



# SimpliLinux

## SX-IO – Edge Computing

SX-IO – Edge Computing User Guide

10/2021  
man-en-sx-io.docx  
Version 2.0

## Legal Notices

### Warning Notice System

This document contains alerts and information indications for the safety of you and your devices. The symbols and meanings used to draw your attention to these notifications are listed below.



**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.



**Info:** Indicates advice or **information**.

### Qualified Personnel

It is assumed that what is described in this document will be applied by qualified personnel for the specific task.

### Disclaimer

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.

The information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

## Change Log

Version	Date	Description
V1.0	07/2020	
V2.0	10/2021	

## **Preface**

### **Purpose of the Document**

This document contains information about the following topics;

- ◆ SX-IO Usage

### **Required Level of Knowledge**

In order to fully understand and apply this document, it is necessary to have knowledge of IT, Automation and Electricity.

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## 1. Home Page

There is one built-in user : "admin" to log into the SX-IO interface.

### 1.1. Admin User

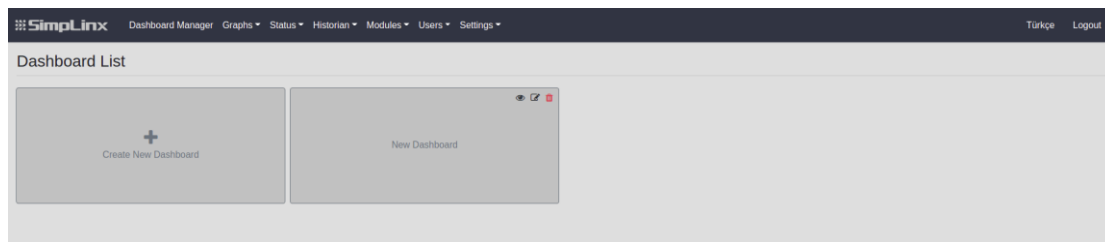
The Admin user is the main account. It has all the privileges including system settings and creating new users.



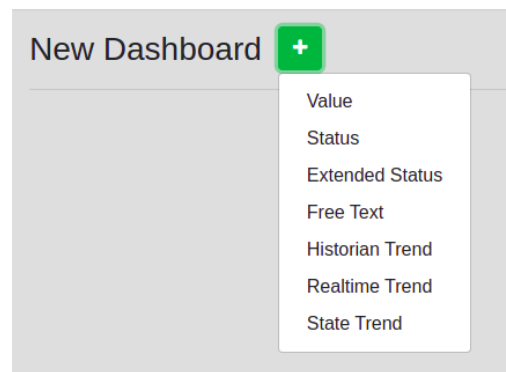
Predefined password for Admin user: "simplinx"

## 2. Dashboard Manager

You can create dashboards for specific requirements and for each dashboard you can create graphics for the "Tags" you have added to the system on the dashboard. You can add new dashboards to the system on "Dashboard" page. Click "+ Create New Dashboard" button and new dashboard will appear. You can give a name your dashboard. After that click your new dashboard, the "+" button located next to the your new dashboard name label text on the upper left of the page.



- ◆ Value
- ◆ Status
- ◆ Extended Status
- ◆ Free Text
- ◆ Historian Trend
- ◆ Realtime Trend
- ◆ State Trend



## 2.1. Value

The screenshot shows the 'Details' configuration page in the SimPLiNX interface. The page has a dark header with navigation links: Dashboard Manager, Graphs, Status, Historian, Modules, Users, Settings, Türkte, and Logout. The main content area is titled 'Details' and contains the following fields:

- Title: Demo
- Unit: %
- Display Type: Normal
- Min Scale Value: 0
- Max Scale Value: 100
- Eval String: cix.tag('machine\_temperature')

A 'Build' button is located at the bottom of the form.

On the page that opens when you select the "Value" chart;

- Enter your chart title in the "Title" box.
- Enter the unit of your chart in the "Unit" box. (example "%","seconds")
- Enter the lower limit of the graph to the "Lower Limit of Value" box.
- Enter the upper limit of the graph to the "Upper Limit of Value" box.

The screenshot shows the alarm configuration page with the following fields and buttons:

- High Alarm: 0
- High Warning: 0
- Low Warning: 0
- Low Alarm: 0

Buttons: Kaydet (green), Vazgeç (grey)

- Enter the upper limit value in the "High Alarm" box where your chart will go to the alarm level.
- Enter the lower limit value in the "Low Alarm" box where your chart will go to the alarm level.
- Enter the upper limit value in the "High Warning" box where your chart will go to the warning level.
- Enter the lower limit value in the "Low Warning" box where your chart will go to the warning level.

Click the "Create" button under the "Eval String" box. In the window that opens, there are "Tags" that you have added in the list named "Tags". You can choose the one you want to see in the chart from this list and you can determine the display type of the "Tag" you have selected from the "Function"

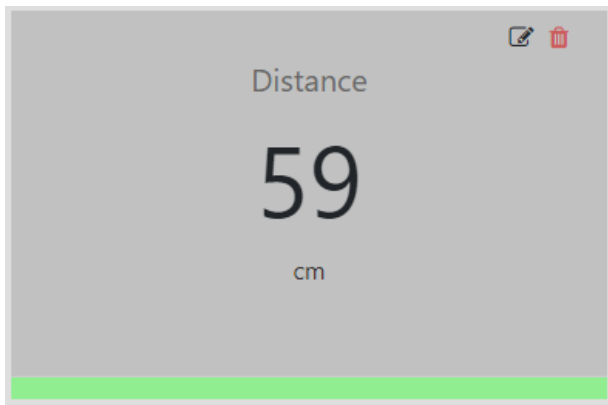
box. The "Value" option under "Function" shows the value of the "Tag", and the "Bit" option shows its address.

After making the selection, you can add it with the "Add" button and check whether it works correctly with the "Test" button. If your settings are correct, you can confirm the changes with the "Use" button.

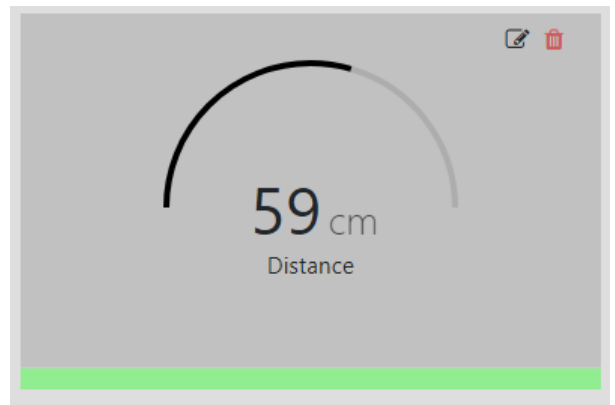
The screenshot shows a configuration window titled "Eval String". At the top, there is a text input field containing the code `ctx.tag("Random_100")`. Below this, there are two columns of dropdown menus. The left column has "Tags" with "Random\_100" selected and "Fonksiyon" with "Value" selected. The right column has "Archieve" with "A\_Sin" selected and "Fonksiyon" with "Sum" selected. Each column has an "Ekle" (Add) button below the dropdowns. At the bottom of the window, there is a green text label "Sonuç: 92" and three buttons: "Kullan" (Use), "Test Et" (Test), and "Vazgeç" (Cancel).

There are 5 different graphic options under "View Type".

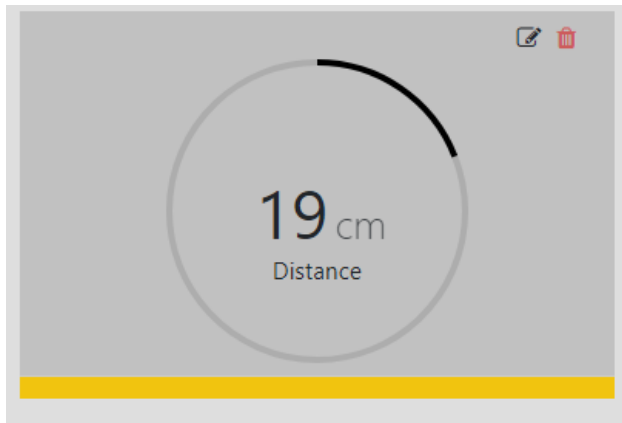
● Normal



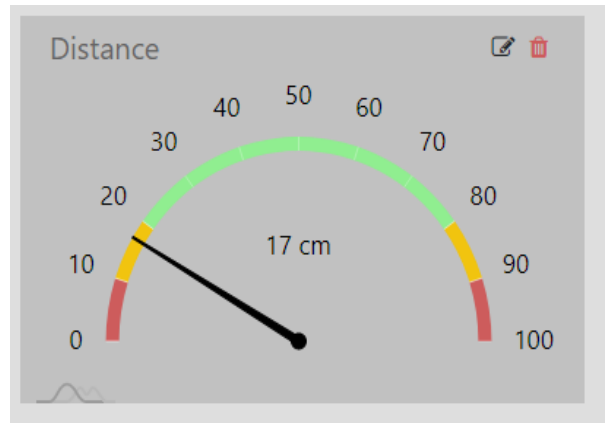
● Half Meter



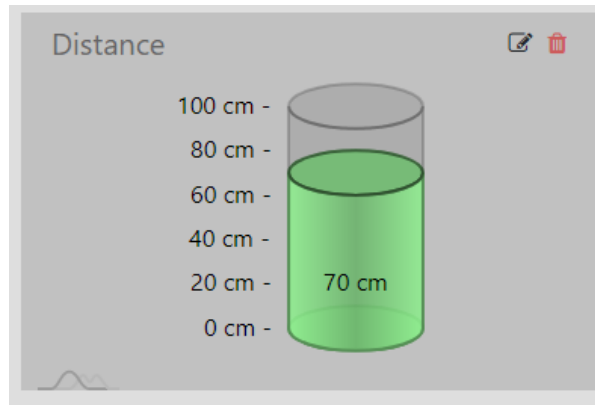
- Full Meter



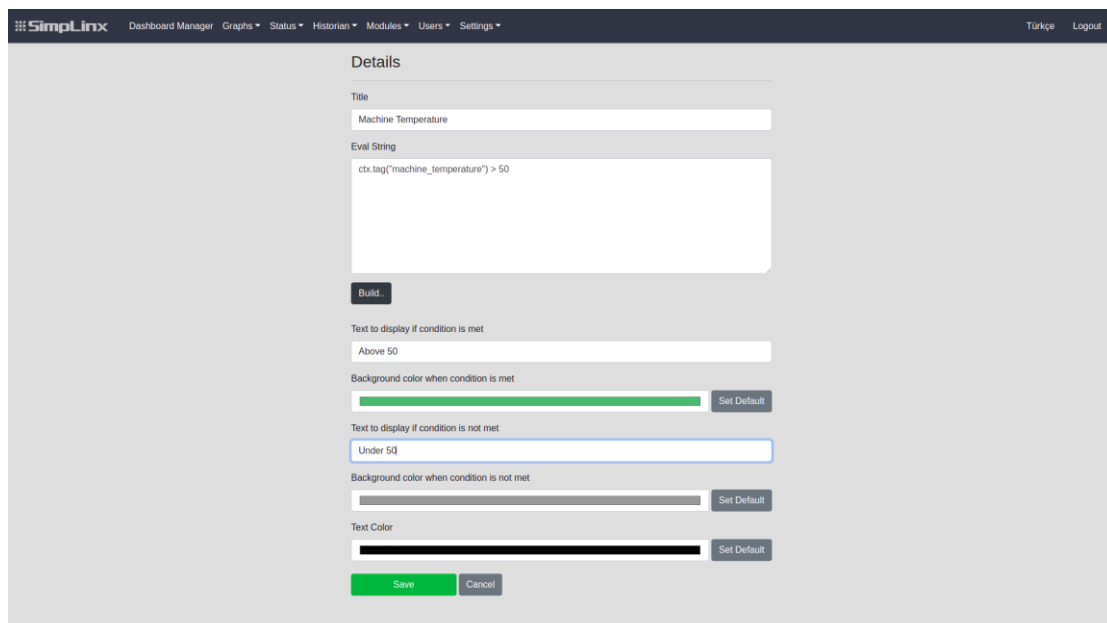
- Animated Gauge



- Cylinder Gauge



## 2.2. Status



- After clicking "Status", "Details" page will be appear. On this page,

- Title: Type your Status title in the “Title” box.
- Eval String: This box for building a condition for status.
- Text to display if condition is met: This text will appear if Eval String condition is true
- Background Color when condition is met: You can select color for displaying condition is satisfied.
- Text to display if condition is not met: This text will appear if Eval String condition is false
- Background color when condition is not met: You can select color for displaying condition is not satisfied.
- Text Color: You can select text color.

### 2.3. Extended Status

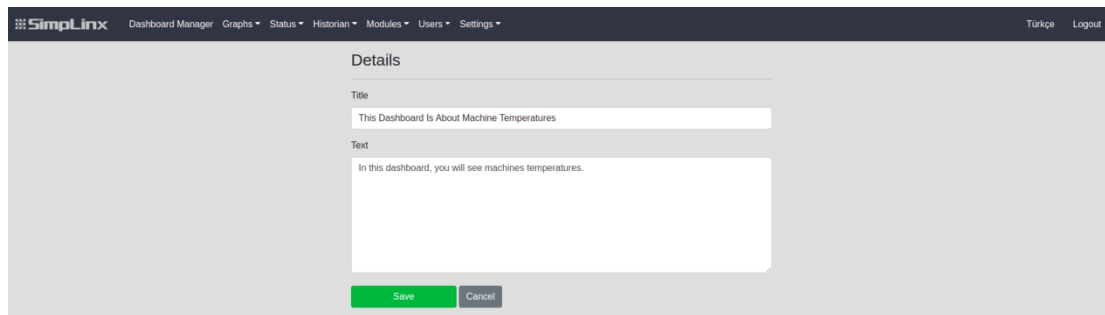
The screenshot shows the 'Details' configuration page in Simplinx. The 'Title' field contains 'Extended Machine Temperature'. The 'Eval String' field contains 'ctx.tag("machine\_temperature")'. Below the 'Build' button is the 'Predefined Values' section, which includes 'Text Color' (black), 'Background' (grey), and 'Default Text' (Current). The 'Value Table' section contains a table with two rows:

Value	Text to Display	Background
20	Optimum	Green
40	Normal	Cyan

After clicking “Extended Status”, “Details” page will be appear. On this page,

- Title: Type your Extended Status title in the “Title” box.
- Eval String: This box for building for value.
- Predefined Values: You can choose background color, default text and text color for predefined values.
- Value Table: If the instant reading value is less than or equal to the values in the lines you add to the "Value Table", the text and color in the relevant line will be used.
- Value: Choose value for this condition.
- Text to Display: Write text for to display for this specific value.
- Background: Select color for this specific value.

## 2.4. Free Text



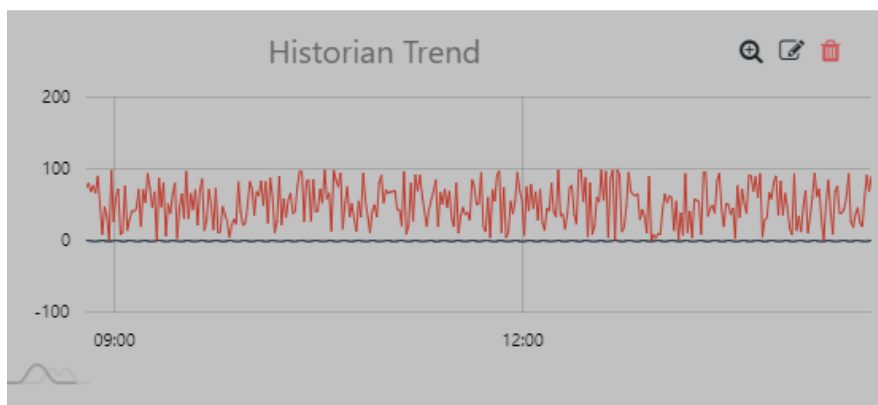
- After clicking "Free Text", "Details" page will be appear. On this page,
  - Title: Type your Free Text title in the "Title" box.
  - Text: Write your description for this title.

## 2.5. Historian Trend

You can view the archive data of the "Tag" you have selected in the "Historian Trend" graphic option. On the page that opens when you select the "Historian Trend" graphic;

- Type your graphic title in the "Title" box
- Enter the period option as "Daily", "Weekly" or "Monthly" with the "Time Interval" option
- Select "Tag" that you want to view with the "Archive" option and add it with the "+" button side

Then you can create your graphic with the "Save" button.



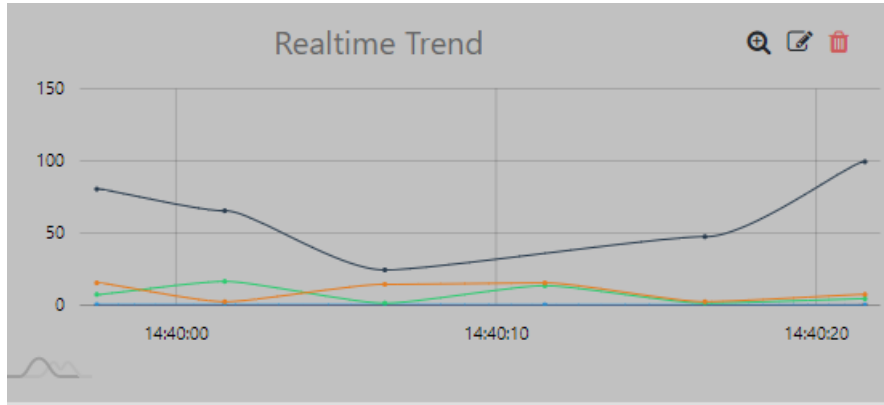
## 2.6. Realtime Trend

You can view the real-time data of the "Tag" you have selected in the "Real-time Trend" graph option. On the page that opens when you select the "Real-time Trend" graph;

- Type your graphic title in the "Title" box

- Select "Tag" that you want to view with the "Tag" option and add it with the "+" button side

Then you can create your chart with the "Save" button.



## 2.7. State Trend

You can view the machine state data of the "Machine State" you have selected in the "State Trend" graph option.

On the page that opens when you select the "State Trend" graph;

- Type your graphic title in the "Title" box
- Enter the period option as "Daily", "Weekly" with the "Time Interval" option
- Select "State" that you want to display with the "Machine State" option and add it with click.

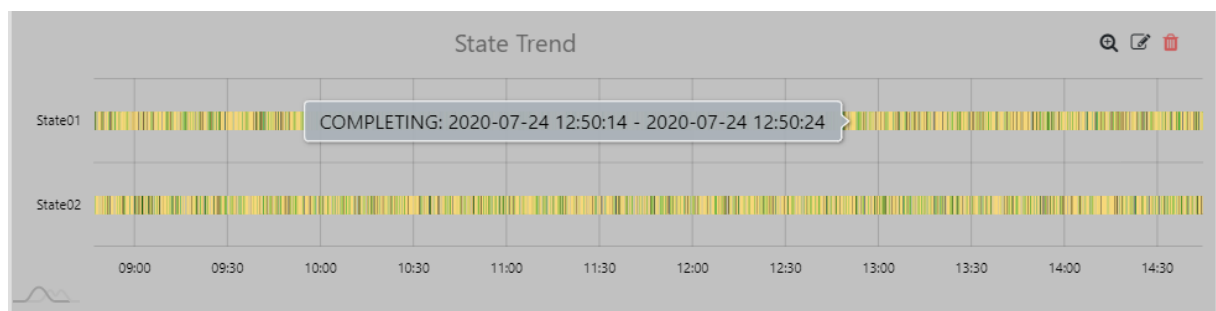
Then you can create your chart with the "Save" button.

In the upper right corner of the graphics you add;

- You can delete the graphic with the "Trash" icon.
- You can edit graphic information with the "Edit" icon
- You can view your chart on "State Center" page with the "Magnifier" icon



The page "State Center" will be described in the later headings of this document.



### 3. Historian Chart Center Page

You can view the archive data for "Tag" that you select on the "Historian Chart Center" page.

- Select "Archive" that you want to view from the list at the bottom left of the page.
- You can add maximum 4 "Archive".
- After choosing your "Archive" to display,
- With the boxes at the top of the page, set the range you want to display as "Start Date", "End Date" and "Time Interval".
- If you want a specific end date for chart, choose "End Date" but if you want a time interval for your chart, choose "Time Interval". Only one of them will be active after selection.
- Once you've set the time range, you can view your chart by pressing the "Refresh" button on the right.



After you choose archives to display, you can add them to a archive list:

- To do that, click green save button next to selected archives.
- A new page will be appear, you can name for Archive list.
- Also you can give specific "Start Date", "End Date" or "Time Interval" (Optional).
- Click "Save" button to save your Archive list.
- After saving your Archive list, you can select your list to display chart at the right bottom of the page.

With the "Options" button in the upper-right corner of the chart;

- You can export the graphic in "PNG", "JPG", "SVG", "GIF" and "PDF" formats.
- You can export graphic data's in "JSON", "CSV" and "XLSX" formats.
- You can print a snapshot of the chart with the "Print" option.



You can select maximum 4 "Archive" records.

## 4. Realtime Chart Center Page

On the "Realtime Chart Center" page, you can view real-time data of "Tag" that you choose.

- Select "Tag" that you want to view from the list at the bottom left of the page
- Delete the "Tag" that is added with the left of "Tag" name, click "x" button.



With the "Options" button in the upper-right corner of the chart;

- You can export the graphic in "PNG", "JPG", "SVG", "GIF" and "PDF" formats.
- You can export graphic data's in "JSON", "CSV" and "XLSX" formats.

- You can print a snapshot of the chart with the "Print" option.



You can select more than 1 "Tag" at the same time.

## 5. State Center Page

On the "State Center" page, you can view the machine state data for "Machine State" that you choose.

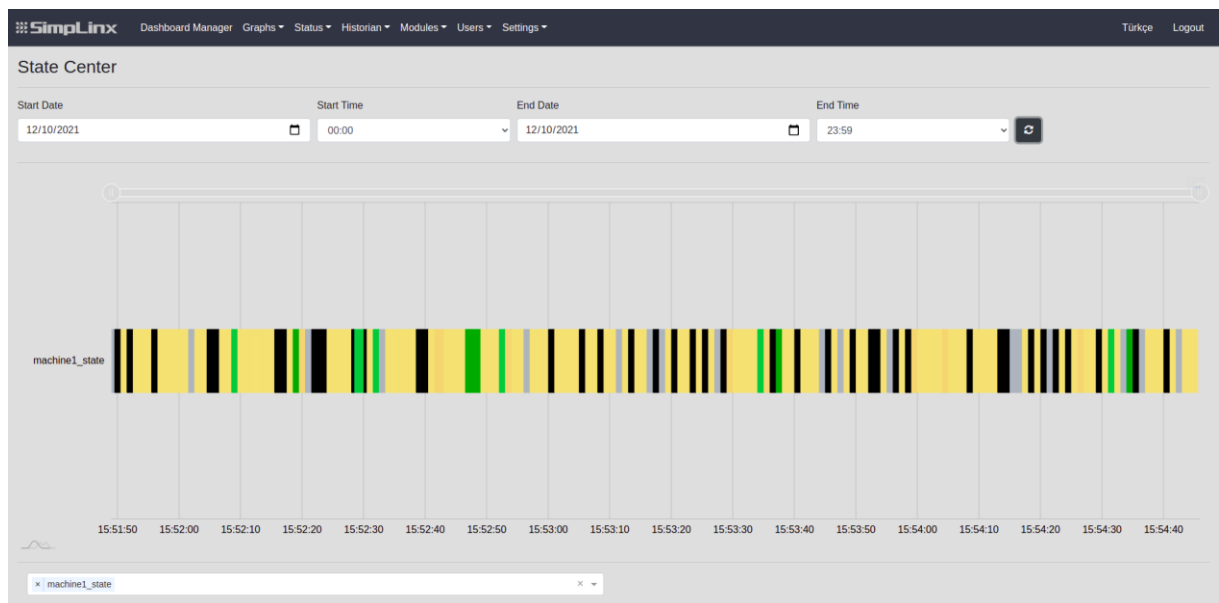
- Select "Machine State" that you want to view from the list at the bottom left of the page
- You can add your selection with clicking "Machine State" and delete with "x" button left of "Machine State" name.
- Set the range you want to display with boxes at the top of the page as "Start Date", "Start Time", "End Date" and "End time".
- Once you've set the time interval, you can view your chart by pressing the "Refresh" button on the right.

With the "Options" button in the upper-right corner of the chart;

- You can export the graphic in "PNG", "JPG", "SVG", "GIF" and "PDF" formats.
- You can export graphic data's in "JSON", "CSV" and "XLSX" formats.
- You can print a snapshot of the chart with the "Print" option



You can select maximum 2 "Machine State" at the same time



## 6. Status Page

On the "Status" page;

- The status of the "Tag" you've added
- The status of the "Driver" you have added
- If exist, the status of the "Cloud Connector" connection you can view it.
- If exist, the status of the "SMS Connector" connection you can view it.
- If exist, the status of the "SQL Connector" connection

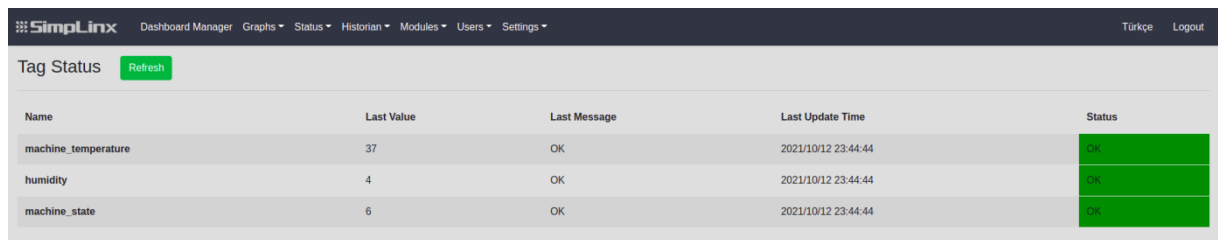
you can view it.

### 6.1. Tag Status

"Tag" that you added on the "Tag Status" page is shown as a table. Table has;

- Name
- Last Value
- Last Message
- Last Updated Time
- Status

columns. You can update table data with the "Refresh" button at the top left.



Name	Last Value	Last Message	Last Update Time	Status
machine_temperature	37	OK	2021/10/12 23:44:44	OK
humidity	4	OK	2021/10/12 23:44:44	OK
machine_state	6	OK	2021/10/12 23:44:44	OK



The "Status" column appears in "Red" if there is an error and "Green" if there is no error.

### 6.2. Driver Status

"Driver" that you have added on the "Driver Status" page is shown as a table. Table has these columns;

- Name
- Tags Read
- Tags Written
- Last Message
- Last Update Time
- Last Response Duration
- Status

You can update table data with the "Refresh" button at the top left.

Name	Tags Read	Tags Written	Last Message	Last Update Time	Last Response Duration	Status
test_driver	0	0		2021/10/12 23:29:33	0 ms	Connected



The "Status" column appears in "Red" if there is an error and "Green" if there is no error.

### 6.3. Cloud Connector Status

On the "Cloud Connector Status" page;

- Last Message
- Published Topic Count
- Connected?

Information's of the cloud connection you have made is displayed. You can update cloud connection data with the "Refresh" button at the top left.

Cloud Connector Status
Last Message
OK
Published Topic Count
-
Connected?
Connected



"Is it connected?" box will appear as "Red" if not connected, "Green" if connected".

### 6.4. SMS Connector Status

You can see the status of your SMS account that you have linked to on the "SMS Connector Status" page and the number of "Topics" created and sent.

You can update the data with the "Refresh" button at the top left.

SMS Connector Status
Last Message
-
Published Topic Count
0



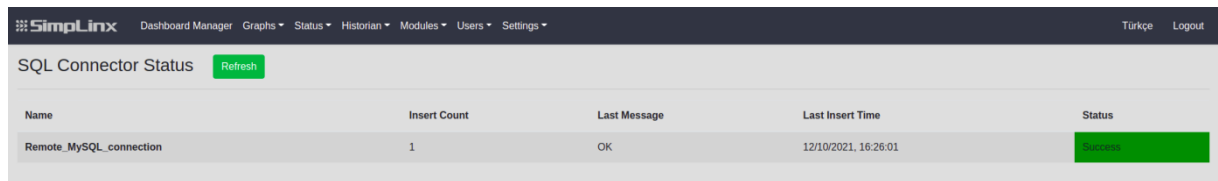
The "Status" column appears in "Red" if there is an error and "Green" if there is no error.

## 6.5. SQL Connector Status

On the “SQL Connector Status” page;

- Name
- Insert Count
- Last Message
- Last Insert Time
- Status

Information of SQL connection you have made is displayed. You can update SQL connection data with the “Refresh” button at the top left.



Name	Insert Count	Last Message	Last Insert Time	Status
Remote_MySQL_connection	1	OK	12/10/2021, 16:26:01	Refresh

## 7. Historian

The pages on this tab list the time-based breakdown of records that occur as a result of the settings made on pages under the "Modules" tab. Pages consist of several buttons and data from the table. These are;

### ✓ Buttons



Used to display data details. Editing cannot be made.



Used to download the current version of the table in CSV format.



Used to update table data.



Used to go to the first page in case of multiple pages in the table.



Used to go to the previous page in case of multiple pages in the table.



Used to go to the next page in case of multiple pages in the table.



Used to go to the last page in case of multiple pages in the table.

### ✓ Data



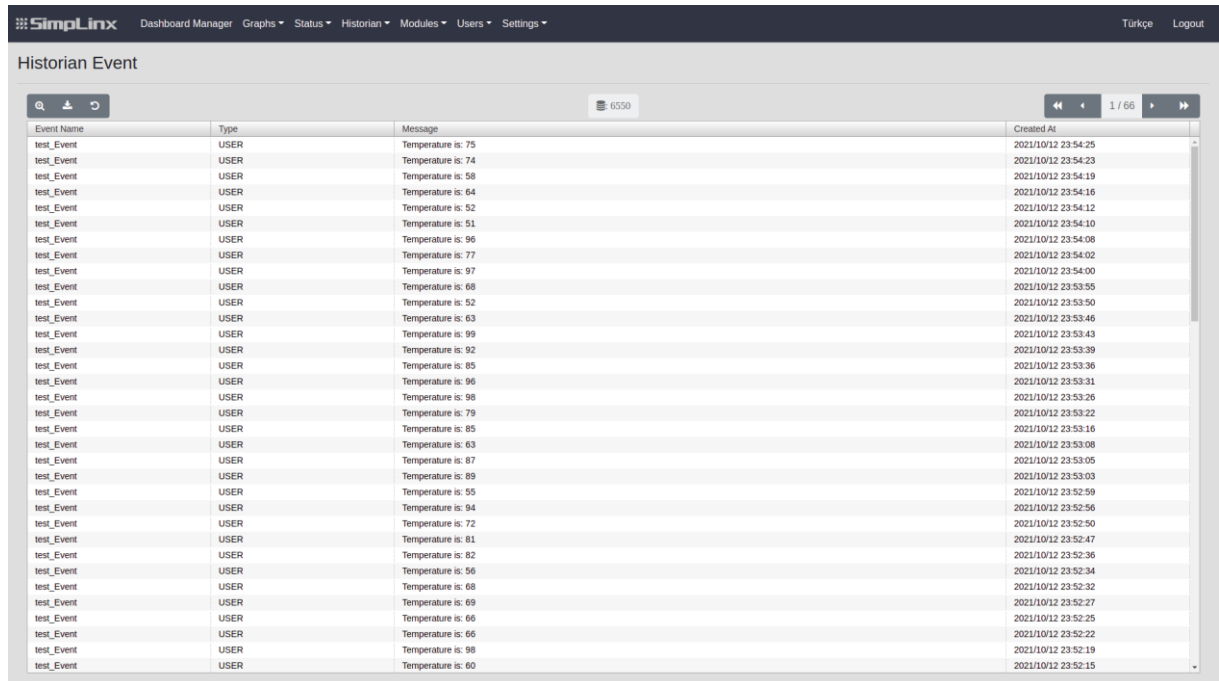
Shows the total number of data in the table.



Shows the page you are in the table and the total number of pages. The table generates 1 page for each 100 data.


## 7.1. Event

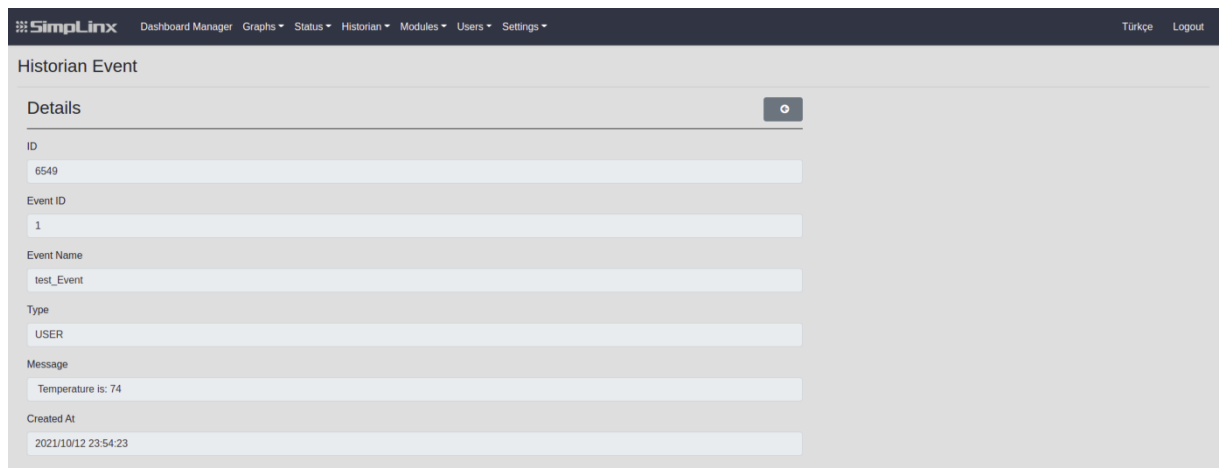
This page lists the values that are recorded and the values for system events when the terms of the events you create on the "**Modules**"-->"**Event**" page are met.



The screenshot shows the 'Historian Event' page in the Simplinx interface. The page has a navigation bar at the top with 'Simplinx' logo and menu items: Dashboard Manager, Graphs, Status, Historian, Modules, Users, Settings. The user is logged in as 'Türkçe' and can click 'Logout'. Below the navigation bar, there is a search bar and a table of events. The table has columns for Event Name, Type, Message, and Created At. The table contains 30 rows of test events, each with a unique 'Created At' timestamp and a 'Message' of 'Temperature is: [value]'. A pagination control shows '1 / 66'.

Event Name	Type	Message	Created At
test_Event	USER	Temperature is: 75	2021/10/12 23:54:25
test_Event	USER	Temperature is: 74	2021/10/12 23:54:23
test_Event	USER	Temperature is: 58	2021/10/12 23:54:19
test_Event	USER	Temperature is: 64	2021/10/12 23:54:16
test_Event	USER	Temperature is: 52	2021/10/12 23:54:12
test_Event	USER	Temperature is: 51	2021/10/12 23:54:10
test_Event	USER	Temperature is: 96	2021/10/12 23:54:08
test_Event	USER	Temperature is: 77	2021/10/12 23:54:02
test_Event	USER	Temperature is: 97	2021/10/12 23:54:00
test_Event	USER	Temperature is: 68	2021/10/12 23:53:55
test_Event	USER	Temperature is: 52	2021/10/12 23:53:50
test_Event	USER	Temperature is: 63	2021/10/12 23:53:46
test_Event	USER	Temperature is: 99	2021/10/12 23:53:43
test_Event	USER	Temperature is: 92	2021/10/12 23:53:39
test_Event	USER	Temperature is: 85	2021/10/12 23:53:36
test_Event	USER	Temperature is: 96	2021/10/12 23:53:31
test_Event	USER	Temperature is: 98	2021/10/12 23:53:26
test_Event	USER	Temperature is: 79	2021/10/12 23:53:22
test_Event	USER	Temperature is: 85	2021/10/12 23:53:16
test_Event	USER	Temperature is: 63	2021/10/12 23:53:08
test_Event	USER	Temperature is: 87	2021/10/12 23:53:05
test_Event	USER	Temperature is: 89	2021/10/12 23:53:03
test_Event	USER	Temperature is: 55	2021/10/12 23:52:59
test_Event	USER	Temperature is: 94	2021/10/12 23:52:56
test_Event	USER	Temperature is: 72	2021/10/12 23:52:50
test_Event	USER	Temperature is: 81	2021/10/12 23:52:47
test_Event	USER	Temperature is: 82	2021/10/12 23:52:36
test_Event	USER	Temperature is: 56	2021/10/12 23:52:34
test_Event	USER	Temperature is: 68	2021/10/12 23:52:32
test_Event	USER	Temperature is: 69	2021/10/12 23:52:27
test_Event	USER	Temperature is: 66	2021/10/12 23:52:25
test_Event	USER	Temperature is: 66	2021/10/12 23:52:22
test_Event	USER	Temperature is: 98	2021/10/12 23:52:19
test_Event	USER	Temperature is: 60	2021/10/12 23:52:15

If you wish, you can double-press the event created from the list or select the event and access the details of the event with the button 

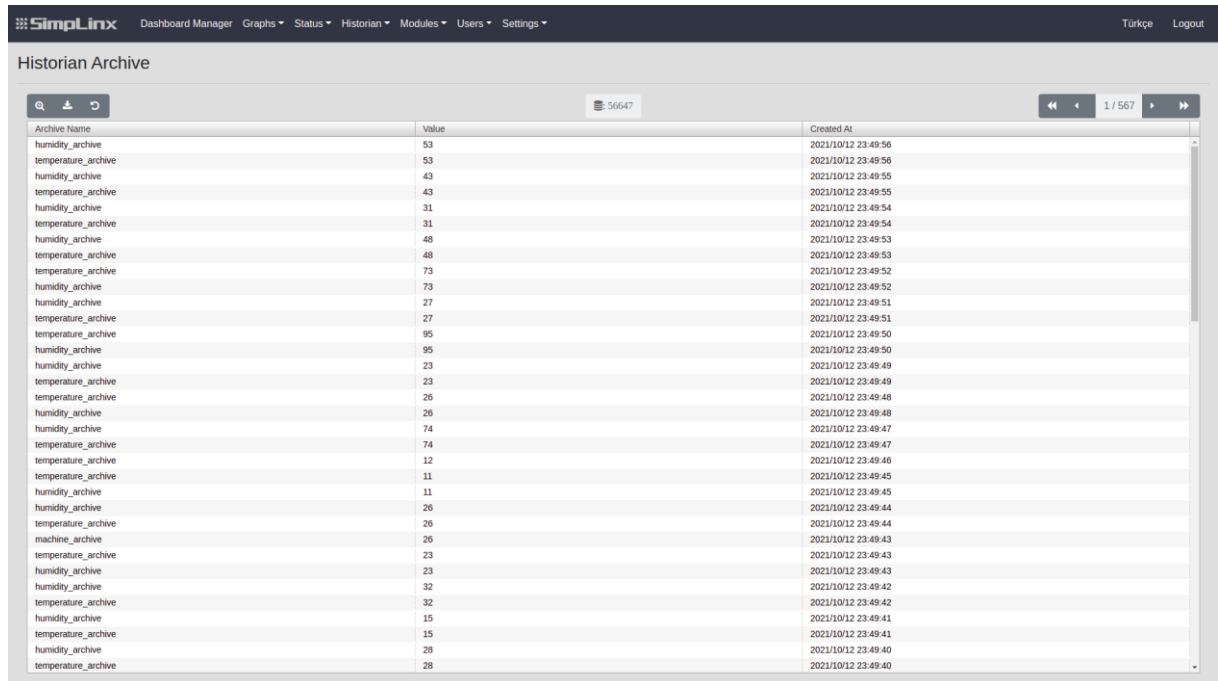


The screenshot shows the 'Historian Event' details page in the Simplinx interface. The page has the same navigation bar as the previous screenshot. Below the navigation bar, there is a 'Details' section with a close button. The details are displayed in a form with the following fields:


ID	6549
Event ID	1
Event Name	test_Event
Type	USER
Message	Temperature is: 74
Created At	2021/10/12 23:54:23

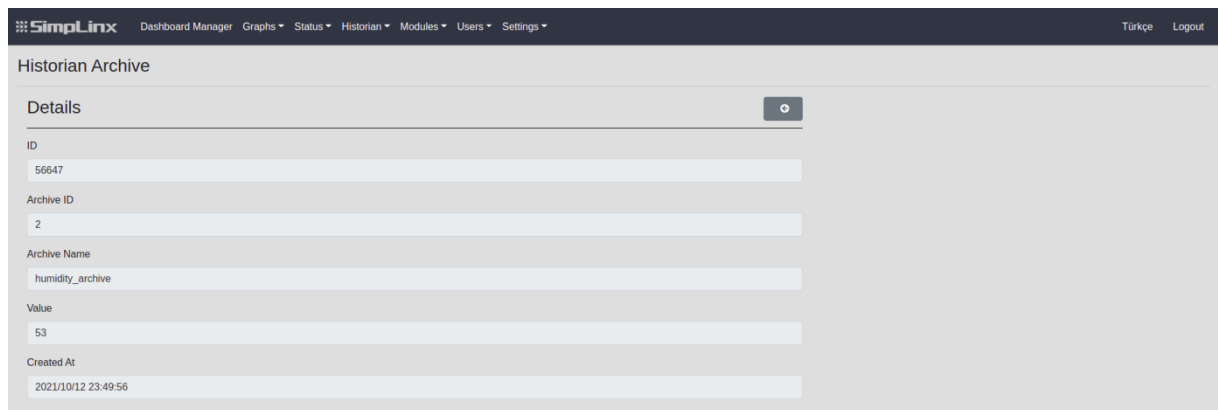
## 7.2. Archive

This page lists the values recorded when the terms are met in the archives that you create on the "Modules"-->"Archive" page.



Archive Name	Value	Created At
humidity_archive	53	2021/10/12 23:49:56
temperature_archive	53	2021/10/12 23:49:56
humidity_archive	43	2021/10/12 23:49:55
temperature_archive	43	2021/10/12 23:49:55
humidity_archive	31	2021/10/12 23:49:54
temperature_archive	31	2021/10/12 23:49:54
humidity_archive	48	2021/10/12 23:49:53
temperature_archive	48	2021/10/12 23:49:53
temperature_archive	73	2021/10/12 23:49:52
humidity_archive	73	2021/10/12 23:49:52
humidity_archive	27	2021/10/12 23:49:51
temperature_archive	27	2021/10/12 23:49:51
temperature_archive	95	2021/10/12 23:49:50
humidity_archive	95	2021/10/12 23:49:50
humidity_archive	23	2021/10/12 23:49:49
temperature_archive	23	2021/10/12 23:49:49
temperature_archive	26	2021/10/12 23:49:48
humidity_archive	26	2021/10/12 23:49:48
humidity_archive	74	2021/10/12 23:49:47
temperature_archive	74	2021/10/12 23:49:47
temperature_archive	12	2021/10/12 23:49:46
temperature_archive	11	2021/10/12 23:49:45
humidity_archive	11	2021/10/12 23:49:45
humidity_archive	26	2021/10/12 23:49:44
temperature_archive	26	2021/10/12 23:49:44
machine_archive	26	2021/10/12 23:49:43
temperature_archive	23	2021/10/12 23:49:43
humidity_archive	23	2021/10/12 23:49:43
humidity_archive	32	2021/10/12 23:49:42
temperature_archive	32	2021/10/12 23:49:42
humidity_archive	15	2021/10/12 23:49:41
temperature_archive	15	2021/10/12 23:49:41
humidity_archive	28	2021/10/12 23:49:40
temperature_archive	28	2021/10/12 23:49:40

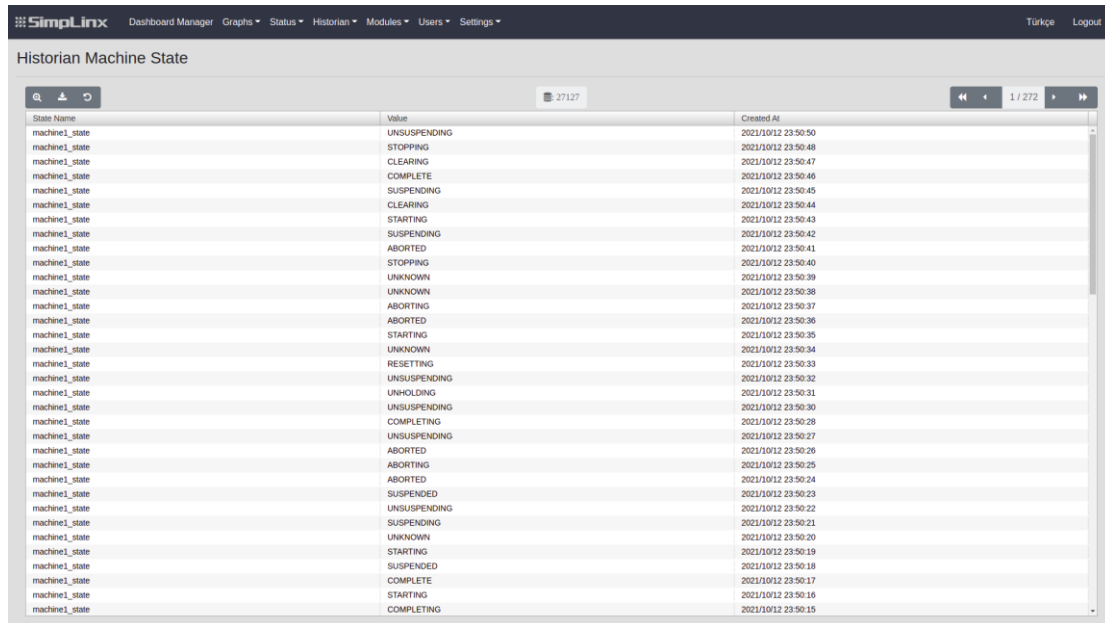
If you wish, you can access the details of the archive by double clicking from the list or by selecting the archive and clicking the button 




Details
ID
56647
Archive ID
2
Archive Name
humidity_archive
Value
53
Created At
2021/10/12 23:49:56

### 7.3. Machine State

This page lists the historically recorded values of the devices that you create on the "Modules"-->"Machine State" page.



State Name	Value	Created At
machine1_state	UNSUSPENDING	2021/10/12 23:50:50
machine1_state	STOPPING	2021/10/12 23:50:49
machine1_state	CLEARING	2021/10/12 23:50:47
machine1_state	COMPLETE	2021/10/12 23:50:46
machine1_state	SUSPENDING	2021/10/12 23:50:45
machine1_state	CLEARING	2021/10/12 23:50:44
machine1_state	STARTING	2021/10/12 23:50:43
machine1_state	SUSPENDING	2021/10/12 23:50:42
machine1_state	ABORTED	2021/10/12 23:50:41
machine1_state	STOPPING	2021/10/12 23:50:40
machine1_state	UNKNOWN	2021/10/12 23:50:39
machine1_state	UNKNOWN	2021/10/12 23:50:38
machine1_state	ABORTING	2021/10/12 23:50:37
machine1_state	ABORTED	2021/10/12 23:50:36
machine1_state	STARTING	2021/10/12 23:50:35
machine1_state	UNKNOWN	2021/10/12 23:50:34
machine1_state	RESETTING	2021/10/12 23:50:33
machine1_state	UNSUSPENDING	2021/10/12 23:50:32
machine1_state	UNHOLDING	2021/10/12 23:50:31
machine1_state	UNSUSPENDING	2021/10/12 23:50:30
machine1_state	COMPLETING	2021/10/12 23:50:28
machine1_state	UNSUSPENDING	2021/10/12 23:50:27
machine1_state	ABORTED	2021/10/12 23:50:26
machine1_state	ABORTING	2021/10/12 23:50:25
machine1_state	ABORTED	2021/10/12 23:50:24
machine1_state	SUSPENDED	2021/10/12 23:50:23
machine1_state	UNSUSPENDING	2021/10/12 23:50:22
machine1_state	SUSPENDING	2021/10/12 23:50:21
machine1_state	UNKNOWN	2021/10/12 23:50:20
machine1_state	STARTING	2021/10/12 23:50:19
machine1_state	SUSPENDED	2021/10/12 23:50:18
machine1_state	COMPLETE	2021/10/12 23:50:17
machine1_state	STARTING	2021/10/12 23:50:16
machine1_state	COMPLETING	2021/10/12 23:50:15

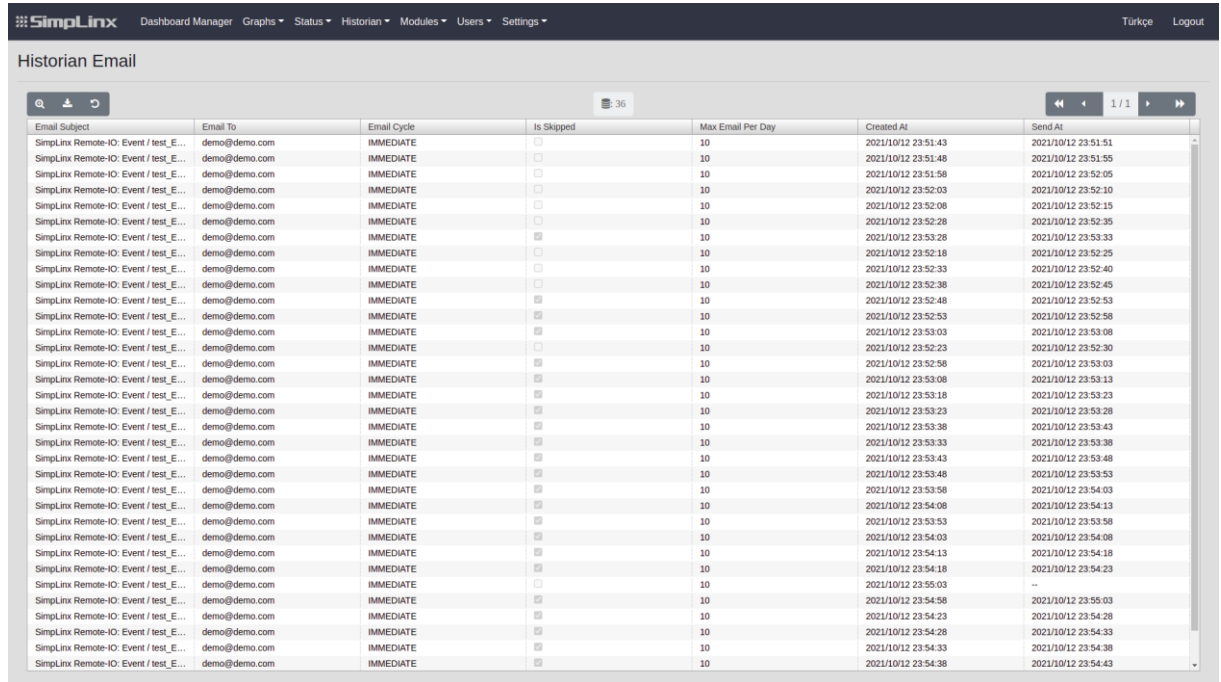
If you wish, you can access the details of the machine state by double clicking from the list or by selecting the state and clicking the button 




Details	
ID	27127
State Name	machine1_state
Value	14
Created At	2021/10/12 23:50:50

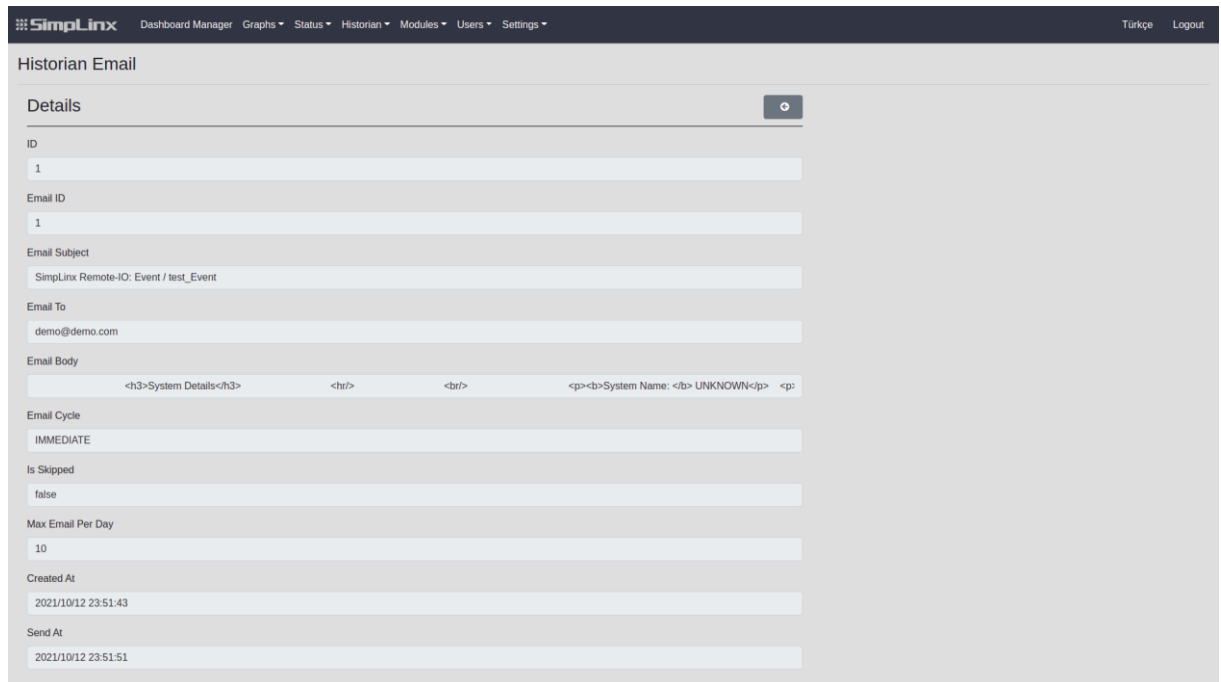
## 7.4. Email

On this page, information about the mails sent when the events are triggered in the records you created on the “**Modules**”->“**Email**” page is listed.



Email Subject	Email To	Email Cycle	Is Skipped	Max Email Per Day	Created At	Send At
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:51:43	2021/10/12 23:51:51
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:51:48	2021/10/12 23:51:55
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:51:58	2021/10/12 23:52:05
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:03	2021/10/12 23:52:10
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:08	2021/10/12 23:52:15
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:28	2021/10/12 23:52:35
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:28	2021/10/12 23:53:33
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:18	2021/10/12 23:52:25
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:33	2021/10/12 23:52:40
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:38	2021/10/12 23:52:45
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:48	2021/10/12 23:52:53
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:53	2021/10/12 23:52:58
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:03	2021/10/12 23:53:08
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:23	2021/10/12 23:52:30
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:52:58	2021/10/12 23:53:03
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:08	2021/10/12 23:53:13
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:18	2021/10/12 23:53:23
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:23	2021/10/12 23:53:28
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:38	2021/10/12 23:53:43
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:33	2021/10/12 23:53:38
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:43	2021/10/12 23:53:48
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:48	2021/10/12 23:53:53
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:58	2021/10/12 23:54:03
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:08	2021/10/12 23:54:13
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:53:53	2021/10/12 23:53:58
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:03	2021/10/12 23:54:08
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:13	2021/10/12 23:54:18
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:18	2021/10/12 23:54:23
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:55:03	--
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:58	2021/10/12 23:55:03
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:23	2021/10/12 23:54:28
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:28	2021/10/12 23:54:33
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:33	2021/10/12 23:54:38
SimpliX Remote-IO: Event / test_E...	demo@demo.com	IMMEDIATE	<input type="checkbox"/>	10	2021/10/12 23:54:38	2021/10/12 23:54:43


If you wish, you can access the details of the email record by double clicking from the list or by selecting the email record and clicking the button 

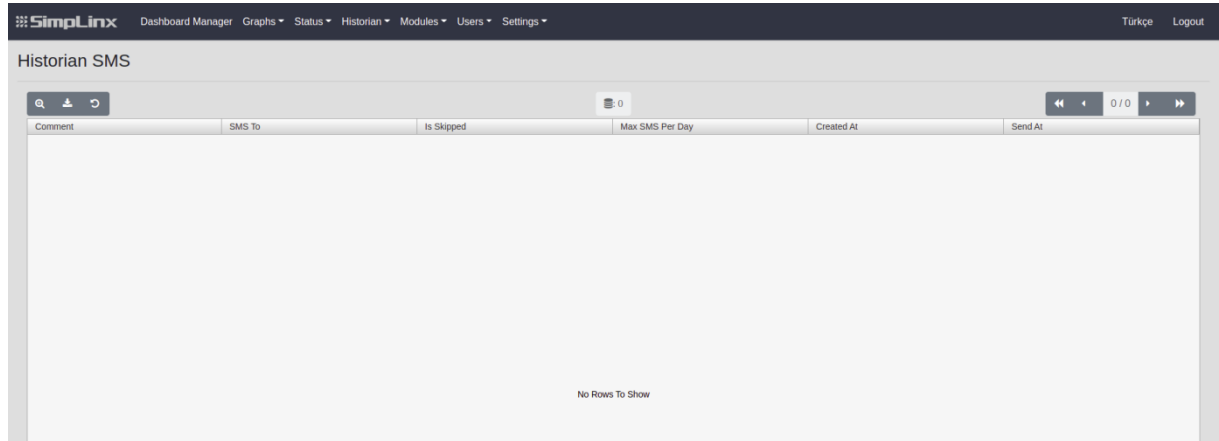


ID	1
Email ID	1
Email Subject	SimpliX Remote-IO: Event / test_Event
Email To	demo@demo.com
Email Body	<h3>System Details</h3>   <p><b>System Name: </b> UNKNOWN</p>
Email Cycle	IMMEDIATE
Is Skipped	false
Max Email Per Day	10
Created At	2021/10/12 23:51:43
Send At	2021/10/12 23:51:51

## 7.5. SMS

This page lists information about SMS sent when the events in the records that you create on the "Modules"-->"SMS" page are provided.

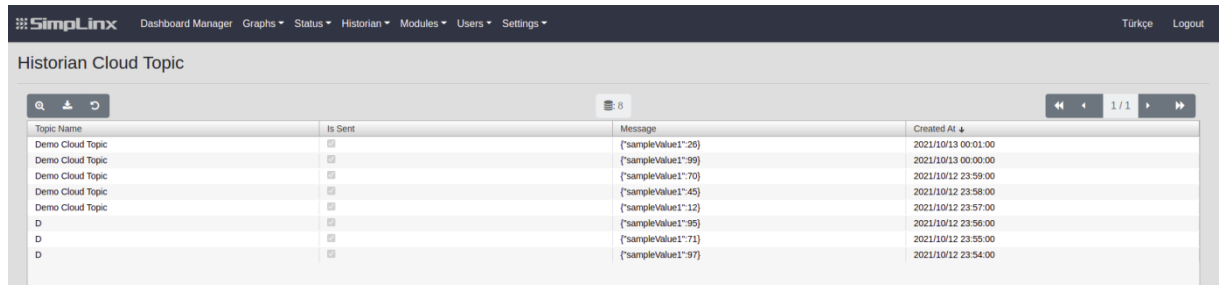
If you wish, you can access the details of the sent SMS by double clicking on the SMS record created from the list or by selecting the SMS record and clicking the button 




Comment	SMS To	Is Skipped	Max SMS Per Day	Created At	Send At
No Rows To Show					

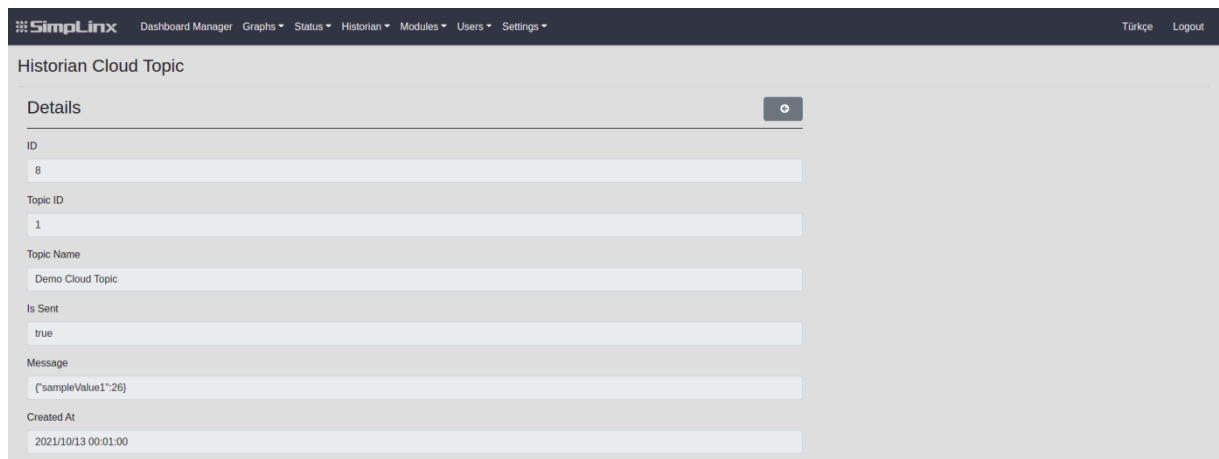
## 7.6. Cloud Topic

This page lists information about topics sent to the cloud when the terms of the records you create on the "Modules"-->"Cloud Topic" page are met.



Topic Name	Is Sent	Message	Created At
Demo Cloud Topic	<input checked="" type="checkbox"/>	{sampleValue1:26}	2021/10/13 00:01:00
Demo Cloud Topic	<input checked="" type="checkbox"/>	{sampleValue1:99}	2021/10/13 00:00:00
Demo Cloud Topic	<input checked="" type="checkbox"/>	{sampleValue1:70}	2021/10/12 23:59:00
Demo Cloud Topic	<input checked="" type="checkbox"/>	{sampleValue1:45}	2021/10/12 23:58:00
Demo Cloud Topic	<input checked="" type="checkbox"/>	{sampleValue1:12}	2021/10/12 23:57:00
D	<input checked="" type="checkbox"/>	{sampleValue1:95}	2021/10/12 23:56:00
D	<input checked="" type="checkbox"/>	{sampleValue1:71}	2021/10/12 23:55:00
D	<input checked="" type="checkbox"/>	{sampleValue1:97}	2021/10/12 23:54:00

If you wish, you can access the details of the submitted subjects by double clicking the created subject record from the list or by selecting the subject record and clicking the button 



Details	
ID	8
Topic ID	1
Topic Name	Demo Cloud Topic
Is Sent	true
Message	{sampleValue1:26}
Created At	2021/10/13 00:01:00

## 7.7. SQL Insert Event

On this page, information about the SQL insert events sent when the events are triggered in the records you created on the “**Modules**”->“**SQL Insert Event**” page is listed.

Timestamp	SQL Event	SQL Connection	SQL String	Is Sent	Is Skipped
2021/10/12 23:24.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:23.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:22.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:21.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:20.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:19.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:18.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:17.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:16.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:15.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:14.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:13.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:12.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:11.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:10.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:09.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:08.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:07.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:06.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:05.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:04.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:03.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:02.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:01.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 23:00.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:59.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:58.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:57.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:56.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:55.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:54.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:53.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:52.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>
2021/10/12 22:51.00	Insertion_event	Remote_MySQL_connection	INSERT INTO sampleTable3 (tag1) values ...	<input type="checkbox"/>	<input type="checkbox"/>

If you wish, you can access the details of the email record by double clicking from the list or by selecting the email record and clicking the button 

Details	
ID	419
Timestamp	2021/10/12 23:24:00
SQL Event	Insertion_event
SQL Connection	Remote_MySQL_connection
SQL String	INSERT INTO sampleTable3 (tag1) values (73)
Is Sent	true
Is Skipped	false

## 8. Modules

This tab contains the pages where the definitions and settings are made that are required for data collection. These pages are accessed only by the admin user. To use data collection, the first to do is make the necessary definitions from the pages under the "Modules" tab. Pages consist of several buttons and data from the table. These are;

### ✓ Buttons



Used to display data details. Editing cannot be made.



Used to add new data to the list. Directs it to the add data page.



Used to access and edit details of the selected data.



Used to delete the selected data from the table.



Used to download the current version of the table in CSV format.



Used to update table data.



Used to go to the first page in case of multiple pages in the table.



Used to go to the previous page in case of multiple pages in the table.



Used to go to the next page in case of multiple pages in the table.



Used to go to the last page in case of multiple pages in the table.

### ✓ Data



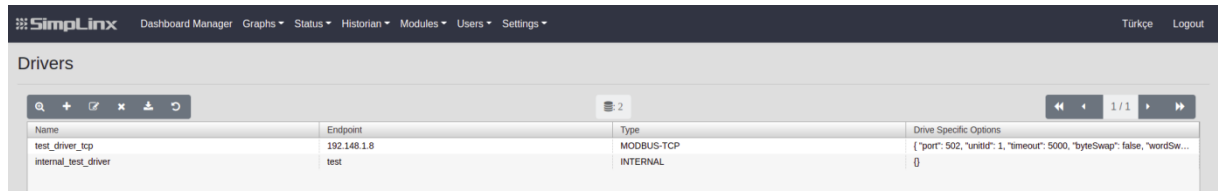
Shows the total number of data in the table.



Shows the page you are in the table and the total number of pages. The table generates 1 page for each 100 data.

## 8.1. Driver

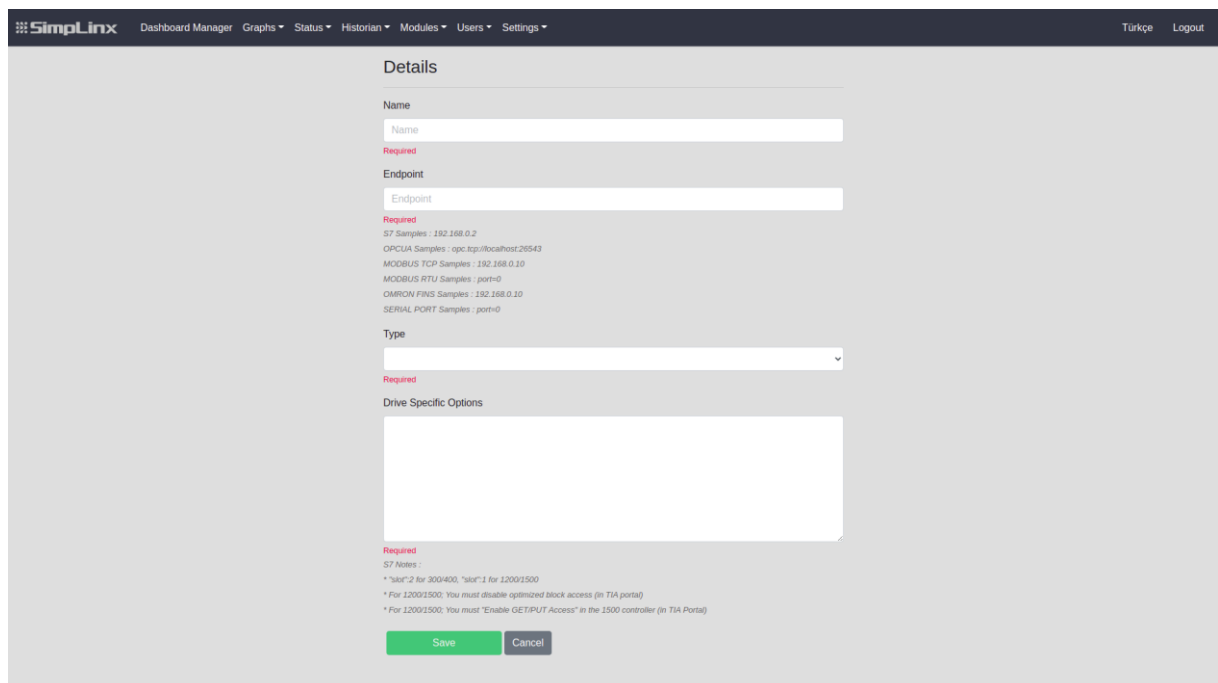
The page that you define for data collection is the page where you can list and manage the PLCs you define. If you are logging into the system for the first time, the list will be empty.



Name	Endpoint	Type	Drive Specific Options
test_driver_tcp	192.148.1.8	MODBUS-TCP	{ "port": 502, "unitid": 1, "timeout": 5000, "byteSwap": false, "wordSw...
internal_test_driver	test	INTERNAL	{}

### Adding Drive Connection

- From the Menu, go to the "**Modules**"--->"**Driver**" page.
- Press the icon from Toolbar to **+**. You will be redirected to the "**Add Driver**" page. The required information on this page is as follows;



**Details**

Name  
Name

Endpoint  
Endpoint

Type  
Type

Drive Specific Options

S7 Samples : 192.168.0.2  
OPCUA Samples : opc.tcp://localhost:26543  
MODBUS TCP Samples : 192.168.0.10  
MODBUS RTU Samples : port=0  
OMRON FINS Samples : 192.168.0.10  
SERIAL PORT Samples : port=0

Save Cancel

**Name:** The area you need to easily recognize your driver when performing different operations.

**Endpoint:** You must enter the IP Address to access your drive connected to SMX-RNS02.

**Type:** You must select the driver type to adjust the appropriate settings for your drive. The system supports 5 different types of drivers. These are;

- MODBUS TCP
- MODBUS RTU
- OPC UA
- S7
- OMRON FINS
- SERIAL PORT
- INTERVAL

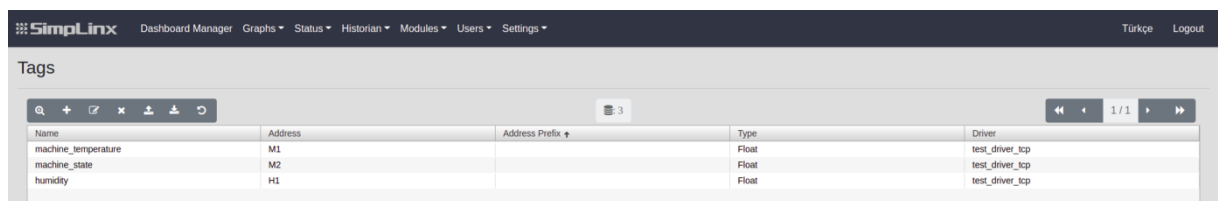
**Drive Specific Settings:** This value automatically comes according to the type of driver that you have selected. You can edit additional settings here if you wish.

Once the necessary information is entered, your driver will be identified in the system. To make sure that your settings are correct and the connection is provided, you can go from the menu to the "**Status**"--->"**Driver**" tab.

An error may appear during connecting when the status page is first opened. Check again with the Refresh button.

## 8.2. Tag

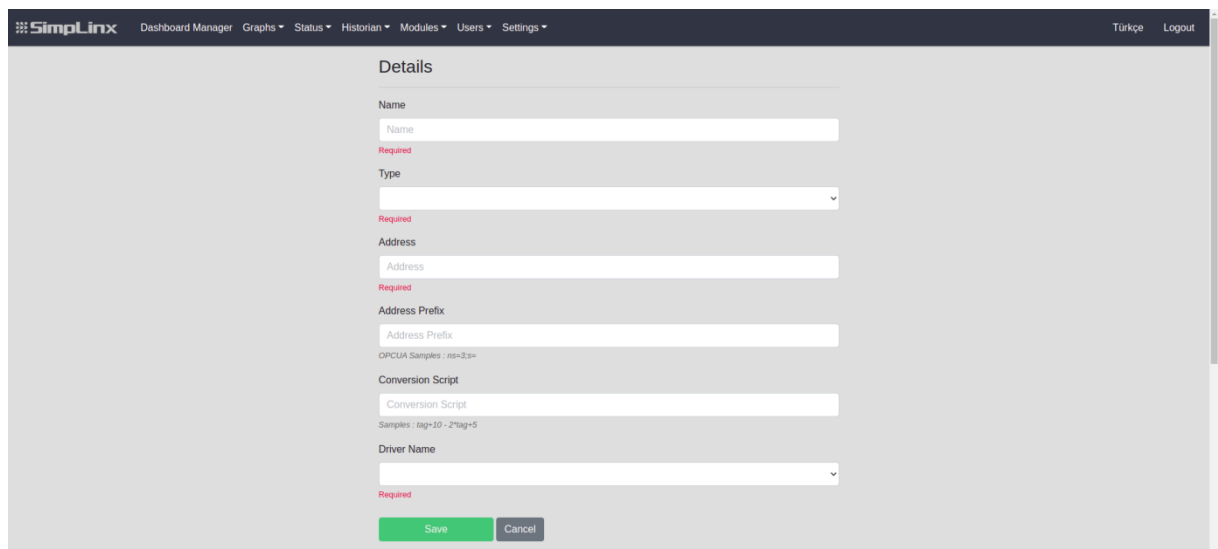
This is the page where tags are listed and managed. If you are logging into the system for the first time, the list will be empty.



Name	Address	Address Prefix	Type	Driver
machine_temperature	M1		Float	test_driver_tcp
machine_state	M2		Float	test_driver_tcp
humidity	H1		Float	test_driver_tcp

### Adding Tags

- From the Menu, go to the "**Modules**"--->"**Tag**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "**Tag Insert**" page. The required information on this page is as follows;



**Details**

Name  
  
 Required

Type  
  
 Required

Address  
  
 Required

Address Prefix  
  
 OPCUA Samples : ss=33=

Conversion Script  
  
 Samples : tag=10 - 2tag=5

Driver Name  
  
 Required

Save Cancel

**Name:** The area you need to easily recognize your tag when doing different operations.

**Type:** You must select the correct data type to read values from the tag

**Address:** You must enter the address in your PLC to access the relevant tag.

**Address Prefix:** This is required when reading data from your OPC-UA type drivers. Different types of drivers can be passed blank.

**Conversion Script:** This is the area where you can use your tag data to save your data by making changes over incoming data without interfering with PLC. Support JavaScript codes.

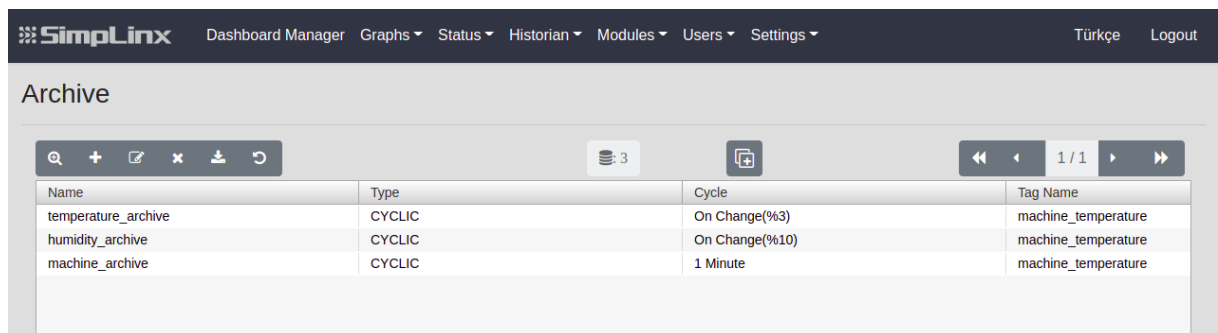
**Driver Name:** This is the field where the tag is in which PLC is selected.

Once the necessary information is entered, your tag will be defined in the system. To make sure your settings are correct, you can go to the "**Status**"--->"**Tag**" page from the menu.

An error may appear during connecting when the Tag page is first opened. Check again with the Refresh button.

### 8.3. Archive

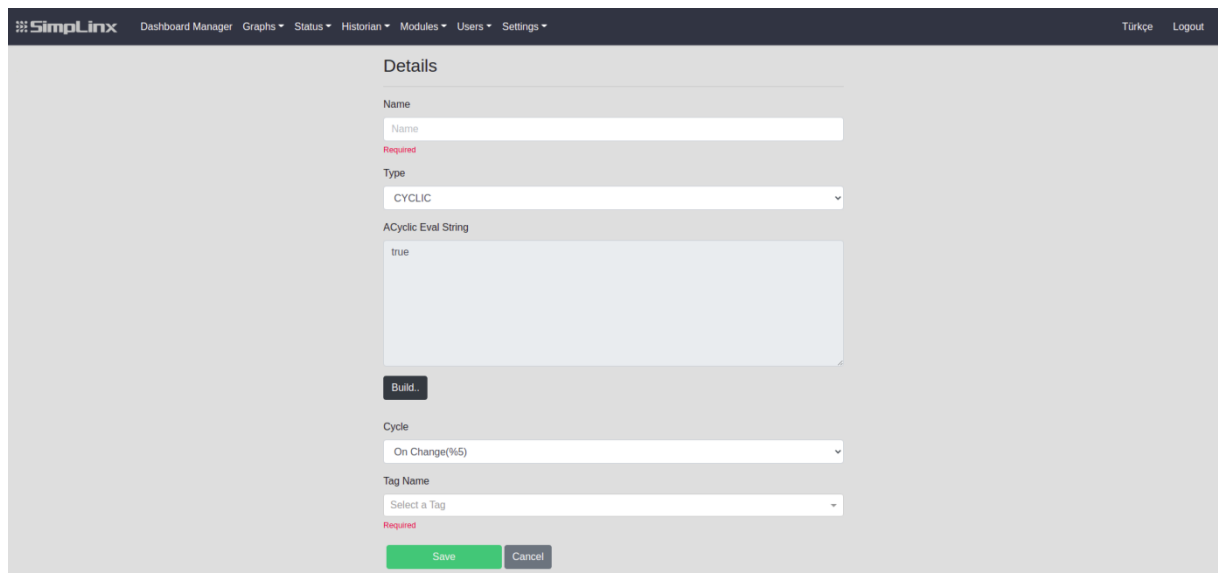
This is the page where you can list and manage archive settings. Archives ensure that the value of the tag you specify is recorded regularly.



Name	Type	Cycle	Tag Name
temperature_archive	CYCLIC	On Change(%3)	machine_temperature
humidity_archive	CYCLIC	On Change(%10)	machine_temperature
machine_archive	CYCLIC	1 Minute	machine_temperature

#### Adding Archives

- From the Menu, go to "**Modules**"--->"**Archive**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "**Adding Archive**" page. The required information on this page is as follows;



**Details**

Name  
Name  
Required

Type  
CYCLIC

ACyclic Eval String  
true

**Build...**

Cycle  
On Change(%5)

Tag Name  
Select a Tag  
Required

**Save** **Cancel**

**Name:** The area you need to easily recognize your archives when doing different operations.

**Type:** Specifies the archive creation type. There are two different options. These are;

- **CYCLIC**  
Allows archive creation with specific loops, such as minutes, hours.
- **ACYCLIC**  
Ensures the creation of one archive each time the specified condition is provided.

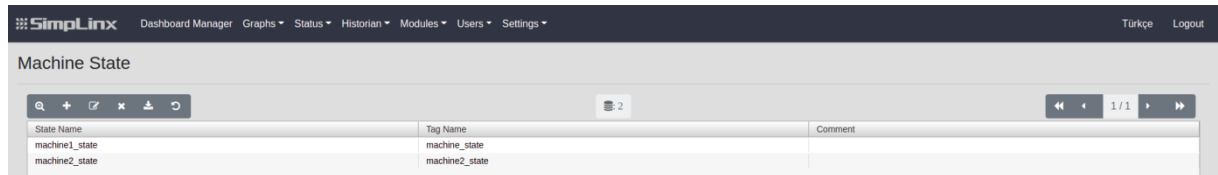
**ACyclic Eval String:** It is active when ACYCLIC is selected as the type. The trigger condition must be written in the specified field by using the CREATE.. button or directly typing. As long as the condition is met, archives are created at 5 seconds interval.

**Loop:** It is active when CYCLIC is selected as type. It ensured that the relevant archive is created at certain intervals without being bound by any conditions.

**Tag Name:** Determines the tag to be saved as an archive.

## 8.4. Machine State

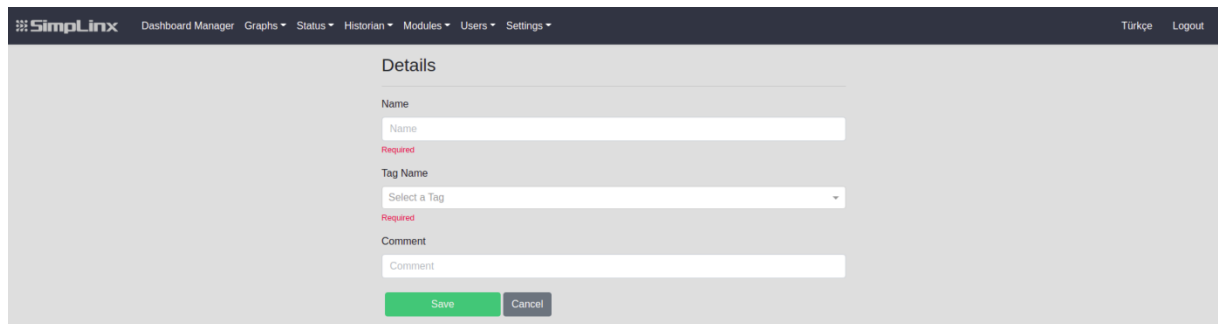
It is the page where the machines to be monitored are listed and you can manage them. If you add a tag with your machine status to your PLC, the values on that tag are recorded according to the standard. Thanks to the machine status, you can monitor the momentary or retrospective status of your machine at what time. There are 17 different machine states. Each case is shown with different standardized colors. The values and meanings of these colors are specified at the bottom of the page. For more information, please follow the relevant link.



State Name	Tag Name	Comment
machine1_state	machine_state	
machine2_state	machine2_state	

### Adding Machine States

- From the Menu, go to the "**Modules**"--->"**Machine State**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "**Adding Machine State**" page. The required information on this page is as follows;



**Details**

Name  
  
Required

Tag Name  
  
Required

Comment

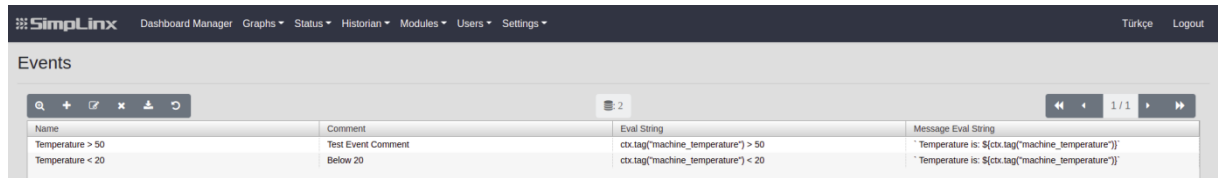
**Name:** The area you need to easily recognize your machine status when performing different operations.

**Tag Name:** The area where the Tag with machine status information is selected.

**Comment:** A comment can be added to provide information about the machine status created. It is not mandatory, it can be left blank.

## 8.5. Event

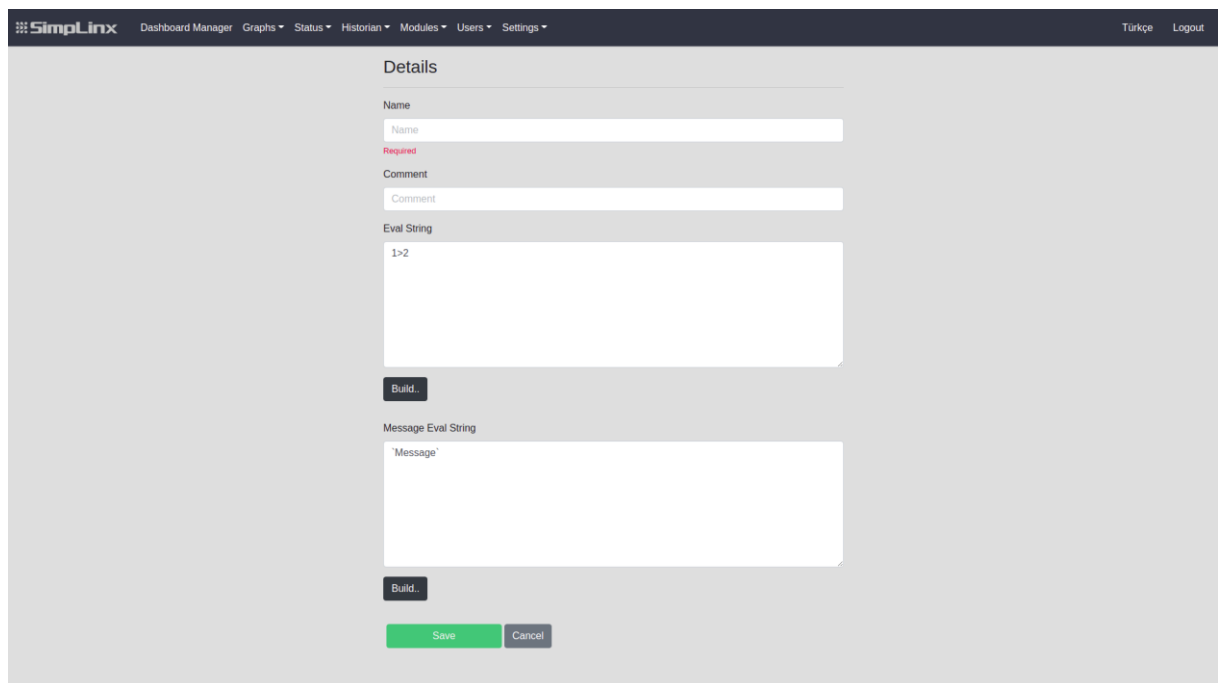
The page where you can list and manage events created. Events occur when the conditions of the tag you set are met. The events you create will allow you to be notified by email or SMS.



Name	Comment	Eval String	Message Eval String
Temperature > 50	Test Event Comment	ctx.tag("machine_temperature") > 50	Temperature is: \${ctx.tag("machine_temperature")}
Temperature < 20	Below 20	ctx.tag("machine_temperature") < 20	Temperature is: \${ctx.tag("machine_temperature")}

### Adding Events

- From the Menu, go to the "**Modules**"--->"**Event**" page.
- Press the icon from Toolbar to +, you will be redirected to the "**Adding Event**" page. The required information on this page is as follows;



**Details**

Name

Required

Comment

Eval String

Message Eval String

**Name:** The area that you need to easily recognize when doing different operations.

**Comment:** A comment can be added to provide information about the event created. It is not mandatory, it can be left blank.

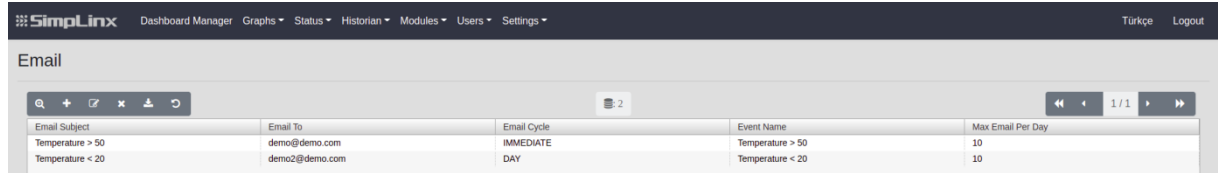
**Eval String:** Create in the specified field the trigger condition must be written by typing or the button directly. The event will be created as the condition is provided.

**Message Eval String:** Create in the specified field the message to be saved can be written when creating an event by button or directly typing. This message value is used as message content in email and SMS submission.

For example, if the event creation depends on a specific tag, the message section can also indicate that tag and print the value of the tag when the event is created.

## 8.6. Email

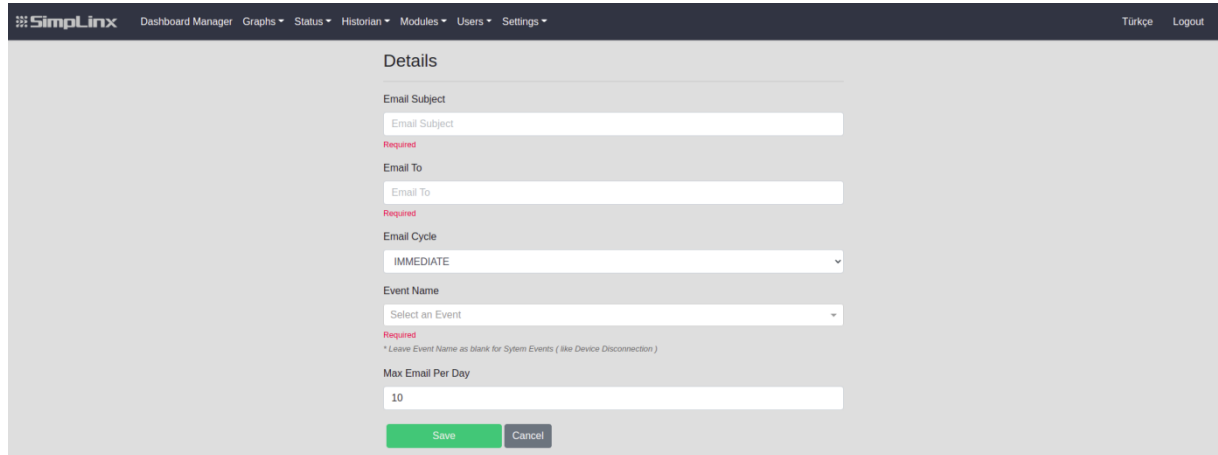
It is the page where email settings are listed and managed. Depending on the events you create, it allows you to learn about the situation. When the events are triggered, information mail is sent to you according to the cycle you have determined.



Email Subject	Email To	Email Cycle	Event Name	Max Email Per Day
Temperature > 50	demo@demo.com	IMMEDIATE	Temperature > 50	10
Temperature < 20	demo2@demo.com	DAY	Temperature < 20	10

### Adding Emails

- From the Menu, go to the "**Modules**"--->"**Email**" page.
- Press the icon from Toolbar to +, you will be redirected to the "**Adding An Email** " page. The required information on this page is as follows;



**Details**

Email Subject  
  
Required

Email To  
  
Required

Email Cycle

Event Name  
  
Required  
\*Leave Event Name as blank for System Events ( like Device Disconnection )

Max Email Per Day

**Email Subject:** The area that determines the subject in the mail sent.

**Email To :** The area where it is determined who to go to mail when the relevant event is triggered.

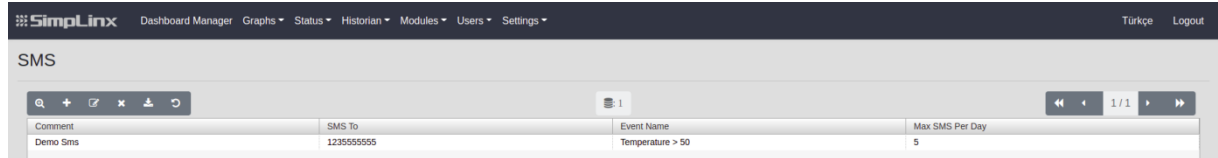
**Email Cycle:** The area that determines the frequency of mail sent as the event is triggered. If you wish, you can send an e-mail at the time the event occurs, or if you want to collect events daily or weekly and send them as mail.

**Event Name:** The field in which the event name to follow is selected. As the event unfolds, the message you set up in event details will be delivered to you according to the mail cycle.

**Max Email Per Day:** The area where the mail limit to be sent to you daily is determined. In some cases, it is used because the event occurs very often, the mail comes in and there is a pile-up.

## 8.7. SMS

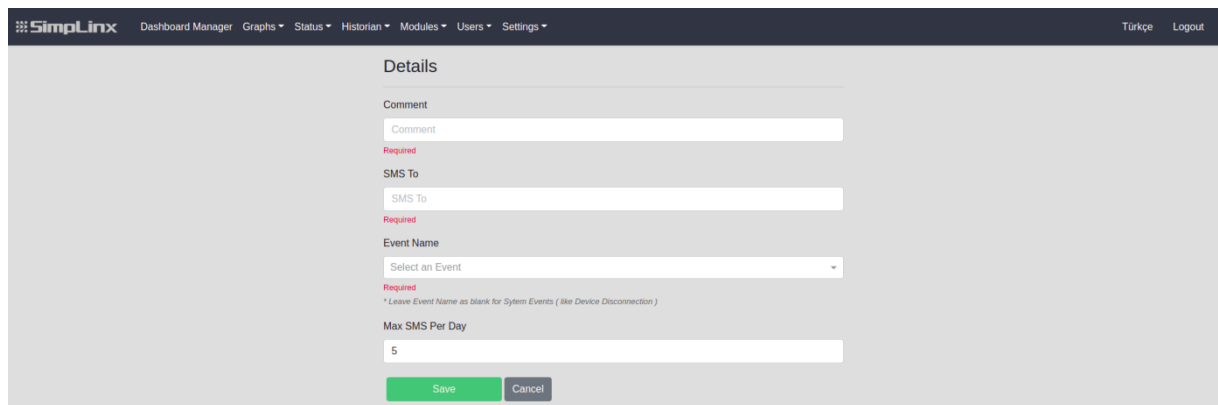
This is the page where SMS settings are listed and managed. Depending on the events you create, it allows you to learn about the situation. When events are triggered, the information SMS is sent to the person you specified.



Comment	SMS To	Event Name	Max SMS Per Day
Demo Sms	1235555555	Temperature > 50	5

### Adding SMS Configuration

- From the Menu, go to the "**Modules**"--->"**SMS**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "**Adding SMS**" page. The required information on this page is as follows;



**Details**

Comment  
  
 Required

SMS To  
  
 Required

Event Name  
 Select an Event  
  
 Required  
\* Leave Event Name as blank for System Events ( like Device Disconnection )

Max SMS Per Day

Save Cancel

**Comment:** A comment must be added to provide information about the generated SMS setting.

**SMS To:** It is the area where it is determined to which number the SMS will go when the relevant event is triggered.

**Event Name:** The field where the event name to follow is selected. As the event unfolds, the message you set up in event details will be transmitted to you as SMS.

**Max SMS Per Day:** The area where the SMS limit to be sent to you daily is determined. In some cases, it is used because events occur frequently and mail is received.

## 8.8. Cloud Topic

A page where preset Cloud Topic values are listed and managed. According to the values set here, the data is written to the cloud server..

Name	Cloud Topic Type	Cycle	Condition Eval String	Message Eval String	Max Buffer Day Count
Demo Cloud Topic	CYCLIC	1 Minute	true	{"sampleValue1":ctx.tag("machine_temper...	30

### Adding Cloud Topic

- From the Menu, go to the "**Modules**"--->"**Cloud Topic**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "Adding Cloud Topic" page. The required information on this page is as follows;

**Name**

**Comment**

**Cloud Topic Type**

**Cloud Topic Cycle**

**Condition Eval String**

If you're CYCLIC, and the condition is false, we will not send data to cloud.  
If you're EVENT\_DRIVEN, we will send data at positive edge of the condition.

**Message Eval String**

```
{
  "sampleValue1":ctx.tag("tag/name1"),
  "sampleValue2":ctx.tag("tag/name2")
}
```

**Max Buffer Day Count**

**Name:** The area you need to easily recognize cloud topic when doing different operations.

**Comment:** A comment can be added to provide information about the cloud topic created. It is not mandatory, it can be left blank.

**Cloud Topic Type:** Specifies the type of Cloud Topic creation. These are;

- **CYCLIC**  
Provides cloud topic creation with specific loops, such as minutes and hours.
- **EVENT\_DRIVEN**  
Allows the creation of one cloud topic each time the specified condition is provided.

**Cloud Topic Cycle:** Allows the relevant cloud topic to be created periodically, regardless of any circumstances.

**If the Condition Eval String:** Cloud Topic Type is CYCLIC and this condition is incorrect, data is not sent to the cloud, but if the type is Event Oriented, data is sent to the cloud with 5sec. intervals as long as it is provided.

**Message Eval String:** The area where the message to be saved as data content is specified when sending data to the cloud.

**Max Buffer Day Count:** Specifies how many days the data to be sent will be stored in the memory in case the connection with the Cloud is lost. Pending data is sent collectively when reconnected. Thus, data loss is prevented.

## 8.9. SQL Insert Event

This is the page where SQL Insert Events are listed and managed. You can create new events for insertion to remote SQL connections.

Name	Comment	SQL Insert Event Type	Cycle	SQL Connection	SQL Table Name	Max Buffer Hour
test_insertion		ACYCLIC	-	Remote_MySQL_connection	sampleTable3	20
insertion_event		CYCLIC	1 Minute	Remote_MySQL_connection	sampleTable3	20

### Adding SQL Insert Event:

- From the Menu, go to the "**Modules**"--->"**SQL Insert Event**" page.
- Press the icon from Toolbar to **+**, you will be redirected to the "Adding SQL Insert Event" page. The required information on this page is as follows;

### Details

Name  
  
**Required**

Comment

SQL Insert Event Type  
  
**Required**

Condition Eval String  
  
**Required**

**Build..**

SQL Insert Event Cycle  
  
**Required**

SQL Connection  
  
**Required**

SQL Table Name  
  
**Required**

Insert Into Column Names  
  
**Required**

Insert Into Values

**Build..**

Max Buffer Hour  
  
**Required**

**Save** **Cancel**

**Name:** Write any name that you like to describe SQL Insert Event.

**Comment:** A comment can be added to provide information about the SQL Insert Event created. It is not mandatory, it can be left blank.

**SQL Insert Event Type:** Specifies the type of SQL Insert Event creation. These are;

- **CYCLIC**  
Provides SQL Insert Event creation with specific loops, such as minutes and hours.
- **ACYCLIC**  
Allows the creation event each time the specified condition is provided.

**Condition Eval String:** Write your conditional eval string. ACYCLIC events depends “Condition Eval String”. Every change from false to true in this condition, a new insertion event will be created. If your event type is CYCLIC, this area will be empty.

**SQL Insert Event Cycle:** If your event type is CYCLIC, you have to choose a cycle for events. Cyclic events are created continuously with the selected time interval.

**SQL Connection:** Choose proper connection which is created in “Settings” page for event.

**SQL Table Name:** Your table name that you want to insert events.

**Insert Into Column Names:** Columns that will be effected insertion, you should write column names in order

**Insert Into Values:** This part should be match with columns that you write above, you can use tag values or any value for column that will be accepted for insertion.

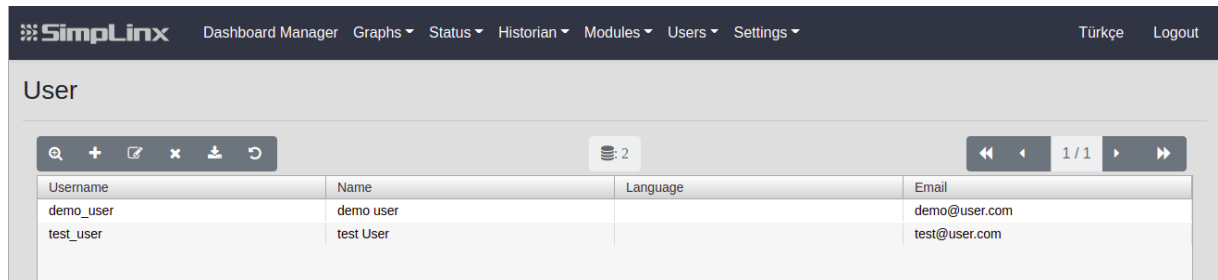
**Max Buffer Hour:** Specifies how many hours the data to be sent will be stored in the memory in case the connection with the SQL is lost. Pending data is sent collectively when reconnected. Thus, data loss is prevented.

## 9. Users

This tab contains pages that are accessible only to the **admin** user and where users are created and giving permission to access modules.

### 9.1. User Page

This is the page where "Users" are listed and managed. You can create new users, delete users or update users.

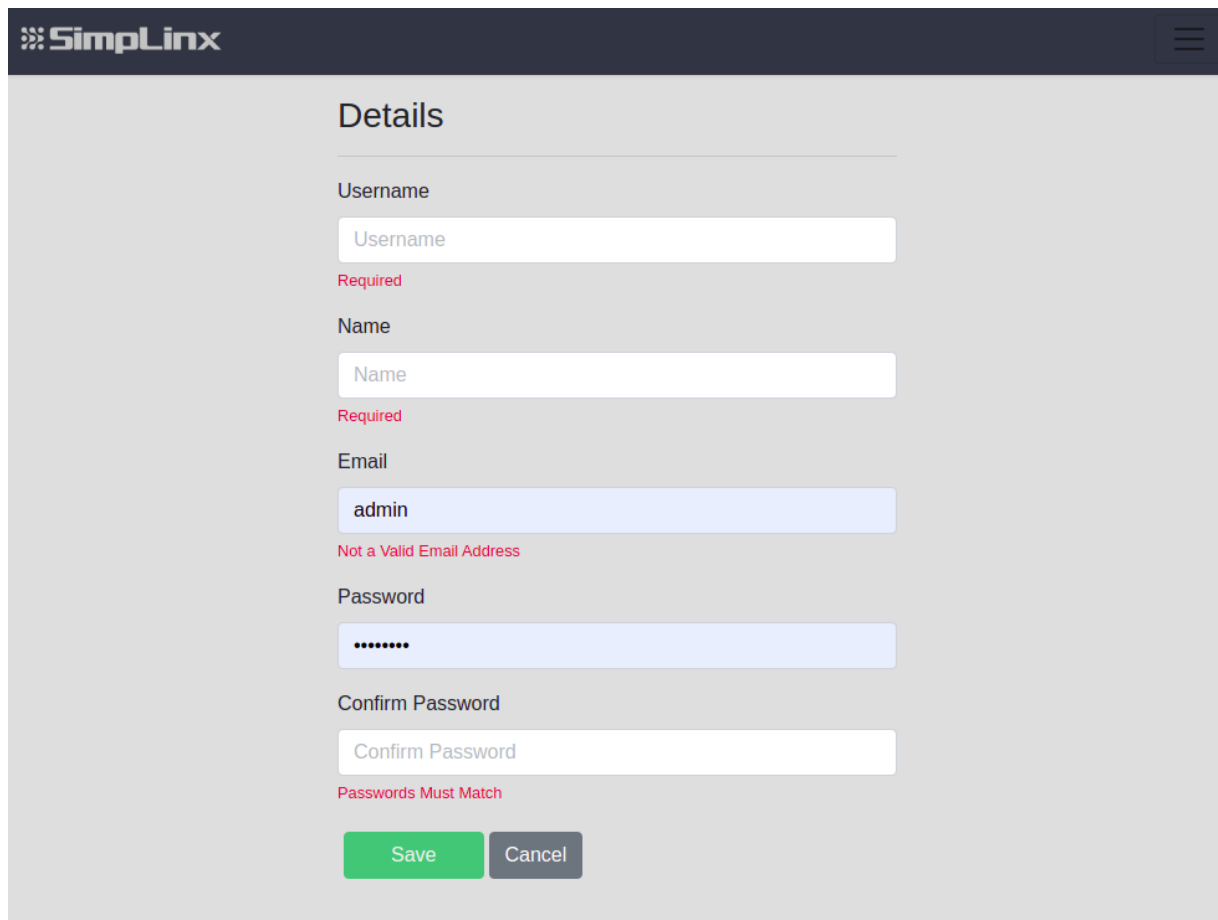


The screenshot shows the Simplicon interface with the 'Users' menu item selected. The main content area displays a table of users. The table has columns for Username, Name, Language, and Email. There are two users listed: 'demo\_user' and 'test\_user'.

Username	Name	Language	Email
demo_user	demo user		demo@user.com
test_user	test User		test@user.com

#### Adding New User:

- From the Menu, go to the "Users"---->"User" page.
- Press the icon from Toolbar to +, you will be redirected to the "Details" page. The required information on this page is as follows;



The screenshot shows the 'Details' page for adding a new user. The form includes fields for Username, Name, Email, Password, and Confirm Password. The Username field is empty. The Name field is empty. The Email field contains 'admin' and has a red error message 'Not a Valid Email Address' below it. The Password field is filled with dots. The Confirm Password field is empty. There are 'Save' and 'Cancel' buttons at the bottom.

**Username:** The area where the username is determined for log into the system. Username must be unique.

**Name:** The area where the name is determined for user.

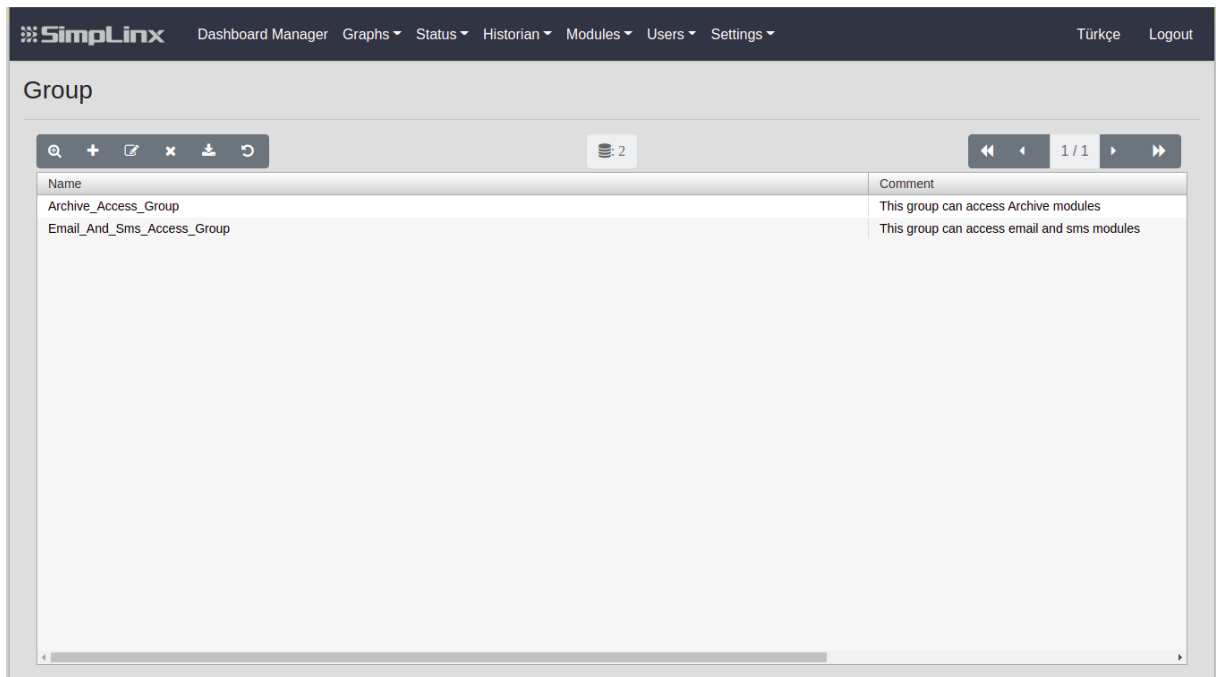
**Email:** The area where the email is determined for user.

**Password:** The area where the password is defined for user.

**Confirm Password:** The area where the password should be match from above.

## 9.2. Group Page

This is the page where "Group" are listed and managed. You can create new group, delete group or update group.



### Adding New Group:

- From the Menu, go to the "Users"---->"Group" page.
- Press the icon from Toolbar to +, you will be redirected to the "Details" page. The required information on this page is as follows;

Name  
Name

Required

Comment  
Comment

Save Cancel

Group Access Rights

Access Subject	Read	Read+Write	Own Records (Read+Write)	Comment
Archive Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Archive
Cloud Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Cloud Topic
Driver Module	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Driver
Email Module	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Create Email Jobs
Event Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Event
MachineState Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Machine State
Sms Module	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Create Sms
Tag Module	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create Tags
SQL Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Create SQL Insert Event

**Name:** The area where the name is determined for group.

**Comment:** A comment can be added to provide information about the **group** created. It is not mandatory, it can be left blank.

**Group Access Rights:** The area where the access rights are determined for group.

“Read” access for only viewing data from that module.

“Read + Write” access for viewing or dealing with data from that module.

“Own Recods(Read + Write)” access for viewing or dealing with data which is created by current user.

### 9.3. Mapping Page

This is the page where “Mapping” are listed and managed. You can create new mapping, delete mapping or update mapping. When you create new mapping for user and a group, user have access for modules which are described in that group.

SimpLinX Dashboard Manager Graphs Status Historian Modules Users Settings Türkçe Logout

## Mapping

2

1 / 1

User Name	Group Name
demo user	Archive_Access_Group
test User	Email_And_Sms_Access_Group

### Adding New Mapping:

- From the Menu, go to the "Users"---->"Mapping" page.
- Press the icon from Toolbar to +, you will be redirected to the "Details" page. The required information on this page is as follows;

**User:** The area where the user can be selected for group.

**Group:** The area where the group can be selected for specific user.

## 10.Settings Page

This tab contains pages that are accessible only to the **admin** user and where systemic settings are made. These are;

### 10.1. User Profile

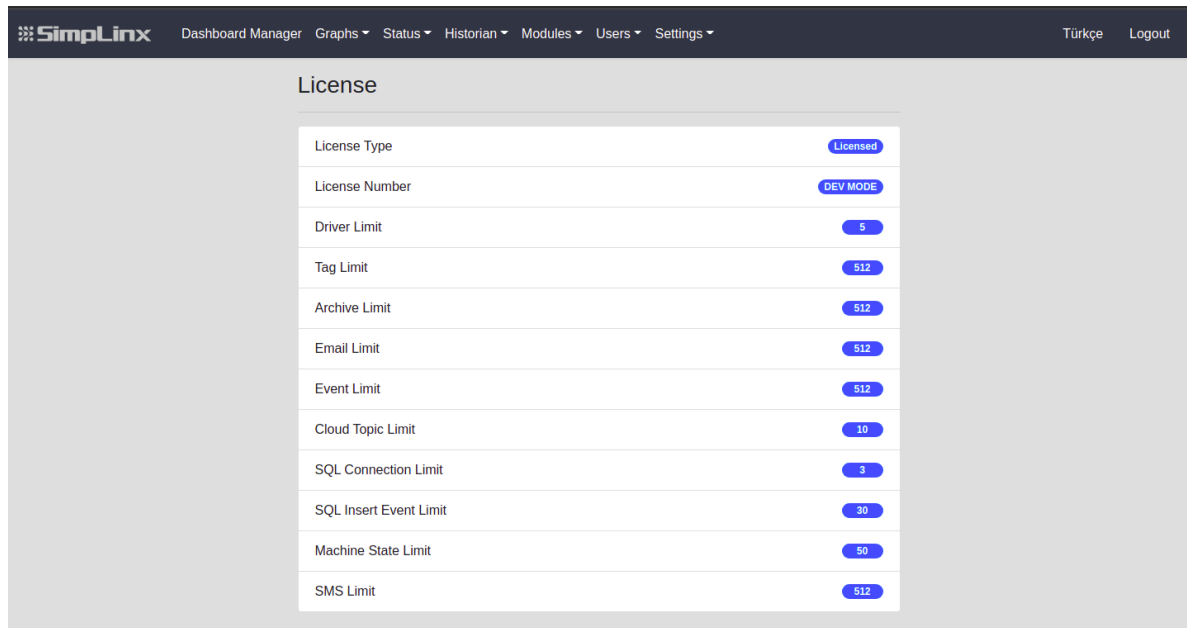
### 10.2. System Info

On this page, you can define your system information or, if necessary, restart SX-IO with the [Restart App...](#) button.

Defining system information helps you to recognize which system and device the e-mail comes from in the emails sent depending on the event. It is necessary to specify a system name, but you can leave the comment section blank if you wish.

### 10.3. License

On this page, you can see your license details and limit records for modules.



License	
License Type	Licensed
License Number	DEV MODE
Driver Limit	5
Tag Limit	512
Archive Limit	512
Email Limit	512
Event Limit	512
Cloud Topic Limit	10
SQL Connection Limit	3
SQL Insert Event Limit	30
Machine State Limit	50
SMS Limit	512

There are 4 different license types. These;

License Type	Basic License
License Number	-
Driver Limit	3
Tag Limit	50
Archieve Limit	50
Email Limit	10
Event Limit	20
Cloud Topic Limit	10
SQL Connection Limit	1
SQL Insert Event Limit	10
Machine State Limit	3
SMS Limit	10

**Basic License**

License Type	Licensed
License Number	-
Driver Limit	5
Tag Limit	512
Archive Limit	512
Email Limit	512
Event Limit	512
Cloud Topic Limit	10
SQL Connection Limit	3
SQL Insert Event Limit	30
Machine State Limit	50
SMS Limit	512

**512 Tag**

License Type	Licensed
License Number	-
Driver Limit	10
Tag Limit	1024
Archive Limit	512
Email Limit	1024
Event Limit	1024
Cloud Topic Limit	10
SQL Connection Limit	10
SQL Insert Event Limit	100
Machine State Limit	100
SMS Limit	1024

**1024 Tag**

License Type	Licensed
License Number	-
Driver Limit	10
Tag Limit	2048
Archive Limit	512
Email Limit	2048
Event Limit	2048
Cloud Topic Limit	10
SQL Connection Limit	10
SQL Insert Event Limit	100
Machine State Limit	100
SMS Limit	2048

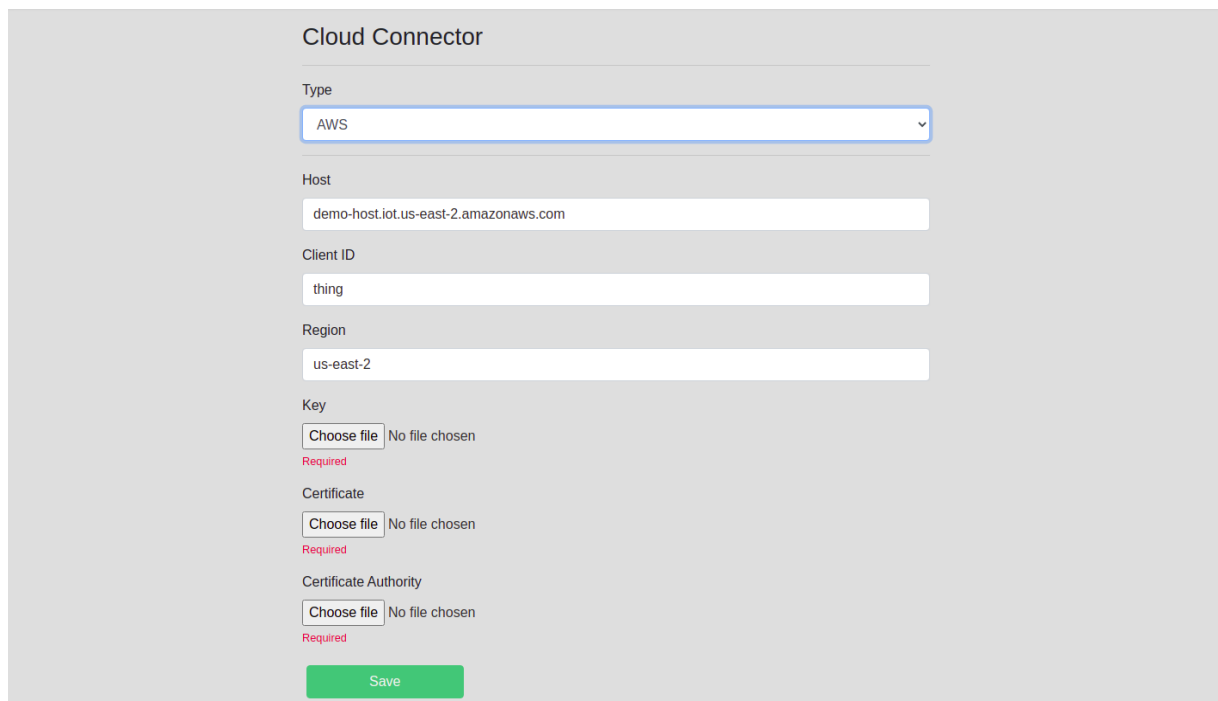
**2048 Tag**

## 10.4. Cloud Connector

On this page, you can easily set up with information from your cloud service provider if you want to save your data on a cloud system instead of saving it to device memory. For now, only 3 service providers are supported. These are;

- Google (MQTT)
- Amazon (AWS)
- Microsoft (Azure)
- DIGITERYA ARYA

Once the relevant option is selected, you can provide a connection and save your data to the cloud server by filling in the information provided by your service provider where necessary. More information can be found at the bottom of the page with **Click Here for Information**.



The screenshot shows a web form titled "Cloud Connector". It contains several input fields and a "Save" button. The fields are:

- Type:** A dropdown menu with "AWS" selected.
- Host:** A text input field containing "demo-host.iot.us-east-2.amazonaws.com".
- Client ID:** A text input field containing "thing".
- Region:** A text input field containing "us-east-2".
- Key:** A "Choose file" button with "No file chosen" text and a red "Required" label below it.
- Certificate:** A "Choose file" button with "No file chosen" text and a red "Required" label below it.
- Certificate Authority:** A "Choose file" button with "No file chosen" text and a red "Required" label below it.

A green "Save" button is located at the bottom of the form.

## 10.5. SMS Connector

If you want to be notified by SMS depending on the events you have created, you can easily install with the information you receive from your SMS service provider. For now, only **TWILIO** is supported.

After the relevant option is selected, you can provide a connection by filling in the sender name then the information provided by your service provider where necessary, and receive SMS notifications, depending on the events you have already set.

## SMS Connector

Tipi

TWILIO

From

Demo

Account SID(accountSid)

Auth Token(authToken)

Kaydet

## 10.6. SQL Connector

On this page, you can connect remote database, view the information about remote databases and update current remote database information.

**Simplinx** Dashboard Manager Graphs Status Historian Modules Users Settings Türkçe Logout

### SQL Connector

1

Name	Comment	Type	Options
Remote_MySQL_connection		MySQL	{ "host": "192.168.1.124", "port": 3306, "usernam...

### Adding New SQL Connection:

- From the Menu, go to the "Settings"---->"SQL Connector" page.
- Press the icon from Toolbar to +, you will be redirected to the "Details" page. The required information on this page is as follows;

- On the “Details” page, there is a button which is “Test Connection” to test remote database connection. If connection successful, there will be green pop up message on the left corner with “Connection is successful” message.

**Name:** The area where the name is determined for SQL connection.

**Comment:** A comment can be added to provide information about the **SQL Connector** created. It is not mandatory, it can be left blank.

**Type:** Choose proper type for remote database connection. There are 3 types: Postgresql, MySQL, MS\_SQL

**Options:** Set your database connection options in curly braces

## 10.7. Export – Import

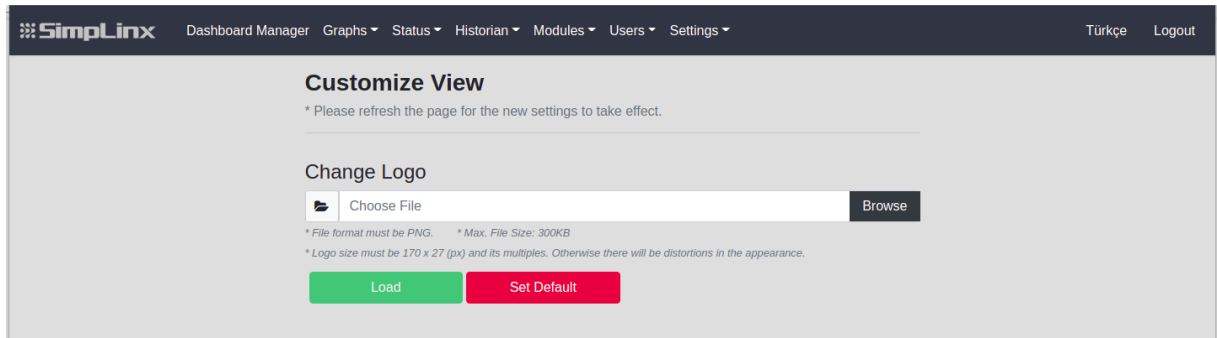
This page is used to easily transfer all the settings you have made on the interface to another device. Once you've set your settings to a standard, you can easily download them as files with the **Export** button and then easily set it with the **Import** button after selecting the relevant file from the new device, instead of adjusting the same settings on all individual devices.



After importing, all data (Configuration and Historian) will be deleted and the new configuration will be imported. This process cannot be reversed!

## 10.8. Customize View

This page is used to customize view for SX-IO. You can change logo on this page. To do that, choose proper file for logo and then click “Load” button. To set default logo, click “Set Default” button.





10/2021  
man-en-sx-io.docx  
Version 2.0

**SimpLinx Elektronik Ltd.**

Halil Rifat Pasa Mh. Nazli Sk. No:1/5 No:17 Sisli/Istanbul  
[www.simplinx.com](http://www.simplinx.com)