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IEEE Standard for Discovery, Authentication, and Authorization in Host Attachments of Storage Devices

IEEE Computer Society

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Information Assurance Committee

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3 Park Avenue
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USA

IEEE Std 1667™-2015
(Revision of
IEEE Std 1667-2009)

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Approved 3 September 2015
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Abstract: Discovery, authentication, and authorization protocols between hosts and storage devices over multiple transports are defined in this standard. It specifies a new Silo Type Identifier (STID) allocation process that uses the IEEE Registration Authority.

Keywords: authentication, authorization, CF, compactflash, discovery, EMMC, IEEE 1667™, password silo, probe silo, SAS, SATA, SCSI, SCTS, security, SILO, smart card transport silo, STID, storage, TCG storage transport silo, transport independent, trusted computing group, UAS, UFS, USB BOT, USB

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Introduction

This introduction is not part of IEEE Std 1667™-2015, IEEE Standard for Discovery, Authentication, and Authorization in Host Attachments of Storage Devices.

The following are included in this document:

- Front matter
- 12 clauses
- 11 annexes

This is the third published version of IEEE Std 1667, as follows:

- IEEE Std 1667-2006 (superseded by IEEE Std 1667-2009)
- IEEE Std 1667-2009 (superseded by IEEE Std 1667-2015)
- IEEE Std 1667-2015

This standard provides the following:

- Device-type independent protocol for discovering and using multiple interfaces
- Support for multiple applications (silos)
- A mechanism and ground rules for externally defined functional modules

Principal changes from IEEE Std 1667-2009 are as follows:

- Support for the Password, Smart Card Transport, and TCG Storage Transport silos
- Obsoleted support for the Certificate Authentication Silo
- Additional Probe Silo functionality
- General clarifications
- Support for interface transports: Serial ATA, USB BOT, UAS, CompactFlash, *e*•MMC, and UFS.

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1. Overview

1.1 Scope

This standard defines discovery, authentication, and authorization protocols between hosts and storage devices over multiple transports. This standard specifies a new Silo Type Identifier (STID) allocation process that uses the IEEE Registration Authority.

1.2 Purpose

This document does not contain a Purpose statement.

1.3 Conventions

1.3.1 Precedence

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1.3.2 Keywords

1.3.2.1 may

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