Project JTC1.22.16: Common Procedure Calling Mechanism Project JTC1.22.17: Common Language-Independent Datatypes

During its meeting in September 1990, SC22/WG11 discussed various documents with comments on documents WG11/N163 (CLID, WD#3) and WG11/N168 (CLIPCM, WD#1). This document contains the responses these comments.

1. Responses to WG11/N197: Comments on CLID WD#3 (Tanner)

- a) It is recognized that examples would be helpful. Please indicate on which topics you think examples are needed, and maybe you even can provide some examples.
- b) No, this is not the intention, but the compliance clauses need some rewording. Specially the *total indirect* compliance needs reworded.

The following text is a proposed rewording of section 5.2:

"An information processing entity which complies indirectly with this International Standard shall provide mappings between its internal datatypes and the CLI datatypes conforming to the specification of clause 10 of this International Standard.

An entity claiming total indirect compliance shall provide an inward and outward mapping for all of the datatypes specified in clause 7 of this International Standard.

An entity claiming total indirect compliance shall specify for which, if any, of the defined-datatypes in Annex B it provides an inward mapping and for which, if any, it provides an outward mapping.

An entity claiming partial indirect compliance shall provide inward and outward mappings for all of the datatypes specified in Annex A of this International Standard.

An entity claiming partial indirect compliance shall specify for which of the datatypes specified in clause 7 and Annex B of this International Standard an inward mapping is provided, for which an outward mapping is provided and for which no mappings are provided."

- c) See also response in WG11/N204.
 - Value-identifier in State and Enumerate is probably not the right terminology: confusion is possible with value declaration (N190, page 41).
- d) See also response in WG11/N204.
 - A number of languages make a difference between the 'single char' datatype and the string datatype of length 1. Mapping standards could have a default character repertoire, but CLID itself could not have a default character repertoire: this would bee too restrictive.
- e) See discussion on Null datatype elsewhere.
- f) See response in WG11/N204.
- g) See response to a). Note that tensor is removed in WD#4.
- h) Done, see annex E of WD#4.
- i) See response in WG11/N204.

Not only LCAS should be considered: also the mapping standards should be taken into account. The problem of determining of the value is more a language issue than a CLID issue.

2. Responses to WG11/N200: Discrepancy in CLID WD#3 (Pickett)

The comment is accepted.

3. SQL related CLID issues from WG11/N196, WG11/N199 and WG11/N204

3.1 N204 issues 1 + 2

Brian Meek to communicate with Ed Barkmeyer directly on these issues.

3.2 SQL Table

Currently in SQL, Table is not regarded as a datatype. SQL has to make up its mind whether Table should be a datatype. Most likely it will not be! Therefore it is not a CLID problem.

3.3 SQL Nu11

During the meeting a slightly different approach was investigated regarding Null and Undefined. It was felt that CLID should describe the association between an object and its datatype. Such an association should include a status indicating the nature of the value of the object. The status should at least allow for Null and Undefined indicators. The mapping standards should handle the various indications. In this way, attributes like Overflow and others could be passed on when needed.

By email, Ed Barkmeyer opposed strongly against this approach. Brian Meek will communicate with Ed Barkmeyer on the subject. Also, the input from others is invited, as per N205.

3.4 Datetime

WD#4 refers to ISO 8601. It should be checked whether this standard uses timezones. And if so, CLID should also use timezones.

WG11 decided that CLID should use the term "resolution" (N204, point 8).

3.5 User-defined types

It can be expected that the SQL UDT will move in the direction of the CLID UDT; specially seeing the timing of the standard (SQL UDT is expected in a standard in 1995).

4. Responses to WG11/N192: Comments on CLIPCM WD#1 (Diamond)

The text of the CLIPCM document has extensively been rewritten for WD#2, and it is felt that all the concerns raised in points 1-5 of N192 are handled.

Currently there is no clear idea on what to do with global data; input at this point is welcomed.

The problem of global data will be one of the issues in the unresolved issues list that will appear in the next version of the CLIPCM document.