MUMPS Development Committee.

Extension to the MDC Standard
Type A Release of the MUMPS Development Committee

Negative Subscripts in Namevalue

September 29, 1996

Produced by the MDC Subcommittee #13
Data Management and Manipulation

Ed de Moel, Chairman
MUMPS Development Committee

Dan Bormann, Chairman
Subcommittee #13

1. Identification of the Proposed Change

1.1 Title

Negative Subscripts in Namevalue

1.2 MDC Proposer and Sponsor

Proposer
SC13 Data Management and Manipulation
Chair: Dan Bormann

Sponsor
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1.3 Motion

None. Final version approved by MDC on September 29, 1996. This document supersedes X11/SC13/96-5.

1.4 History

13 Oct 1996	X11/96-68	Final document.
29 Sep 1996	X11/SC13/96-5	Accepted by MDC, 27:0:0.
20 Mar 1996	X11/SC13/95-28	SC13 accepted as Type A, 16:0:2.
03 Jun 1995	X11/SC13/95-16	Amends the 1994 Canvass Version 1 to permit negative subscripts in namevalue. Sponsored by Frederick Hiltz for MDC/TG17. SC13 accepted as type B, 20:0:4.
28 Jan 1993	X11/93-3	MDC interprets the intent of the 1990 standard to permit negative subscripts in $QUERY. (p JAN93-171).
09 Sep 1992	X11/92-96	NIST requests interpretation of problem ID# 4, "$QUERY Function disregards and changes Negative Numeric Subscript Values." (p NOV92-355).

1.5 Dependencies

This proposal modifies ANSI/MDC X11.1-1995.

Proposals that depend on this proposal: none.

2. Justification of the Proposed Change

2.1 Needs

ANSI/MDC X11.1-1995 specifies that numeric subscripts appearing in a namevalue shall appear as numlit. Because numlit is an unsigned number, this prohibits negative subscripts where namevalue is used, for example in $NAME, $QLENGTH, $QSUBSCRIPT, and $QUERY.

2.2 Existing Practice in Area of the Proposed Change

ANSI/MDC X11.1-1990, clause 2.2.7.13 $QUERY, contains the same specification. All known implementations return negative subscripts in the value of $QUERY.

2.3 Justification

This amendment makes the standard agree with the MDC's intent and with universal practice.

3. Description of the Proposed Change

3.1 General Description of the Proposed Change

The change amends the definition of <u>namevalue</u> to permit negative subscripts.

3.2 Annotated Examples of Use

```
SET REF=$QUERY(^A) WRITE REF
^A(-55.1)
```

3.3 Formalization

Amend ANSI/MDC X11.1–1995, clause 7.1.4.12. Strike the paragraph:

> b) Each subscript whose value has the form of a number as defined in 7.1.4.3 appears as a <u>numlit</u>, spelled as its numeric interpretation.

Replace it with the paragraph:

> b) Each subscript whose value has the form of a number appears as specified in 7.1.4.3.

4. Implementation Effects

4.1 Effect on Existing User Practices and Investments

None. All known implementations follow the MDC's stated intent, permitting negative subscripts in <u>namevalue</u>.

4.2 Effect on Existing Vendor Practices and Investments

None. All known implementations permit negative subscripts where <u>namevalue</u> is specified.

4.3 Techniques and Costs for Compliance Verification

None.

4.4 Legal Considerations

None.

5. Closely Related Standards Activities

5.1 Other X11 Proposals Under Consideration

None.

5.2 Other Related Standards Efforts

None.

5.3 Recommendations for Coordinating Liaison

None.

6. Associated Documents

None.

7. Issues, Pros and Cons, and Discussion

7.1 June 1995 MDC meeting

Pro

1 Answers NIST question (3)

2 Corrects a real error (6)

3 Standardizes existing practice (1)

Con

(Number of citations in the vote.)

7.2 March 1996 MDC meeting

Pro

1 Resolves issues raised by NIST (6)

Con

1 Editing error in placement of Pros/Cons (0)

(Number of citations in the vote.)

7.3 September 1996 MDC meeting

Pro

1 Answers NIST question (10)

Con

(Number of citations in the vote.)