# MUMPS Development Committee

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

## ssvn Collation
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Produced by the MDC Subcommittee #15
Programming Structures

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The reader is hereby notified that the following MDC specification has been approved by the MUMPS Development Committee but that it may be a partial specification that relies on information appearing in many parts of the MDC Standard. This specification is dynamic in nature, and the changes reflected by this approved change may not correspond to the latest specification available.

Because of the evolutionary nature of MDC specifications, the reader is further reminded that changes are likely to occur in the specification released, herein, prior to a complete republication of the MDC Standard.

Anyone reproducing this release is requested to reproduce this introduction.

## 1. Identification

### 1.1 Title:

# ssvn Collation

### 1.2 MDC Proposer and Sponsor:

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### 1.3 Motion:

None (final version of document), superseding X11/SC15/95-13.

### 1.4 History:

| Date | Document | Action | |
|------|----------|--------|---|
| 31 Aug 95 | X11/95-117 | Final publication version | |
| 19 Apr 95 | X11/SC15/95-13 | Proposed as MDC/A | Passed: 28-0-9 |
| 01 Dec 94 | X11/SC15/94-34 | Proposed as SC15/A | Passed: 19-0-3 |
| 20 Apr 94 | X11/SC15/TG13/94-2 | Proposed as SC15/B | Passed: 20-0-5 |
| 01 Oct 93 | X11/SC12/TG4/93-__ | Initial proposal (transferred to SC15/TG13) | |

### 1.5 Dependencies:

No proposals have been identified which depend on this proposal.
No proposals have been identified upon which this proposal depends.

## 2. Justification

### 2.1 Needs

In the draft standard, the $ORDER function describes which collation rule is applied for gvns, and then provides a blanket mechanism for non-gvn collation. ssvns however, are explicitly stated to use a system-wide character set profile and collation algorithm.

### 2.2 Existing Practice

None identified. (A rather new part of the M environment)

## 3. Description

### 3.1 General description

ssvns need to be special-cased in the definition of collation algorithm for use in the CO function presented in the definition of $ORDER.

### 3.2 Annotated Examples of Use

Not applicable; this change defines where the collation sequence for ssvns is found.

### 3.3 Formalization (References are to the x11.1-1994 Canvass Document)

- **In clause 7.1.3.7 (^$SYSTEM) Replace the last paragraph of the section (beginning "This node specifies the charset ...") with the following:**

  This node specifies the charset which the specified system uses for interpretation of all system-wide name values (syntactic elements, e.g. ssvn names, commandwords, svn names, etc). Note that this allows an implementation to provide $Z[*] names, etc which include idents other than those in ASCII/M.

  System Collation Algorithm

      ^$SYSTEM( systemexpr, expr V "COLLATE") = expr V algoref

  This node identifies the collation algorithm which the specified system uses for determining collation order for system syntactic elements.

- **Replace the paragraph and subsequent ordered list in subclause 7.1.5.11 which begins "The ordering sequence is defined ..." with the following (the intent is to special case $Order when used with ssvns, set the order of precedence to be "COLLATE" followed by "CHARACTER"'s collation, and permit easier extension of these paragraphs):**

  The ordering sequence is defined using the *collation algorithm* determined as follows:

  a) If $ORDER refers to a ssvn, then the algorithm is determined by the value of ^$SYSTEM($SYSTEM,"COLLATE"); if that node does not exist, then the value of $GET(^$CHARACTER(^$SYSTEM($SYSTEM,"CHARACTER"),"COLLATE")) is used.

  b) If $ORDER refers to a gvn with name *global* then the algorithm is determined by the value of ^$GLOBAL("*global*","COLLATE"); if that node does not exist, then the value of $GET(^$CHARACTER(^$GLOBAL("*global*","CHARACTER"),"COLLATE")) is used.

  c) If $ORDER does not refer to either of the above, then the algorithm is determined by the value of $GET(^$CHARACTER(^$JOB($JOB,"CHARACTER"),"COLLATE")).

  d) If the resulting algorithm is the empty string, then the *collation algorithm* of the charset M (defined in Annex A) is used.

## 4.  Implementation Effects

### 4.1  Effect on Existing User Practices and Investments

None expected.

### 4.2  Effect on Existing Vendor Practices and Investments

None expected.

### 4.3  Techniques and Costs for Compliance Verification

None identified; possibly not applicable.

### 4.4  Legal Considerations

None identified.

## 5.  Closely Related Standards Activities

### 5.1  Other X11 Proposals Under Consideration

None identified.

### 5.2  Other Related Standards Efforts

None identified.

### 5.3  Recommendations for Coordinating Liaison

X11/TG18                                          ssvn coordination

## 6.  Associated Documents

| | | |
|---|---|---|
| X11/92-48 | MDC/A | Structured System Variables |
| X11/SC12/93-21 | MDC/A | ASCII Character Usage |
| X11/SC12/93-23 | MDC/A | Alternate Collation Sequences |

## 7.  Issues, Pros and Cons, and Discussion

The $ORDER definition clearly was not written with ssvns in mind.  Recent changes to ssvns have left a hole in the definition.  Reading the definition of ^$SYSTEM however, does not clearly state that ssvns use the system charset for determining the collation algorithm.

June 1994  proposed as SC15/B passed: 20-0-5
    Pro: Needed for Internationalization

January 1995     proposed as SC15/A passed 19-0-3
    minutes not available for details

June 1995  proposed as MDC/A passed 28:0:9
    no cons.

## 8.  Glossary

None.

## 9.  Appendix

None.