

OS/3

**PROGRAM
PRODUCT
SPECIFICATION****IMS-DDP Transaction Facility
(Multithread)****Type Number: 6229-XX****SECTION I**

The IMS Distributed Transaction Facility (IMSTF) allows users of IMS Multithread to easily define and perform remote transaction processing. Specifically, it supports the transfer of transactions between local and remote transaction processing systems (e.g., transfer of transactions from one OS/3 IMS to another OS/3 IMS), using the Univac Distributed Communications Architecture.

The user defines his DDP needs simply by supplying parameter information at IMS configuration time, and by generating a global ICAM network that supports distributed data processing. In either case, IMS local transaction processing is unaffected.

PRODUCT FEATURES**■ Transaction Routing**

Simple or dialog transactions can be routed on a DDP network. A simple transaction is a single-request and single-response exchange; a dialog transaction is composed of a series of request-response exchanges.

Routing mechanisms underlying the transfer of transactions from one transaction processing system to another within IMSTF are of the following types:

- Directory Routing

Directory routing of a transaction is accomplished through a Transaction ID directory. The Transaction ID directory contains a list of valid transaction codes and associated information. This information determines if a transaction is to be processed locally or remotely. If the latter, a message of appropriate format is created and sent to the destination, otherwise processing proceeds as usual in the local environment. There is no need to change IMS action programs to use directory routing.

- Operator Routing

A terminal operator can cause a transaction to be routed to a remote system by adding a previously defined special character to the beginning of the input message. After validation of the special character, the rest of processing is similar to directory routing. This makes it possible to perform transactions with the same transaction code on both local and remote systems. For example, UNIQUE (UNiform InQuiry Update Element) transactions can be processed at a remote system by adding the appropriate special character to the OPEN command (e.g. *OPEN), or at a local system by omitting the special character.

- Program Routing

Program routing allows action programs written in COBOL or Basic Assembly Language (BAL) to determine where a transaction is to be processed. The action program identifies the remote system in its output message header, generates a message for delivery to the remote system, and issues an ACTIVATE function call to initiate the transaction. The action program processing the transaction on the remote system returns a message to the originating action program or its successor.

- Remote Transaction Processing

Transactions routed to a remote IMS system can be processed by UNIQUE or action programs written in COBOL, RPG II, or BAL. Remote transactions are processed in the same way as local transactions. Most IMS features are available for remote transactions, including the use of formatted screen displays through screen format services.

SOFTWARE REQUIREMENTS

The IMS-DDP transaction facility requires the following OS/3 software products for operation:

- SCS - OS/3 System Control Software
- ESS - OS/3 Extended System Software
- RPG II, COBOL, or Basic Assembler Language, if action programs are desired

- ICAM Terminal Support Facility
- DCA Termination Systems or Packet Switched PDN
- Information Management System (IMS) Multithread

HARDWARE REQUIREMENTS

The IMS-DDP transaction facility will operate on any System 80, 90/25, 30, or 40 model and configuration that meets the minimal hardware configuration requirement for that specific model and satisfies the main storage requirements specified in the software release documentation accompanying each release.

Additional main storage and/or peripheral devices may be required, depending upon the user's selection of the system's supported features and size of the user's programs, files, and/or data bases.

SECTION II

CUSTOMER EDUCATION

Sperry Univac makes available customer education related to this Program Product. Course availability and schedules are contained in the published course catalog. Charges for courses are at prevailing rates. Customers should contact their Sperry Univac representative for enrollment procedures.

PROGRAM PRODUCT SUPPORT

Sperry Univac endeavors to correct any significant error in an unaltered current release of the Program Product that the customer brings to the attention of Sperry Univac in accordance with established correction procedures. Sperry Univac does not represent or warrant that all errors will be corrected. This error correction service may result from time to time in update releases that the customer will install. Sperry Univac reserves the right to alter the classification of this Program Product to reflect changes in policy or support requirements.

ORDERING INFORMATION

This Program Product and its associated documentation may be licensed from Sperry Univac at separately stated charges. Upon execution of the appropriate Consolidated Agreement or Supplemental Agreement, the following will be provided:

1. A magnetic tape or diskette(s) in OS/3 Operating System format
2. One copy of the associated documentation