

## TPT Severe Issues

### Introduction

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

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#### TITLE:

TPT-VMAPI corrupts values at runtime for array input or read/write output channels that have a specified dimension in TPT less than the specified dimension in the SUT(C code).

#### ISSUE DETECTION:

11-Jun-18

#### AFFECTED VERSIONS OF TPT:

TPT 8 - TPT 12

#### PRECONDITIONS:

- Test execution by means of EXE-platform, CANoe-platform, ASCET-platform (excluding ASCET@FUSION), C-code-platform.
- Test model contains array channels (including struct channels containing arrays or array channels containing structs) that are configured as input channels.
- The dimension of these array input channels in TPT is smaller than the dimension in the SUT.

#### DETAILS:

Assume that the test model uses the feature of TPT which allows the dimension of array channels in TPT (logical dim) to be smaller than the dimension in the SUT (physical dim). If one or many of such the array channels are read from the SUT to TPT per test cycles (periodically) during test execution TPT potentially corrupts some \*other\* channels/parameter values at runtime. For each test model the number of affected channels/parameters is fixed, but unpredictable.

#### EFFECT OF THE ISSUE:

Channels and/or parameters can be corrupted at runtime under the specified preconditions. The signals recorded for these channels/parameters in the TPTBIN file are corrupted afterwards and the subsequent assessment will analyze the results based on these potentially corrupted data.

#### WORKAROUND:

Regenerate the testframe.c testdriver to ensure that the dimension of signals in TPT matches the dimension of signals in the SUT.

#### RESOLVED IN:

TPT11u3, TPT12u2