X11/95-118

MUMPS Development Committee

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

Undefined ssvns

June 4, 1995

Produced by the MDC Subcommittee #15
Programming Structures

Ed de Moel, Chairman
MUMPS Development Committee

Art Smith, Chairman
Subcommittee #15

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.

1. Identification

1.1 Title:

Undefined ssvns

1.2 MDC Proposer and Sponsor:

Proposer:
Ben Bishop
64 Maolis Road
Nahant, MA 01908
aci@shore.net

Sponsor:
SC15/TG13 ssvn Syntax
Alan Frank, Chair
Matchups
alf@world.std.com

1.3 Motion:

None (final version of document), superseding X11/SC15/95-14

1.4 History:

Date	Document	Action	
31 Aug 95	X11/95-118	Final publication version	
19 Apr 95	X11/SC15/95-14	Proposed as MDC/A	Passed: 34-0-3
01 Dec 94	X11/94-35	Proposed as SC15/A	Passed: 20-0-1
20 Apr 94	X11/SC15/TG13/94-3	Proposed as SC15/B	Passed: 22-0-3
09 Sep 93	X11/SC12/TG4/93-4	Initial proposal, transferred to SC15/TG13; not addressed due to time	

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

Through no fault of its own, ssvns became one of the choices in the definition of glvn. However, the subclause 7.2 of the X11.1-1994 Canvass Document defines the ecode content for referencing an undefined lvn, gvn, and even svn, without defining the ecode for referencing an undefined ssvn.

2.2 Existing Practice

To the authors knowledge, there is no existing practice for referencing an undefined node of an ssvn where the semantics have defined that an error is to occur.

3. Description

3.1 General description

An ecode will be assigned to any attempt at referencing a ssvn with an undefined value unless the semantics of such are reference is clearly defined by the specific ssvn.

3.2 Annotated Examples of Use

Referencing an undefined ssvn should result in an error, unless the ssvn semantics are defined not to produce an error, for example:

```
K ^$Window("test","title")
W !,^$Window("test","title")
```

Would normally give an undefined error, unless the definition of ^$WINDOW clearly defines something else should happen (such as providing an empty string value instead).

3.3 Formalization (References are to the X11.1-1994 Canvass Document)

- **In subclause 7.2 Expression tail exprtail, add to the last paragraph (begins "Any attempt to evaluate ...") the following sentence, wherever it is deemed appropriate; in addition, add ssvn to the list of meta-elements in the first sentence (the intent is to add wording for the ssvn undefined condition only):**

A reference to a ssvn with an undefined value, where the semantics of that action is not specified for that specific ssvn, causes an error condition with ecode="M60".

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; although checking the resulting value of $ECODE after referencing a ssvn node which was undefined would seem to be a good first step. Note that there are significant verification issues with ssvns which may be undefined but which are expected to return a value (default values in ^$WINDOW, for example).

4.4 Legal Considerations

None identified.

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

X11/TG18	ssvn coordination

6. Associated Documents

None.

7. Issues, Pros and Cons, and Discussion

References to undefined ssvns should produce some form of 'undefined' error. There are instances where this might not be the desired outcome, but those situations can be addressed through the definition of the individual ssvns which are of interest.

June 1994, Passed as SC15/B: 22-0-3
No cons.

January 1995, Passed as SC15/A: 20-0-1
No cons

June 1995, Passed as MDC/A: 34-0-3
No cons

8. Glossary

None.

9. Appendix

None.