



Date: March 17, 1994
To: X3T10
From: Jim McGrath (408-894-4504)
Subject: Optional and Mandatory in SAM

Background

SAM is a standard for standards, and yet it is very unclear to me what is mandatory and what is optional within SAM, and whether the referenced item is one within a standard claiming SAM compliance or an implementation of that standard.

Proposal

I therefore suggest the following modifications to SAM (rev 12A):

(new item) Page 12: 2.1.28 implemented: The referenced item from a standard is realized in the actualization of the standard. For standards complying with SAM, an implemented item is an item in SAM realized within that standard. For devices complying with a standard (e.g. products), an implemented item is an item in that standard which is realized within that device.

(new item) Page 13: 2.1.34 item: A feature defined within a standard. The fundamental element for claiming compliance to a standard.

Page 13: 2.1.41 mandatory: The referenced item is required to claim compliance with the specified standard.

page 13: 2.1.44 optional: The referenced item need not be implemented to claim compliance with a specified standard.

(new item) page 13: 2.1.45 option set: A set of referenced items which individually are considered to be optional. If all of the items are implemented, then the option set is implemented. If any item is not implemented, then the option set is not implemented.

A new section should also be created (I suggest section 2.4) as follows:

Grounds for Compliance

SAM consists of a set of items, each of which is clearly noted as being mandatory (either explicitly or implicitly by the use of the word "shall") or optional (either explicitly or implicitly by the use of the word "may"). Optional items may be further grouped into sets of options ("option sets").

All standards claiming compliance with SAM shall implement within the standard all mandatory SAM items. A standard may implement optional SAM items.

All standards claiming compliance with SAM shall in turn consist of a set of items, each of which is clearly noted as being mandatory or optional. Optional items may be grouped together as optional sets. Any implementation claiming compliance with that standard shall implement all mandatory items and may implement any optional items.

Any standard claiming compliance with SAM must provide a facility to allow the determination of whether an implementation of that standard implements specific optional items identified in SAM. This determination shall typically be done during a configuration period.