

Tuesday, May 21, 1996

X3T10.1/96a136r0

Accredited Standards Committee
X3, Information Processing Systems

Doc: X3T10.1/96a136r0
Date: May 1, 1996
Project: X3T10.1 / 1051D
Ref Doc.: SSA-S3P rev 1
Reply to: John Scheible

To: X3T10.1 Membership
From: John Scheible

Subject: SSA-S3P Services Model

BACKGROUND

At the May 1st, 1996 plenary meeting, the X3T10.1 group decided to move alternate path control into the protocol layer (from the transport layer) and the tag value control from the protocol layer into the transport layer.

As a first pass, I included the model section described on the following page into SSA-S3P rev 1. Still to be done is updating Annexes C and D (protocol and transport services models) to reflect this.

PROPOSAL

- 1) Move the conventions clause under Definitions, symbols and abbreviations.
- 2) Add a new section described on the following page under the General clause.

Sincerely,

John Scheible
Voice: (512) 823-8208
FAX: (512) 823-0758
Email: Scheible@vnet.ibm.com

X.2 Model

X.2.1 SAM Services

The SSA-S3P protocol layer maps the SAM Services model with some additional enhancements onto the SSA-TL2 transport layer services (see **Error! Reference source not found.**).

X.2.2 Logical paths

The SSA-S3P protocol layer provides a logical path between the Application Client and the node identified by a Unique ID. This logical path guarantees ordered delivery of tasks. A feature in addition to the SAM Services is the ability of the Application Client to request multiple logical paths and control what tasks use which logical path. If the task uses the Confirmed Status feature, the SSA-S3P layer will automatically redirect all outstanding tasks to use an alternate path (if any exist) in the event of a path failure.

X.2.3 Path control

The SSA-S3P protocol layer controls the use of paths to guarantee a logical path when needed.

X.2.4 Tag control

The SSA-TL2 transport layer controls the allocation of TAG field values. This is required to meet the requirement that TAG field values be unique across all outstanding tasks that use data transfer SMSs for all simultaneous protocol layers being used by the I_Tnexus.

X.2.5 Data Channels

The SSA-TL2 transport layer controls the allocation of data channel for data transfer

X.2.6 Outstanding Commands table and Outstanding Tasks table

The SSA-S3P protocol layer maintains a list of outstanding commands and tasks for the following reasons:

- a) map the appropriate completion SMSs to the task;
- b) transparently handle link failure by redirecting tasks;
- c) provide an interlock for TASK SET FULL, RESERVATION CONFLICT, BUSY and ACA ACTIVE;
- d) and provide a means to emulate Contingent Allegiance.