

HP StorageWorks 30ux optical drive and Windows Operating systems



<i>Document Outline</i>	2
<i>Preface</i>	2
<i>Purpose</i>	2
<i>Introduction</i>	2
<i>No native Windows OS support</i>	3
<i>Patch Requirements</i>	3
<i>RSM (Removable Storage Manager)</i>	4

Document Outline

Preface

This document is intended to specifically address usage of the HP StorageWorks 30ux UDO drive on Windows Systems and the usage of the supplied UDF driver. There is however important information which relates to all StorageWorks UDO products (ux series of products).

Purpose

The purpose of this document is to inform users of some of the differences in Ultra Density Optical drives (UDO drives) particularly HP StorageWorks Optical 30ux stand-alone drives and previous HP Magneto Optical drives. Information in this document will also assist users in trouble free operation of UDO devices.

Introduction

The HP UDO drives provide optical storage with a cartridge capacity of 30 G Bytes (15 G Bytes per side).

UDO drives are designed to fit in to the same usage models and applications as previous Magneto Optical drives, furthermore they are designed to have the same level of reliability as well as increased performance and offer a significantly lower cost per gigabyte when compared to previous optical drive technologies.

The most significant difference between prior Magneto Optical drives and UDO drives is an increase in the number of bytes per sector, which have increased from 4K (mx MO drives), to 8K. This increase in density has reached some internal limits of the Windows Operating systems. As a result there is no native device support in any of the Windows Operating systems, and further there are some steps that are required particularly with the 30ux products to obtain trouble free operation.

No native Windows OS support

Previous HP optical drives were able to be accessed in the Windows operating system similar to a standard removable disk. In these cases native disk drivers and file systems (NTFS and FAT32) could be used to store data to the devices. The ux family of optical drives can not be used in the same manner. While they will still be detected by the system and claimed with the disk driver as a removable drive, they can not be formatted using the native NTFS or FAT file systems.

A solution for 30ux customers is the use of a supplied UDF driver. The UDF driver will provide file system functionality to 30ux drives running in Windows operating environments.

It's very important to note that as a result of the internal OS limitations, attempts by the OS to read an 8K sector sized piece of media can result in a "Stop" error and "Blue Screen" of their Windows system. Currently patches are available for Windows 2000 versions, and updates for XP professional and 2003 server are under development.

Patch Requirements

Currently the only Windows based OS that is supported for use with the 30ux and the supplied UDF file system is Windows 2000. The hot fix for this issue is described in Microsoft Knowledge Base Article KB831293. This information can be viewed on the Microsoft support web-site. Although the web page indicates the only work-around as "disconnecting the removable device", there is a patch associated with this issue that solves the problem.

The necessary hot fix should be obtained by installing the current Security Update package, with the first version to include the fix being in update ms04-11. This update is only available for Windows2000 operating system versions at this time, and information will be added as updates become available for other Windows versions.

If you're using a third party application and driver other than the included file system driver you should consult your application vendor as to what Operating Systems they support and their requirements.

Remember that until the hot fix is installed on the system, insertion of media into the UDO drive may result in a system Stop Error and Blue Screen.

RSM (Removable Storage Manager)

RSM is not supported for use with any HP Optical drive products including the 30ux. The use of 30ux products on Windows systems requires that the RSM service is disabled.

□

© 2003 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Itanium is a trademark or registered trademark of Intel Corporation in the U.S. and other countries and is used under license.

XXXX-XXXXEN, 07/2003

