# User Guide for DFSORT PTFs UI58435 and UI58461

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+--- DFSORT WEB SITE -------------------------------------------------+
|                                                                     |
| For papers, online books, news, tips, examples and more, visit the DFSORT |
| home page at URL:                                                   |
|                                                                     |
| http://www.ibm.com/storage/dfsort                                   |
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# Abstract

This paper is the documentation for z/OS DFSORT V2R2 PTF **UI58461** and z/OS DFSORT V2R3 PTF **UI58435**, which were first made available in **November, 2018**.

This new enhancement will enable DFSORT to create channel programs that exploit System z High Performance FICON (zHPF) with SORTWORK datasets. This may provide I/O performance improvements without the need for application changes. The function is available on z/OS V2.2 and later via PTFs UI58435 and UI58461 for APAR PI99290.

This paper highlights the new features provided by these PTFs for DFSORT.

# Contents

# User Guide for DFSORT PTFs UI58435 and UI58461

## Introduction

DFSORT is IBM's high performance sort, merge, copy, analysis and reporting product. DFSORT is an optional feature of z/OS.

DFSORT, together with DFSMS and RACF, form the strategic product base for the evolving system-managed storage environment. DFSMS provides vital storage and data management functions. RACF adds security functions. DFSORT adds the ability to do faster and easier sorting, merging, copying, reporting and analysis of your business information, as well as versatile data handling at the record, field and bit level.

DFSORT includes the versatile ICETOOL utility and the high-performance ICEGENER facility.

z/OS DFSORT V2R2 PTF **UI58461** and z/OS DFSORT V2R3 PTF **UI58435**, which were first made available in **November, 2018.** This new enhancement will enable DFSORT to create channel programs that exploit System z High Performance FICON (zHPF) with SORTWORK datasets. This may provide I/O performance improvements without the need for application changes. The function is available on z/OS V2.2 and later via PTFs UI58435 and UI58461 for APAR PI99290.

This paper highlights and describes the performance improvements provided by these PTFs for DFSORT.
You can access all the DFSORT books online by clicking the **Publications** link on the DFSORT home page at URL:
http://www.ibm.com/storage/dfsort

This paper provides the documentation you need to start using the features and messages associated with z/OS DFSORT V2R2 PTF UI58461 or z/OS DFSORT V2R3 PTF UI58435.

## Determining if this PTF is installed

If you see the following in the messages from a DFSORT run:
ICE201I B RECORD TYPE ...
the B indicates you have z/OS DFSORT V2R2 PTF UI58461 or z/OS DFSORT V2R3 PTF UI58435, so you can exploit the new performance improvements described in this paper.

If you do not see ICE201I B, ask your System Programmer to install z/OS DFSORT V2R2 PTF UI58461 or z/OS DFSORT V2R3 PTF UI58435, so you can exploit the new performance improvements.

# Summary of Changes

This new enhancement will enable DFSORT to create channel programs that exploit System z High Performance FICON (zHPF) with SORTWORK datasets. This may provide I/O performance improvements without the need for application changes. The function is available on z/OS V2.2 and later via PTFs UI58435 and UI58461 for APAR PI99290.

# Detailed Description

This white paper item describes the design of the DFSORT component in support of System z High Performance FICON (zHPF) on z/OS for work files.

High Performance FICON for System z (zHPF) is a data transfer protocol that is optionally employed for accessing data from IBM DS8000 storage and other subsystems. High Performance FICON for System z (zHPF) is a System z I/O architecture, whose channel programs allow to reduce elapsed time and increase I/O rates. zHPF will help reduce the infrastructure costs for System z I/O by efficiently utilizing I/O resources so that fewer CHPIDs, fiber, switch ports and control unit ports are required. zHPF also compliments the Extended Address Volumes for System z (EAV) strategy for growth by increasing the I/O rate capability as the volume sizes increase. zHPF support was available in z/OS through use of DFSMS Basic Access Methods (BSAM, QSAM, BPAM) to data sets on zHPF enabled volumes. Next, DFSORT was updated to use zHPF BSAM for SORTIN, SORTOUT, and OUTFIL when zHPF is available, instead of EXCP.

Support for zHPF channel programs using the EXCP access method for sort work data sets in DFSORT is being added with this SPE.

z/OS DFSORT V2R2/V2R3 will execute on any IBM processor that supports z/OS V2R2/V2R3. With the implementation of this support DFSORT V2R2/V2R3 will now be able to exploit the High Performance Ficon (HPF) hardware for DFSORT sort work datasets.

With this support the default will be to favor zHPF EXCP for sort work input and output when they satisfy zHPF requirements and when zHPF is available. No user actions are required to activate this support.