ENDL
T E X A S

Date: 5 January 2003
To: T10 Technical Committee
From: Ralph O. Weber
Subject: SAM-3 Glossary Cleanup

Changes are proposed to make the SAM-3 glossary more accurate and useful.

Revision History

r0 Initial proposal

Specific Changes

All proposed changes reference SAM-3 r04.

Change 1 ['service']: Like an 'object', a 'service' is an architectural abstraction. Following the model of the former:

> **3.1.71 object:** An architectural abstraction or container that encapsulates data types, services, or other objects that are related in some way.

Modify the latter as follows:

> **3.1.114 service:** ~~Any~~ An architectural abstraction for an operation or function performed by a SCSI object that is invoked by other SCSI objects.

Change 2 ['service' should be 'process']: In a few instances, the word 'service' is used in a manner that is not consistent with the glossary entry. A suitable replacement for 'service' is 'process' and such a replacement fits traditional SCSI usage.

In 4.5 (SCSI domain), modify the following as shown.

> A SCSI device is an object that originates or ~~services~~ processes SCSI commands. … A SCSI device containing logical units that ~~service~~ process commands is called a SCSI target device and receives commands through a SCSI target port or a SCSI target/initiator port.

In 5.1 (The Execute Command remote procedure), modify the following as shown:

> **Data-Out Buffer:** A buffer containing command specific information to be sent to the logical unit, such as data or parameter lists needed to ~~service~~ process the command. …

In 5.4.2 (Execute Command request/confirmation SCSI transport protocol services), modify the following as shown:

> **Data-Out Buffer:** A buffer containing command specific information to be sent to the logical unit, such as data or parameter lists needed to ~~service~~ process the command (see 5.1). …

Change 3 ['service delivery port']: The SAM-2 changes to support SCSI devices with multiple ports eliminated the concept of a 'service delivery port', but one instance of usage of that term remains. In 4.6.2 (Synchronizing client and server states), modify the last paragraph as shown.

> The model assumes that state synchronization, if required by a SCSI transport protocol standard, is enforced by the service delivery subsystem transparently to the server (i.e., whenever the server invokes a SCSI transport protocol service to return a response as described in 7.10 and 5.4~~,~~. It ~~it~~ is assumed that the SCSI port ~~service delivery port~~ for such a SCSI transport protocol does not return control to the server until the response has been successfully delivered to the SCSI initiator device).

Change 4 [the 'call' architectural abstraction]: The terms 'call', 'procedure call', and 'remote procedure call' are used interchangeably and only 'call' is defined in the glossary. The following changes are needed to cleanup this hodge-podge.

Modify the glossary as follows:

> **~~3.1.9~~ 3.1.x procedure call:** An architectural abstraction having the appearance of a programming language function call that is used to model service interfaces. ~~The act of invoking a procedure.~~

In 4.2 (The SCSI distributed service model), make the following modifications:

> Client-server relationships are not symmetrical. A client may only originate requests for service. A server may only respond to such requests. The client calls the server-resident procedure and waits for completion. From the client's point of view, the behavior of a remote service invoked in this manner is indistinguishable from a ~~conventional~~ local procedure call. …

In 5.1 (The Execute Command remote procedure), make the following modifications:

> **5.1 The Execute Command ~~remote~~ procedure call**
>
> An application client requests the processing of a SCSI command by invoking the SCSI transport protocol services described in 5.4, the collective operation of which is conceptually modeled in the following ~~remote~~ procedure call:

Change 'remote procedure call' to 'procedure call' in the following subclauses:

- 4.2 (The SCSI distributed service model)
- 4.6.1 (The service delivery subsystem object)
- 5.1 (The Execute Command remote procedure)
- 5.4.1 (SCSI transport protocol services in support of Execute Command overview) [twice]
- 5.4.3.1 (Data transfer SCSI transport protocol services introduction)
- 5.8.1 (Unlinked command example)
- 5.8.2 (Linked command example) [twice]
- 6.3.2 (Hard reset)
- 6.3.4 (I_T nexus loss)
- 7.10 (Task management SCSI transport protocol services)

Change 'call' to 'procedure call' in the following subclauses:

- 4.14 (The SCSI model for distributed communications)
- 5.4.2 (Execute Command request/confirmation SCSI transport protocol service) [unless 03-002 is approved before this proposal]

To both make the usage of 'procedure call' consistent and have a common nomenclature between clauses 5 and 7, change 'Function call:' to 'Request' in the following subclauses:

- 7.2 (ABORT TASK)
- 7.3 (ABORT TASK SET)
- 7.4 (CLEAR ACA)
- 7.5 (CLEAR TASK SET)

- 7.6 (LOGICAL UNIT RESET)
- 7.7 (QUERY TASK)
- 7.8 (TARGET RESET)
- 7.9 (WAKEUP)

Change 5 [unused glossary entries]: Remove the following glossary entries for terms that are no longer used in SAM-3:

3.1.32 ended command: A command that has completed or aborted.

3.1.49 implementation option: An option whose actualization within an implementation is at the discretion of the implementor.

3.1.65 logical unit option: An option pertaining to a logical unit, whose actualization is at the discretion of the logical unit implementor.

3.1.72 peer-to-peer protocol service: A service used by an upper level protocol implementation to exchange information with its peer.

3.1.81 protocol option: A function whose definition within a SCSI transport protocol standard is optional.