Data Flow Controller DX-series

Practices Guide

SynapseSync Schedule

DX100-□□□□

V311-E1-01

Revision History

Version	Revised content	Date
Version 1.0	Original production	March 20, 2025
Version 2.0	Made corrections due to package support.	September 17, 2025
Version 2.1.0	Added support for English UI display.	March 31, 2026

CONTENTS

1.About the SynapseSync Schedule Package

1.1.Overview

This package provides additional custom components that run with SpeeDBee Synapse (hereinafter referred to as Synapse).

When the package is registered, two components are added: Schedule Trigger and Interval Trigger.

Schedule Trigger: Outputs the value that the user sets at the time of the days of the week that the user sets.

Interval Trigger: Alternately outputs the values (0 or 1) specified by the system within the period of time that the user sets.

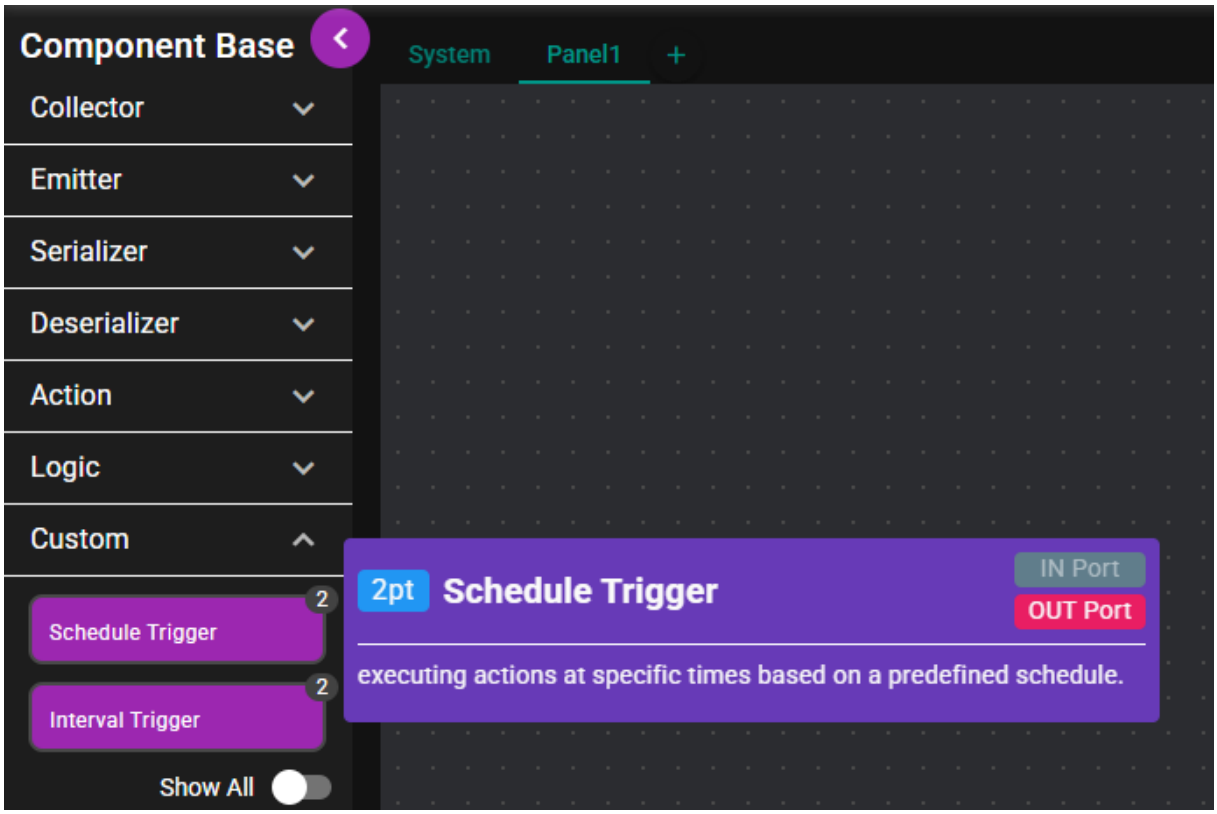
1.2.Basic Information About the Package

The component package provided is as follows.

Package file name (*1)	synapsesync_schedule.sccpkg
Operating environment	Platforms on which Synapse 4.9.5 or later is running
Components to be registered	Schedule Trigger, Interval Trigger (*2)

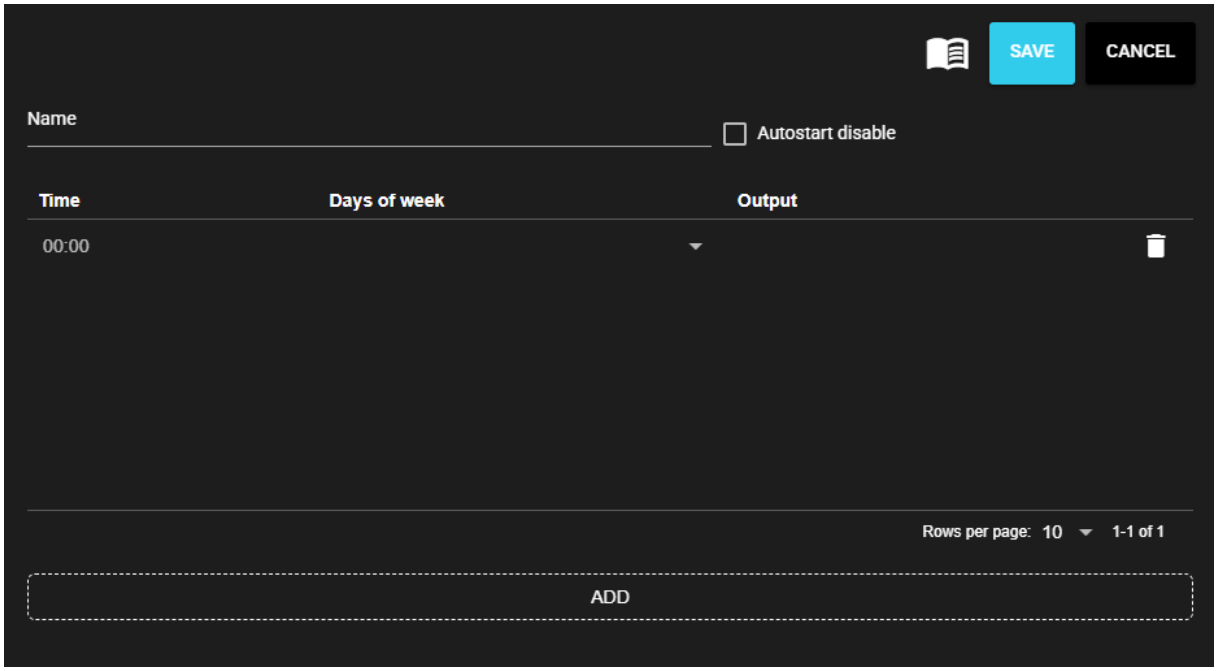
*1 Refer to *6.2.6.4 Registering SCCPKG File in and Deleting SCCPKG File from Synapse in the DX-series SpeeDBee Synapse User's Manual (Cat. No. V243)* for information on registering the package.

*2 If you add these custom components, they will be added under the *Custom* category.



1.3.Setting Screens

1.3.1.Schedule Trigger



Item	Specification	Description
Time	Input	Time hh:mm
Days of week	Select	Days of week
Output	Input	Value
Delete button	Click	Deletion of an input data field
ADD button	Click	Addition of an input data field

The value that the user sets is output at the time of the day of the week that the user sets.
This component is designed on the assumption that this is used with other components such as Component Controller.

- Image

Schedule Trigger making an output according to the set time

+

Component Controller triggering an action according to the given output

⇩

The action can be executed according to the time

- Caution

  You can make multiple schedule settings by adding them, but you cannot have conflicting time and days of the week.

  ➢ Example

Time	Days of week	Output	Judgment
12:00	Mon	0	✓
12:00	Mon, Tue	1	✗
13:00	Mon, Tue	1	✓

1.3.2.Interval Trigger

Item	Specification	Description
Start Time	Input	00:00:00
End Time	Input	23:59:59
ON Time	Input	1800
OFF Time	Input	1800
Information	Display	ON Time: The period of time from when 1 is output until 0 is output next OFF Time: The period of time from when 0 is output until 1 is output next * The ON and OFF Times are repeated alternately.

The values (0 or 1) specified by the system are output alternately within the period of time that the user sets. This component is designed on the assumption that this is used with other components such as Component Controller.

- Image

Interval Trigger making outputs according to the set interval + *Component Controller* triggering actions according to the given outputs ⇩ The actions that can be executed according to the interval

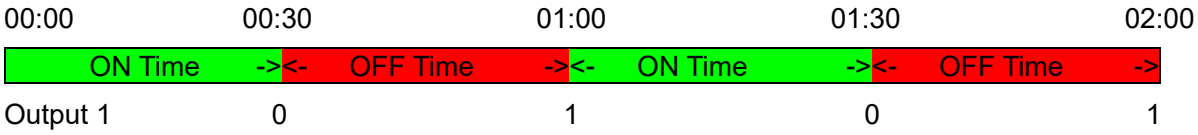
- Usage example

  The repetition of *an action executed for 45 minutes and a rest taken for 15 minutes*, and other similar usage cases are assumed.

- Caution

  (1) The OFF Time starts after the ON Time passes.

  Example:
  Start Time: 00:00:00
  ON Time: 30 (sec)
  OFF Time: 30 (sec)



  (2) The ON and OFF Times are determined based on the Start Time, rather than the startup time.
  In the above example, thus, the output starts from 1 rather than 0 if the component starts up in the period of 00:30 to 01:00.

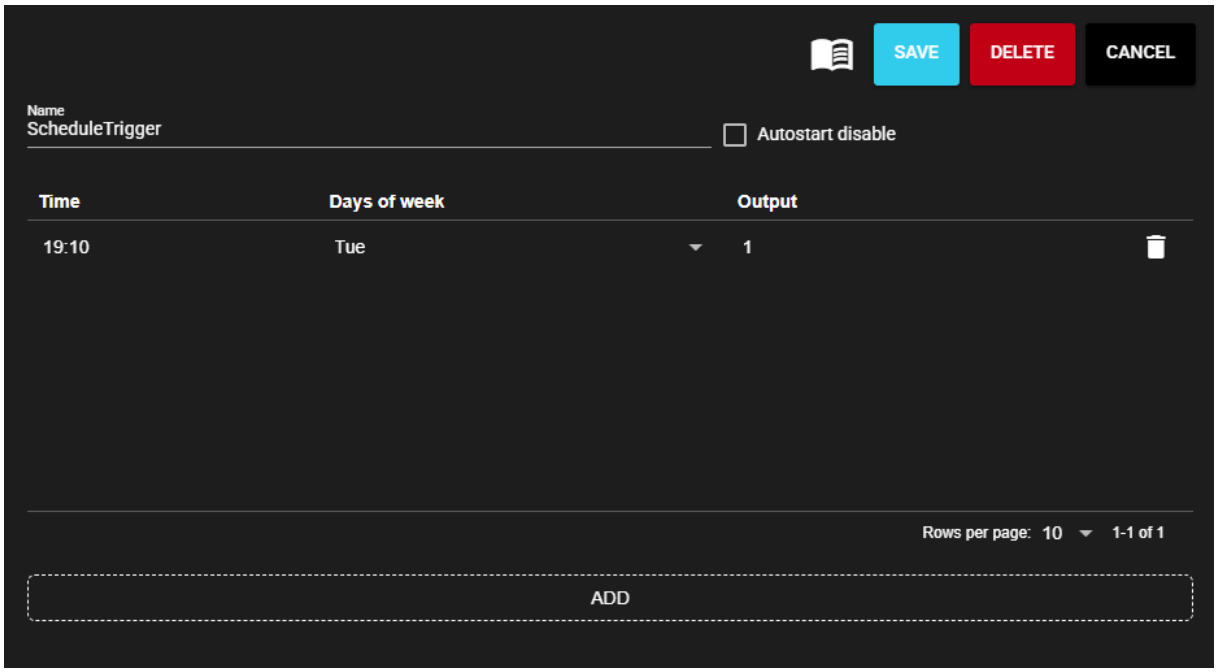
  (3) An action cannot be executed over two days.
  Example: Start Time: 23:59:59, End Time: 00:00:01

2.How to Use These Components

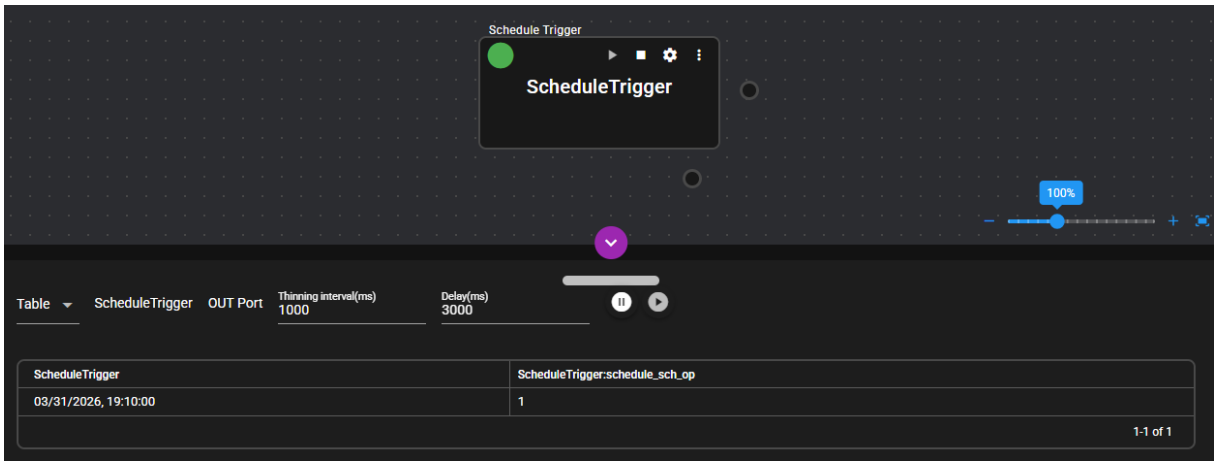
2.1.Schedule Trigger

2.1.1.Setting

Make a setting for a single data output to check it.



2.1.2.Component Execution

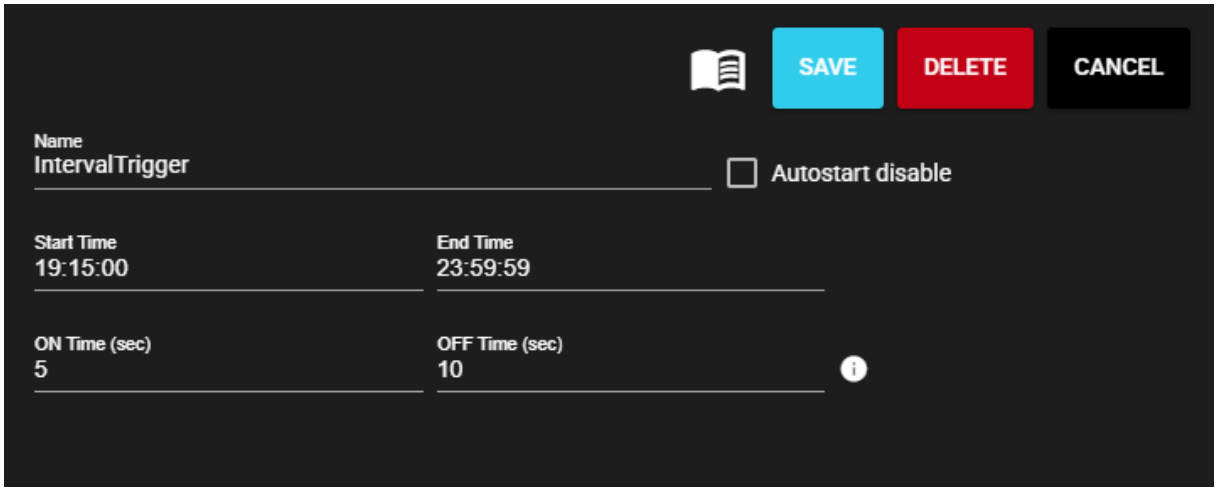


Because the set value is output at the set time, you can confirm that the setting is correctly executed.

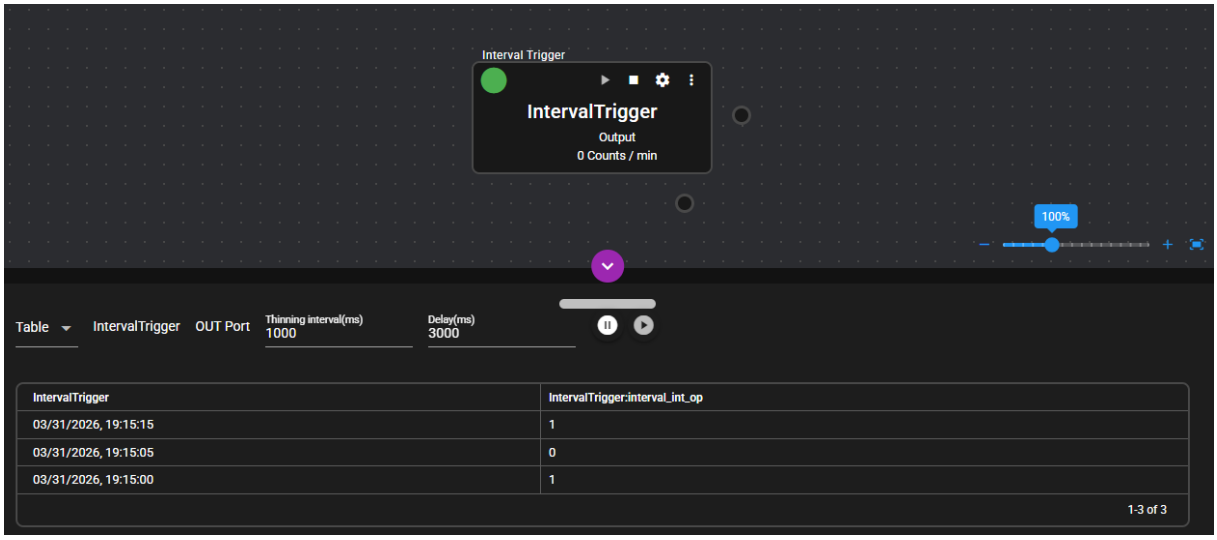
2.2.Interval Trigger

2.2.1.Setting

Make a setting for a single data output to check it.



2.2.2.Component Execution



Because 1 is output at the start time and 0 is output five seconds later, you can confirm that the setting is correctly executed.

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Tutorial Video

https://www.fa.omron.co.jp/dx1/video-manual/en/

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