

## TPT Severe Issues

### Introduction

=====

The following document contains a list of known severe issues of TPT. By severe issues we mean issues/bugs in particular versions of TPT that:

1. might cause malfunctions in the behavior of TPT
2. are hard or even impossible to find by the TPT user herself/himself
3. cause the risk that bugs/defects in a SUT (system under test) are not detected by TPT in cases where TPT would have been able to reveal these bugs/defects in the SUT without the aforementioned malfunction in the behavior of TPT.

Usually these severe issues address the situations where the problem might appear and have well-defined workarounds.

### ISSUE # 31722

=====

#### TITLE:

If a test case containing a "Wait for Value" step with the „with assessment“-option being set or a "Compare" step is executed with the FUSION platform with real-time option, it can happen that the assessment fails although the "Wait for Value" step was executed properly or that the "Compare" step is not calculated at all. Using FUSION with real-time behavior and test cases that contain "Wait for value" steps with the „with assessment“-option might fail during assessment even if the step has been executed successfully.

#### ISSUE DETECTION:

17-September-2021

#### AFFECTED VERSIONS OF TPT:

TPT 16, TPT16u1, TPT16u2, TPT 17

#### PRECONDITIONS:

- FUSION platform in use (or derived platforms that base on FUSION under the hood)
- Real-time node in use
- Test case contains step lists with either "Wait for Value" steps (with "with assessment" option being set) or "Compare steps" with a duration of just one sample.

#### DETAILS:

If a test case containing a "Wait for Value" step with the „with assessment“-option being set or a "Compare" step is executed with the FUSION platform with real-time option, it can happen that the assessment fails although the

“Wait for Value” step was executed properly or that the “Compare” step is not calculated at all.

The problem occurs if the duration of the underlying "Wait for value"/“Compare” step is shorter than one sample in "step size" (in terms of real-time).

#### EFFECT OF THE ISSUE:

The problem appears sporadically.

The TPT assessment dejitters all real-time test data before running the assessment. The sample rate for dejittering is the configured sample rate of the FUSION platform. If a sample is shorter (in real-time) than

"step size", the sample will be omitted caused by the dejitter undersampling.

Thus, the assessment does not see

the step being performed in the first place. The fix now that TPT will handle samples that are important for

such "Wait for value" / “Compare” steps for later assessment in a special manner to avoid being omitted while dejittering.

The bug does NOT affect the test execution itself, but the assessment only.

#### WORKAROUND:

Set the “Maximum increase in percent of one simulation step” Option in FUSION Real-time node config to “0%”.

However, since this setting makes the problem occur less often, but cannot avoid it 100%, it is best to apply the update to TPT16u3 or TPT17u1.

#### RESOLVED IN:

TPT 16u3, TPT 17u1