Mumps Development Committee

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

Execution Environment

January 1995

Produced by the MDC Subcommittee #14 Networking and Communications

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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.

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Execution Environment

1. Identification of the Proposed Change

1.1 Title: Execution Environment

1.2 MDC Proposer and Sponsor:

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1.3 Motion:

No motion;

1.4 History:

january 29, 1995	X11/SC14/TG3/95-1	Accepted by MDC as type A
June 19,1994	X11/SC14/TG3/94-4	Accepted as Subcommittee type A
25 February 94	X11/SC14/TG3/94-1	Accepted as Type B 10:0:0
16 December 93	X11/SC14/TG3/93-5	Discussed in MDCC-E. Some editorial correctons and a line added to the end of section 3.3. Motion accepted to support by MDCC-E.
28 August 93	X11/SC14/TG3/93	Proposal completely rewritten according to instructions of SC14/- TG3 and the MDCC-E taskgroup on networking syntax. The MDCC-E taskgroup produced this proposal in August.
Feb 1993	X11/SC14/TG3/93-1	MDCC-E taskgroup produced this proposal in August.

Discussion paper Seattle meeting

Original document from MDCC-E containing all proposals

1.5 Dependencies

This proposal is not dependent on another proposal.

X11/SC7/TG1/89-009

MDCC-E

2. Justification of Proposed Change

2.1 Needs

May 1989

??? 1988 .

In the current MUMPS standard the JOB command can start another process. The standard does not address the issue of the value of \$SYSTEM for the new process and the default environments for ROUTINE, GLOBAL and LOCK. This proposal addresses these issues.

2.2 Existing Practice in the Area of the Proposed Change

Most implementations allow to specify SYSTEM and UCI in a non-standardized way which implicitly determine the ROUTINE, GLOBAL and LOCK environment.

3. Description of Proposed Change

3.1 General description of the Proposed Change

A syntactic element in the JOB argument will be added to specify the execution environment of the the process to be initiated. The default environments for the process initiated by a JOB command are inherited from the parent process. The execution environment specifies the value of \$SYSTEM. If no explicit execution environment is specified in the JOB argument the default execution environment is used. For the default execution environment a new ssyn is defined.

3.2 Annotated Examples of Use

JOB |"MY-WORLD"|^ROU(A,B)::10 JOB |"SYSTEM"|LABEL^ROU

3.3 Formalization

This proposal modifies canvass version 1.

Add to the table in section 5: <u>VB</u> vertical bar

Change the sentence below the table in section 5. :

The following visible representations of ASCII characters required in the defined syntactic objects are used: $\underline{SP}(\text{space})$, $\underline{CR}(\text{Carriage-return})$, $\underline{LF}(\text{Line-feed})$, $\underline{FF}(\text{form-feed})$ and $\underline{VB}(\text{vertical bar})$.

Change in all sections the meta language construct:

lenvironmentl to: VB environment VB

Replace in section 5.2.10 the meta language part the definition for jobargument by:

[jobenv] entryref [: jobparameters]			
jobargument	::=	[jobenv] labelref actuallist [: jobparameters]	
@ expratom V L jobargument			

jobenv ::= <u>VB environment VB</u>

At at the end of the descriptive part:

If <u>jobenv</u> is explicitly specified, the JOB command attempts to initiate this process in the environment specified by <u>jobenv</u>. Reference to a non-existent <u>jobenv</u> causes an error condition with an <u>ecode</u>= "M26" If <u>jobenv</u> is not explicitly specified, than the value of ^\$JOB(\$JOB,"JOB") is used.

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7.1.3.9 replace fourth paragraph by:

When a process starts, the values of these ssvns are in general defined by the implementation. However a process initiated by a JOB command inherits the default environments of the initiating process, unless explicitly specified in the jobargument.

Add to section 4.1.xx.9 ssvns specifying default environments: ^\$JOB(processid ,"JOB") default JOB environment

4. Implementation Effects

4.1 Effect on Existing User Practices and Investments

The functionality introduced by this change to the language was not previously available.

4.2 Effect of Existing Vendor Practices and Investment

The syntax chosen is the same as used for ROUTINE, GLOBAL and LOCK. The vertical bar syntax allows vendors to specify the currently used syntax as the environment specification.

4.3 Techniques and Costs for Compliance Verification

4.4 Legal Considerations

No legal considerations.

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

8. Glossarv

job environment The value of \$SYSTEM for the the process to be initiated by the JOB command.