SIEMENS

Insights Hub

Factory Twin

System Manual

03/2024

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Siemens AG
Digital Industries
Postfach 48 48
90026 NÜRNBERG
GERMANY

3/2024 Subject to change

Table of contents

1 Introduction

1.1 Introduction

The Factory Twin application helps to define and manage the mappings between physical assets and virtual model representations.
It enables the physical and virtual model mapping and connection to different enterprise applications with the platform, by using a connector. The enterprise application capabilities can be exposed as services, which another application can consume. It also allows you to configure the model for simulation and run it using operational data of an asset. This application provides a secure communication channel between the platform and enterprise applications.
The data collected using the MindConnect portfolio can be brought in the virtual world in a controlled and contextualized manner. This application provides connectivity and service using which, you can build closed loop applications that can run simulation models with the existing simulation tools.
This application provides standard interfaces to collect the time series, events information, etc. from Insights Hub and send it to a variety of Product Lifecycle Management (PLM) objects for modelling, simulating, analyzing, visualizing and optimizing the systems, processes and operations. The PLM objects includes simulation and Computer Aided Engineering (CAE) model.

Overview

Factory Twin enables a cross domain view of the operations of a business including production, processes and overall plant/product performance. This view combined with information from upstream design, planning, developing applications, systems and processes and provides a holistic view of a product or an asset.
By comparing what happens in the real world and what is designed in representations of the real world, engineers can gain insights to improve the product's design, production and operation. This enables engineers to analyze the status of the designed products.
The Factory Twin and the other applications enable you to build the key Digital Twin connection between the physical model and the corresponding virtual model through the complete product development life cycle by exchange of time series data.
The Factory Twin application has the following features:

- Easily connect the production facility’s IoT data with its simulation model and visualize it in action in 3D

- Perform production replay by channeling IoT data to the simulation model. Use all existing Technomatix Plant Simulation™ libraries as diagnostic tools.
- Map IoT data to simulation parameters for easy bi-directional data exchange between Insights Hub and simulation model.
- Transform IoT data using unique and reusable transformation recipes to calculate machine KPIs
- Perform What-IF analysis by building different recipe configurations
- Calculate machine KPIs and other important metrics like MTTR, MTBF, etc.
- Calculate distribution characteristics (probability distribution) of machine KPIs for accurate simulation modelling. Identify the best fitting distribution.
- Schedule recurring headless simulations and automatically imports result back in Insights Hub

The Factory Twin application has the following benefits:

- Perform production replay in 3D for granular insights into shop floor
- Manage Bottlenecks, maximize resource utilization
- Achieve sustainability demands. Reduce energy usage and costs
- Increase production throughput of the plant. Reduce time to value
- Perform What-if Analysis. Validate new machine/line, reuse production system across product generations
- Achieve predictable launches. Predict production capacity.

Purchase Factory Twin

You can use the Factory Twin application by purchasing the following offering:

- Insights Hub Premium Capability Package

User Interface and User Rights

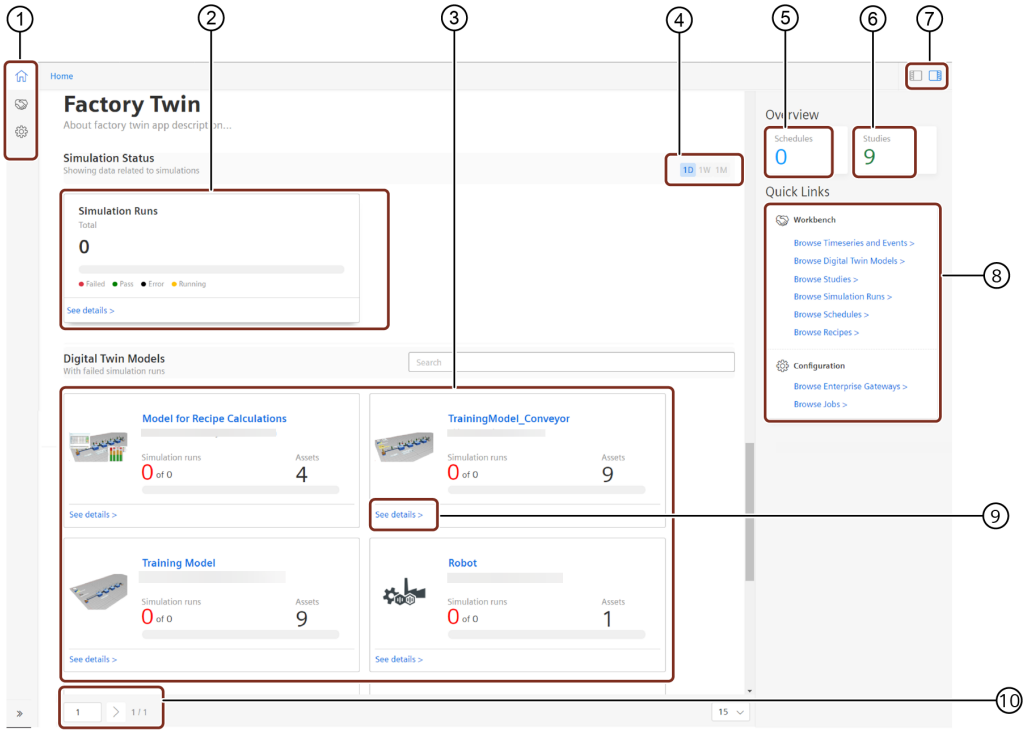
2

2.1 User Interface and User Rights

User interface "Home"

The "Home" screen in "Factory Twin" application displays the Simulation Status, total Simulation runs, available Digital Twin Models, Schedules and Study details.

The following graphic shows the "Home" screen:



① Left navigation

② Displays the total number of simulation runs and the different status

③ Displays the available Digital Twin Models

④ Selection of day, week and month

⑤ Displays the schedule details

⑥ Displays the Study details

⑦ Show/hide the right navigation

⑧ Quick links for Workbench and Configuration details

⑨ Navigates to that Digital Twin Model

⑩ Pagination to view the next/previous pages

User rights

The user rights depend on the following user roles:

- Admin
- User

The following table gives an overview of the permissions for different user roles:

Rights	Admin	User
View Timeseries and Events	✓	
Create Simulation Runs	✓	
Create Digitial Twin Models	✓	
Edit Digital Twin Models	✓	
Delete Digital Twin Models	✓	
Create Digital Twin Instance	✓	
Edit Digital Twin Instance	✓	
Delete Digital Twin Instance	✓	
Create Study	✓	
Delete Study	✓	
Create a new run	✓	✓
Delete simulation run	✓	✓
Create a recipe	✓	
Edit a recipe	✓	
Delete a recipe	✓	
Create Enterprise Gateway	✓	
Edit Enterprise Gateway	✓	
Delete Enterprise Gateway	✓	

Rights	Admin	User
View Enterprise Gateway details	✓	✓
View Job Monitoring details	✓	✓
Delete completed jobs	✓	

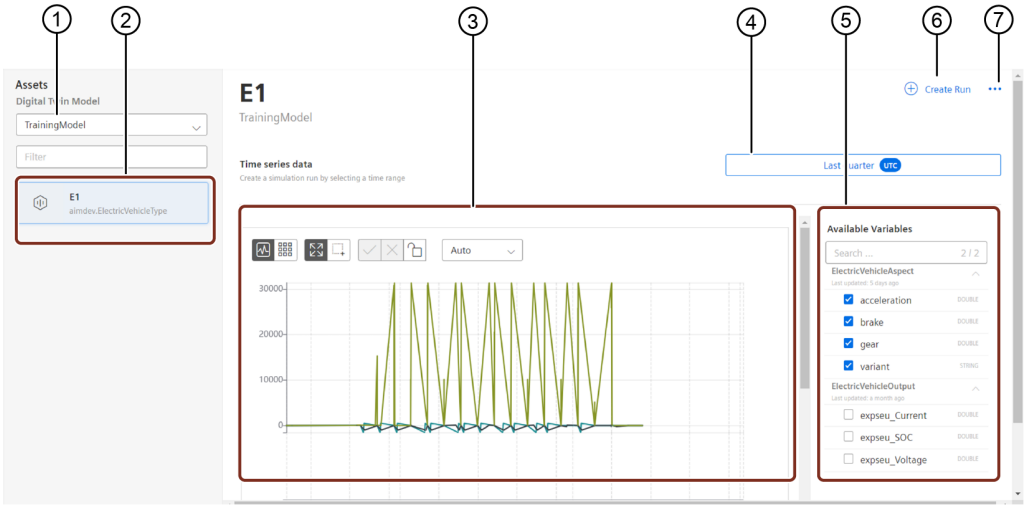
Using "Workbench" 3

3.1 Viewing Timeseries and Events

For any asset configured for a specific Digital Twin Model, the timeseries data can be viewed in "Workbench" in the "Assets" tab.

User interface

The user interface of "Assets" is as shown below:



① Displays the available Digital Twin Models
② Displays the configured assets for the selected Digital Twin Model
③ Displays the timeseries and events data
④ Date and time picker to select the timerange
⑤ Available variables
⑥ Creates a new run
⑦ Creates a batch simulation

Viewing timeseries data and event details

To view timeseries data and event details for a specific time range, proceed with the following steps:

1. In "Factory Twin", select "Workbench" from the left navigation and click "Assets".

2. Select the required Digital Twin Model from the drop-down.

3. Click on any configured asset for that Digital Twin Model.

4. Select the required date range from the date picker, and enter the time in "Add time" field.
The date range can be selected either by manually selecting the dates in the "Absolute" menu, or by selecting the available date range from "Quick range". The following ranges are available:

- Last 60 minutes
- Last 24 hours
- Last 7 days
- Last 30 days
- Last 90 days
- Today
- Yesterday
- Last week
- Last month
- Last quarter

5. Select the variables from "Available Variables" section.

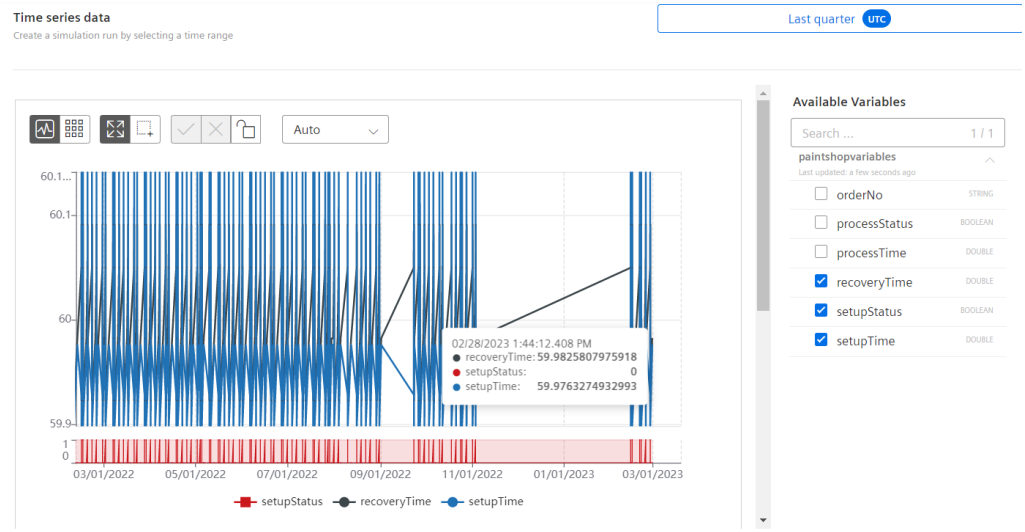
6. Once the data is visible in the chart, you can perform any of the following actions by using the icons available to the right of the graph:

-  - Display the results as chart
-  - Display the results as a table
- - Move the selected time range by dragging over the chart
- - Select a different time range by dragging over the chart
- - Apply the selected time range
- - Reset the selected events from chart
-  - Reset the selected time range from chart

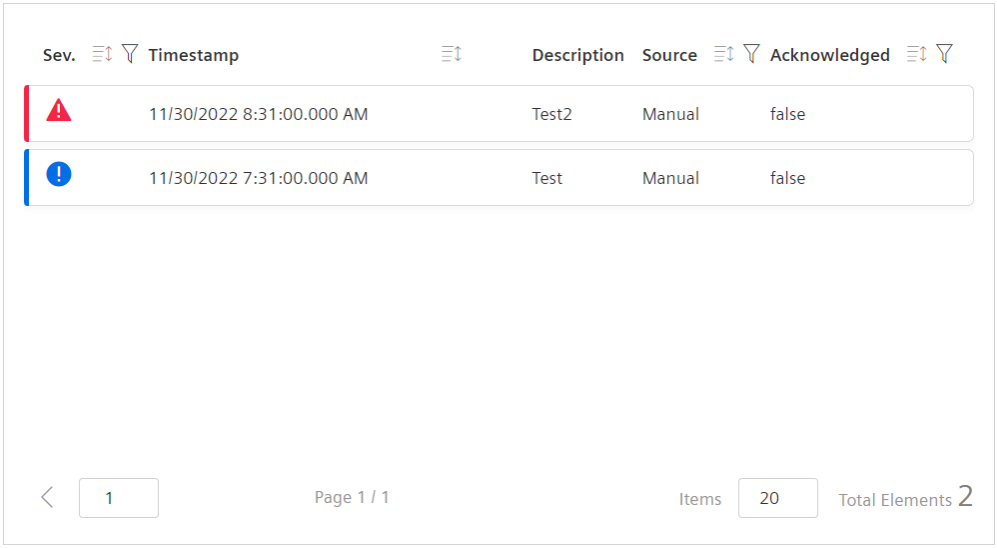
Select the type of data to be displayed from the drop-down: Auto, Raw or Aggregates.
In addition, the events for the selected time period is also displayed below the graph. On clicking a specific event, the runs information is displayed. Also, the selected event is depicted in the graph.
You can create a new run by clicking "Create Run". For more information on creating a new run, refer the chapter Creating and viewing a Simulation Run.

Result

- The data is displayed for the specific asset for the required selected date range.



- The events and the event details for the selected event are displayed for the selected time range.



3.2 Creating a Batch Simulation

Batch Simulation creates schedule to run simulations periodically using the Timeseries data for the digital twin models.

The following steps describe the procedure to create a batch simulation:

1. In the "Factory Twin" application, click "Workbench" from the left navigation and select "Assets".

2. Select the required "Digital Twin Model" from the drop-down.

3. Click the ··· icon and click "Batch Simulation".

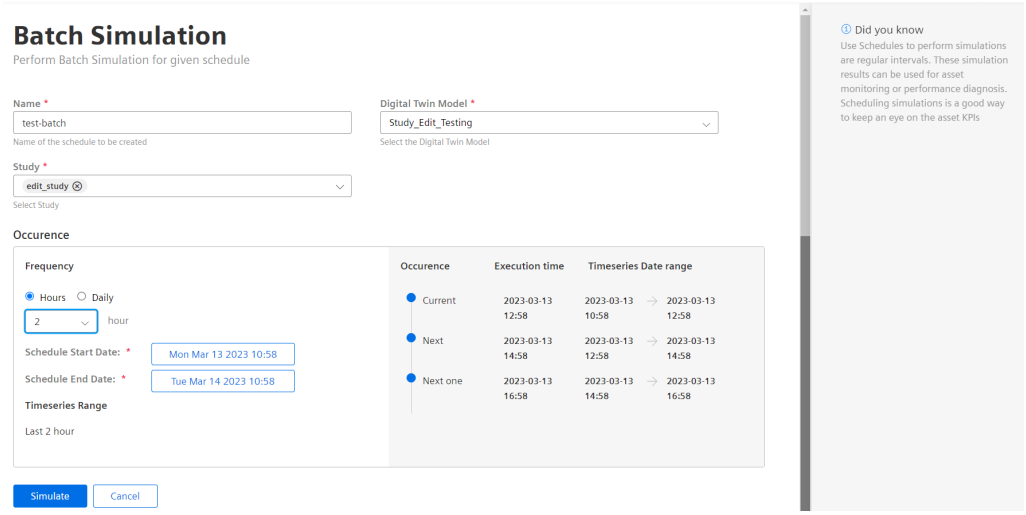
4. Enter the name for the batch simulation that you want to create.

5. From the drop-down, select the "Digital Twin Model" and study/studies for which the simulation needs to be created.

6. Select the frequency for the simulation as per your choice:

   - To execute the simulation on an hourly basis, select the "Hours" radio button. Select the Schedule Start Date and Schedule End Date from the date picker.
   - To execute the simulation at a particular time everyday, select the "Daily" radio button. Select the Simulation start time, schedule Start Date and Schedule End Date from the date picker. After creation, this run will be displayed in the "Schedules" tab.
     Based on the selected date and time, the next occurrences of the simulation is displayed.

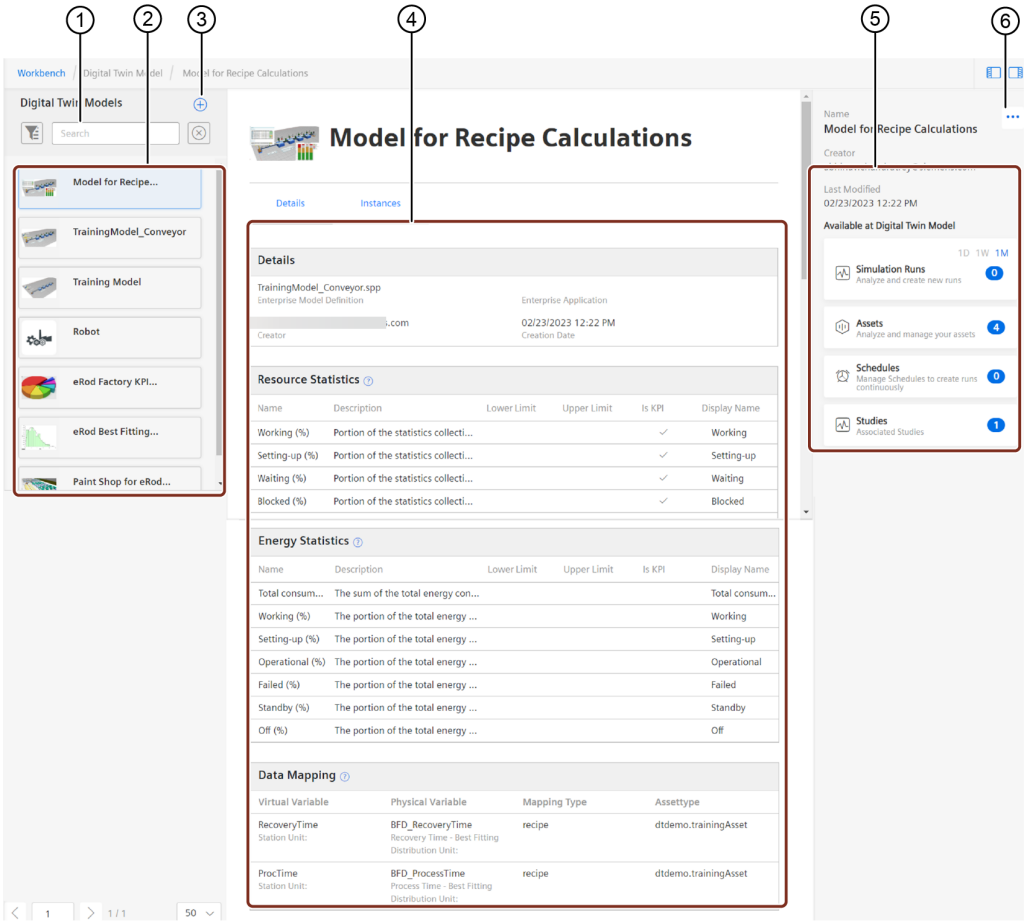
7. Click “Simulate”.



The created Schedule is displayed in the "Schedules" tab. For more information on viewing the created Schedules, refer "Viewing Schedules".

3.3 Creating a new "Digital Twin Model"

The Digital Twin Model allows you to connect the virtual simulation model to an onboarded asset. This mapping allows the link between the signal/parameter in the virtual model and the measurable variable from the aspect of the asset type. The mapping also saves the data type and units for the both virtual and physical models.
Digital Twin Model establishes the relationship between physical model and virtual models. The physical model is captured from Data Model in the Platform. The virtual model comes from different enterprise Applications.
The Digital Twin Model and the instance can then be used to set up the configuration for a simulation run. Once the simulation is executed, the application provides services to establish the traceability between the simulation and the simulation result.
The user interface of "Digital Twin Model" is as shown in the below image:



① Search field to search for the available Digital Twin models

② List of available Digital Twin models

③ Create a new Digital Twin model

④ Details, Resource Statistics and Energy Statistics for the selected Digital Twin model

⑤ Quick display of Simulation Runs, Assets, Schedules and Studies for the selected Digital Twin model

⑥ Displays the following options:

- Edit the Digital Twin model
- delete the Digital Twin model
- copy access information

Creating a Digital Twin Model

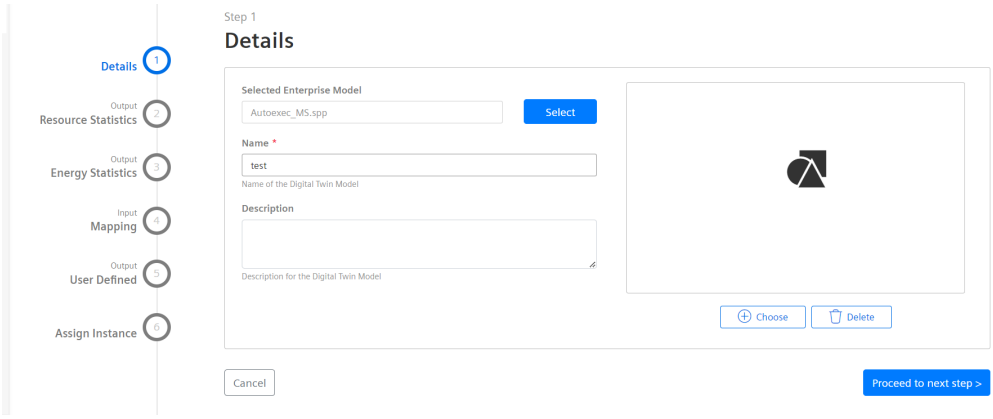
To create and configure a new Digital Twin Model, proceed with the following steps:

1. In "Factory Twin" application, click "Workbench" from left navigation and click "Digital Twin Models".

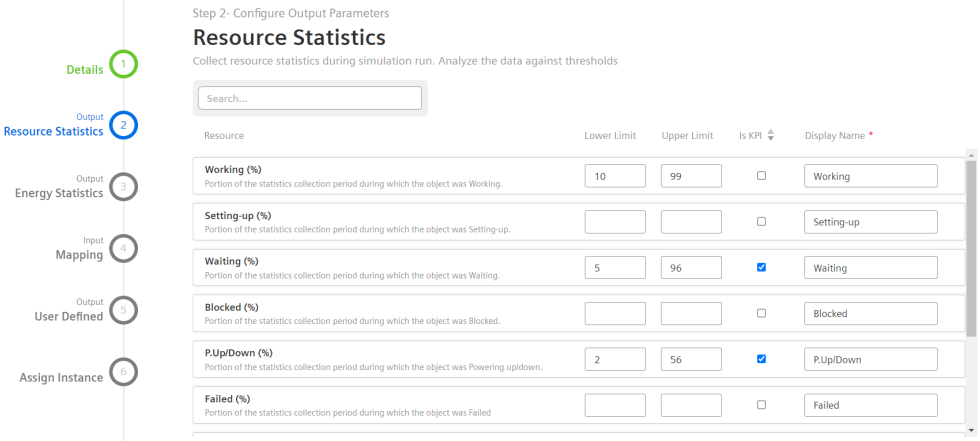
2. In the "Digital Twin Models" screen, click  .

3. In the "Details" page,

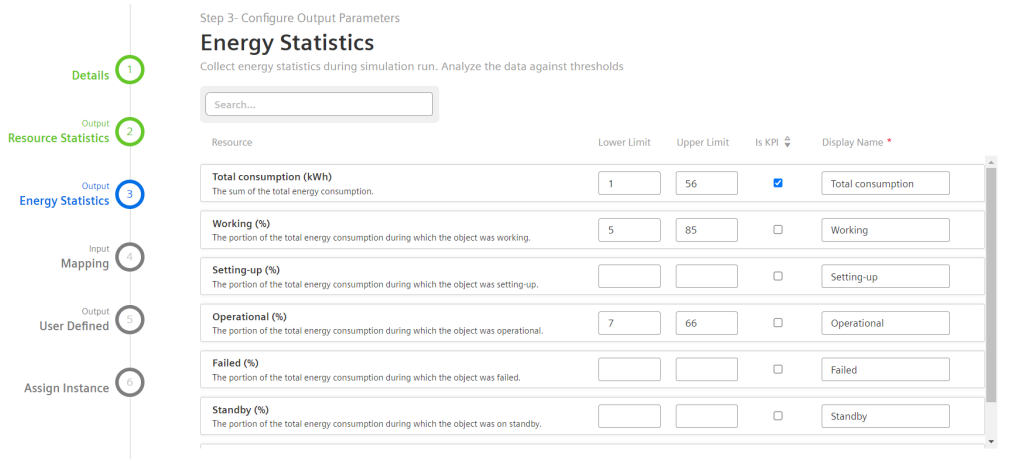
- In the "Selected Enterprise Model" field, click "Select". To select the model from your local system, under "Browse Models", click "Browse" and select the required file. To select a model based on the Enterprise application, in the "Select a Model" tab, select the Enterprise application from the drop-down and click "Search". The list of available models are displayed. Click on the required model and click "Select". Based on the selected model, the "Selected Enterprise Model" field is automatically populated.
- Enter the Name and Description.
- Click "Choose" to upload an icon for the Digital Twin Model.
- Click "Proceed to next step".



4. In the "Resource Statistics" page, enter the Lower Limit, Upper Limit values for the required resources. To use a certain resource as a KPI, check the "Use as KPI" checkbox. You can also edit/update the display name for a resource by entering the name under "Display Name" field. Click "Proceed to next step".

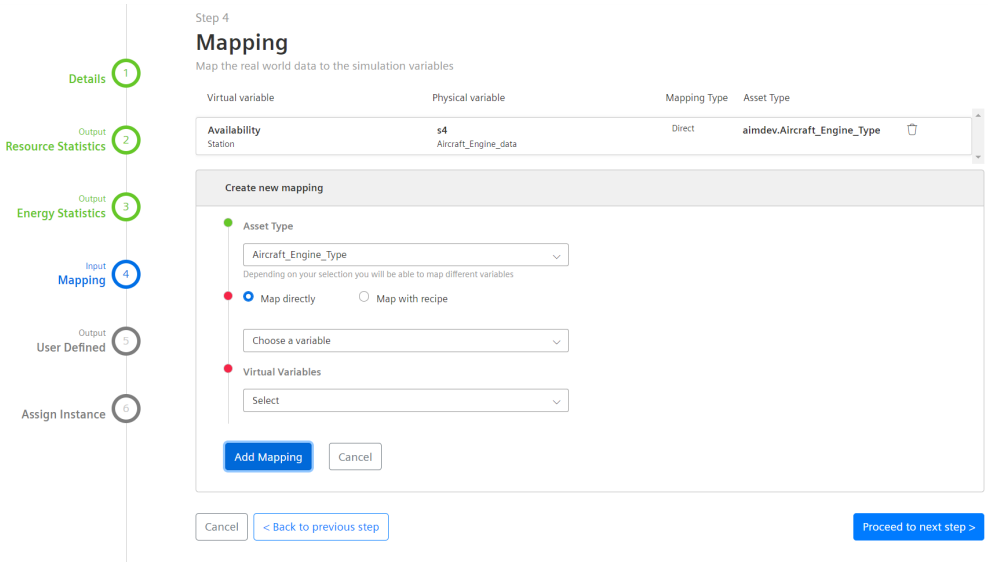


5. In the "Energy Statistics" page, enter the Lower Limit, Upper Limt values for the variables. Select the "Use as KPI" checkbox if necessary. Click "Proceed to next step".

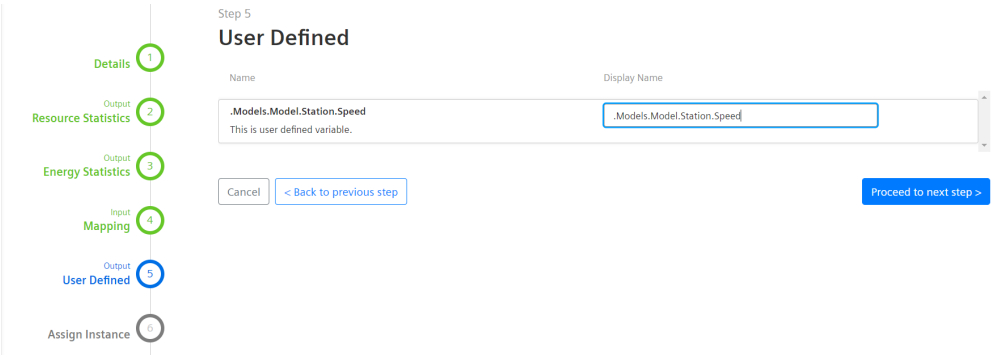


6. In the "Mappings" page,

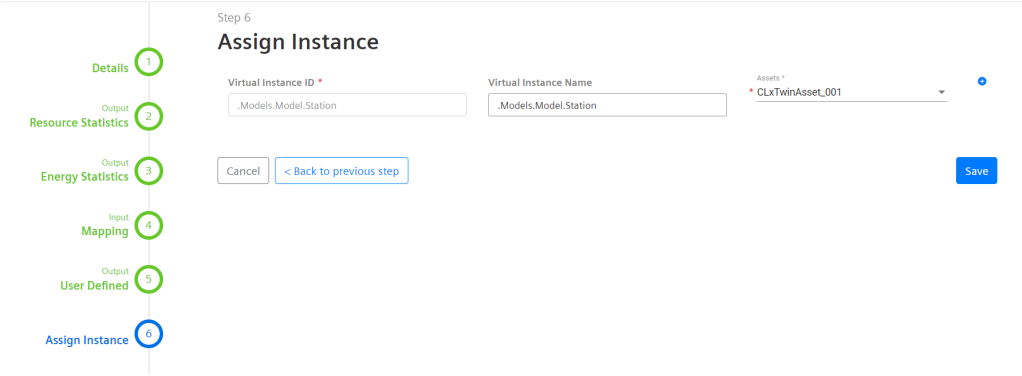
- Click "Add a mapping".
- Choose the Asset type from the drop-down. To create direct mapping, select "Map directly". To create mapping with recipe, select "Map with recipe".
- After selecting "Map Directly", choose a variable from the drop-down.
- After selecting "Map with recipe", choose a recipe from the available list, or click "Create a new recipe". For more information on creating a new recipe, refer the chapter Creating a new recipe.
- Choose the virtual variable from the drop-down.
- Click "Add Mapping". The created mapping is displayed on the screen.
  To delete the mapping, click the "delete" icon next to the mapping in the "Mapping Overview" section.



7. In the "User defined" page, the list of variables and its display name is listed.



8. In the "Instance Assign" page, select the assets for the respective Virtual Instance ID.



- The assets shared from other tenants(shared assets) are visible in the "Asset type" dropdown, and support the creation of Digital Twin Templates, Digital Twin Instances. It is also possible to run simulation on shared assets.
- A physical variable can be mapped to a single virtual variable.
- A virtual variable can be mapped to a single physical variable in a given Asset and Aspect.
- Duplicate mappings are not allowed.

7.Click "Save".

Parameters of new Digital Twin Model

The following table describes the parameters of the the new Digital Twin Model:

Parameter	Description
Details	Select the Enterprise Model file. Enter the name, description and upload the icon.
Resource Statistics	Resource Statistics for the selected model.

Parameter	Description
Energy Statistics	Energy Statistics for the selected model.
Mapping	Mapping between virtual variables and physical variables for the selected model.
User defined	List of variables.

Editing the Digital Twin Model

To edit a Digital Twin Model, proceed with the below steps:

1. In "Factory Twin" application, click "Workbench" from left navigation and click "Digital Twin Models".

2. From the list, select the Digital Twin Model which needs to be modified.

3. On the right pane, click  and click "Edit". The Digital Twin Model details page is displayed.

4. Update the details as required. For more information on the steps, refer Creating a Digital Twin Model.

5. Click "Save".

3.4 Creating Digital Twin Instance

To create and configure a new Digital Twin Instance, proceed with the following steps:

1. In "Factory Twin" application, click "Workbench" from left navigation and select "Digital Twin Models".

2. Select the model for which the Digital Twin Instance needs to be created.

3. In the "Instances" tab click "Create Digital Twin Instances" button.

4. Enter the Virtual Instance name. Select the asset for that Virtual Instance ID and click "Save".

Parameters of new Digital Twin Instance

The following table describes the parameters of the new Digital Twin Instance:

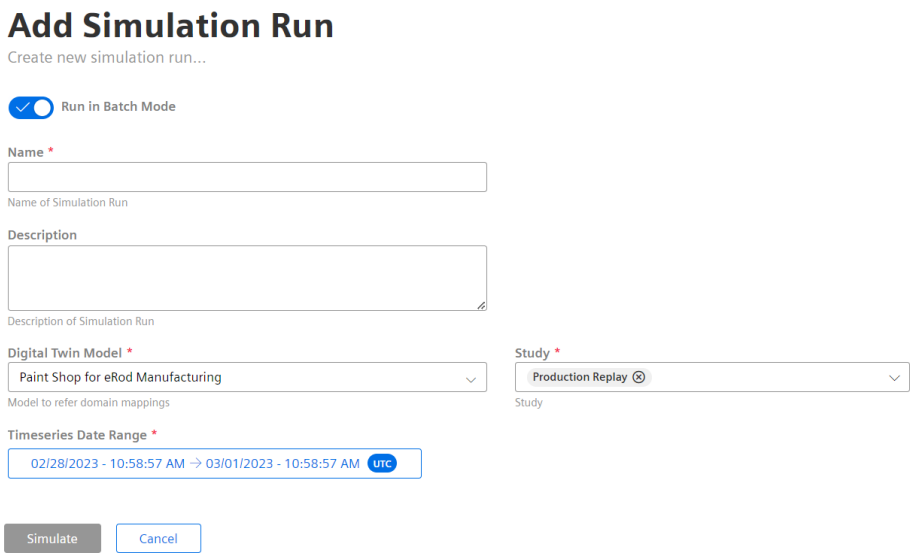
Parameter	Description
Virtual Instance ID	ID of virtual instance. This field is automatically populated and cannot be edited.
Virtual Instance Name	Name of the virtual instance. This field is editable.
Assets	Select the asset from the drop-down.

3.5 Creating a new Run

To create a new Run, proceed with the following steps:

1. In "Factory Twin", select "Workbench" from the left navigation and click "Assets".
2. Select the required Digital Twin Model from the drop-down.
3. Click "Create Run".
4. Enter the name and description for the new run.
5. From the drop-down, select the Digital Twin Model, study/studies for which the run needs to be created.
Batch mode creates a schedule to run simulations periodically either in batch mode (no manual intervention) or interactive mode. If "Run in Batch Mode" toggle button is enabled, the simulations will be executed in non-interactive mode. It also imports the HTML report of the simulation which can be viewed in the application.
6. Select the "Timeseries Date range" from the date picker.
7. Click "Simulate".

You can Refresh, rerun or delete the run by clicking ⋯ .

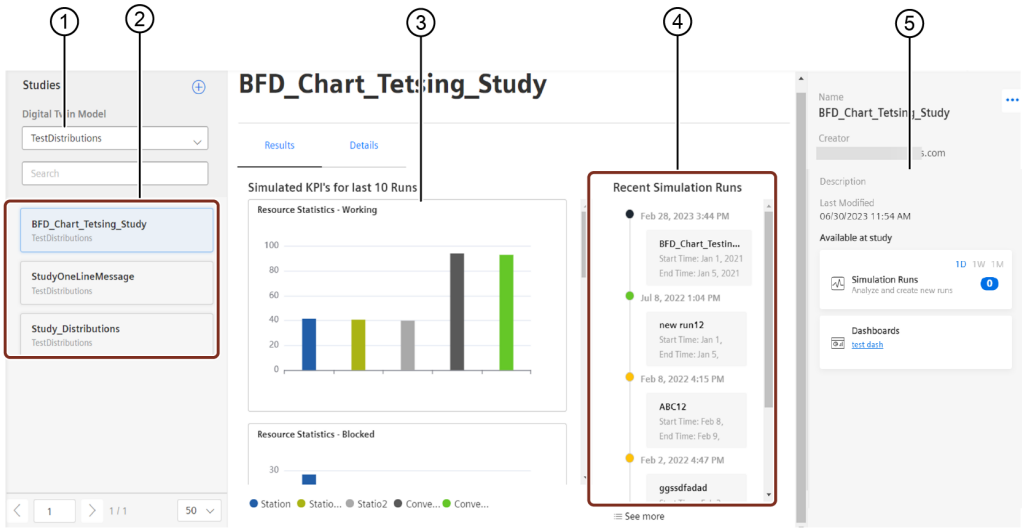


3.6 Creating and viewing Study

Digital Twin Model, variable mapping and Digital Twin Instance need to be configured before creating a Study.

User interface

The user interface of "Studies" screen is as shown below:



① Select the Digital Twin Model from the drop-down
② Available Studies for the selected Digital Twin Model
③ Creates a new study
④ Simulated KPI details in chart view

⑤ Recent Simulation run details for the selected study. Click on any of these runs to redirect to the "Simulation Runs" screen. In addition, the configured Dashboard URL is displayed. Click on the URL to navigate to the respective Dashboard.

⑥ Available Simulation Run details for the selected study

⑦ Allows you to edit or delete the study

On clicking on the study, the Study details will be displayed. In addition, the simulation runs for the selected study will be displayed on the right navigation. Click "Simulation Runs" to view the simulation run details.

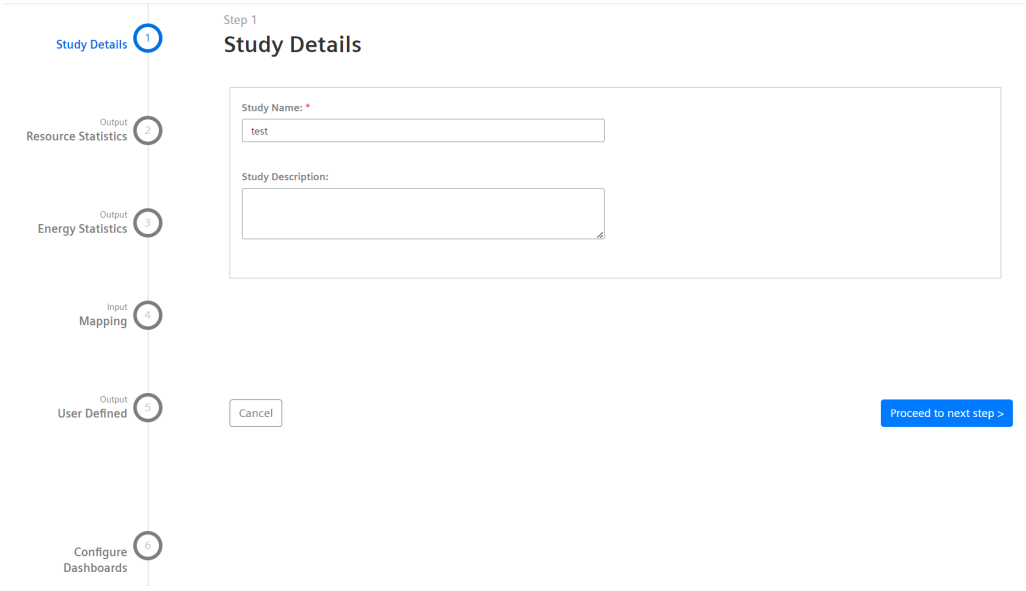
Creating a new Study

To prepare data for simulation, proceed with the following steps:

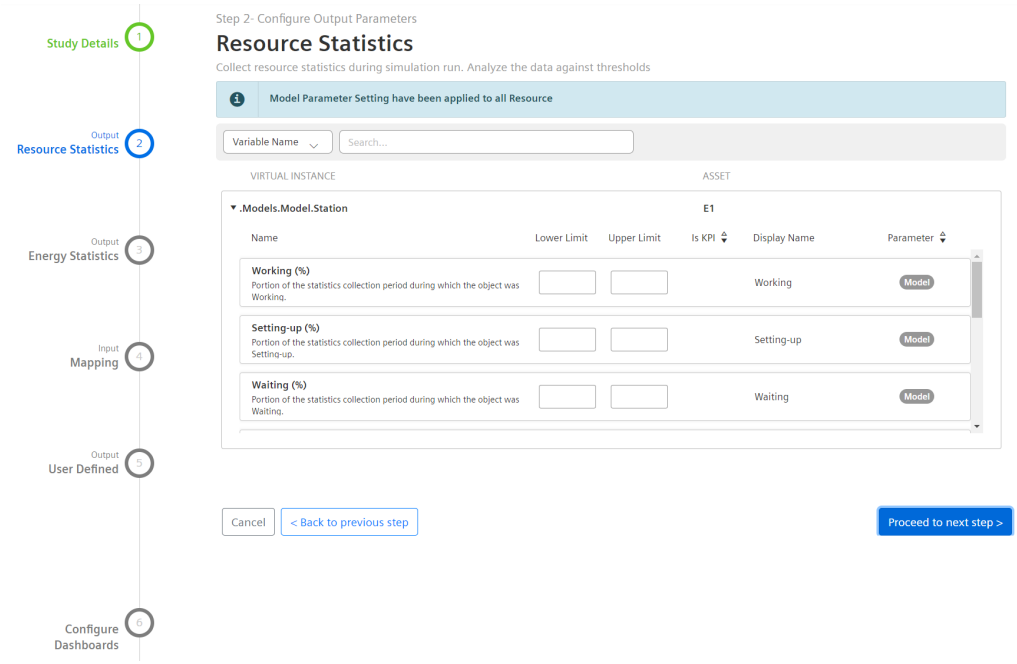
1. In "Factory Twin" application, click "Workbench" from left navigation and click "Studies".

2. In the "Studies" page, click  to create a new study.

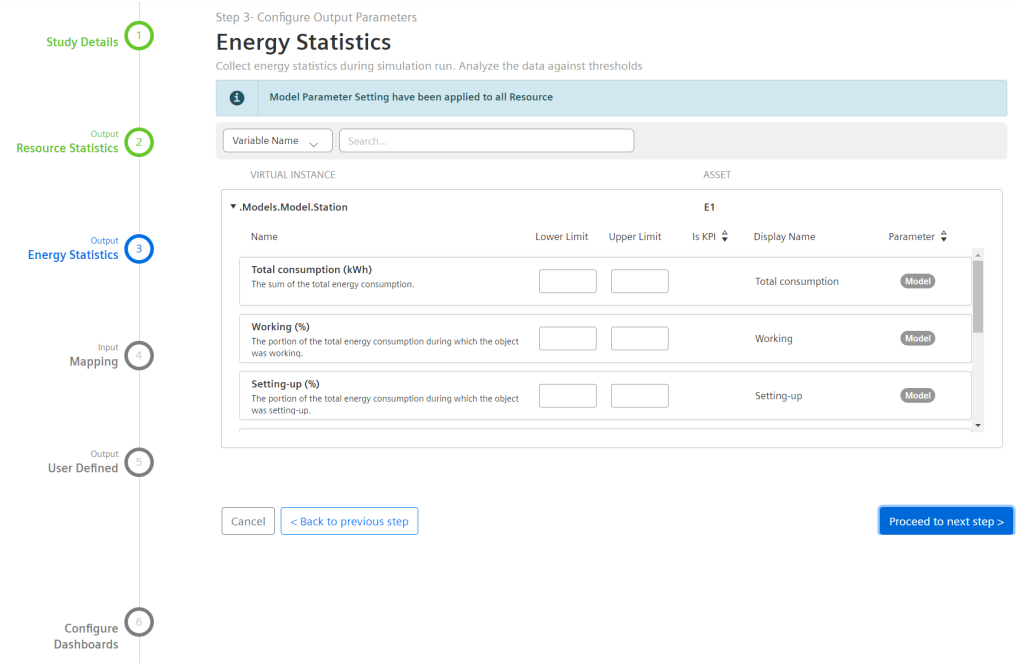
3. In "Study Details" page, enter the Study Name and Study Description. Click "Proceed to next step".



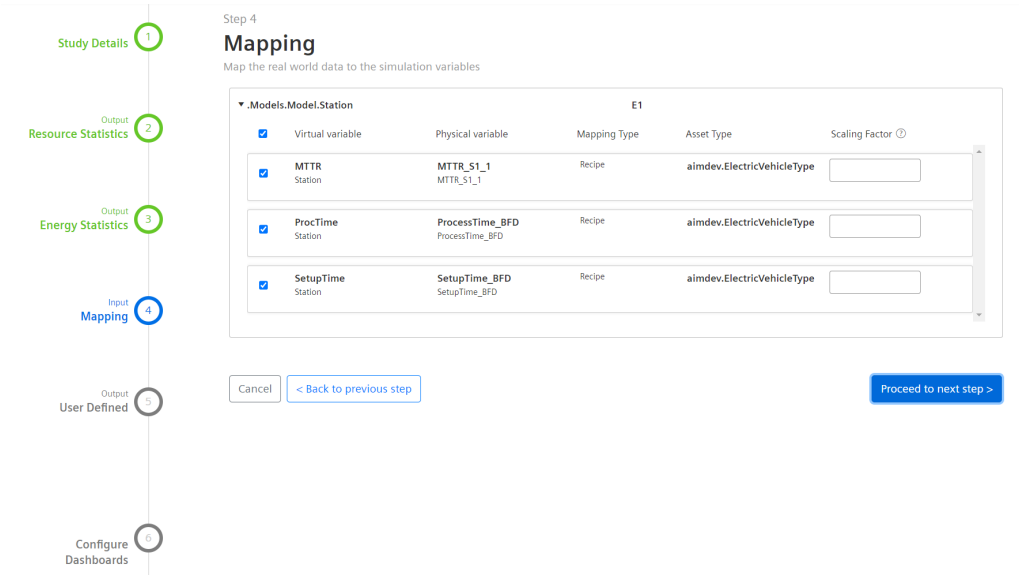
4. In "Resource Statistics" page, select the required resources, enter the Lower Limit and Upper Limit. Click "Proceed to next step".



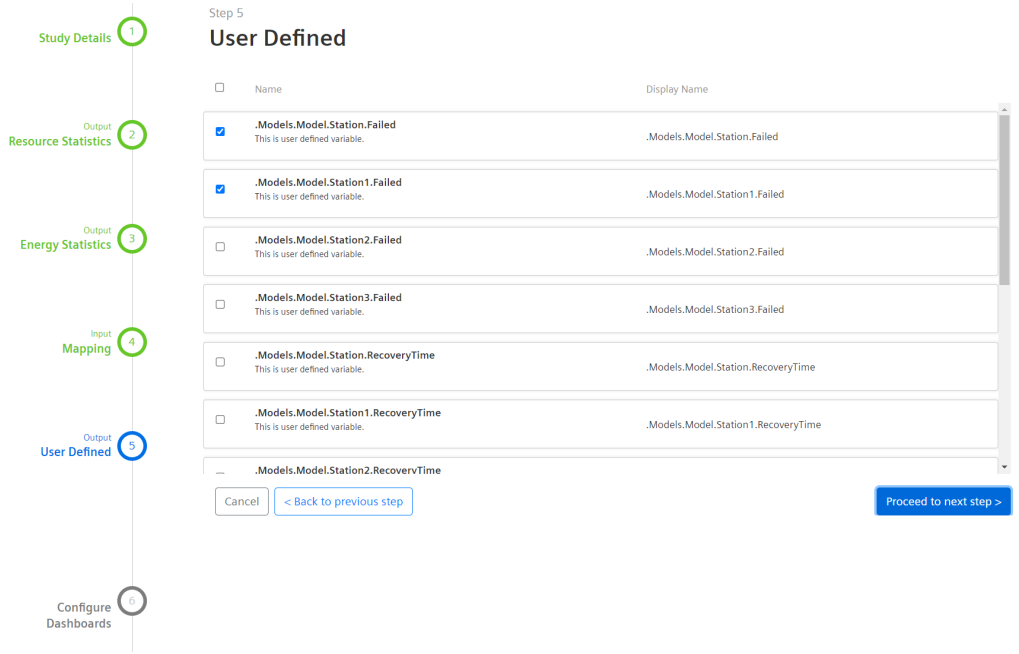
5. In "Energy Statistics" page, select the required resources, enter the Lower Limit and Upper Limit. Click "Proceed to next step".



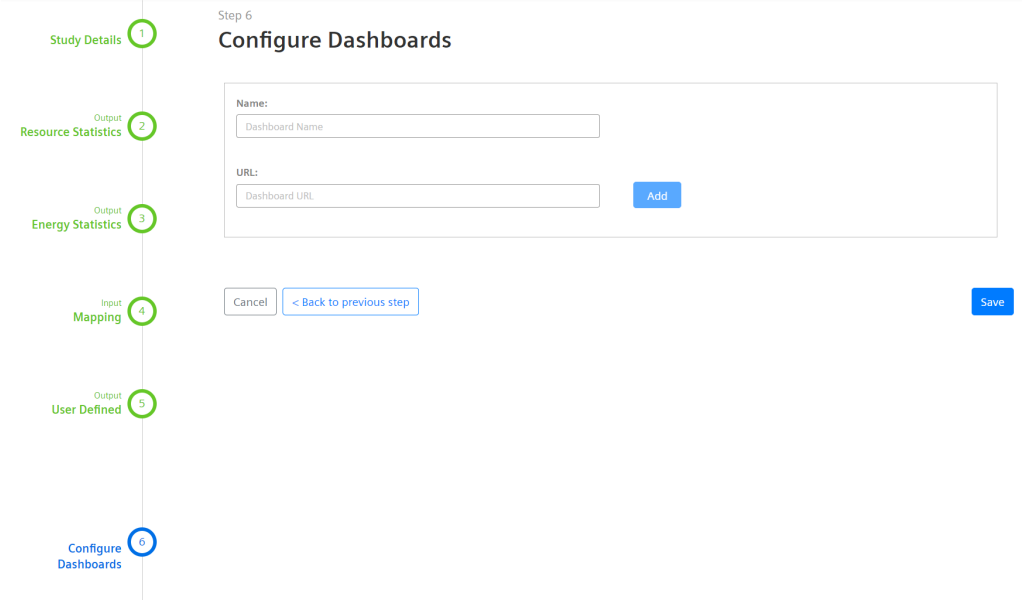
6. In the "Mapping" page, select the required mappings available in the list by clicking the checkbox next to each mapping.



7. In "User defined" page, select the required variables and click "Proceed to next step".



8. In "Configure Dashboards" page, enter the name and URL and click "Add".



After the Dashboard is configured, it is possible to navigate to the same dashboard using link provided in the right pane.

9. Click Save.

The created Study will be displayed in the "Studies" tab.

The application displays an error if the following conditions are not met:

- If the data is not provided in the right format.
- If the Study name is not unique for the selected asset.

Viewing study

The created Study can be viewed in the "Studies" tab in "Workbench".

Editing the study

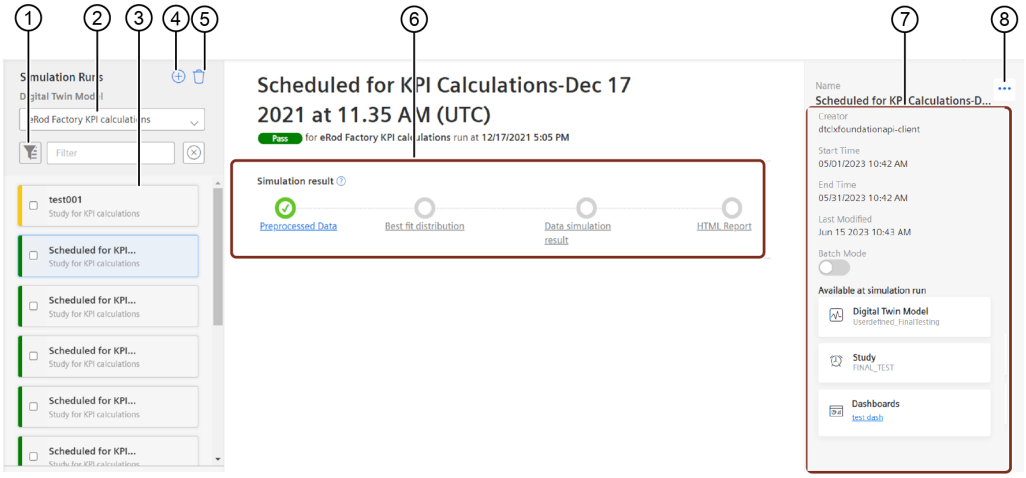
To edit the created study, proceed with the below steps:

1. In "Factory Twin" application, click "Workbench" from left navigation and click "Studies".
2. From the list of available Studies, select the Study which needs to be modified.
3. On the right pane, click and click "Edit". The Study details page is displayed.
4. Update the details as required. For more information on the steps, refer Creating a new study.
5. Click "Save".

3.7 Creating and viewing a Simulation Run

User interface

The user interface of "Simulation Runs" is as shown below:



① Filter the simulation run based on Study, Status, Modified After and Modified Before fields

② Select the required Digital Twin Model

③ Displays the list of available Simulation Runs

④ Creates a new simulation run

⑤ Deletes the selected simulation run

⑥ Displays the simulation results for the selected simulation run

⑦ Displays the details for the selected simulation run. In addition, the configured Dashboard URL is displayed. Click on the URL to navigate to the respective Dashboard.

⑧ Displays the options for download, Rerun and refresh the run

Creating a new run

To create a new Run for an existing Study, proceed with the following steps:

1. In "Factory Twin", click "Workbench" and select "Simulation runs".

2. Select the required Digital Twin Model Name from the drop-down.

3. Click  .

4. Enter the name and description for the new run.

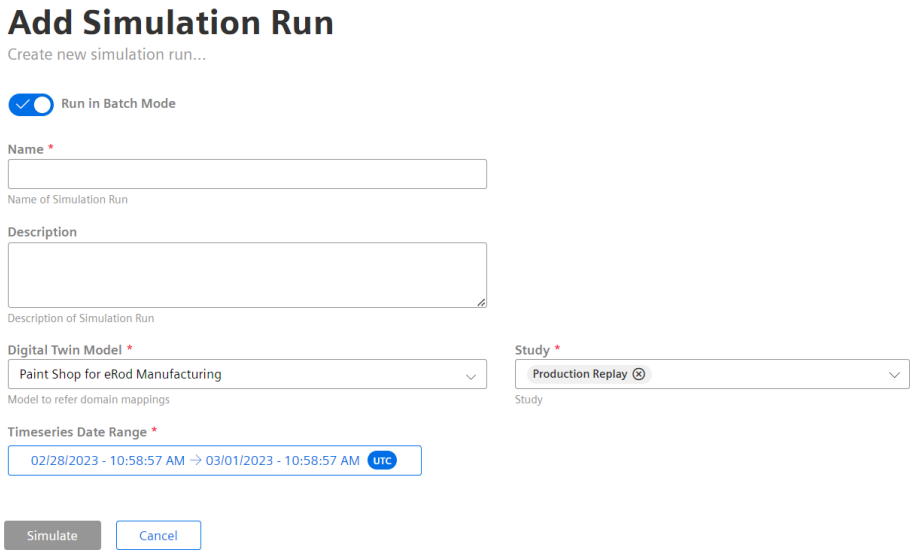
5. From the drop-down, select the Digital Twin model, and Study/Studies for which the run needs to be created.

6. Select the "Timeseries Date range" form the date picker.

7. Click "Simulate".

Batch mode creates a schedule to run simulations periodically either in batch mode (no manual intervention) or interactive mode. If "Run in Batch Mode" toggle button is enabled, the simulations will be executed in non-interactive mode. It also imports the HTML report of the simulation which can be viewed in the application

You can download, rerun or refresh the run by clicking ⋯ .



- The application displays an error if the following conditions are not met:
  - If the Run name is not unique
  - If non-numerical value is entered in nano seconds
  - If there is no time-series data to export
- A Run cannot be created if a Digital Twin Instance is not available for a Digital Twin Template.

Viewing charts and reports

For any asset configured for a specific Digital Twin template, the Runs data can be viewed in "Workbench" in the "Simulation Runs" tab.

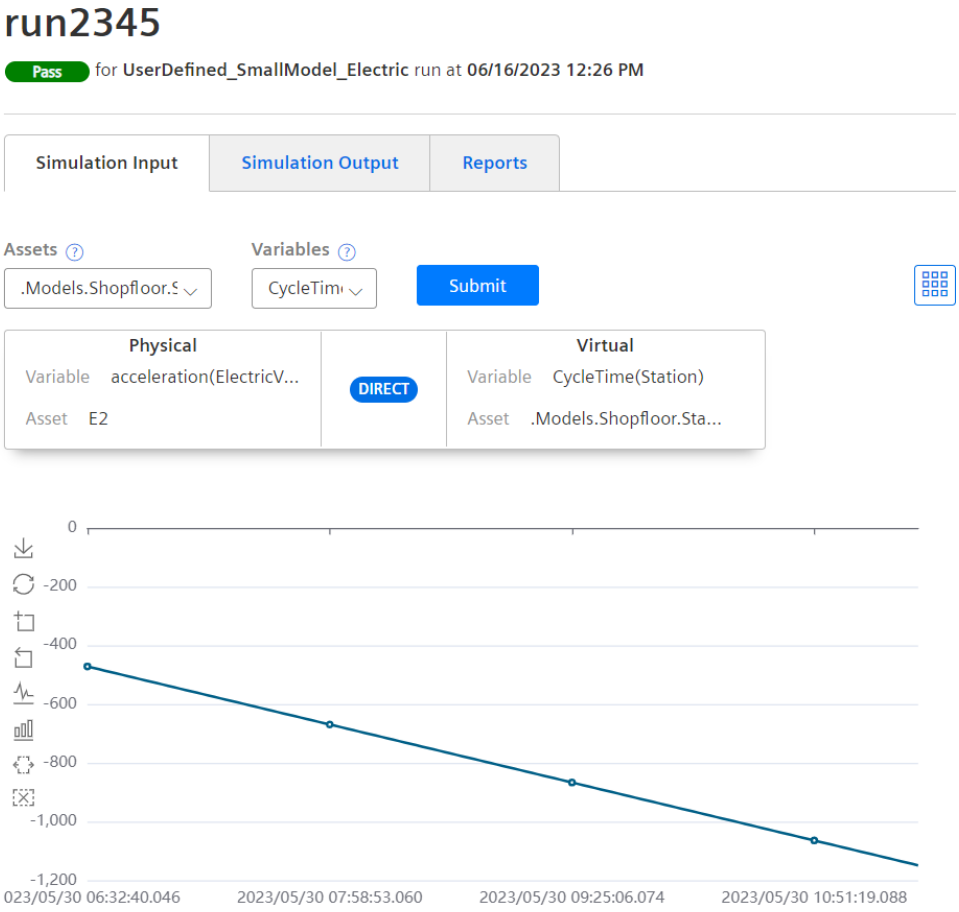
The created runs are listed in the "Simulation Runs" tab of the "Workbench" screen. The runs can be in any of the following states:

States	Color codes
Pass	Green
Submitted	Yellow

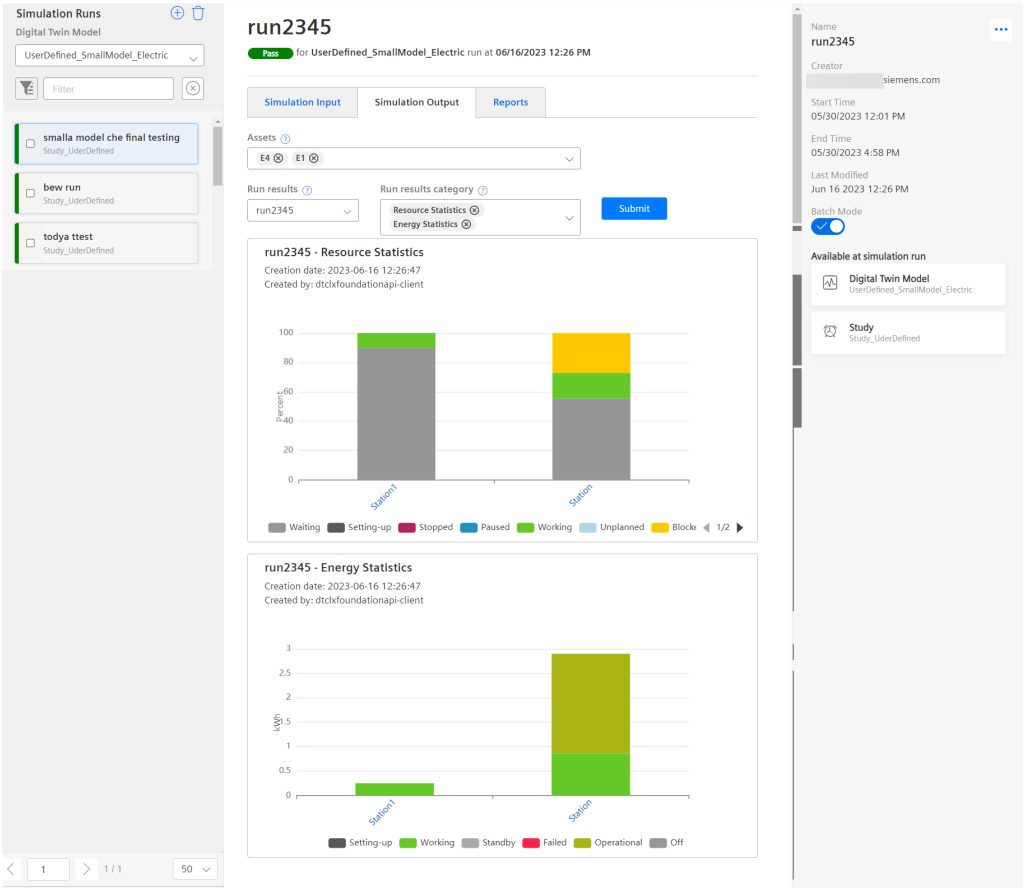
States	Color codes
Error	Black
Failed	Red

To view the simulation results, click on the required Run and select the type of Simulation result. The available options are explained below:

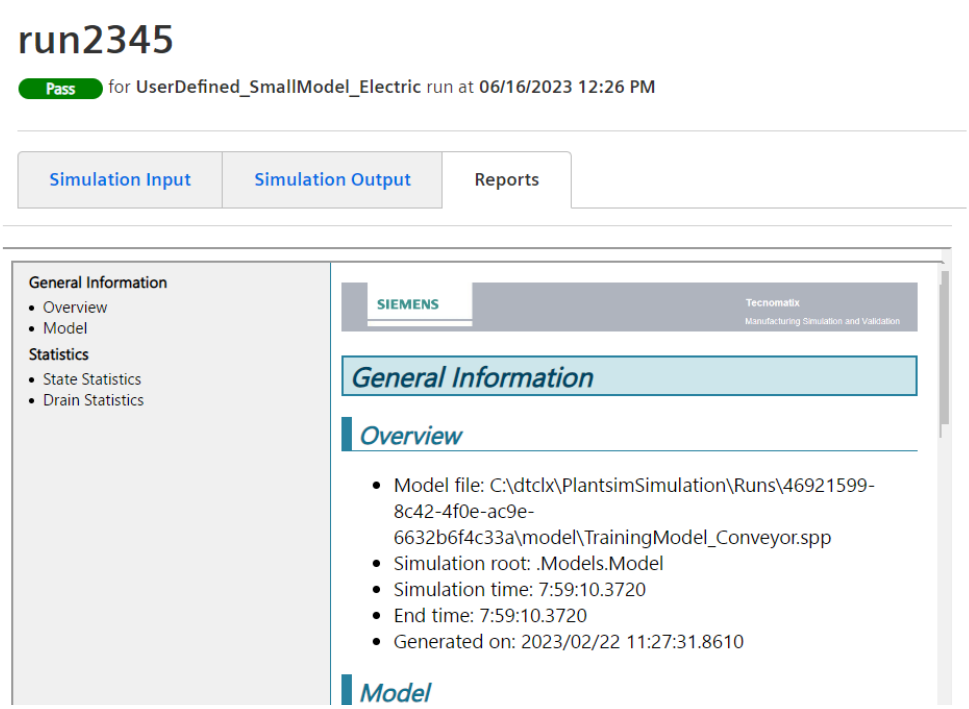
Simulation input: To view simulation data in chart or table view, click "Simulation input" tab. Select the Assets and Variables and click "Submit". In addition, the physical and virtual variables and the respective assets are displayed.

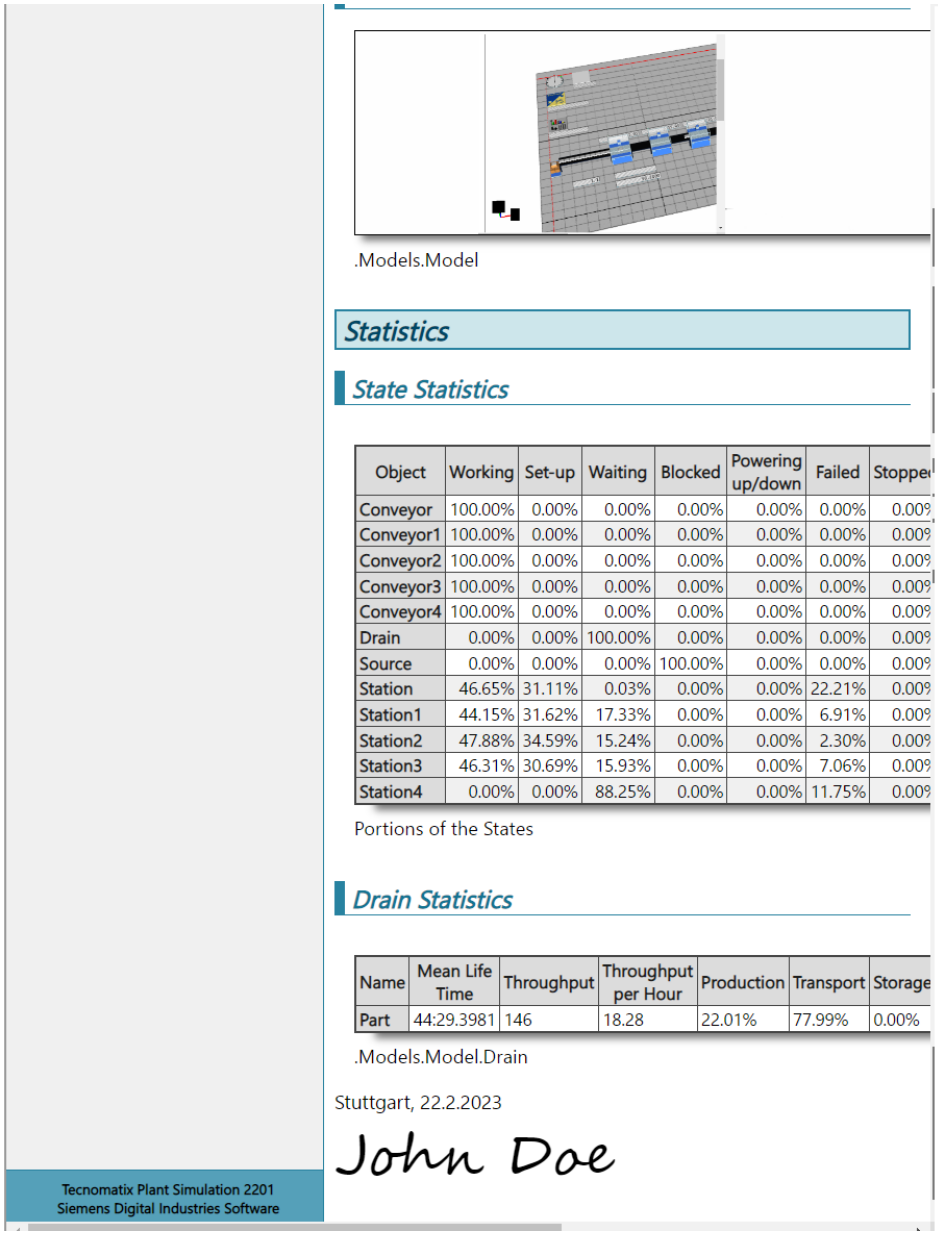


Simulation Output: To view the Simulation output data, click "Simulation Output" tab. Select the required assets, run results and the run results category. Click "Submit". The Simulation Statistics data is available for Pass and Failed Simulation runs.
The result is as shown below:

- 

Reports: The reports tab displays information about Simulation statistics. The HTML report is available for Pass and Failed Simulation runs. On clicking the "Reports" tab, the report is displayed as shown below:





.Models.Model

Statistics

State Statistics

Object	Working	Set-up	Waiting	Blocked	Powering up/down	Failed	Stoppe
Conveyor	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Conveyor1	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Conveyor2	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Conveyor3	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Conveyor4	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Drain	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00
Source	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00
Station	46.65%	31.11%	0.03%	0.00%	0.00%	22.21%	0.00
Station1	44.15%	31.62%	17.33%	0.00%	0.00%	6.91%	0.00
Station2	47.88%	34.59%	15.24%	0.00%	0.00%	2.30%	0.00
Station3	46.31%	30.69%	15.93%	0.00%	0.00%	7.06%	0.00
Station4	0.00%	0.00%	88.25%	0.00%	0.00%	11.75%	0.00

Portions of the States

Drain Statistics

Name	Mean Life Time	Throughput	Throughput per Hour	Production	Transport	Storage
Part	44:29.3981	146	18.28	22.01%	77.99%	0.00%

.Models.Model.Drain

Stuttgart, 22.2.2023

John Doe

Tecnomatix Plant Simulation 2201
Siemens Digital Industries Software

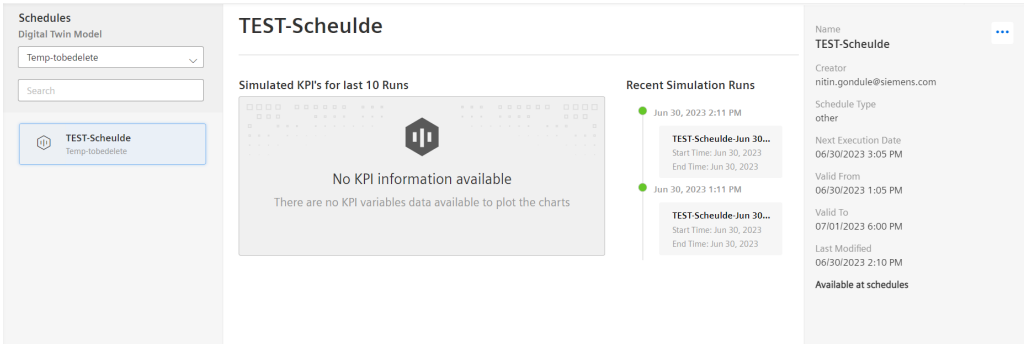
In addition, you can Download or Rerun the run by clicking ⋯ at the top right corrner of the page.

To delete a run, select the run/runs by clicking on the checkbox next to that run and click  . You can select multiple runs and delete them in one click.

3.8 Viewing Schedules

To view the created schedule, select "Workbench" from left navigation and click "Schedules". For more information on creating schedules, refer "Creating a Batch Simulation".
Select "Digital Twin Model" from the drop-down. The created schedules for the selected "Digital Twin Model" are displayed. On selecting the schedule, the Schedule Type, Next execution Date, Valid From and Valid To.

The Recent Simulation Runs details for the selected schedule are are also displayed on the screen.

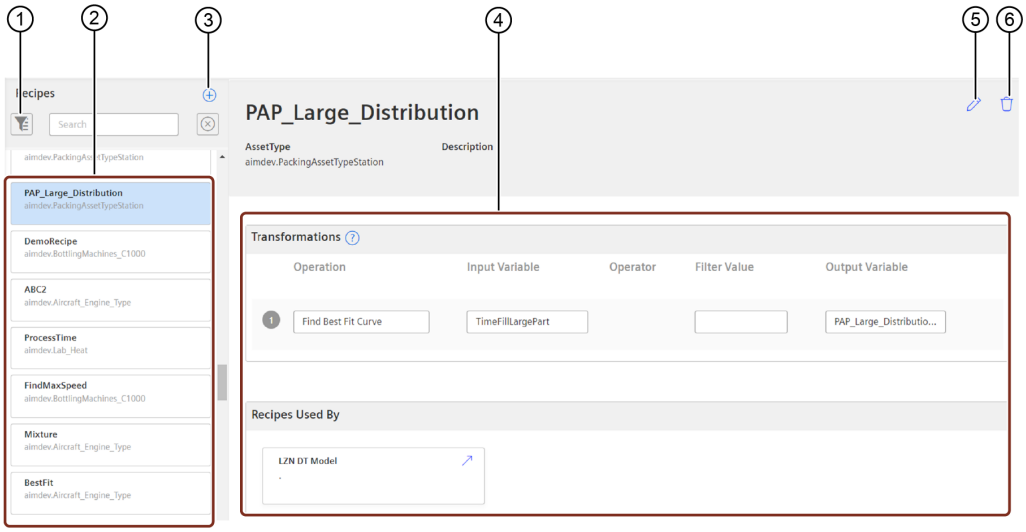


3.9 Creating a new recipe

Recipes are chain of operations. Each operation is a function.

This application enables the user to create a recipe from the "Workbench" tab. The following section describes the procedure to create a recipe.

The user interface of "Recipes" is as shown below:



① Filter the available recipes based on Asset type, Modified after and Modified before fields

② Displays the list of available recipes

③ Creates a new recipe

④ Displays the details for the selected recipe

⑤ Edits the selected recipe

⑥ Deletes the selected recipe

Procedure

To create a new recipe, proceed with the following steps:

1. In the "Workbench" tab, click "Recipes". Click "Add a recipe".

2. To create a recipe from the existing recipes, choose a recipe from the available list.
To create a new recipe, click "Create a new Recipe".

3. Enter the name for the recipe.

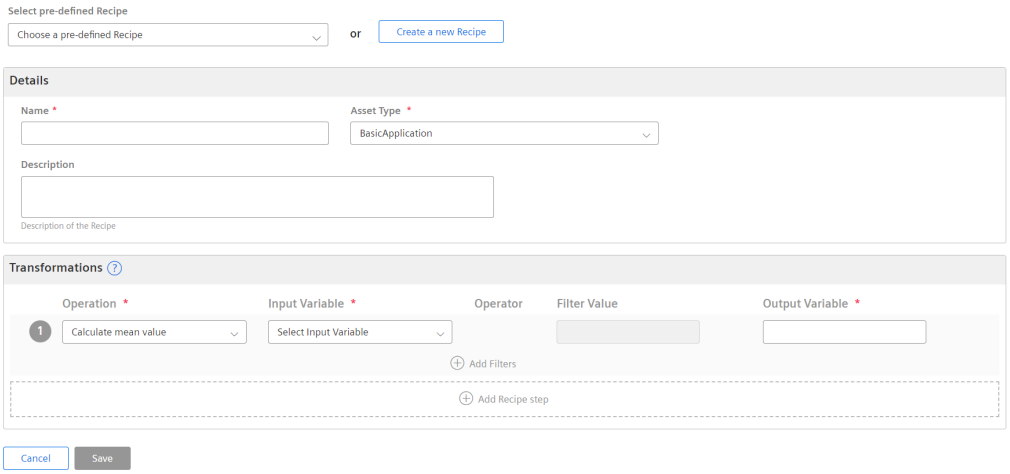
4. Choose the asset type from the drop-down.

5. Enter the description for the recipe.

6. In the Transformations section, select the Function from the drop-down.

7. Choose the Input variable and enter the name for the output function.
Add a new recipe step if applicable.

8. Click Save.



Result

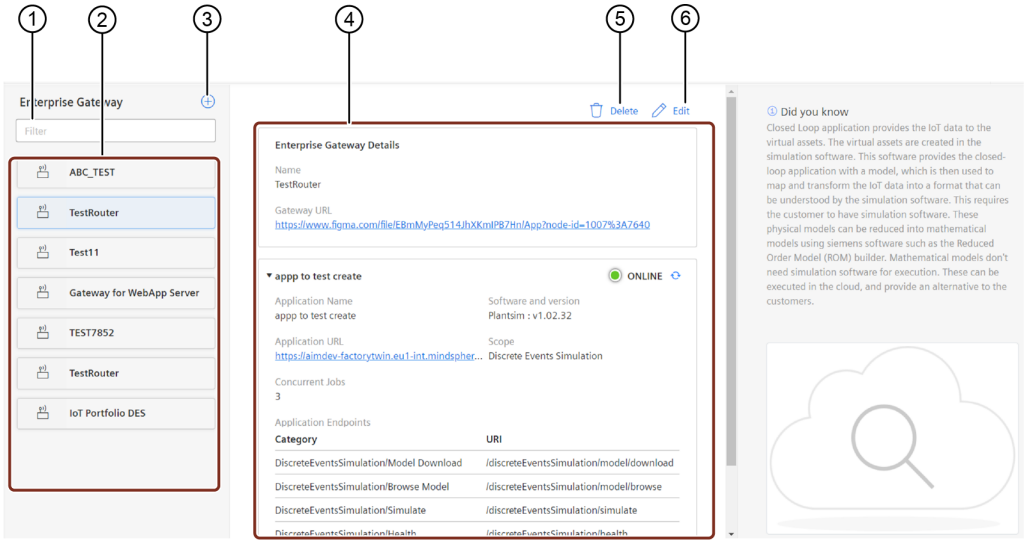
The recipe is created successfully and is displayed on the Recipes screen.

Using "Configuration" 4

4.1 Creating and viewing Enterprise Gateway

User interface

The user interface of "Enterprise Gateway" screen is as shown below:

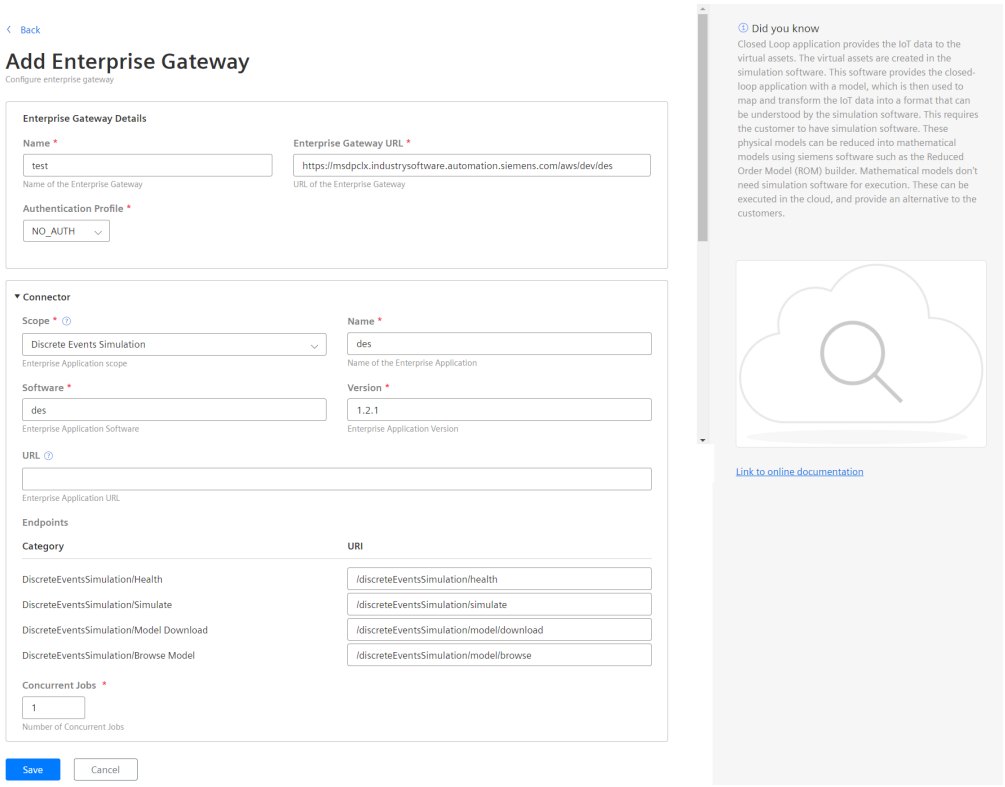


① Search for a specific Enterprise Gateway
② Displays the list of available Enterprise Gateways
③ Creates a new Enterprise Gateway
④ Displays the details for the selected Enterprise Gateway
⑤ Deletes the selected Enterprise Gateway
⑥ Edits the selected Enterprise Gateway

Procedure

To create and configure a new enterprise gateway, proceed with the following steps:

1. In "Factory Twin" application, click "Configuration" and click "Enterprise Gateway".
2. Click "Create Enterprise Gateway".
3. Enter the field parameters and click "Save".



Parameters of new enterprise gateway

The following table describes the parameters of the new enterprise gateway:

Parameter	Description
Enterprise Gateway URL	URL of the enterprise gateway
Organization	Organization name
Description	Description for the enterprise gateway
Authentication Profile	The following Authentication type are available: NO_AUTH, BASIC, OAUTH2
Connectors	
Description	Description for the connector
Concurrent Jobs	Number of concurrent jobs
Enterprise Application	
Name	Name of the Enterprise application
Software	Enterprise Application software

Parameter	Description
Scope	Scopes of application. The following scopes are available: Discrete Events Simulation, Product Definition, System Simulation
Version	Version of the Enterprise application
URL	URL of the Enterprise application
Endpoints	
Category	Category of the endpoint
URI	URI of the endpoint

4.2 Viewing job details

The Jobs Monitoring screen helps the admin to monitor the status of the jobs. This screen shows the details of the selected connector. The job could be in any of the following states:

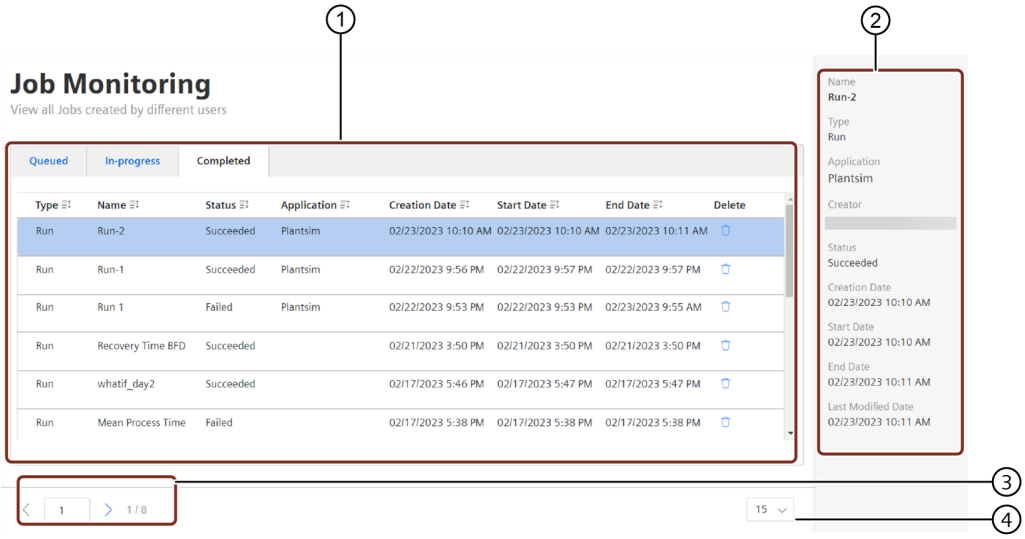
- In-progress
- Queued
- Completed

The details of the job includes the Job type, date of creation, the connector name and the Enterprise application for the selected connector.
It is also possible to sort the jobs based on Connector, Job Type, Status and Creation date.

- Once the job is submitted, it cannot be edited or deleted.
- "Completed" jobs can be deleted by the admin.

User interface

The following graphic shows the user interface of Jobs Monitoring screen:



① Shows the job in the following states:

- Queued
- In-progress
- Completed

② Job details of the selected job

③ Pagination for the selected tab, to navigate to the next page

④ Shows the number of jobs per page