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To: T10 Committee (SCSI)

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Subject: Presentation on SCSI Socket/SSL Services

Extract from: T10/97-129r1 - SCSI Socket/SSL Services (SSS) Proposal

## **2. JUSTIFICATION OF PROPOSED STANDARD**

### **2.1 NEEDS:**

The SCSI standard currently does not include a command set to implement a Platform/Device Independent (PDI) SCSI Socket/SSL Services (SSS) interface at the Application Programming Interface (API) level.

When communication devices are accessed at the hardware register level it is impossible to have a secure system due to the problems of cipher key management and promiscuous software.

When communication devices are accessed at the hardware register level portability between platforms is severely limited/complicated by the large quantity of platform/device specific systems software required between the register level hardware and the platform/device independent Socket/SSL Applications Programming Interface (API).

Despite user interest in processor to processor communication via SCSI, there is currently no comprehensive SCSI command set for implementing processor to processor communication via SCSI.

There is no SCSI command set that allows standard socket applications such as e-mail or web browsers to platform/device independently access SCSI devices.

The SCSI Socket/SSL Services (SSS) command set would allow all hard/firm/software to implement a rational and SECURE Socket/SSL system to be physically inside a communication device.

The SSS could also be used for direct processor to processor communication via SCSI.

The SCSI Socket/SSL Services (SSS) command set would allow any real/virtual device to implement any useful Internet Request for Comment (RFC) to provide services such as HTTP, FTP, PING, FINGER, SMTP, POP3, DHCP, TELENET, & others platform/device independently.

### **2.2 RECOMMENDED SCOPE OF STANDARD:**

The SSS standard will:

- a) define a platform and device independent method of communication between processor devices and communication devices or other processor devices.
- b) be optimized for platform/device independence.
- c) provide "hooks" to allow SSS compatible devices to be dynamically integrated into a future platform/device independent File System SCSI command set.
- d) provide other capabilities which fit within the general application scope of the SCSI Socket/SSL Service that may be proposed during the development phase by the participants in the project.

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Diogenes SCSI Magic File Drive Systems Manifesto  
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