

ENTBUS PLUS

**SOFTWARE FOR ENERGY MONITORING AND
RECORDING**

INSTALLATION AND OPERATING MANUAL

Foreword

Entbus services manage the collection of information and storing this information in the database. Services are listed below in the order that they are recommended to be installed:

1. Distributor
2. VTS – Data Collection Server

The data that is collected from the field is stored in the MS SQL database.

According to user demand, this data is compiled into monthly, daily, hourly reports (in xls format) and presented to the user.

Index

1. Minimum System Requirements.....	4
2. Installation	5
3. Uninstallation:	13
4. Authorization Problem for Standard Users on Operating Systems and Its Solution	17
5. General Settings:	18
6. Introduction:	19
7. Main Form:	21
8. Configuration:	23
a. Connection Points:	24
i. Defining Connection Point:	24
b. Devices:	27
i. Defining Device:	28
c. Alarms:	29
i. Defining Alarm:	30
d. Regions:	33
i. Defining Region:	33
e. Users:	34
i. Defining User:	34
f. System Parameters:	36
9. Monitoring:	38
a. Instant Monitoring:	38
b. Mimic Diagram	39
10. Reporting:	44
a. Report Toolbar:	45
c. Total Energy and Power Factor Report:	48
d. Periodic Values Report:	50
e. Alarm Report:	51
f. Log Report:	52
g. Business Report:	54
11. Help:	55
a. User Manual:	55
b. About:	55

1. Minimum System Requirements

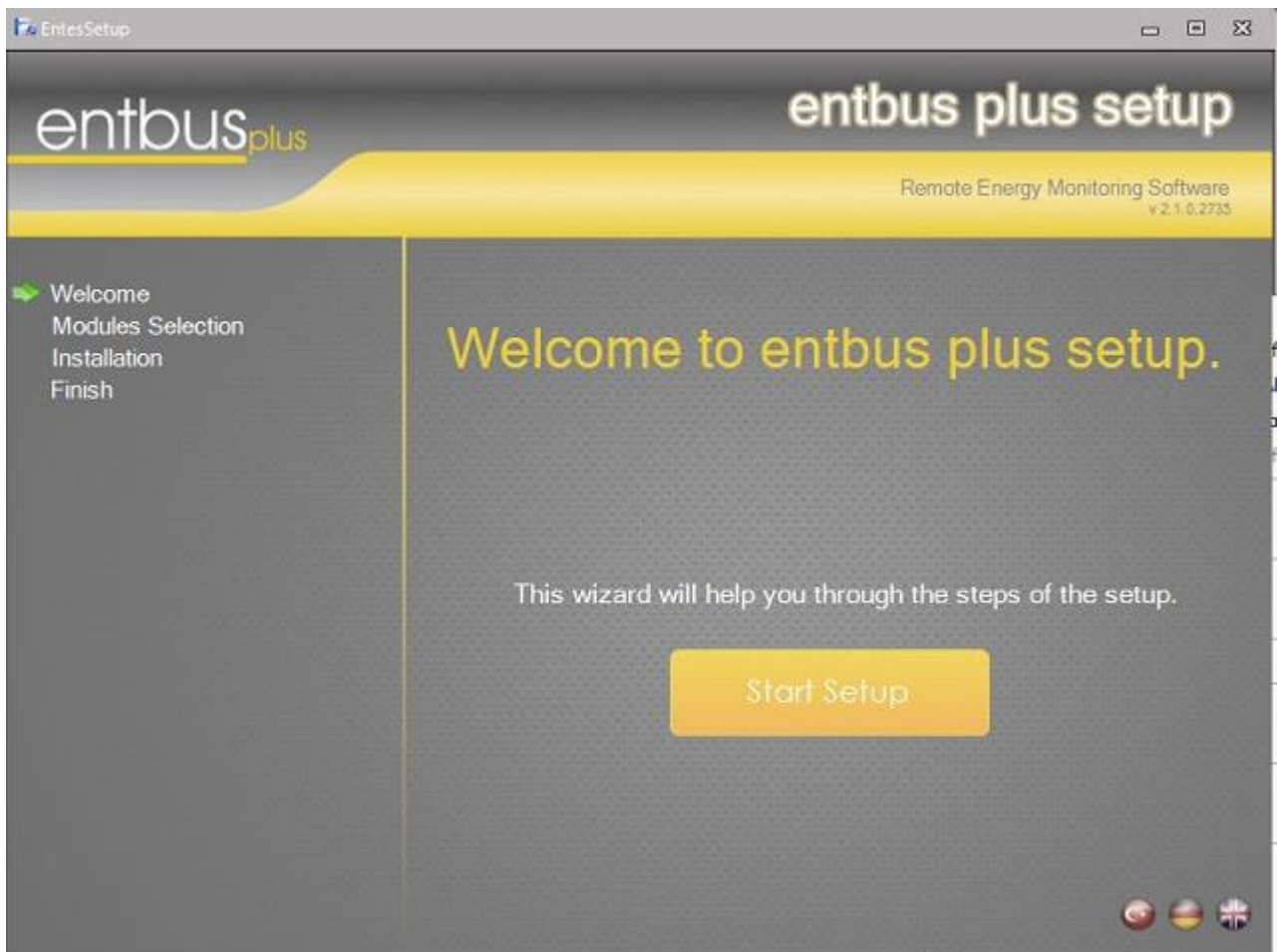
CPU	Intel Core 2 Duo 3.0 GHz.
RAM	4 GB
Operating System	Windows XP Professional SP3 Windows 7 Professional, Ultimate, Home Premium SP1 Windows Server 2008 Windows Server 2008 R2 SP1 Windows 8 Pro Windows 8.1 Windows Server 2012 SP1
Operating System Architecture	32 bit/64 bit
.Net Framework Version	4
HDD Space	20 GB (Yearly)

2. Installation

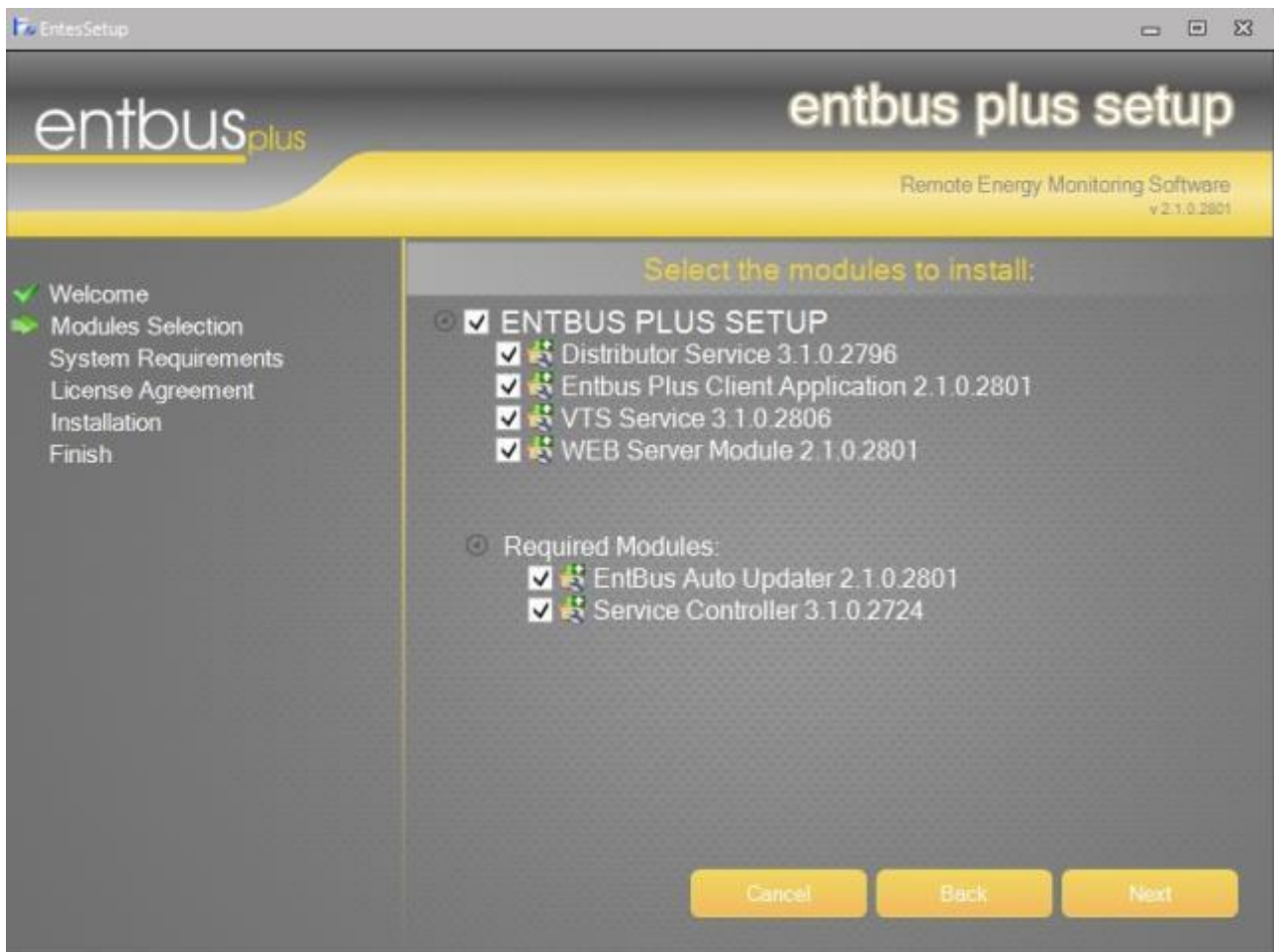
When you double click Setup file following menu will appear.



Please select the language you want to install. English, German and Turkish are selectable. Click English.



The installation window is displayed on the selected language; please click on **Start Setup** button to continue.



After English is selected as the installation language, a window like the one above appears. Necessary modules to be installed are selected on this window. If the computer is going to be used as only for monitoring, **Entbus Plus Client Application** is selected. If the system is going to be monitored through web module, **WEB Server Module** should also be selected. If all the modules are going to be installed to the computer, the top option **ENTBUS PLUS SETUP** is selected and **Next** button is clicked.



At this stage, all of the requirements must be met to prevent problems during EntBus Plus installation.



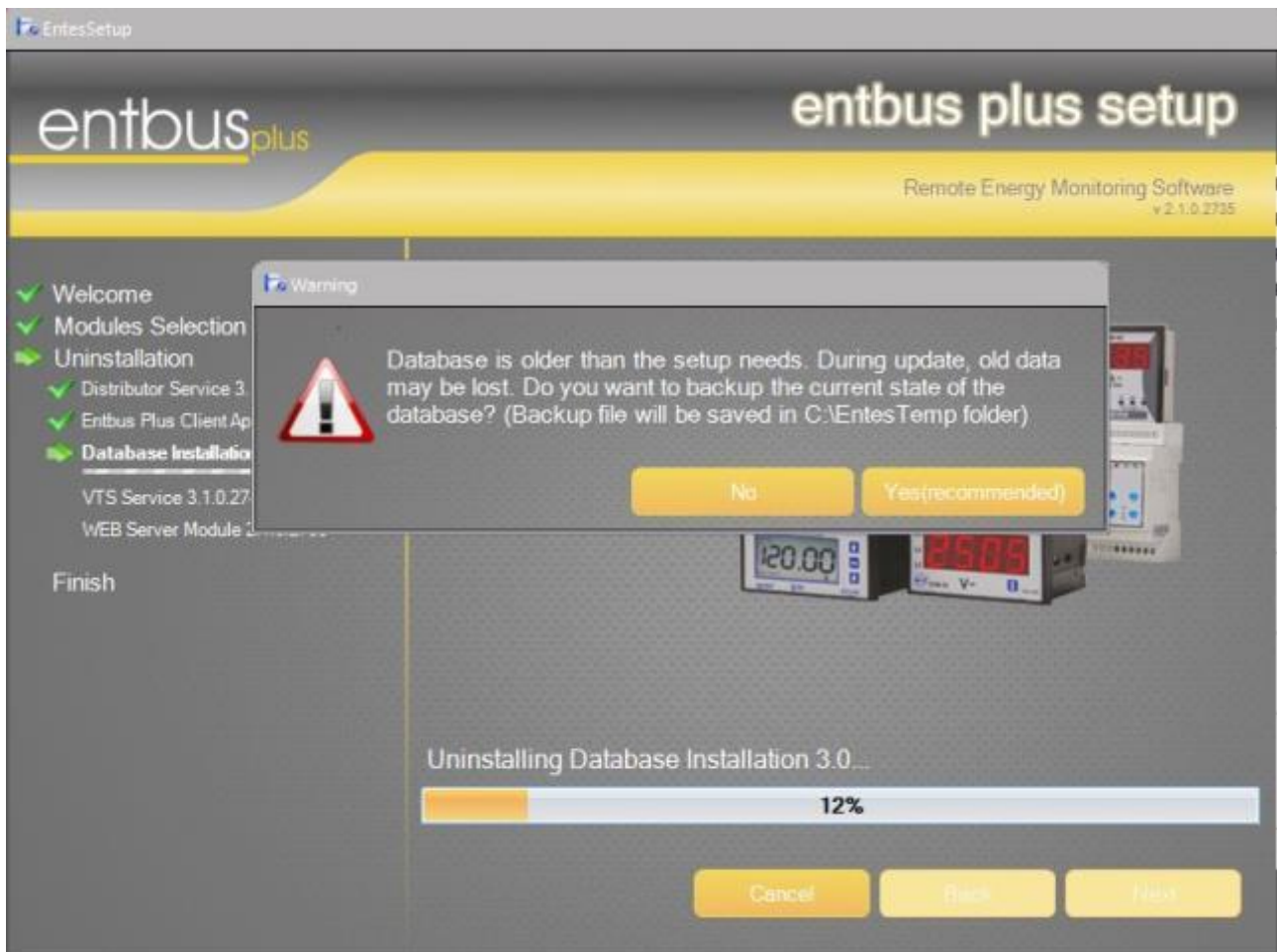
If any requirement missing it will be shown you can continue with **Next** button however it must be considered that not fulfilling the missing requirements may cause problems after starting to use the EntBus Plus software.



License Agreement of Entbus Plus Software is displayed on this window. After clicking on the “**I have read the conditions and agree to them**” checkbox, **Next** button is activated. The user clicks on the **Next** button to proceed.



On the left side of this window, the components to be installed are displayed. On the right side of this window, settings about those components and the progress of the currently installing component is displayed in percent values. If there will be no errors during installation following window will appear. Click **Exit**, you have successfully installed the software.



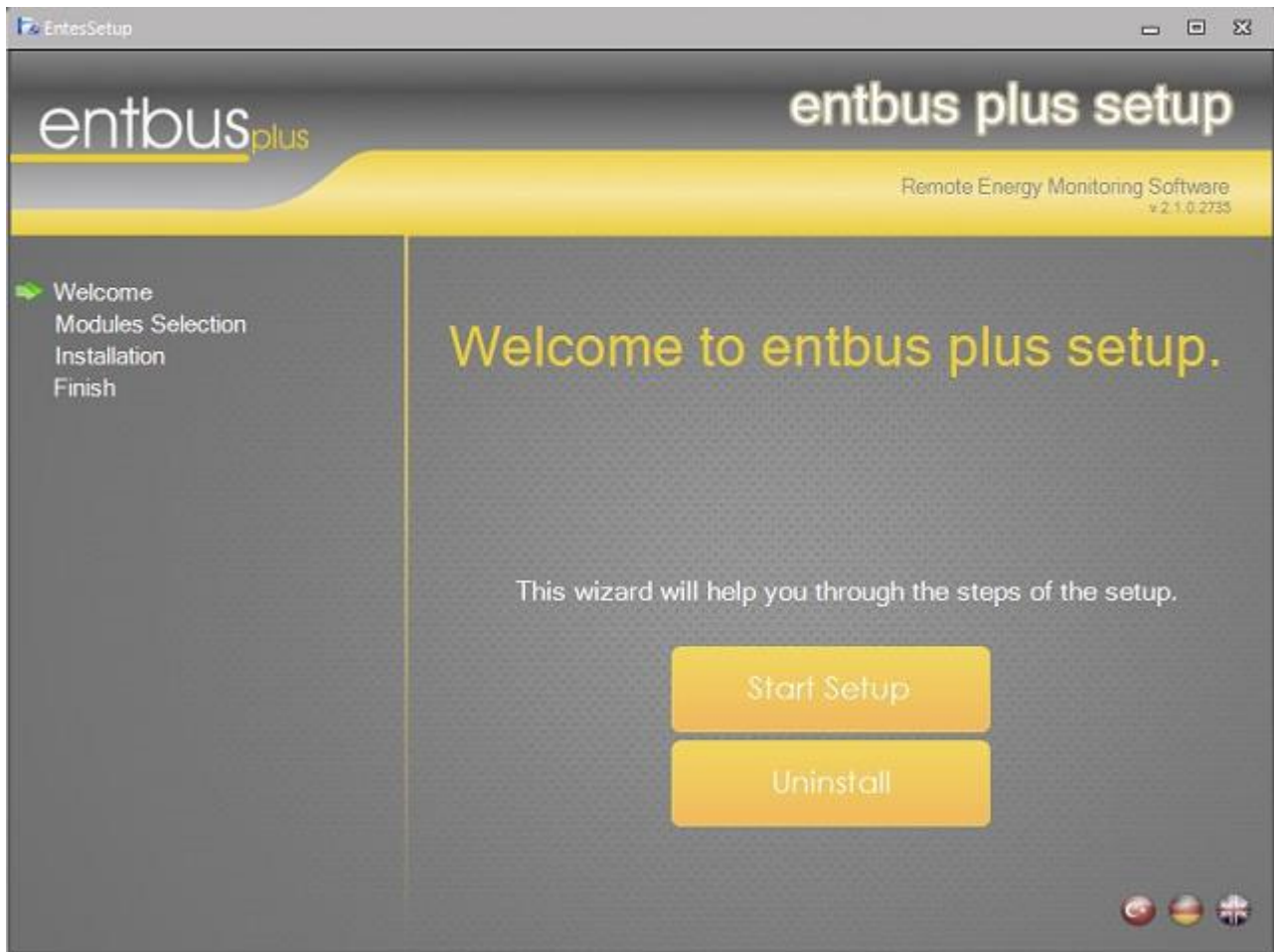
During the installation of the components, the setup may require the user to restart the computer. This process can occur more than once. When the user encounters such a warning, he/she must click on **Restart** button.

Note: If the setup window doesn't open automatically after the computer is restarted, the user has to start the setup manually from where it left off by double-clicking on the Setup.exe.

You have to see following panel if you successfully install the software:



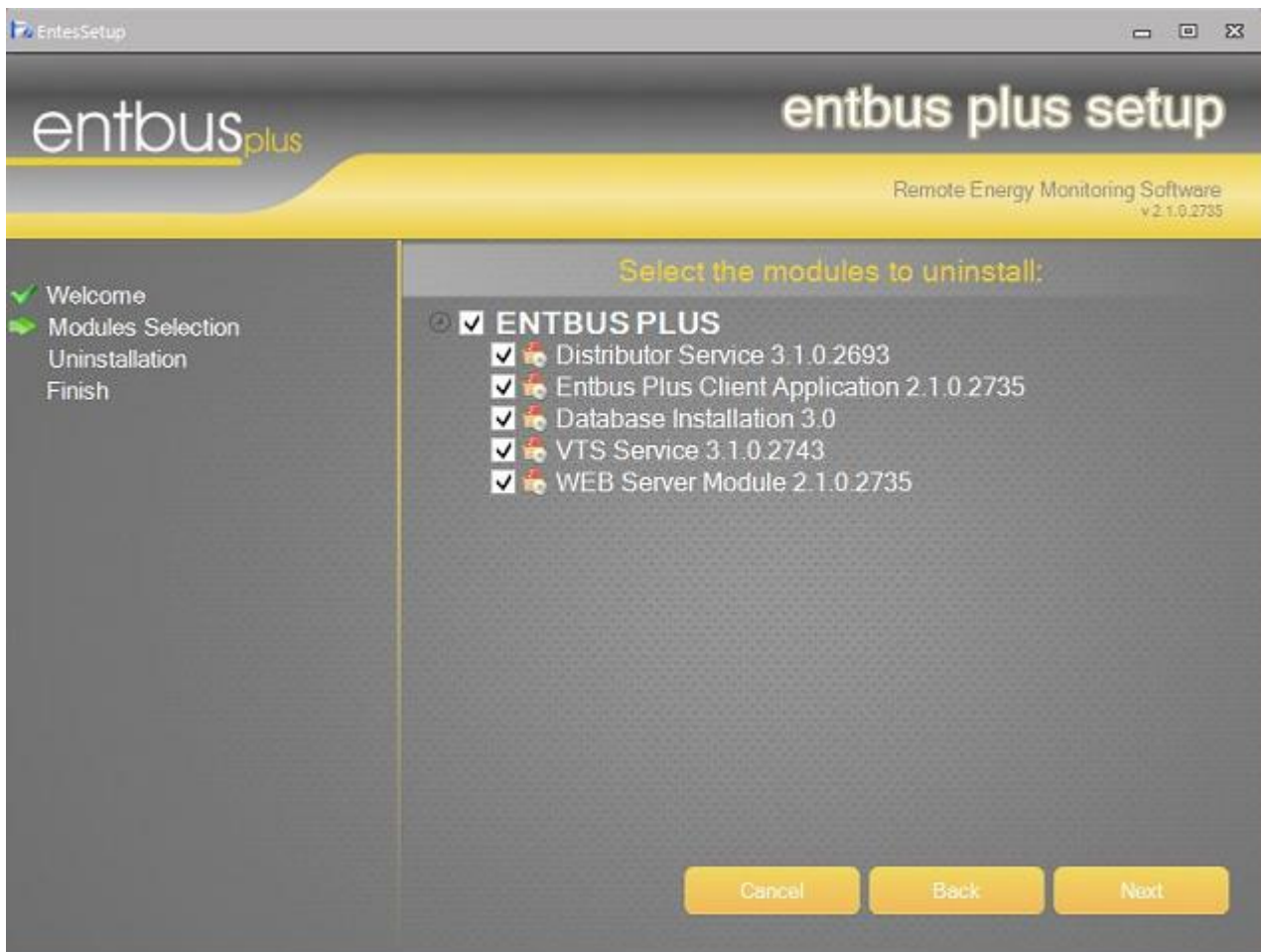
3. Uninstallation:



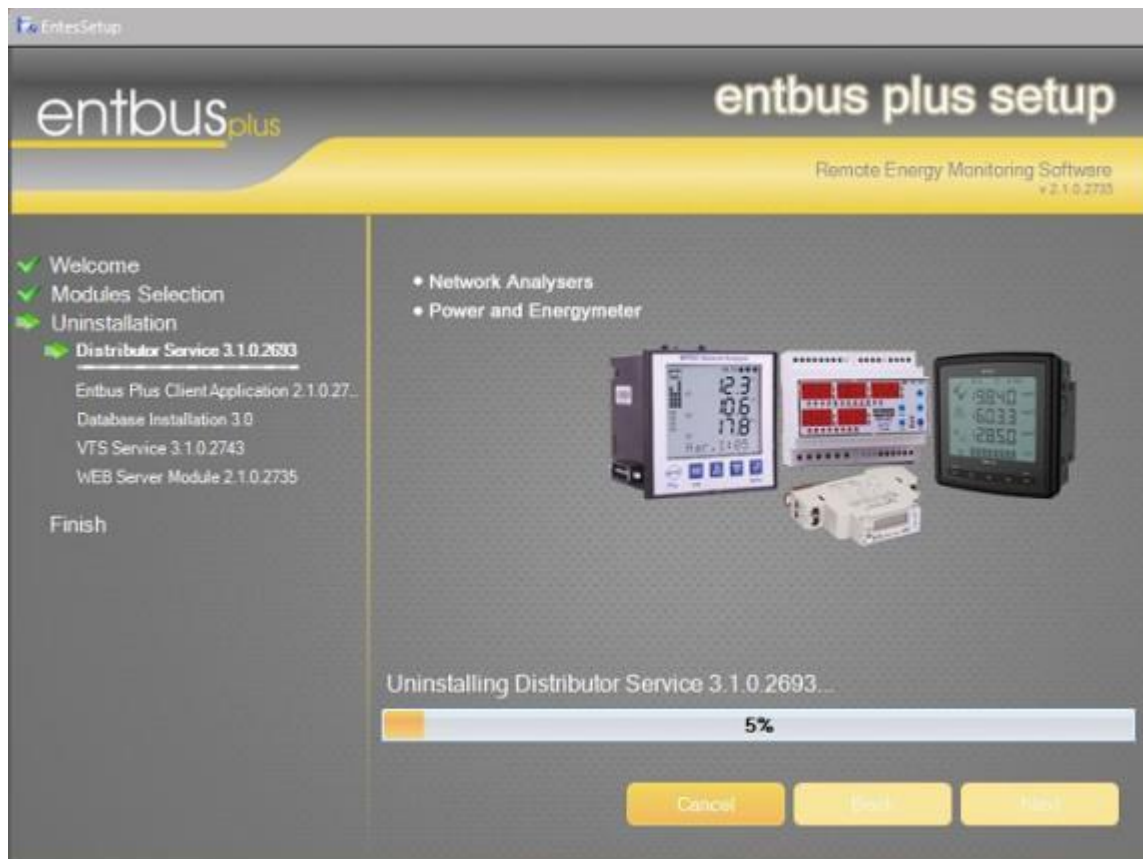
The software is uninstalled by opening the above window. It opens automatically when the Setup CD is inserted or it can be opened manually by double-clicking on the Setup.exe file on the CD.

This window has two buttons as **Start Setup** and **Uninstall**.

The user clicks on the **Uninstall** button.



The user selects the components that he/she wishes to uninstall on this window and clicks on **Next** button. After the uninstall process has finished, the user clicks on **Exit** button.



During uninstallation process, S/W will ask whether keep a .bak file to backup all configuration for future use



After your choice, Uninstall process will terminate with the following comment.



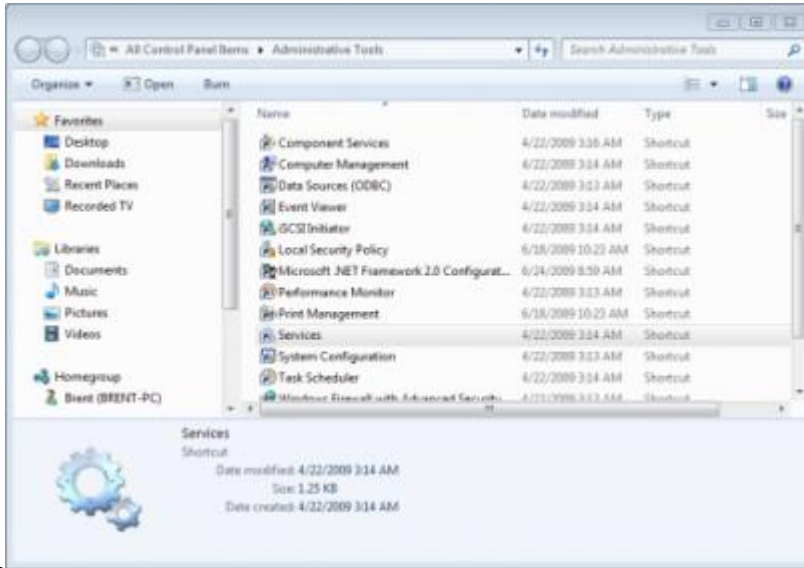
4. Authorization Problem for Standard Users on Operating Systems and Its Solution

When the user installs the software on a PC, a window may appear after the selection of the modules. When this window appears, the user must select “Following User” and enter the necessary password for “Administrator” user. Afterwards, click on “OK” button to continue the installation.

5. General Settings:

The EntBus_Distributor and Entbus_VTS services must be installed and running before you define the analyzers on the system.

Please make sure that the EntBus_Distributor and Entbus_VTS services have been installed successfully. Windows → Control Panel→Administrative Tasks→Services



COM+ Olay Sistemi	Abone Bl...	Baglad	Otomatik	Local Service
COM+ Sistem Uygu...	Bilegen ...		Elle	Local System
Dağıtım Bağlantı I...	Bir bilgis...	Baglad	Otomatik	Local System
Dağıtım İşlem Düz...	Veritaba...	Baglad	Elle	Network Service
Dağıtım İşlem Düz...	Dağıtım...		Elle	Network Service
DCOM Sunucusu İşl...	DCOMLA...	Baglad	Otomatik	Local System
Depolama Hizmeti	Depolam...		Elle	Local System
DHCP İstemcisi	Bu bilgis...	Baglad	Otomatik	Local Service
Disk Birleştirici	Disk Birle...		Elle	Local System
DNS İstemcisi	DNS İste...	Baglad	Otomatik	Network Service
EntBus_Distributor	EntBus i...	Baglad	Otomatik	Local System
EntBus_VTS	EntBus i...	Baglad	Otomatik (Geçikmeli Bağlatma)	Local System
Eş Adı Çözümleme ...	Eş Adı Ç...		Elle	Local Service
Eş Ağ Gruplandırma	Eşler Ar...		Elle	Local Service
Eşler Arası Ağ Olut...	Eş Adı Ç...		Elle	Local Service

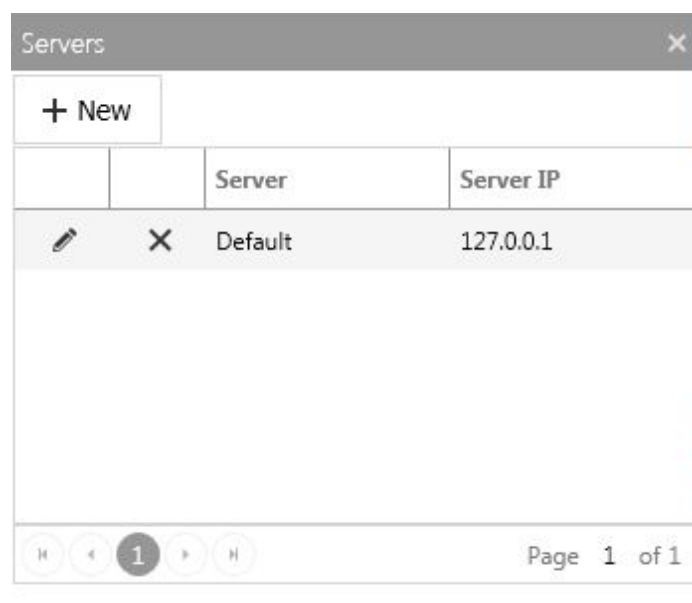
6. Introduction:

When the EntBus Plus module is started for the first time, you will see a screen like the one in the screenshot below. The software language can be changed from the **Language section. Select English.** The servers that the user can connect will be listed under Server section. The servers that you will define will show up on this list the next time that you start the program.

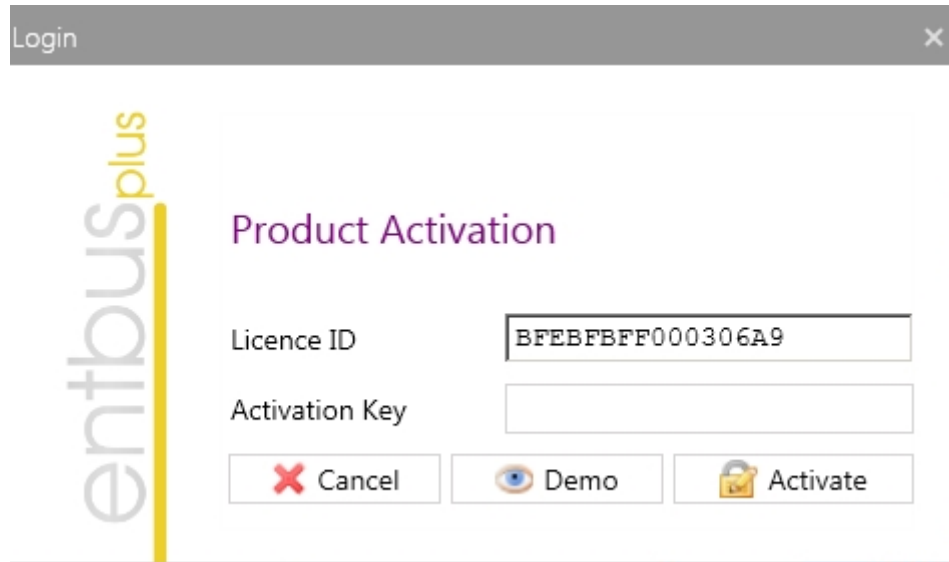


Because there are no servers to connect when you run the program for the first time, you have to create a new server. Click on the “Server Settings” button. On the next window; enter a server name and server IP. Afterwards, click on the X icon in the top right corner or press the Esc key. Default server is the “localhost” under Server column, “127.0.0.1” under IP Address column. This is the installed Entbus on the local computer. If you want to connect to another Entbus+ on the network, please give a name to it and define by its IP number in below menu. The User Name and Password information is entered on the login window and Enter button is pressed.

The **default Username is “admin”** and **Password is “1234”**.



After you enter the default “User name” and “Password” information on the login window, the activation window will be displayed as in the following figure.



entbous plus

Product Activation

Licence ID BFEBFBFF000306A9

Activation Key

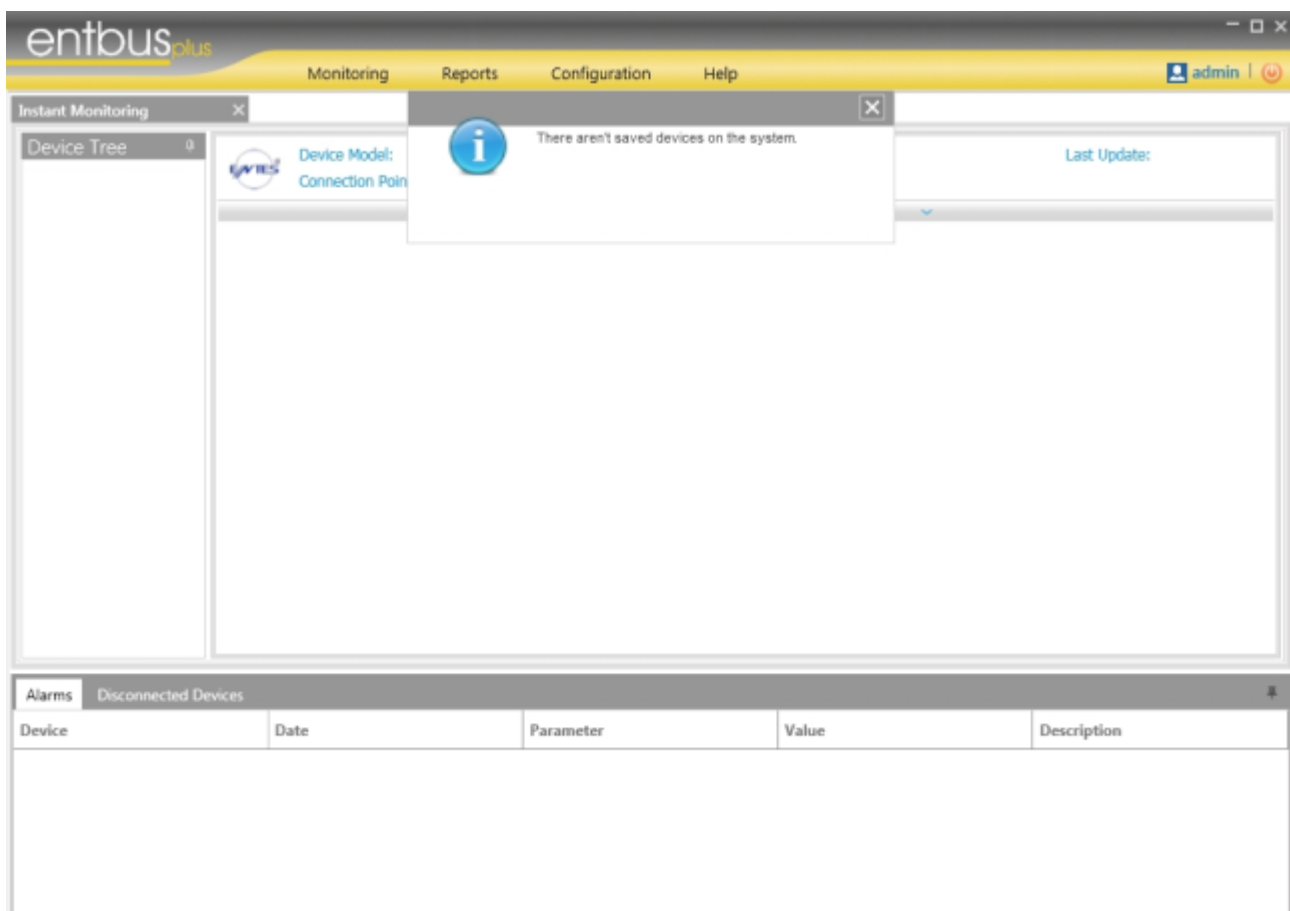
Cancel Demo Activate

In order to acquire the Activation Code that you have to enter on this window, **you have to send the License ID on this window to your customer representative or to our company's International Sales Department.** The necessary Activation Code will be sent to you. After you enter this code to the necessary field and click on “Activate”, Main Form will be displayed.

For one Device usage Click “Demo” button for free usage

7. Main Form:

After the user logs in by entering the correct username and password information, following window is displayed. This window is called main form. Main form will display the instant monitoring window first when you open the program. Since you haven't actually added any devices after installing the software, this window will display "There aren't saved devices on the system." Message will be displayed. This message will disappear automatically after a short while.



Monitoring, Report, Configuration and Help menus are displayed on the main form window. Additionally, Alarms and Disconnected Devices are displayed on the bottom side of the main form.

Under Alarms tab, the user can display information about the occurring alarms (Device name, alarm occurrence date, parameter, alarm occurrence value and the user-entered alarm definition).

Alarms Disconnected Devices				
Device	Date	Parameter	Value	Description

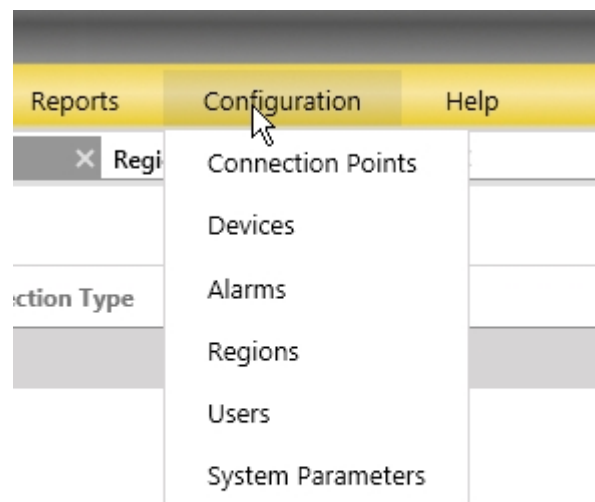
Under Disconnected Devices tab, the user can display information about the devices that are not communicating (name of the disconnected device, connection point of the disconnected device, the last time that a successful connection to the device occurred).

Alarms Disconnected Devices		
Device	Connection Point	Last Communication Time (*)

8. Configuration:

Following setting option can be found under Configuration menu:

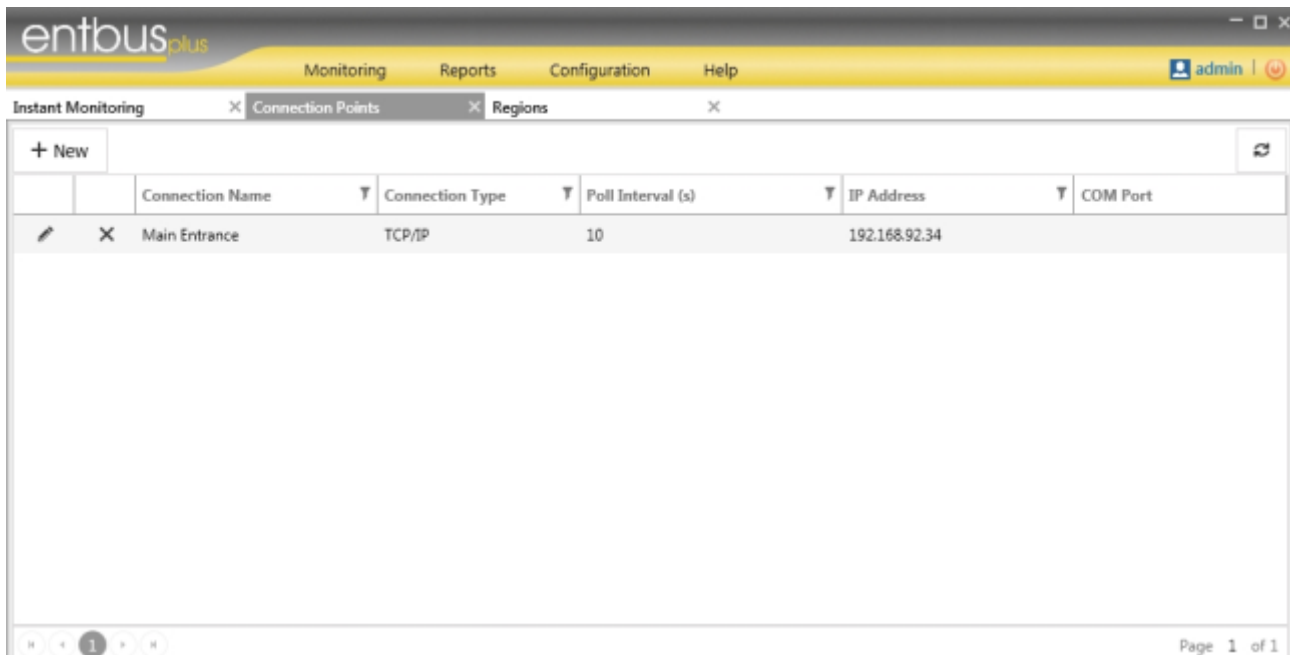
- Connection Points
- Devices
- Alarms
- Regions
- Users
- System Parameters



a. Connection Points:

The user can display the already-defined connection points and define new connection points on this screen.

EntBus accepts serial or TCP connection to communicate via Modbus.



1. Defining Connection Point:

To define a connection point, "+New" icon on the Connection Points screen is clicked. "Connection Points: New Connection" window will open. Following information about the connection point must be entered in order for the software to run properly.

Connection Name: Name of the connection point is entered here.

Connection Type: The type of connection is selected here as TCP/IP or Serial Port. TCP/IP option is selected as default.

New Connection

Connection Name: Entrance-1-2

Connection Type: TCP/IP

IP Address: 192.168.20.102

TCP Port: 502

Poll Interval (s): 10

Time Out (ms): 2,000

Delay (ms): 250

Attempts: 10

Cancel Save

If the Connection Type is selected as “TCP/IP”:

IP Address: IP address of the connection point is entered here.

TCP Port: The TCP Port for the TCP/IP connection is entered here. Communication between connection point and software is done through this port. Default port number for Modbus communication is 502.

Poll Interval (s): The time interval to read the device at the connection point is entered here. It is 10 seconds by default.

Time Out (ms): The time in which the connection point will read device data is entered here. It is 2000 milliseconds by default.

Delay (ms): The time for which the software will wait for a response from the connection point. It is 250 milliseconds by default.

Attempts: The number of times that the software will attempt to read the devices at the connection point is entered here. It is 10 by default.

Connection Name	computer
Connection Type	Serial Port
COM Port	1 (COM1)
Baudrate	19200
Data Bits (bit)	7
Stop Bit (bit)	1
Parity	None
Poll Interval (s)	10
Time Out (ms)	2,000
Delay (ms)	250
Attempts	10

Buttons: Cancel, Save

If the Connection Type is selected as “Serial Port”:

ComPort: The COM Port of connection point is entered here. Communication with the connection point is done through this port. It is COM1 by default.

Baudrate (bps): Communication speed of the connection point is selected here. It is 19200 by default.

Data Bits (bit): Data bit count in each character is selected here. It is 7 by default.

Stop Bit (bit): Stop bits are sent to resynchronize the connection point after each sent byte. It is 1 by default.

Parity: Parity is used to determine errors during communication. It is “None” as default.

Poll Interval (sn): The time interval to read the device at the connection point is entered here. It is 10 seconds by default.

Time Out (ms): The time in which the connection point will read device data is entered here. It is 2000 milliseconds by default.

Delay (ms): The time for which the software will wait for a response from the connection point. It is 250 milliseconds by default.

Attempts: The number of times that the software will attempt to read the devices at the

connection point is entered here. It is 10 by default.

After appropriate settings have been entered, connection point is saved by clicking on the “Save” button.

b. Devices:

The user can display the already-defined devices and define new devices on this screen.

EntBus Plus only supports ENTES brand devices.

The screenshot displays the 'entbusplus' web application interface. The top navigation bar includes 'Monitoring', 'Reports', 'Configuration', and 'Help'. The user is logged in as 'admin'. The main content area is titled 'Instant Monitoring' and features a tabbed interface with 'Connection Points', 'Regions', and 'Devices'. The 'Devices' tab is active, showing a table with columns: Device Name, Device Model, ConnectionPoint, Region, and NAD. A single device is listed: 'Main Shalter' (Device Model: MPR47S, ConnectionPoint: Main Entrance, Region: Company, NAD: 1). Below the table is a pagination control showing 'Page 1 of 1'. At the bottom, there is an 'Alarms' section with a sub-tab 'Disconnected Devices' and a table with columns: Device, Connection Point, and Last Communication Time (marked with a red exclamation mark).

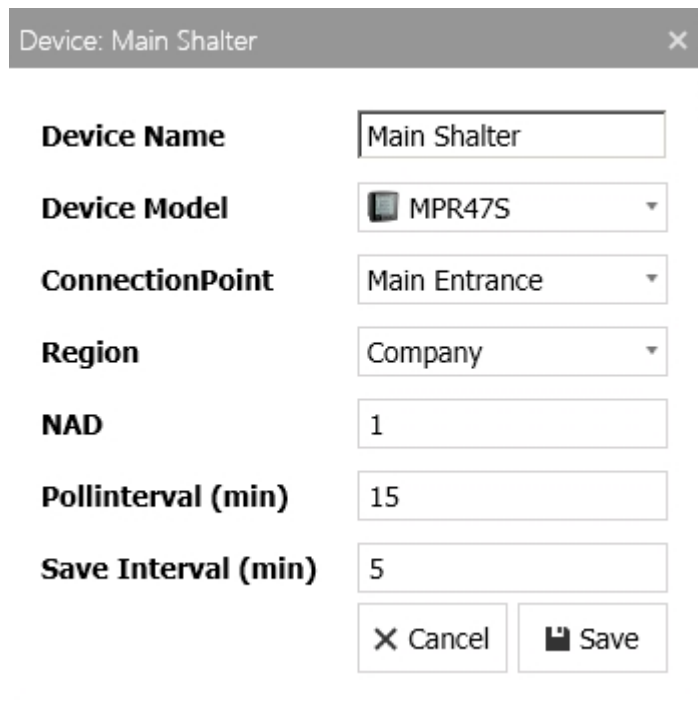
Device Name	Device Model	ConnectionPoint	Region	NAD
Main Shalter	MPR47S	Main Entrance	Company	1

Page 1 of 1

Device	Connection Point	Last Communication Time (*)
--------	------------------	-----------------------------

1. Defining Device:

To define a device, “+New” icon on the Devices screen is clicked. “Device: New Device” window will open. Following information about the device must be entered in order for the software to run properly.



Device Name	Main Shalter
Device Model	MPR47S
ConnectionPoint	Main Entrance
Region	Company
NAD	1
Pollinterval (min)	15
Save Interval (min)	5

Cancel Save

Device Name: Name of the device is entered here.

Device Model: Model and version of the device is selected here.

Connection Point: The connection point to which the device is connected is selected from the list.

Region: The region in which the device is located is selected from the list.

NAD: RS-485 address of the device is entered here.

Poll Interval (min): The time interval to read the device is entered here. It is 15 minutes by default.

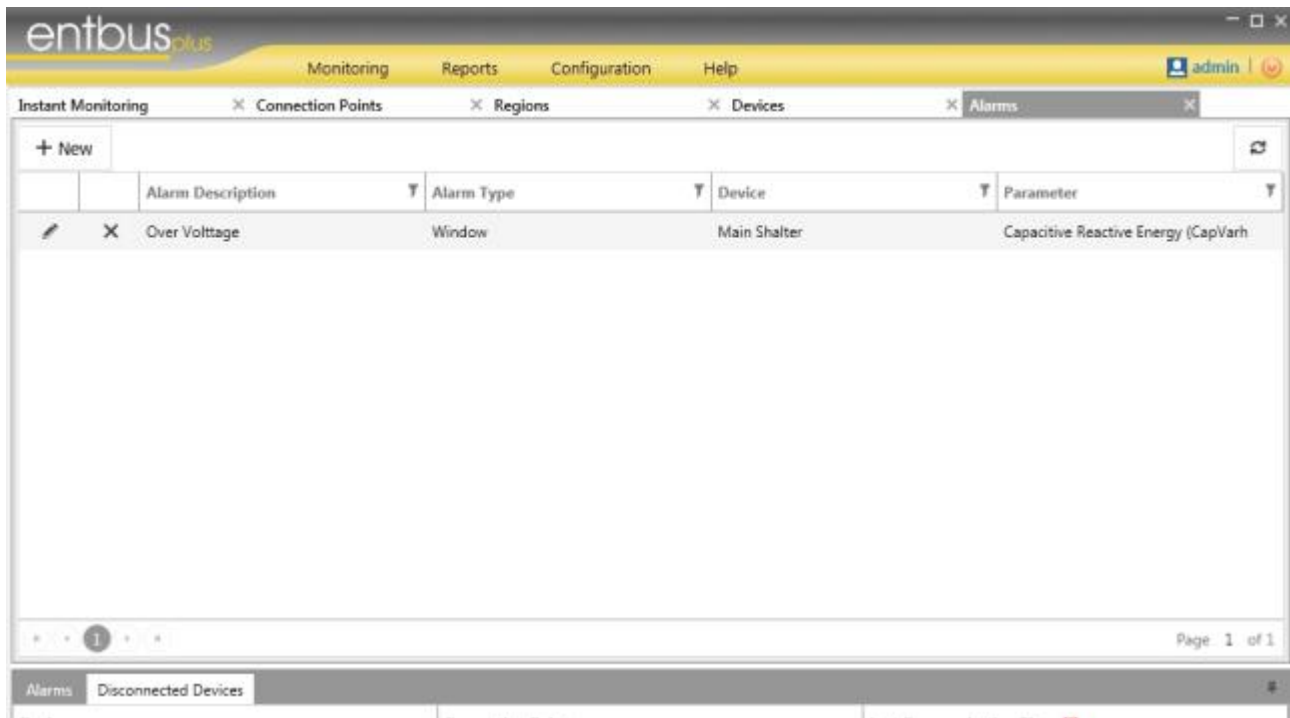
Save Interval (min): The time interval to save the read device values is entered here. It is 5 minutes by default.

After appropriate settings have been entered, device is saved by clicking on the “Save” button.

c. Alarms:

Alarm information for each device can be assigned on this screen.

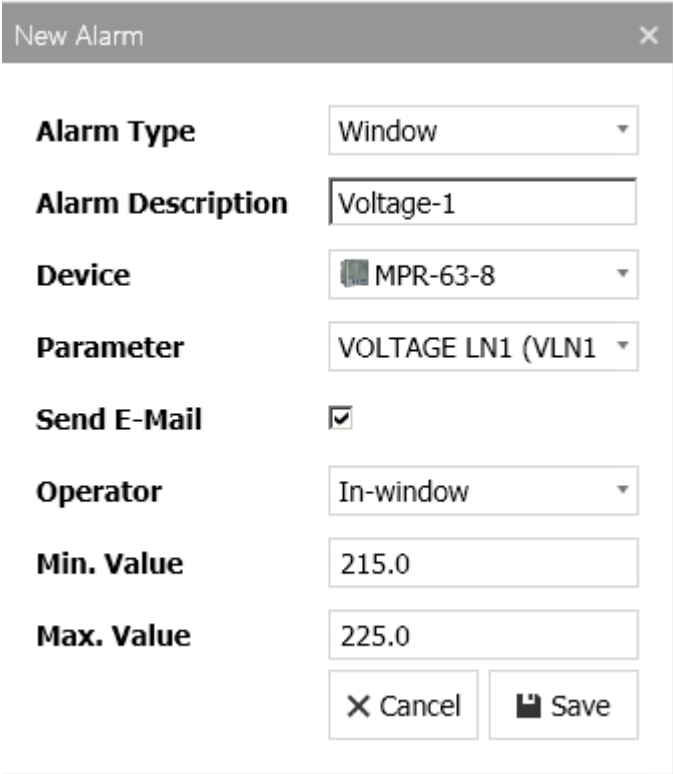
Window or Setpoint alarms can be defined on Entbus Plus. When this defined alarm occurs, its information will be displayed under “Alarms” tab on the mainform screen.



1. Defining Alarm:

To define an alarm, “+New” icon on the Alarms screen is clicked. “Alarms: New Alarm” window will open. Following information about the alarm must be entered in order for the software to run properly.

Alarm Type: There are two options for an alarm: Window or Setpoint. Window is selected by default.



Alarm Type	Window
Alarm Description	Voltage-1
Device	MPR-63-8
Parameter	VOLTAGE LN1 (VLN1)
Send E-Mail	☒
Operator	In-window
Min. Value	215.0
Max. Value	225.0

Cancel Save

If the alarm type is selected as **Window**;

Alarm Description: This description is displayed when the alarm occurs.

Device: The device for the alarm is selected here.

Parameter: The device parameter to create the alarm is selected here.

Send E-Mail: This selection indicates sending an e-mail to the address given in the users screen when an alarm occurs.

Operator: The type of operation for the alarm is selected here. There are two options as In-Window and Out-Window.

Operator	In-window ▼
Min. Value	100.0
Max. Value	300.0
	X Cancel Save

When the Operator is selected as **In-Window**, the software recognizes the value window between min and max values as normal. When the measured value exceeds max value or goes below min value, the alarm will occur.

Min Value: The minimum limit of the alarm window.

Max Value: The maximum limit of the alarm window.

Operator	Out-window ▼
Min. Value	100.0
Max. Value	300.0
	X Cancel Save

When the Operator is selected as **Out-Window**, the software recognizes the value window between min and max values as an alarm condition. When the measured value exceeds min value or goes below max value, the alarm will occur;

Min Value: The minimum limit of the alarm window.

Max Value: The maximum limit of the alarm window.

New Alarm

Alarm Type Setpoint

Alarm Description Current

Device MPR-63-8

Parameter CURRENT LN1 (ILN1

Send E-Mail ☒

Operator >

Value 100

Cancel Save

If the alarm type is selected as **Setpoint**;

Alarm Description: This description is displayed when the alarm occurs.

Device: The device for the alarm is selected here.

Parameter: The device parameter to create the alarm is selected here.

Send E-Mail: This selection indicates sending an e-mail to the address given in the users screen when an alarm occurs.

Operator: There are two options. An alarm occurs if measured value is greater or smaller than entered value. They are indicated as ">", "<". ">" is selected by default.

Value: The value to determine a base for greater or smaller operators is entered here.

After appropriate settings have been entered, alarm is saved by clicking on the "Save" button.

d. Regions:

Regions that the devices are located are created on this screen.

To define a device, Entbus Plus architecture requires defining a region first.

The screenshot shows the Entbus Plus software interface. The top navigation bar includes 'Monitoring', 'Reports', 'Configuration', and 'Help'. The 'Regions' tab is selected, showing a '+ New' button and a table with columns 'Region Name' and 'Company'. Below the table, there are navigation buttons and a page indicator 'Page 1 of 1'. At the bottom, there is a section for 'Disconnected Devices' with a table showing device details.

Device	Connection Point	Last Communication Time (*)
Main Shalter	Main Entrance	12/24/2015 2:14 PM

1. Defining Region:

To define an alarm, “+New” icon on the Regions screen is clicked. “New Region” window will open. Following information about the region must be entered in order for the software to run properly.

The 'New Region' dialog box is shown, featuring a text input field for 'Region Name' and two buttons: 'Cancel' and 'Save'.

Region Name: A name is entered for the region.

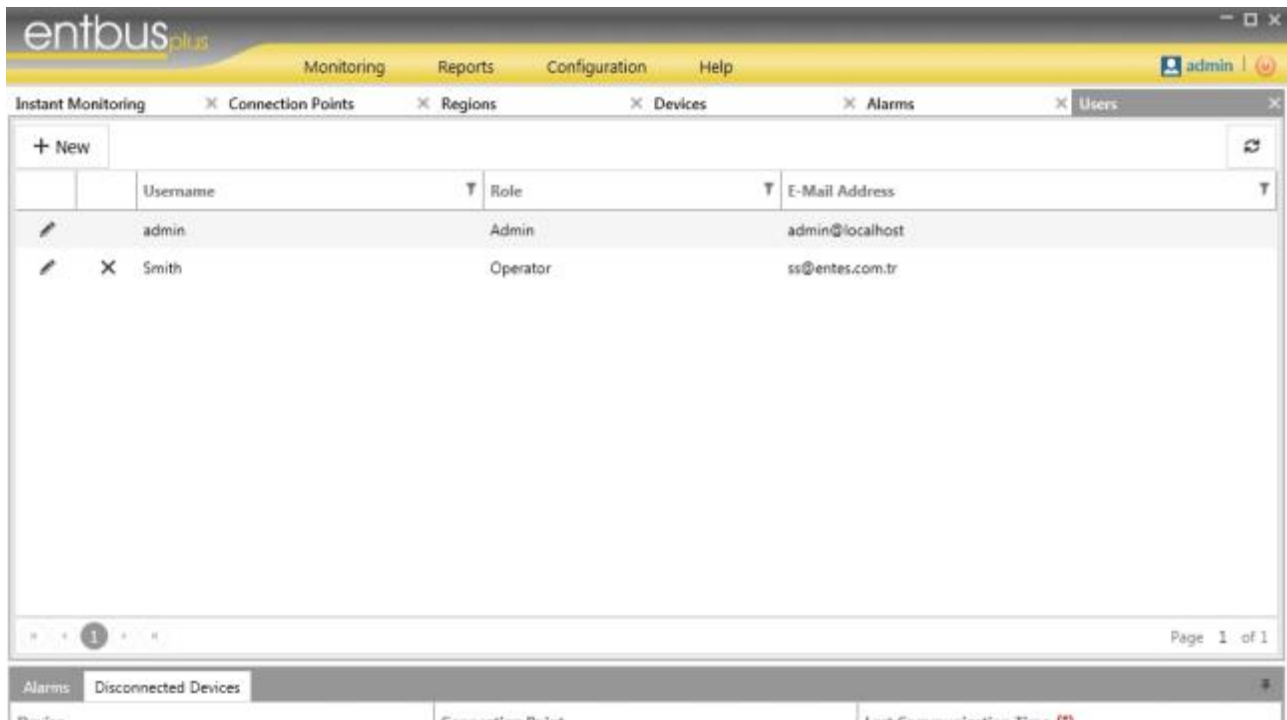
After appropriate region name has been entered, region is saved by clicking on the “Save”

button.

e. Users:

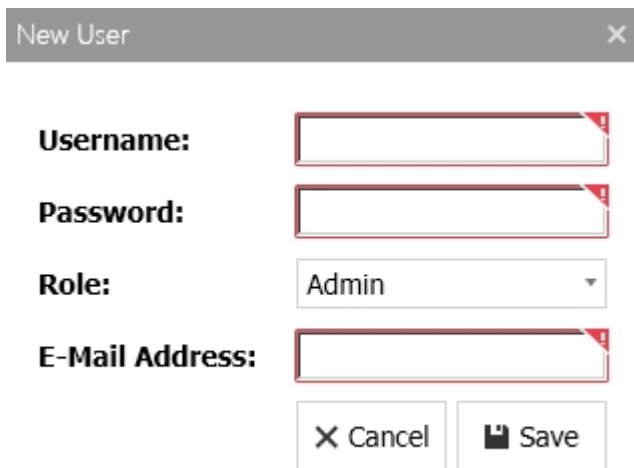
Information about the users who will use the software is defined on this screen.

The users listed on this screen are allowed to login to the system when the software opens.



1. Defining User:

To define a user, "+New" icon on the User screen is clicked. "New User" window will open. Following information about the user must be entered in order for the software to run properly.



The image shows a 'New User' dialog box with a title bar containing the text 'New User' and a close button (X). The dialog contains four labeled input fields: 'Username:', 'Password:', 'Role:', and 'E-Mail Address:'. The 'Role:' field is a dropdown menu currently showing 'Admin'. Below the input fields are two buttons: 'Cancel' (with an X icon) and 'Save' (with a floppy disk icon). Each of the four input fields has a small red error icon in its top right corner.

User Name: The name that the user will enter to login to the system is entered here.

Password: The password for that user is entered here.

Role: There are two role options on the system: Admin and Operator.

Users with Admin role can access all menus and sub-menus of the system and change any setting of the software.

Users with Operator role can only access menus regarding the monitoring aspect of the software.

E-Mail Address: E-mail address of the user is entered here.

After appropriate user information has been entered, the user is saved by clicking on the "Save" button.

f. System Parameters:

The user can change some system parameters on this screen.

Some of these parameters can be changed. However, some of them are there for display only and can't be changed.

entbusplus
Monitoring
Reports
Configuration
Help
admin

Instant Monitoring
Connection Points
Regions
Devices
Alarms
Users
System Parameters

Configuration Key	Configuration Value
Activation Code	11111111111111111111
Alarm Control Period	15000
Arithmetical Accuracy	3
Auto Update Check	On
Business Report DeviceModels	8,9,10,11,12,13,14,15,16,17,31
Database Command Timeout	900
Default Theme	Windows8
Device Commands Password Verification	On
e-Mail Exit Port	
e-Mail Password	

1
2

Alarms
Disconnected Devices

Arithmetic Precision: IT indicates how many digits after the decimal point will be shown on the monitoring screen for parameters.

DefaultSkin: The theme of the system is changed from here. The change will be active after the software is closed and restarted.

Mail.SmtpAddress: SMTP address is entered here.

Mail.FromAddress: The sender address for alarm e-mails is entered here.

Mail.Password: The password for the sender address is entered here.

Mail.OutgoingPort: The port of the sending server is entered here.

Mail.UserName: The username for the sender address is entered here.

ActivationCode: Activation code for the software is displayed here.

SqlCommandTimeout: Timeout for the SQL commands is entered here.

DeviceCommands.PwdConfirmation: During deleting operations of devices, a password confirmation can be activated. This key is used for that function.

Mail.Ssl: SSL status is toggled from this key.

Report.CompanyDeviceModels: Device models to include in the Business Report is entered here. Device model IDs are stored in the SQL Server Management.

Values on the system parameters screen are the default values. They can be changed by clicking on the pen icon next to them. After entering new values, new parameters are saved after clicking on the “Save” button.

9. Monitoring:

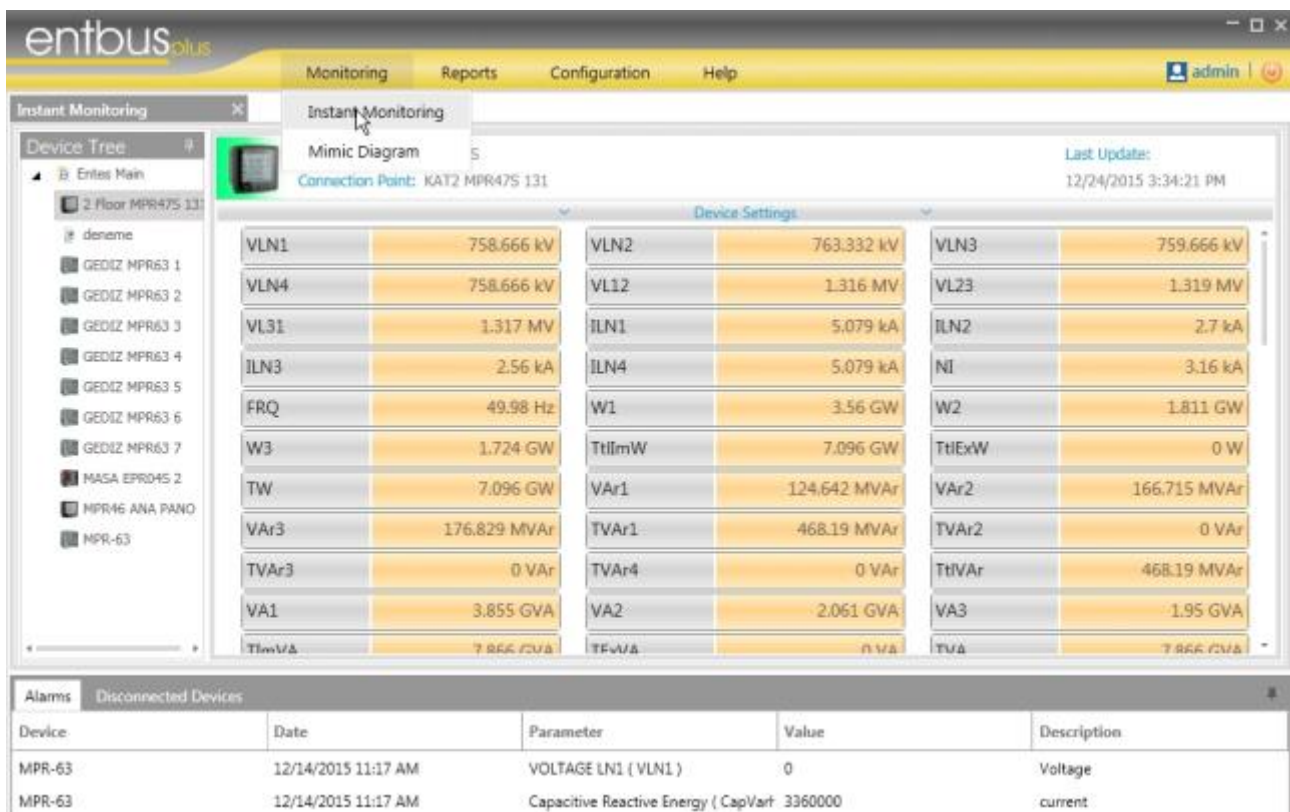
Instant Monitoring and Mimic Diagram options are available under Monitoring menu.



a. Instant Monitoring:

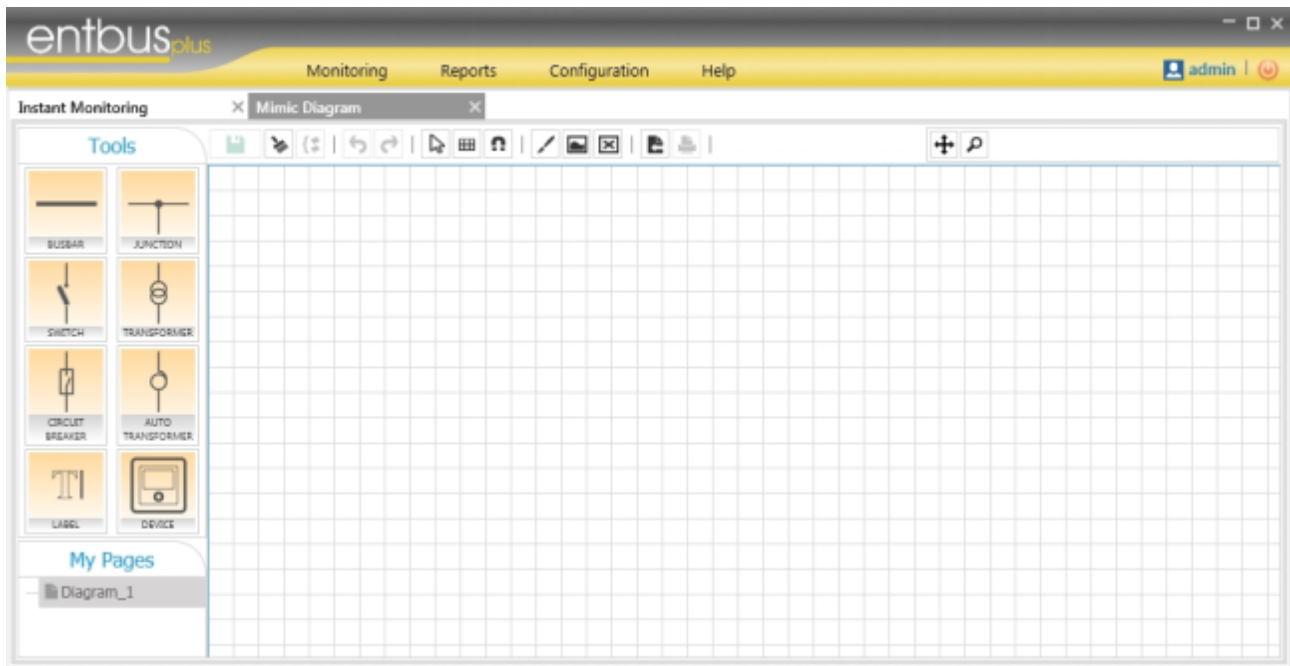
Parameters of the devices that have been defined on the system are monitored on this screen.

Additionally, configuration settings of the monitored devices can be displayed by clicking on the “Device Settings” banner. On this section, device configuration can be changed remotely.



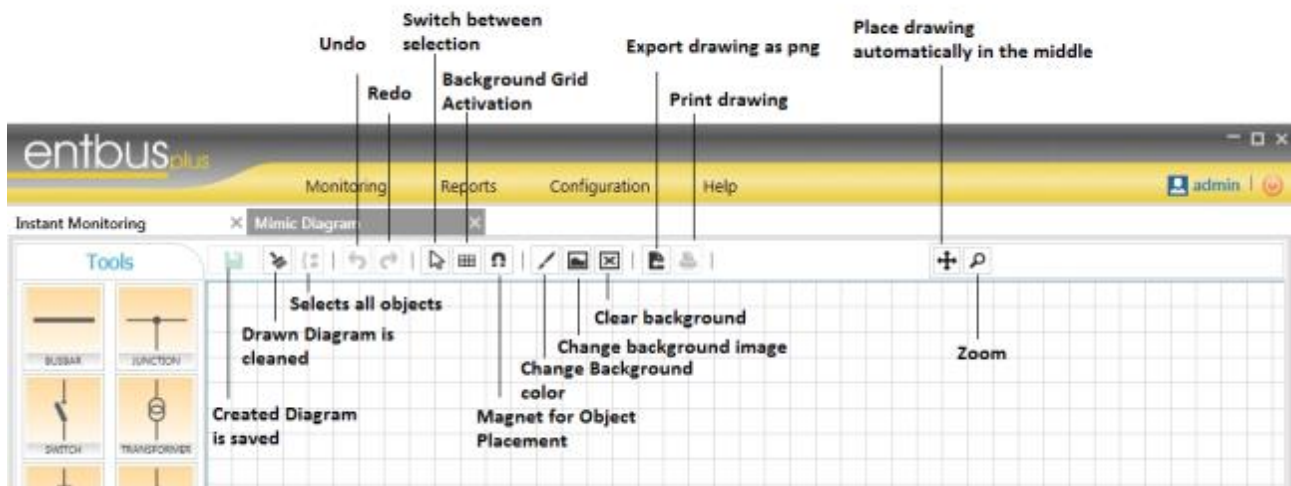
b. Mimic Diagram

When “Mimic Diagram” option is clicked under Monitoring, following screen is displayed.

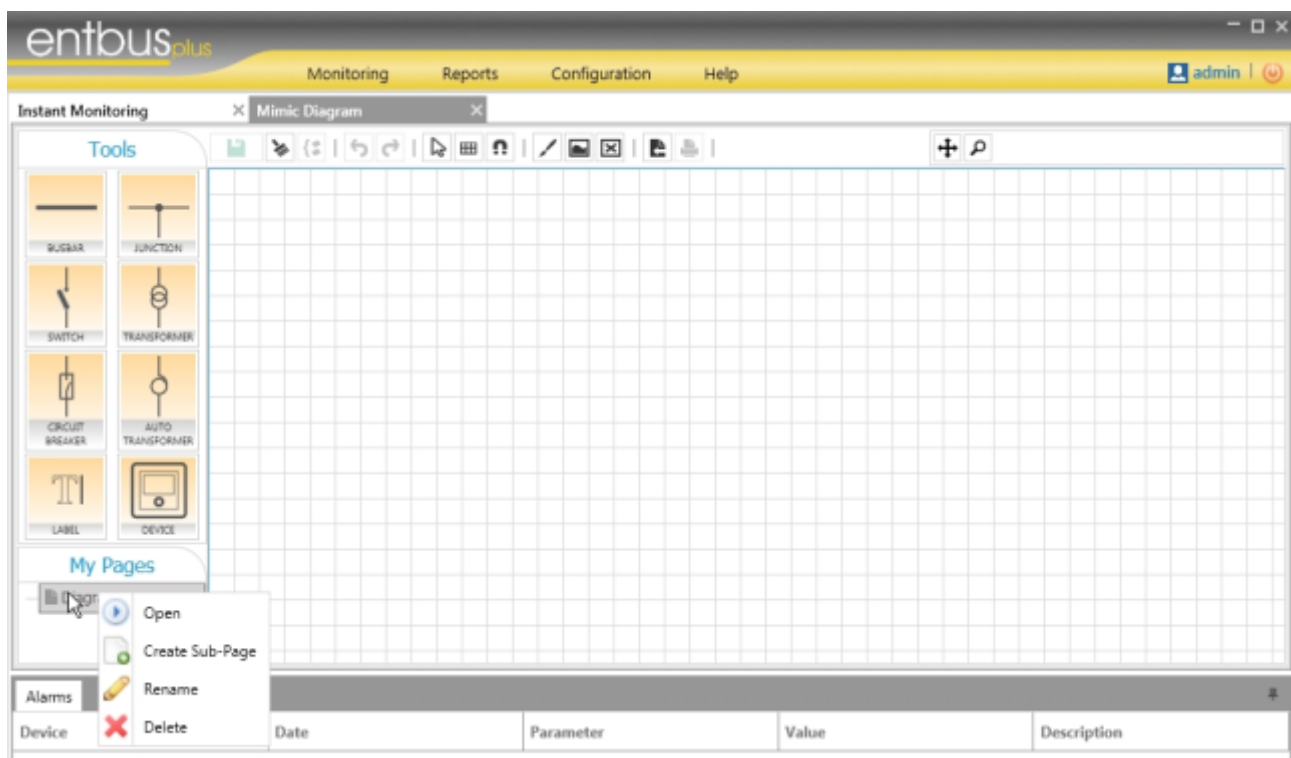


This screen is opened ready to design. There are objects on the left side that you can drag and drop onto the drawing area.

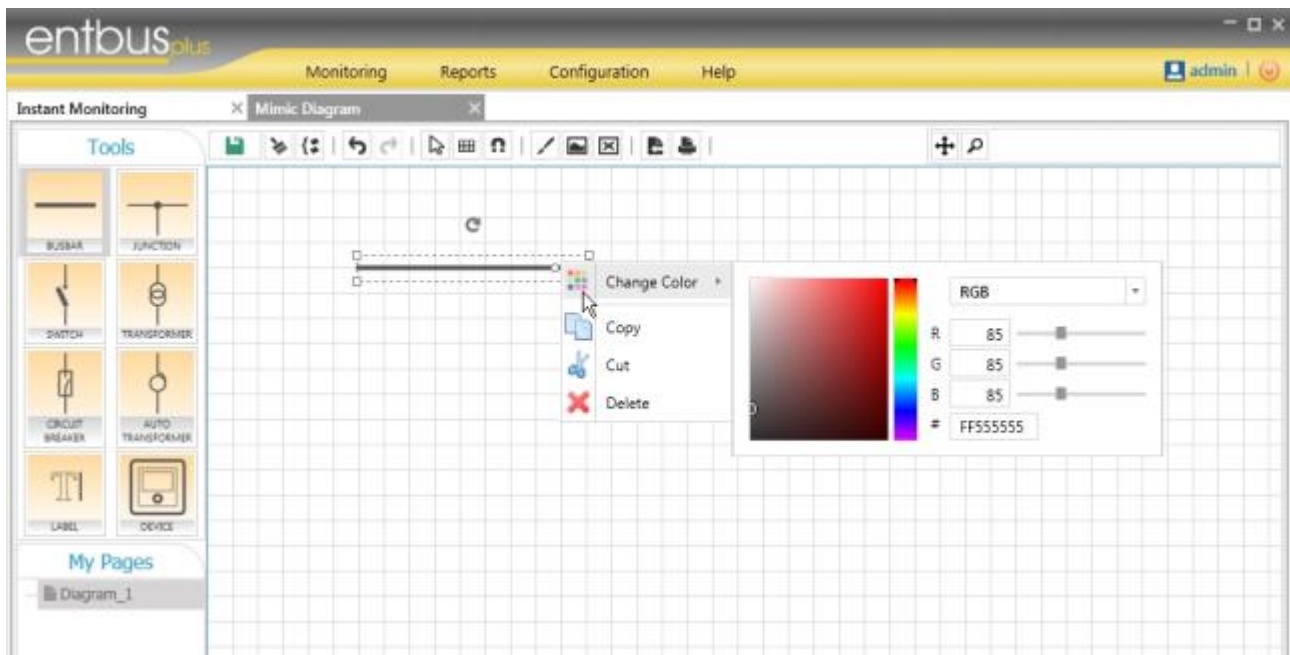
Functions of the buttons that are located above the drawing area are explained below:



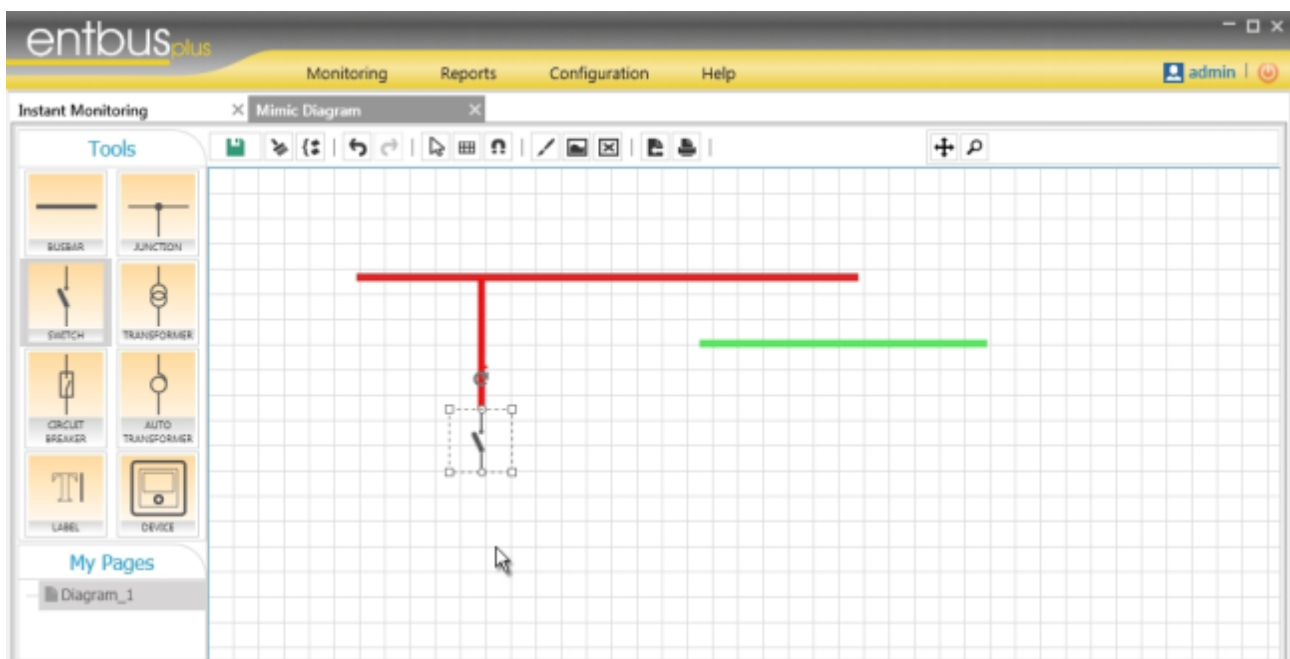
A sub-page can be created by right-clicking on the main page. All pages can be renamed.



Objects are added to the drawing by dragging and dropping them.

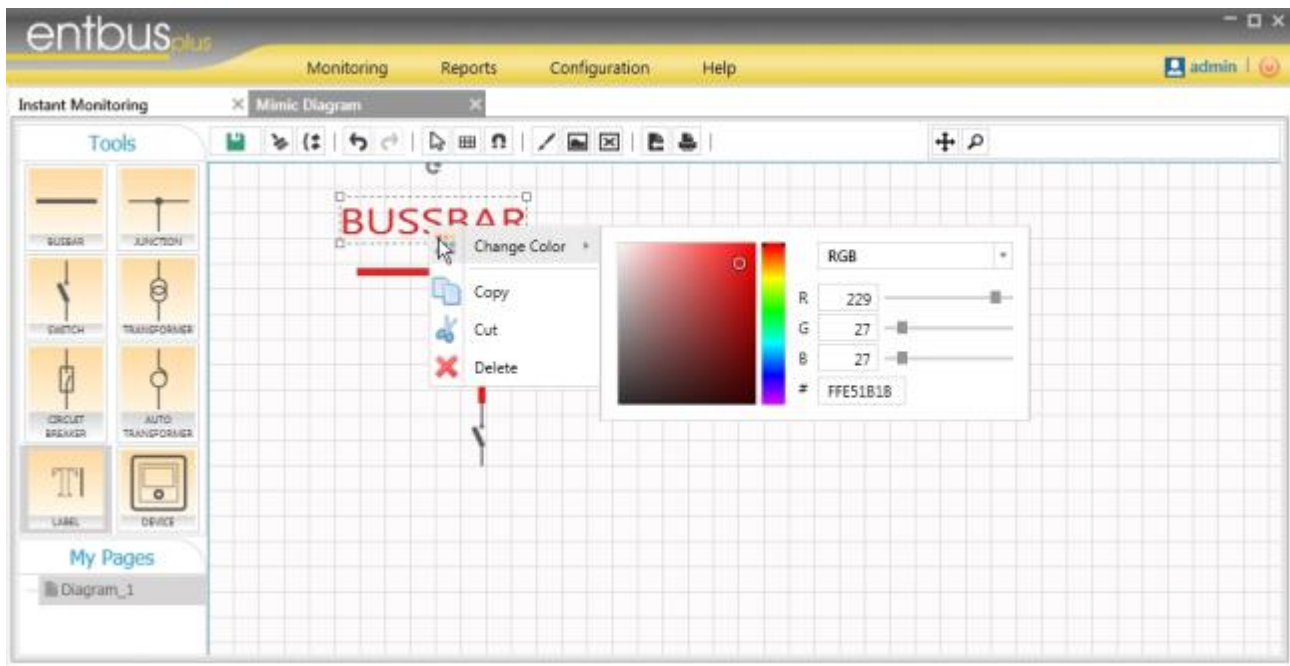


On the figure above, a busbar has been added to the drawing by dragging and dropping it. The color of the busbar can be changed by right-clicking on it.



On the figure above, a disconnector has been added to the drawing. Its size can be changed.

Labels to identify the objects can be created in any color and size.



A device's parameters can be monitored on the drawing by dragging and dropping the DEVICE object to the drawing.

Select Device and Parameters

Device

2 Floor MPR47S 13

▼

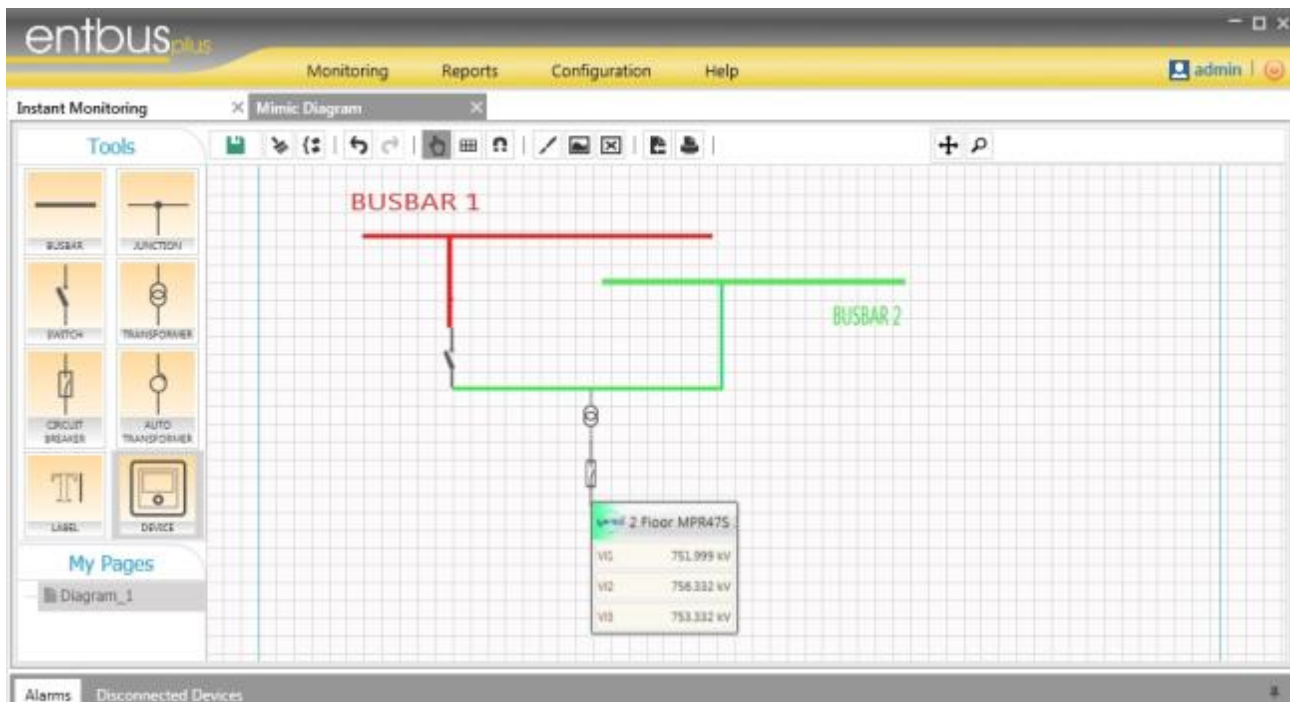
☒ Show Device Title

Parameters

+ New

✕ Cancel

Save



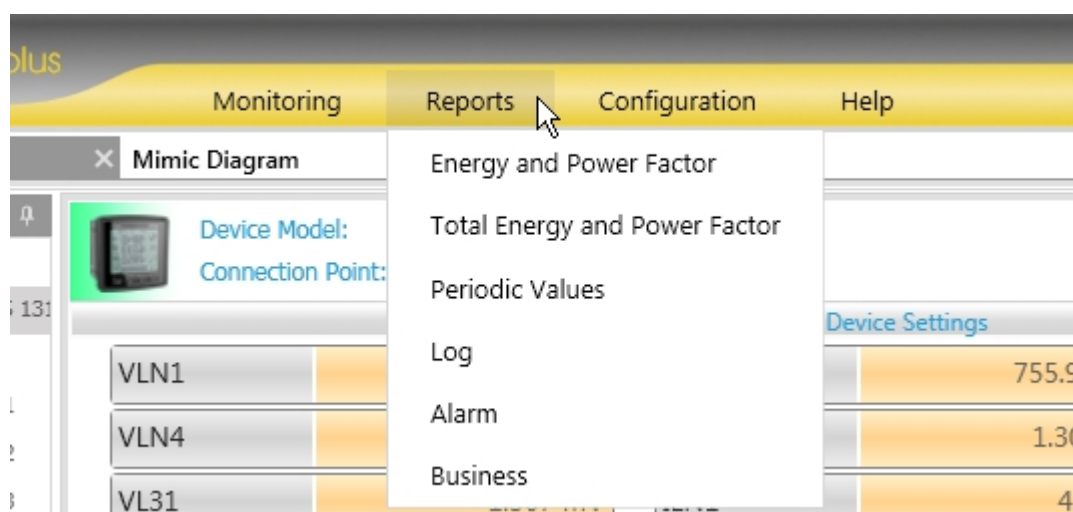
A circuit can be created with the added objects. On the figure above, the device line color is the same as the green busbar when the disconnector connected to the green busbar is closed. If this disconnector is opened and the disconnector connected to the red busbar is closed, the line color will change to red.

The diagram can be zoomed in by using the zoom button on the right side of the top menu. This can be used to view the details of the drawn diagram.

10. Reporting:

Available reports under Reports menu are as following:

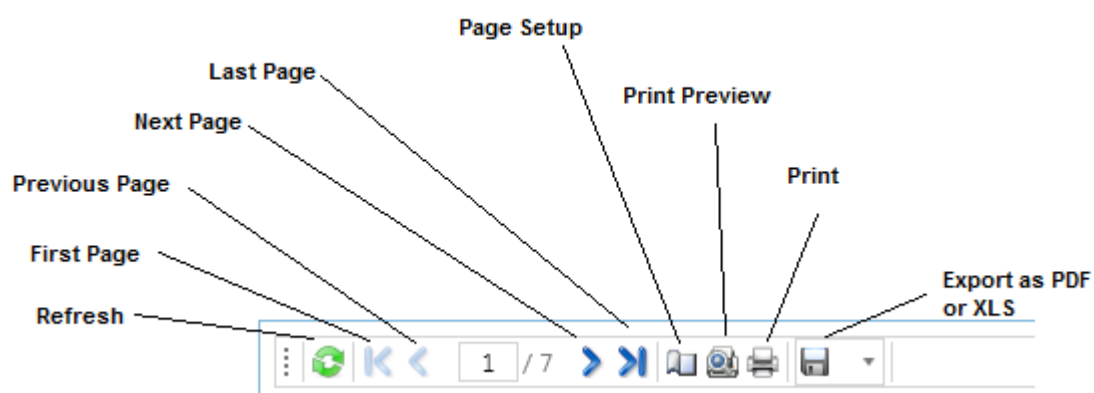
- Energy Report
- Total Energy Report
- Region Energy Report
- Periodic Values Report
- Log Report
- Compensation Report
- Alarm Report
- Business Report



These reports are created by the user's input of start and/or end date. They contain parameter values of device(s) or region(s) according to the entered start and/or end dates.

a. Report Toolbar:

Functions of buttons above the report values is explained below:



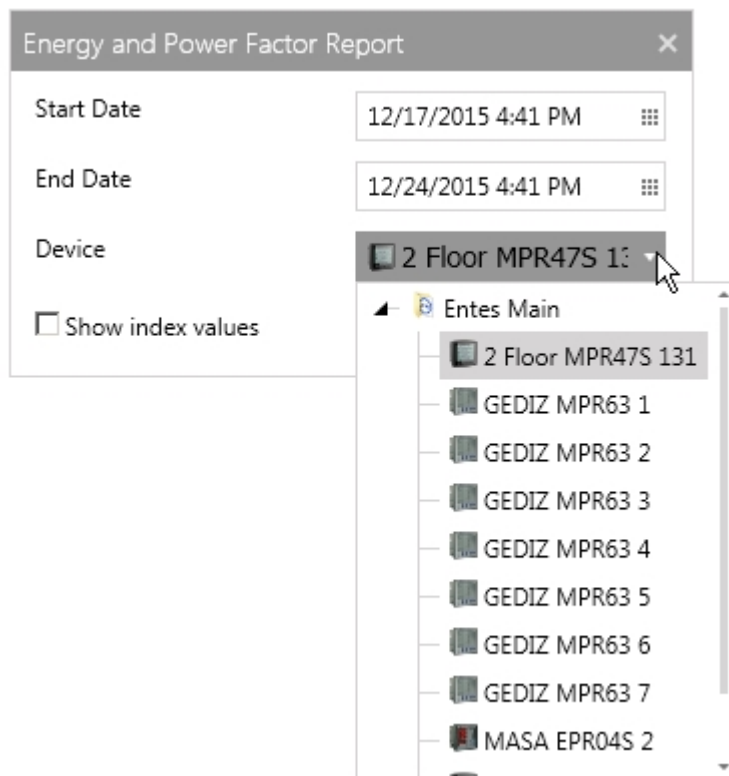
These functions are valid for all reports.

b. Energy and Power Factor Report

Following energy values can be reported between two dates:

- Import Active Energy (ImWh)
- Export Active Energy (ExWh)
- Inductive Reactive Energy (IndVARh)
- Capacitive Reactive Energy (CapVARh)

When Energy Reports option is selected from the Reports menu, the user has to select a device and a date range to create the report.



After the necessary selections are made, “Generate Report” button is clicked. Energy parameters for the selected device between entered dates are displayed on the screen.

The time interval of the displayed lines depend on the selected date range:

- If the date range is smaller than a day, the time interval of the displayed lines will be the same as the Save Interval.
- If the date range is between 1 day and 30 days, the time interval of the displayed lines will be one hour.
- If the date range is greater than 30 days, the time interval of the displayed lines will be one day.

entbus^{plus}
Monitoring
Reports
Configuration
Help
admin

Instant Monitoring
Devices
Connection Points
Regions
Energy and Power Factor R...

1 of 7

Energy and Power Factor Rep

Start Date : 11/12/2015 2:14:56 PM
Report Date : 11/19/2015 2:15:52 PM
End Date : 11/19/2015 2:14:56 PM
Device : 2 Floor MPR47S 131

Date	ImWh	ExWh	IndVarh	CapVarh	Inductive Ratio	Capacitive Ratio	Start ImWh	S
11/12/2015 3:00:00 PM	16,554.000	0.000	3,623.000	5.000	21.896	0.030	88,880,510.000	1,
11/12/2015 4:00:00 PM	22,576.000	0.000	4,319.000	7.000	19.131	0.031	88,897,064.000	1,
11/12/2015 5:03:00 PM	25,721.000	0.000	4,671.000	26.000	18.160	0.101	88,919,640.000	1,
11/12/2015 6:03:00 PM	15,202.000	0.000	761.000	151.000	5.006	0.993	88,945,361.000	1,

c. Total Energy and Power Factor Report:

For this energy report, more than one device can be selected. This report displays the total energy consumption of one or more devices between two dates.

Total Energy and Power Factor Report

Start Date: 12/17/2015 4:43 PM

End Date: 12/24/2015 4:43 PM

Device: Choose device.

☐ Show index values

- Entes Main
 - ☒ 2 Floor MPR47S 131
 - ☐ GEDIZ MPR63 1
 - ☐ GEDIZ MPR63 2
 - ☐ GEDIZ MPR63 3
 - ☐ GEDIZ MPR63 4
 - ☐ GEDIZ MPR63 5
 - ☐ GEDIZ MPR63 6
 - ☐ GEDIZ MPR63 7
 - ☐ MASA EPR04S 2

entbus plus

Monitoring Reports Configuration Help

Instant Monitoring Total Energy and Power Fa...

1 of 1

Total Energy and Power Factor Report

Start Date : 11/19/2015 2:00:00 PM Report Date : 11/19/2015 4:09:24 PM

End Date : 11/19/2015 4:09:03 PM

Device Name	Start Date	End Date	ImWh	ExWh	IndVarh	CapVarh
2 Floor MPR47S 131	11/19/2015 2:04:00 PM	11/19/2015 4:06:00 PM	40,673.000	0.000	4,018.000	0.000
MPR-63	11/19/2015 2:34:00 PM	11/19/2015 4:06:00 PM	0.000	10,000.000	10,000.000	80,000.0

1

Following values are displayed in the report:

- Import Active Energy at the Start Date (Başlangıç ImWh)
- Export Active Energy at the Start Date (Başlangıç ExWh)
- Inductive Reactive Energy at the Start Date (Başlangıç IndVarh)
- Capacitive Reactive Energy at the Start Date (Başlangıç CapVarh)
- Import Active Energy at the End Date (Bitiş ImWh)
- Export Active Energy at the End Date (Bitiş ExWh)
- Inductive Reactive Energy at the End Date (Bitiş IndVarh)
- Capacitive Reactive Energy at the End Date (Bitiş CapVarh)
- Consumed Import Active Energy (Tüketim ImWh)
- Consumed Export Active Energy (Tüketim ExWh)
- Consumed Inductive Reactive Energy (Tüketim IndVarh)
- Consumed Capacitive Reactive Energy (Tüketim CapVarh)

d. Periodic Values Report:

Periodic Values Report

Start Date: 12/17/2015 4:48 PM

End Date: 12/24/2015 4:48 PM

Device: 2 Floor MPR47S 131

- Entes Main
 - 2 Floor MPR47S 131
 - deneme
 - GEDIZ MPR63 1
 - GEDIZ MPR63 2
 - GEDIZ MPR63 3
 - GEDIZ MPR63 4
 - GEDIZ MPR63 5
 - GEDIZ MPR63 6
 - GEDIZ MPR63 7

All saved parameters of a device between two dates is listed in this report.

After a device and a date range are selected, the report is created by clicking on “Generate Report”.

entbusplus

Monitoring Reports Configuration Help

Instant Monitoring Total Energy and Power Fa... Periodic Values Report

Periodic Values Report

Start Date: 11/12/2015 4:11:27 PM Report Date: 11/19/2015 4:11:38 PM

End Date: 11/19/2015 4:11:27 PM Device: 2 Floor MPR47S 131

Date	VLIN1	VLIN2	VLIN3	VLIN4	VL12	VL23	VL31	ILIN1	ILIN2	ILIN3	ILIN4	NI	FRQ	W1	W2	W3
11/12/2015 4:17:00 PM	229.200	230.400	230.000	229.200	397.400	398.500	398.600	51.600	31.700	36.200	51.700	43.100	50.000	11,015.283	6,547.546	6.1
11/12/2015 5:03:00 PM	224.500	225.900	225.200	224.500	389.300	390.700	390.300	48.000	32.500	46.800	48.100	39.600	50.020	9,856.660	6,822.400	8.7
11/12/2015 6:03:00 PM	228.800	229.100	229.500	228.700	396.100	397.600	397.000	21.700	13.300	12.300	21.700	12.600	50.060	4,255.066	2,610.889	2.4
11/12/2015 7:05:00 PM	231.300	231.700	232.200	231.300	400.600	402.300	401.700	17.200	10.400	11.100	17.200	9.600	50.020	3,263.171	1,816.136	2.0

Alarms Disconnected Devices

e. Alarm Report:

Any occurred alarms of a device between two dates is displayed in this report.

Alarm Report

Start Date: 12/17/2015 4:55 PM

End Date: 12/24/2015 4:55 PM

Device: 2 Floor MPR47S 131

- Entes Main
 - 2 Floor MPR47S 131
 - deneme
 - GEDIZ MPR63 1
 - GEDIZ MPR63 2
 - GEDIZ MPR63 3
 - GEDIZ MPR63 4
 - GEDIZ MPR63 5
 - GEDIZ MPR63 6
 - GEDIZ MPR63 7

After a device and a date range are selected, the report is created by clicking on “Generate Report”.

entbusplus

Monitoring Reports Configuration Help

Instant Monitoring Alarms Log Report Alarm Report

Alarm Report

Start Date: 11/12/2015 4:42 PM

End Date: 11/19/2015 4:42 PM

Device: MPR-63

Generate Report

Alarm Report

Start Date: 11/12/2015 4:41:57 PM Report Date: 11/19/2015 4:42:18 PM

End Date: 11/19/2015 4:41:57 PM Device: MPR-63

Alarm Description	Parameter	Start Date	End Date	Alarm Start Value	Alarm End Value
Voltage	VLN1	11/19/2015 4:39:36 PM		0.000	
current	CapVarh	11/19/2015 4:40:50 PM	11/19/2015 4:41:37 PM	43.900	

1

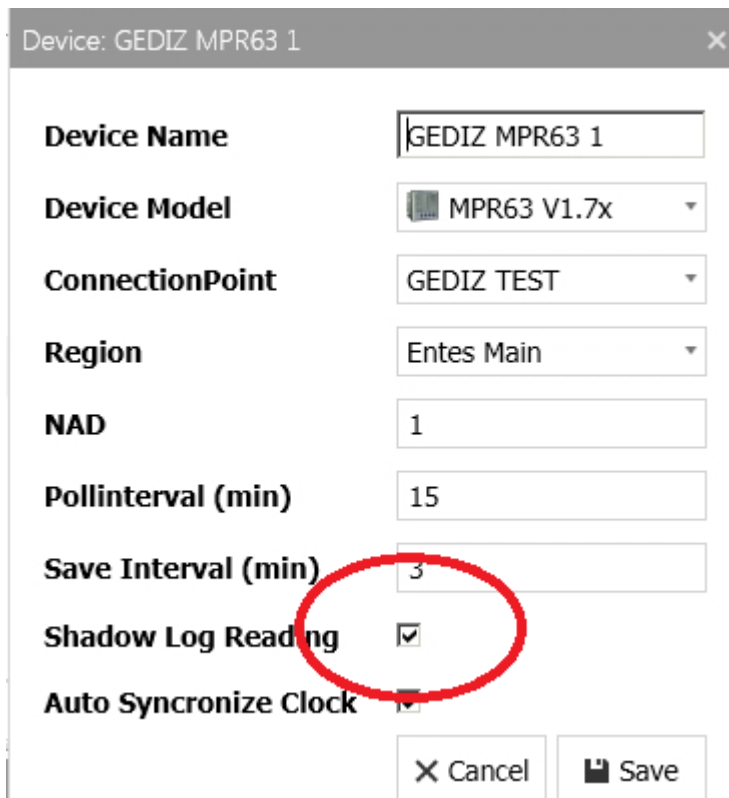
Alarms Disconnected Devices

Device	Date	Parameter	Value	Description
MPR-63	11/19/2015 4:39 PM	VOLTAGE UN1 (VLN1)	0	Voltage
MPR-63	11/19/2015 4:41 PM	Capacitive Reactive Energy (CapVarh)	3360000	current

f. Log Report:

This report requires that the device, from which the report will be created, has log reading feature and the activation of this feature.

This can be done by browsing to the appropriate device's settings and activating the "Shadow Log Reading" option.



The screenshot shows a settings window titled "Device: GEDIZ MPR63 1". It contains several configuration fields:

- Device Name:** GEDIZ MPR63 1
- Device Model:** MPR63 V1.7x
- ConnectionPoint:** GEDIZ TEST
- Region:** Entes Main
- NAD:** 1
- Pollinterval (min):** 15
- Save Interval (min):** 3
- Shadow Log Reading:** ☒ (This checkbox is circled in red)
- Auto Synchronize Clock:** ☒

At the bottom right, there are two buttons: "Cancel" and "Save".

Log report is created from the internal memory data of MPR63 and MPR60S series devices.

After a device and a date range are selected, the report is created by clicking on "Generate Report".

Log Report

Start Date

12/17/2015 4:55 PM

End Date

12/24/2015 4:55 PM

Device

deneme

Entes Main

deneme

GEDIZ MPR63 1

GEDIZ MPR63 2

GEDIZ MPR63 3

GEDIZ MPR63 4

GEDIZ MPR63 5

GEDIZ MPR63 6

GEDIZ MPR63 7

MPR-63

The report displays stored log data on the device.

entbusplus

izleme

Raporlar

Yapilandirma

Yardim

entes

Anlık İzleme

Log Raporu

1 / 69

Log Report

Start Date : 3/15/2014 2:58:31 PM

Report Date : 5/15/2014 2:59:10 PM

End Date : 3/20/2014 2:58:31 PM

Device : MPR-63 v174

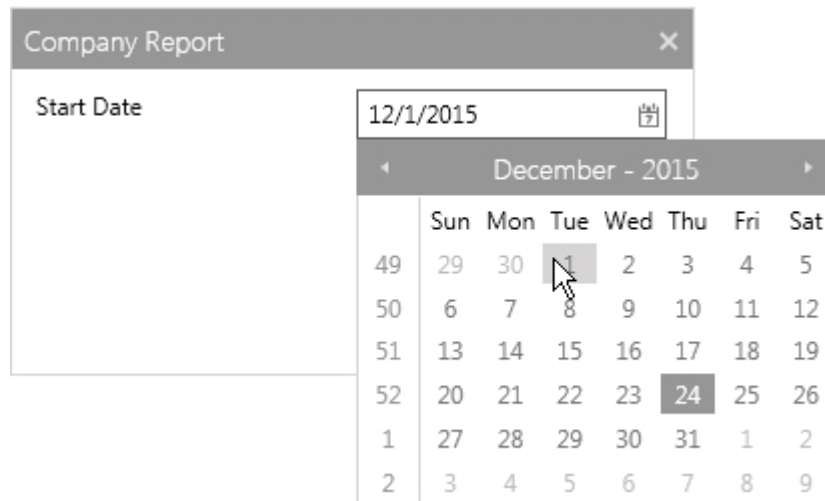
Log Date	Par_1	Par_1 Value	Par_2	Par_2 Value	Par_3	Par_3 Value	Par_4	Par_4 Value	Par_5	Par_5 Value	Par_6
3/15/2014 3:09:05 PM	VLN1	2294 V	VLN2	2291 V	VLN3	2275 V	ILN1	1.38 A	ILN2	1.39 A	ILN3
3/15/2014 3:24:05 PM	VLN1	2297 V	VLN2	2293 V	VLN3	2278 V	ILN1	1.4 A	ILN2	1.4 A	ILN3
3/15/2014 3:39:05 PM	VLN1	2299 V	VLN2	2295 V	VLN3	2280 V	ILN1	1.39 A	ILN2	1.39 A	ILN3
3/15/2014 3:54:04 PM	VLN1	2306 V	VLN2	2302 V	VLN3	2287 V	ILN1	1.39 A	ILN2	1.39 A	ILN3

%100

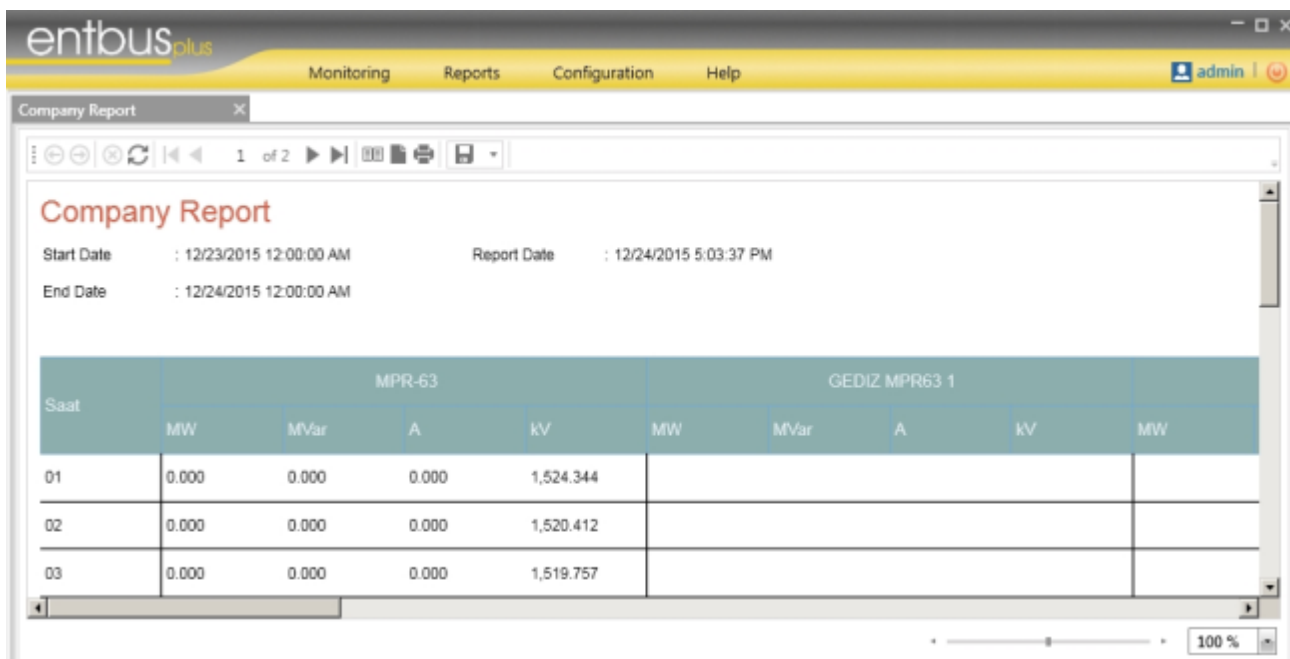
g. Business Report:

This report includes the following parameters of MPR-63 series devices.

- Total Power
- Total Current
- Total Reactive Power
- Phase-Phase Voltages

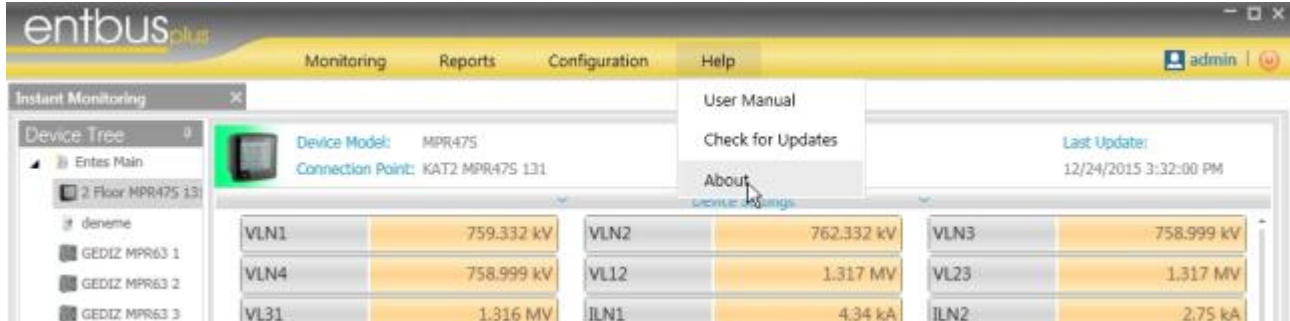


After a Start Date is selected, the report is created by clicking on “Generate Report”.



11. Help:

Under Help menu, User Manual and About options are available.



a. User Manual:

When the user clicks on User Manual option, a PDF software manual is opened according to the Language that the user selected during login.

b. About:

When the user clicks on About option, following information about the software license is displayed.

- Software Version
- License Expiration Date
- Device Limit

