



TAM API

Release Notes

This document describes the evolution of the Triamec Advanced Motion application programming interface as a log of notable changes.

There is a similar document, the TAM System Explorer release notes [1], documenting changes relevant for the respective application. Most of the changes to the TAM System Explorer do also affect the API, so these are not repeated in this document.

The release notes for the Tama compiler are maintained separately in the Tama compiler user guide [3].

The API is deployed in the form of different NuGet packages described in the developer manual [2].

Sometimes, a regression is described using a reference to the breaking release. That version is a package version if not otherwise noted.

Deprecation Policy

When an API is changed breaking backwards compatibility, a deprecation hint is provided whenever possible during compilation, or at runtime when called from 3d-party languages like for example Python.

These deprecation attributes are maintained for at least one year, but are dropped eventually. Therefore, in order to update from a years old code base, please consider doing this in several version steps.

Document SWNET_TamApiReleaseNotes_EP
Version 7.19.0, 2022-06-08
Source Q:\drive\sw\doc\tamssoftware\
Destination T:\doc\Software
Owner chm

www.triamec.com



TAM Software 7.19.0

Improves usability.

Release date: 8.6.2022

Triamec.Tam.Core 13.0.0

Changes

- Don't longer pass a name when constructing a `TamTopology`. The previous overload stays accessible, but is hidden from Intellisense and documentation.
- When an instance in the topology is disposed due to surprise removal, accessing members which previously threw an `System.ObjectDisposedException` now throw an `Triamec.Tam.TimeoutException` with its `InnerException` set to `System.ObjectDisposedException`.

Triamec.Tam.TriaLink 7.15.0, Triamec.Tam.EtherCAT 7.15.0

Feature

- Extension method
`TamTopology.ScanNetworkInterfaces(params string[] networkInterfaceNames) : TamAdapter[]`
allows to get hold onto all Triamec devices attached to the specified network interface cards (NIC). Not passing any name results in a scan on all available NICs.

Change

- Network access is now implemented in the new `TriaLink.ETH` library. Ensure to update your deployment accordingly.

TAM Software 7.18.0

Improves usability.

Release date: 29.3.2022

Triamec.Tam.Core 12.0.5

Changes

- When calling one of the `Wait` methods of `TamRequest` while inside of a `ITamRequestDestination.Transition` event handler, instead of dead-locking, the request is now immediately terminated with a value `WaitedForInHandler`.
- When a request is created while `ITamDevice.StateObserverCount` is 0, the `TamRequest` is immediately set terminated. The respective `TamRequest.Termination` value has been renamed from `Unknown` to `NotObserved`.



TAM Software 7.17.1

Improves usability.

Release date: 14.12.2021

Triamec.Tam.Core 12.0.3

Change

- Reduced lock contention in the `ITamRequestDestination.Transition` handler calling code. This circumvents a dead-lock scenario in user code.

TAM Software 7.17.0

Introduces new elements in the Axis Monitor.

Release date: 22.11.2021

Change

- The NuGet packages are no longer bundled with the setup, but provided with [nuget.org](https://www.nuget.org).

Triamec.Tam.Core 12.0.2

Bug

- Fixes a regression as of 12.0.0 when acquiring only 32-bit of a 40-bit register.

Samples

Bug

- Fixes a regression in the Tama project template as of 7.16.1 where the build failed with a missing `TamaCompilerOutput` task. This was due to an erroneous setting of the `TriamecTamaCompilerPath` property in the project file.

TAM Software 7.16.1

This release contains bug fixes.

Release date: 20.9.2021

Triamec.Tam.Core 12.0.0

Bug

- Restores compatibility with Visual Studio 2015 lost in 10.1.2.

TAM Software 7.16.0

This release features handling of a new kind of data logging files, that is, dump files produced by recent firmware.



This release also improves usability and fixes some notable issues.

Release date: 15.6.2021

Triamec.Tam.UI 7.13.0

Change

- Removed the `autoComplete` parameter from configuration dialog APIs, using `true` implicitly.

Triamec.Tam.Core 11.4.0

Feature

- API in `Triamec.Tam.Acquisitions` to process `.TAMdump` dump files produced by recent firmware: `DumpVariable`, `DumpFile` and related classes;
`ITamReadOnlyRegister<T>.CreateVariable(DumpSignal)`.
- `Triamec.Tam.Registers.EtherCatTimeRegisterValueConverter.DeserializeEtherCatTime` static method to convert the `General.Signals.GlobalTime` register to a `DateTime` value.
- It's now possible to create a register layout representation without a device:
`LayoutManager.Instance.GetRegisterLayoutFactory(rlid: 19)`
`.CreateRegisterLayout(device: null)`

Note however, that any attempt to use functionality which needs a device results in undefined behavior.

Bug

- `ITamDevice.SetReadyToSwitchOn` now throws a `TamException` if the device is in state `NotReadyToSwitchOn`. Previously, the method returned without action in that case.



TAM Software 7.15.0

This release supports file system tables, a new firmware feature introduced with firmware release 4.11.x.

The software was backported to .NET framework 4.6.2, which should help out some customers to run applications on some older Beckhoff IPCs running Windows Enterprise 2016.

There were quite some bug fixes stemming from the analysis of crashes reported with the telemetry feature introduced with TAM SDK 7.14.1.

We decided to rename the installer from *TAM SDK* to *TAM Software*, since software development is not its main use case.

Release date: 25.3.2021

Triamec.Tam.Core 11.3.3

Change

- The `TamRequest.WaitForSuccess` and `WaitForSuccessAsync` methods are defined directly in the class. Previously, they were extension methods.

TAM SDK 7.14.1

This is the first version we deploy a component with the TAM System Explorer gathering anonymous usage and crash data. The libraries coming with the NuGet package don't have this functionality enabled, though.

Release date: 15.12.2020

Triamec.Common 7.3.1

Change

- Maintain commissioning tool of a workspace based on path instead of a version, supporting non-install scenarios.



TAM SDK 7.14.0

This release addresses an issue where not all required content of various NuGet packages was available at runtime for some project types.

Release date: 12.11.2020

Triamec.Tam.Core 11.3.0

Features

- Extension methods `TamRequest.WaitForSuccess` and `WaitForSuccessAsync` which simplifies request handling.
- `TamAxis.ControlSystemTreatment` property to control and monitor whether the control system is overridden.

Bug fix

- Allow to set up the limit torque flag for scheduled moves by means of a new `IssueMoveScheduleEntry` constructor.

Previous Releases

A textual change log of previous releases is deployed with the documentation [4].

References

- [1] "TAM System Explorer release notes",
`SWNET_TamSystemExplorerReleaseNotes-7.19.0_EP001.pdf`, Triamec Motion AG, 2022
- [2] "TAM API Developer Manual", chapter 2.2: NuGet Distribution,
`SWNET_TamApiDeveloperManual_EP037.pdf`, Triamec Motion AG, 2021
- [3] "Tama Compiler User Guide", chapter 6: Change History,
`SWTAMA_CompilerUserGuide_EP032.pdf`, Triamec Motion AG, 2022
- [4] "TAM API 7.13.1 release notes",
`SWNET_TamApiReleaseNotes-7.13.1_EP001.txt`, Triamec Motion AG, 2020



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