



## *TPF Database Facility (TPFDF)* *Fact Sheet*

### **Introduction**

Empower your databases with optimum performance, enhanced programming productivity, and improved system management with the TPF Database Facility (TPFDF) product.

The TPFDF product is a set of macros, functions, and utilities that provides the application programmer a simplified interface between a database and the software system.

The TPFDF macros and functions allow you to enhance programming productivity and reduce development cycle time so you can develop new application programs efficiently.

TPFDF utilities help you to keep system performance finely tuned by providing the following:

- Ability to capture and restore data
- Validation of long-term records
- Ability to display statistics
- Easier Database maintenance.

The TPFDF product is an IBM licensed program that supports applications in a TPF system or an Airline Control System (ALCS) operating environment.

### **Optimum Performance**

The TPFDF product can optimize application program performance with the most efficient method of interfacing with a database, such as, physical data that is organized to reduce DASD I/Os by:

- Selecting optimum physical record sizes
- Allocating spare space in physical records for adding data.

The database administrator can optimize performance by modifying the database definitions. One central change can improve the performance of many application programs without any program modifications.

### **Enhance Programming Productivity**

The TPFDF product enhances programming productivity by providing a consistent method for designing data layouts and writing application programs to access and read information maintained in the TPF or ALCS database.

Because the TPFDF product uses centralized database handling routines, an application programmer can use the logical relationships of data to code high-level macros.

Also, functions are provided for C language programs to access TPFDF file structures.

### **Consistent Database Organization**

The TPFDF product enforces a standard for database organization. For example, it provides common routines to:

- Find and modify data
- Search, sort, and merge data
- Display data
- Read data from tape.

### **Ease of Migration**

The TPFDF product also enhances programming productivity by allowing for an easy and gradual migration from a non-TPFDF database including:

- Both TPFDF and non-TPFDF files can coexist in the same database
- An application can work with both TPFDF and non-TPFDF files
- TPFDF macros and functions can retrieve and manage non-TPFDF files.

New and existing applications are easily integrated with the TPFDF product. No program modification is needed; for instance, block size changes are transparent to the application.

In contrast, data stored in a non-TPFDF database is not compatible between different applications; for example, block size changes can require modification of each new program that accesses the data.

### **Improved System Management**

The TPF product improves your system management capabilities with its comprehensive utilities and a centralized database structure that can be modified without affecting application programs. The following are some illustrations of improved system management:

- Verification of database integrity
- Optimization of application program performance
- Reduction of the application program enhancement effort
- Simplification of the migration process from a non-TPFDF database to a TPFDF database
- Ease of defining different file characteristics for different subsystems when using the multiple database function (MDBF) of the TPF High Performance Option (HPO) feature.
- Increased database integrity with the use of commit scopes provided by the TPF system transaction manager.

### **Other TPFDF Benefits**

The TPFDF product includes many other benefits and features for your database, such as:

- Easy installation using TPF's System Initialization Package (SIP), or SMP/E in ALCS environments.

- Comprehensive documentation currently available in hard and soft copy formats, as well as being on the TPF Family Libraries Web page at: <http://www.s390.ibm.com/products/tpf/tpfid/tpfpubs.htm>
- Easy implementation of the TPFDF Distributed Data Access feature (TPFDF/ DDA). This optional feature allows data from a TPF database to be propagated to an IBM DATABASE 2™ (DB2®) database using Structured Query Language (SQL) statements. The SQL data can be collected from one or more TPFDF fields in each file. The propagation process is transparent to the TPFDF application program and is defined by the database administrator in centralized database definitions.

### **More About The TPFDF Product**

The TPFDF product is a dynamic and efficient solution that offers an easy and practical approach to your data processing demands. To learn more about how the TPFDF product can help you meet your business needs, please contact your IBM Client Representative or [tpfinfo@us.ibm.com](mailto:tpfinfo@us.ibm.com). Additional information on TPFDF and other TPF products can be found on <http://www.ibm.com/tpf>.



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