Secure UDF® Specification

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1 Introduction

The OSTA Secure UDF specification defines a set of security enhancements to the OSTA Universal Disk Format (UDF®) specification. The primary goal of OSTA Secure UDF is to provide support for encryption based security features that are transparent to the user and their applications and is portable between different operating system platforms. Secure UDF is designed to:

- Provide an encryption scheme that should work with any application that is storing information on a Secure UDF volume
- Provide a common encryption scheme that all Secure UDF implementations can support.
- Provide a non-proprietary publicly documented method for supporting encryption in Secure UDF.
- Provide a mechanism that allows Secure UDF to take advantage of all the features of Security Enhanced drives.

The following describe the primary reasons that security is needed in UDF:

- *Native operating system security* - Native operating system security is not portable. For example, a UDF volume created under Windows NT with specific NT security rights on specific directories looses all protection if taken to a UNIX platform, which does not support the NT security rights, resulting in everything on the UDF volume being accessible.

- *Removable Media* - Another very important reason is that UDF is used on *removable* media, which can easily be lost or stolen. Removable media greatly increases the need to have some form of portable protection for the information stored on UDF media.

To accomplish this task this document defines a new *Domain*. A domain defines rules and restrictions on the use of ECMA 167. The domain defined in this specification is known as the "OSTA Secure UDF" domain.

To be informed of changes to this document please fill out and return the OSTA Secure UDF Developers Registration Form located in section 7.

The long-term plan for Secure UDF is to integrate it into a future version of the UDF specification as an optional feature. Until that time Secure UDF shall be a separate Domain.