
Sophia Antipolis, 98.10.20 – 98.10.23

Question: 9 (MSC)

SOURCE: RAPPORTEUR

TITLE: CORRECTION OF GRAMMAR FOR SUBST

Contact: Jan Docekal, Telelogic AB, jan.docekal@telelogic.com

Abstract

The grammar for **subst** is ambiguous.

Problem

The grammar was extended so that substitutions would also be possible for conditions, timers and message parameters. This made the grammar ambiguous.

Solution

Revert to the original MSC'96 grammar for **subst**..

Rationale

The **subst** mechanism is not as flexible as it should be. To avoid problems with “forward” compatibility the corrections should be as simple as possible. When MSC get a data concept, we will be able to specify the **subst** mechanism.

Currently there is a problem with the **subst** mechanisms. Suppose you have an MSC A that has messages m, n and o all sent from instance j to k. MSC A is referred in MSC B as A subst o, p. Suppose that we now rewrite MSC A so by replacing message o by an MSC reference that send message o from instance j to k. We refer to this new MSC as A' (but its name is still A). Now the old MSC A and the new MSC A' still describes the same trace. MSC B, which now refers to MSC A' however does *no longer* describe the same trace as it did when referring to MSC A. Apart from the current problems of making substitutions in MSC's efficiently (by typing little text), this problem should be taken into account when specifying how substitutions should really be treated.