Release 1 (hereafter abbreviated to MERVA ESA V4 R1) provides interfaces to a variety of networks, such as the private network of the Society for Worldwide Interbank Financial Telecommunications s.c. (S.W.I.F.T.) and the public telex network. You can also interconnect MERVA ESA V4 R1 systems using a MERVA-to-MERVA connection (MERVA Link).

MERVA ESA V4 R1 runs on a host processor under:

- Information Management System/Virtual Storage (IMS/VS).
- Customer Information Control System for Virtual Storage (CICS/VS) in either a Multiple Virtual Storage (MVS) or Virtual Storage Extended (VSE) environment.

As major new functions over MERVA ESA V3 R3 MERVA ESA V4 R1:

- Uses DB2 for message queuing
- Supports TCP/IP for MERVA-to-MERVA Connection (MERVA Link) and the connection to the client
- Provides performance improvements
- Is enabled for Sysplex exploitable subsystems
- Provides an MQI attachment under VSE/ESA
- Has 7*24 support, except for customization

Any additional features are contained in the MERVA ESA Components product (5648-B30) and described there. These features are:

- MERVA USE and Branch for Windows NT with and without SWIFT Link
- MERVA message processing client for Windows NT
- · MERVA import/export facility for Windows NT
- MERVA Connection/400 and Connection/NT features
- Directory Services support
- Traffic reconciliation

Specified Operating Environment

"Year 2000 Readiness"

This IBM Program, when used in accordance with its associated documentation, is capable of correctly processing, providing and/or receiving date data within and between the twentieth and twentyfirst centuries, provided that all products (for example, hardware, software, and firmware) used with this IBM Program properly exchange accurate date data with it.

Machine Requirements

Processors: MERVA ESA V4 R1 will run native on all processors that are supported by OS/390 or VSE/ESA. The required size of processors depends on the operating system type. It also depends on whether the data communication system used to control the operating of MERVA ESA V4 R1 is CICS/ESA, CICS/VSE, or IMS/ESA.

Display Station: The dialog function can be used from any display terminal supported and operated by IMS/ESA, CICS/ESA, or CICS/VSE.

Message processing functions can also be performed via the MERVA Message Processing Client for Windows NT.

If MERVA ESA V4 R1 dialog functions are going to be used to display or enter data in the DBCS character set, a terminal of the 5550 family of display terminals is required.

Operator messages are issued via standard WTO macros in single- and multi-line format. MERVA ESA V4 R1 responses to a display subcommand are in table format and require a message length of at least 70 characters.

At least one 3270-compatible display station.

Printer: At least one IBM 3268 printer, or any printer operating in 3270 or SCS mode.

Peripherals: A tape drive and tapes, or cartridge drive and cartridges are necessary for installing and saving operations of MERVA ESA V4 R1.

DASD Files accessed by MERVA ESA V4 R1 must reside on either a tape device or DASD. There is no known device type within these categories that can be operated under MVS/ESA or OS/390 but would not be supported by MERVA ESA V4 R1.

Additional Machine Requirements for the SWIFT Link: The connection to the SWIFT Network using X.25 requires one Communication Controller of Type 3720, 3725, or 3745, LIC type 1 (max. 19200 pbs) or LIC type 3. Physical connections to the SWIFT Network require LIC type 1 (EIA RS 232 or CCITT V.24) or type 3 (CCITT V.35) in 37xx controllers.

Please note that the Communication Controllers 3746-900 and 3746-950 are not supported. However, a 3746-900 is always connected to a 3745 controller, which can be used.

Switched (PSTN) connections to the SWIFT Network require a modem that supports manual dialing, DTR dialing, or V.25 bis dialing (for 3745 only). A V.25 capable modem allows MERVA ESA V4 R1 controlled automatic dialing and is recommended to ensure most integrated customization and processing. A direct-access storage device compatible with the operating system is used for SWIFT Link data sets.

Alternatively and/or as a back-up function the component MERVA USE and Branch with SWIFT Link (described in the LPS of 5648-B30, MERVA ESA Components V4 R1) can be used.

Additional Machine Requirements for MERVA-to-MERVA Connection: The connection between the host processor and another MERVA ESA system, a MERVA USE and Branch system,

or a system running MERVA USE and Branch with SWIFT Link requires one of the following network control facilities:

- An IBM 37xx Communication Controller
- An Integrated Communication Adapter (ICA)

MERVA Link between MERVA ESA and MERVA USE and Branch (with or without SWIFT Link) is described in the LPS of MERVA ESA Components V4 R1.

Additional Machine Requirements for the Workstation Based Functions of MERVA ESA:

The machine requirements for using the workstation based functions SWIFT USE, Telex network connection via workstation, MERVA USE and Branch, and MERVA USE and Branch with SWIFT Link are described in the LPS of MERVA ESA Components V4 R1.

Programming Requirements

The following control programs and subsystems are required for MERVA ESA V4 R1. However, it will run also on subsequent releases or modification levels unless otherwise stated.

Operating System

- VSE/ESA Version 2 Release 3 or higher (5690-VSE) or
- OS/390 Version 2 Release 4 or higher (5647-A01)

Database and Communications Systems:

- CICS/VSE Version 2 Release 3 (5686-026)
- CICS/ESA Version 4 (5685-018)
- IMS/ESA Version 5 (5695-176)

For VSE/CICS, the HL Assembler for VSE (5696-234) is also required.

Optional Usage of DB2

For OS/390:

 DB2 for OS/390 Version 5 Release 1 (5655-DB2)

For VSE:

• DB2 for VM and VSE Version 5 Release 1 (5648-158)

SWIFT Network Connection: For the IBM 37xx Communications Controller one of the following NCPs is needed:

- ACF/NCP Version 4 (5668-854) Release 3.1 (MVS and VSE)
- ACF/NCP Version 5 (5668-738) Release 4 (MVS and VSE)
- ACF/NCP Version 6 (5688-231) Release 1, 2 or 3 (MVS only)
- ACF/NCP Version 7 (5648-063) Release 1, 2, 3, 4, 5, 6 or 7 (MVS and VSE)

In addition, IBM MERVA Extended Connectivity for ESA Version 3 Release 2 is needed:

- MERVA Extended Connectivity for MVS Version 3 Release 2 (5655-110)
- MERVA Extended Connectivity for VSE Version 3 Release 2 (5686-080)

For USE functionality the MERVA USE and Branch feature of MERVA ESA Components V4 R1 (5648-B30) is required together with the MERVA Message Processing Client feature for message processing.

MERVA Link (MERVA-to-MERVA Connection):

This network connection is required for implementation of the SWIFT USE functions on a PC running Windows NT: For communication between MERVA systems one of the following is required:

- ACF/VTAM Version 3 Release 1.1 (5666-313) for VSE
- ACF/VTAM Version 3 Release 4 (5685-085) for MVS/ESA

Together with:

- ACF/NCP Version 4 (5668-854) Release 3.1 (MVS and VSE)
- ACF/NCP Version 5 (5668-738) Release 4 (MVS and VSE)
- ACF/NCP Version 6 (5688-231) Release 1, 2, or 3 (MVS only)
- ACF/NCP Version 7 (5648-063) Release 1, 2, 3, 4, 5, 6, or 7 (MVS and VSE)

TCP/IP Based Attachment for MERVA Message Processing Client under VSE

• TCP/IP for VSE/ESA Version 1 Release 3 (5686-A04)

MQI Attachment and the Inter-Service Communication between Multiple MERVA ESA Instances: For OS/390:

• MQSeries for MVS/ESA Version 1 Release 2 (5695-137)

For VSE/CICS:

- MQSeries for VSE/ESA Version 2 Release 1 (5686-A06)
- ACF/VTAM for VSE/ESA Version 4 Release 2 (5666-363) or TCP/IP for VSE/ESA Version 1 Release 3 (5686-A04)
- Language Environment (LE) for VSE Runtime Library Version 1 Release 4 (5696-067)

Software requirements for other features used by MERVA ESA V4 R1: The machine requirements for using the workstation based functions SWIFT USE, Telex network connection via workstation, MERVA USE and Branch, and MERVA USE and Branch with SWIFT Link are described in the LPS of MERVA ESA Components V4 R1. The same applies for the host based features Traffic Reconciliation and Directory Services.

Compatibility

MERVA ESA V4 R1 is upwardly compatible with installations that have MERVA ESA V3 R3. Any deviations are described in the relevant program documentation.

Licensed Program Materials Availability

Restricted Materials – No. This licensed program is available without source licensed program materials. It is available in object code.

Supplemental Terms

Designated Machine Identification

• Designated Machine Identification Required: Yes.

Testing Period

• Basic License: 2 months (60 days outside the US)

Installation/Location License

• Not applicable. A separate license is required for each machine on which the licensed program will be used.

Usage Restriction

- Usage restriction applies Yes.
- Usage charges for this program are based on the average monthly number of messages processed. The term messages includes:
 - SWIFT messages sent and received by

MERVA ESA V4 R1 itself (via MERVA Extended Connectivity or any other interface program).

- SWIFT messages sent and received through any MERVA USE and Branch with SWIFT Link attached via MERVA Link.
- Messages sent and received through the FMT (Financial Message Transfer) function of MERVA ESA V4 R1.
- Telex messages sent and received through any attached Telex Interface Soft- and Hardware.

When use (average monthly message number) exceeds the registered tier level, you are required to contract your IBM representative to order an additional tier or tiers.

Type/Duration of Program Services

• Central Service, including the IBM Support Center, will be available until discontinued by IBM upon six months written notice.

Warranty

This program is warranted as specified in the IBM licence.

Licensed Program Specifications may be updated from time to time and such updates may constitute a change in specifications.

Following the discontinuance of all program services, this program will be provided "As Is" as specified in the IBM license.

Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries, or both:

ACF/VTAM CICS/ESA CICS/VSE DB2 IBM IMS/ESA MVS MVS/ESA MQSeries OS/390 VSE/ESA PC Direct is a trademark of Ziff Communications Company and is used by IBM Corporation under license.

UNIX is a registered trademark in the United States and other countries licensed exclusively through X/Open Company Limited.

C-bus is a trademark of Corollary, Inc.

Java and HotJava are trademarks of Sun Microsystems, Inc.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks or registered trademarks of Microsoft Corporation.

Other company, product, and service names, may be trademarks or service marks of others.



References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights may be used instead of the IBM product, program, or service.

Any other documentation with respect to this licensed program, including any documentation referenced herein, is provided for reference purposes only and does not extend or modify these specifications.

December, 1999

Printed in Denmark by IBM Danmark A/S

