

# EcoStruxure Machine SCADA Expert HMI Runtime Reference Manual

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09/2023

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# Safety Information

## Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

### **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to physical injury.

## Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

# About This Manual

## Document Scope

This manual describes the settings and operations on target devices where the HMI Runtime for EcoStruxure Machine SCADA Expert is installed (or where HMI Runtime will be installed).

## Validity Note

This documentation is valid for this product.

The technical characteristics of the devices described in the present document also appear online. To access the information online, go to the Schneider Electric home page [www.se.com/ww/en/download/](http://www.se.com/ww/en/download/).

The characteristics that are described in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

## Registered Trademarks

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Product names used in this manual may be the registered trademarks owned by the respective proprietors.

## Related Documents

You can download the manuals related to this product, such as hardware and software manuals, from our website.  
[www.se.com](http://www.se.com)

## Product Related Information

### GPL/LGPL License

This product partially uses the open source licensed under public license such as GNU General Public License (GPL), GNU Lesser General Public License (LGPL). As long as these open source, you have the right to get, modify and redistribute them.

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There is no guarantee by the copyright for these as the open source and we do not provide nor is obligated to provide support for the usage of these source code packages, but we guarantee this product under the condition described in this script.

You can refer the following link about GPL/LGPL.

GPL: <https://www.gnu.org/licenses/gpl-3.0.html>

LGPL: <https://www.gnu.org/licenses/old-licenses/lgpl-2.1.html>

# Cybersecurity

## Cybersecurity Guideline

Use this product inside a secure industrial automation and control system. Total protection of components (equipment/devices), systems, organizations, and networks from cyber attack threats requires multi-layered cyber risk mitigation measures, early detection of incidents, and appropriate response and recovery plans when incidents occur. For more information about cybersecurity, refer to the Harmony HMI/iPC Cybersecurity Guide.

<https://www.se.com/ww/en/download/document/EIO0000004948/>

### **▲ WARNING**

#### **POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY**

- Change default passwords at first use to help prevent unauthorized access to device settings, controls and information.
- Disable unused ports/services and default accounts, where possible, to minimize pathways for malicious attacks.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Apply the latest updates and hotfixes to your Operating System and software.
- Use cybersecurity best practices (for example: least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, interruption of services, or unintended operation.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Hardware Configuration

## What's in This Chapter

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## Introduction

In **Hardware Configuration**, configure required settings such as IP address and internal clock of the target device where the HMI Runtime for EcoStruxure Machine SCADA Expert is installed (or where HMI Runtime will be installed).

## About the Login Password

To reduce the risk of unauthorized access to the product, a password must be set up the first time you log in to Hardware Configuration. The password must meet the following requirements:

Number of characters	At least 8 single-byte characters, up to 64 characters
Types of characters	Use at least one of each of the following types of characters: <ul style="list-style-type: none"> <li>• Uppercase letter (A-Z)</li> <li>• Lowercase letter (a-z)</li> <li>• Number (0-9)</li> <li>• Symbol (special character): ! # - = _ .</li> </ul>

If you forget the password, note that you will not be able to reset it. To restore the product to its original state (at time of purchase), contact customer support. All user data in the product will be lost.

## Functions in Hardware Configuration

This section describes the functions available in **Hardware Configuration**.

## INFORMATION

You can check the product system version, runtime version, IP address, and so on. Also, if a System Error/Runtime Error occurs, you can check the error information in the **Status** area.

The screenshot shows the 'Hardware Configuration' web interface. At the top, there is a navigation bar with tabs: INFORMATION, ETHERNET, COM, USB, DOWNLOAD, SITEMANAGER, SECURITY, and SYSTEM. The 'ETHERNET' tab is selected. Below the navigation bar, the 'System Status' section displays the following information:

- Status: Runtime does not exist. Or, Waiting for download. Please download runtime.
- System Version: -----
- Runtime Version: -----
- Project File: -----

Below the System Status section, there are two Ethernet configuration sections:

**Ethernet 1**

- IP Mode: Manual
- IP Address: 192.168.1.80 255.255.255.0
- MACAddress: [Hexadecimal MAC Address]

**Ethernet 2**

- IP Mode: Disabled
- IP Address: 0.0.0.0 0.0.0.0
- MACAddress: [Hexadecimal MAC Address]

## ETHERNET

Configure Ethernet settings, which are required when communicating over Ethernet with connected devices, or when using functions that interact with a network PC, such as downloading project files.

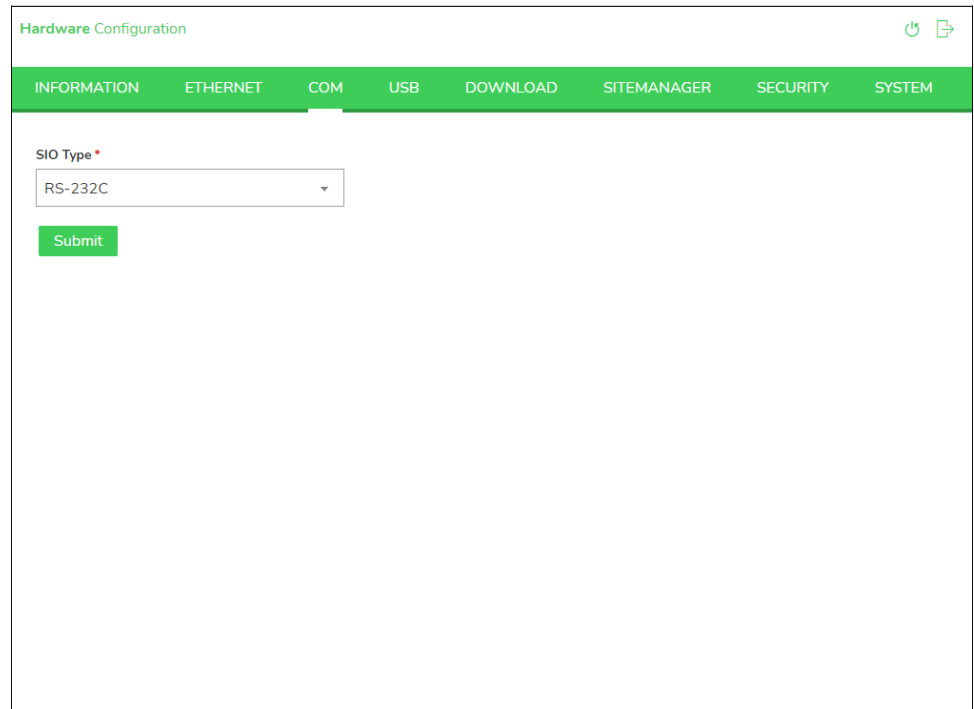
The screenshot shows the 'Hardware Configuration' web interface with the 'ETHERNET' tab selected. The 'Ethernet 1' configuration form is visible, and 'Ethernet 2' is also listed. The form includes the following fields:

- IP Mode \***: A dropdown menu set to 'Manual'.
- IP Address \***: A text input field containing '192.168.1.80'.
- Subnet Mask \***: A text input field containing '255.255.255.0'.
- Default Gateway**: An empty text input field.
- DNS Mode**: A dropdown menu set to 'Manual'.
- DNS Server**: An empty text input field.
- MAC Address**: A text input field containing a hexadecimal MAC address.

At the bottom of the form, there is a green 'Submit' button.

## COM

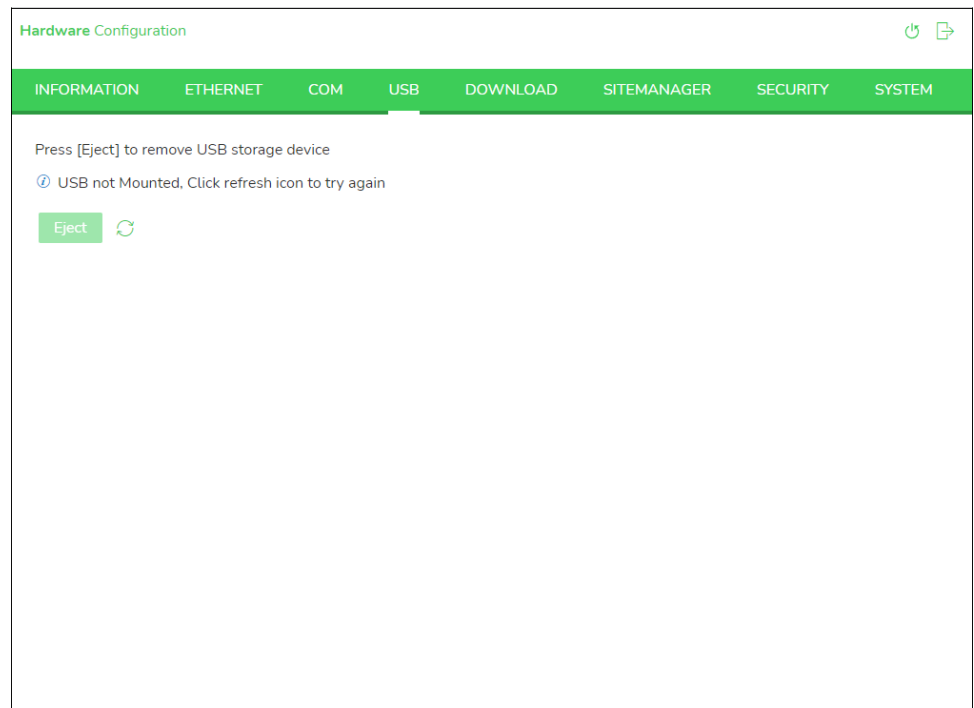
Select the serial interface communication method as either RS-232C or RS-485.



The screenshot shows the 'Hardware Configuration' web interface. At the top, there is a navigation bar with the following tabs: INFORMATION, ETHERNET, COM, USB, DOWNLOAD, SITEMANAGER, SECURITY, and SYSTEM. The 'COM' tab is currently selected. Below the navigation bar, the page title is 'Hardware Configuration'. There is a dropdown menu labeled 'SIO Type' with 'RS-232C' selected. Below the dropdown is a green 'Submit' button.

## USB

When a USB device is connected to this product, use this function to safely remove the hardware.



The screenshot shows the 'Hardware Configuration' web interface with the 'USB' tab selected. The page title is 'Hardware Configuration'. The main content area displays the text: 'Press [Eject] to remove USB storage device'. Below this text is a blue information icon followed by the text: 'USB not Mounted. Click refresh icon to try again'. At the bottom, there is a green 'Eject' button with a circular refresh icon to its right.

## DOWNLOAD

Enable to download project files and HMI Runtime to this product. Disable this setting for active run time operation.

**NOTE:**

- Enable only when downloading project files or HMI Runtime. For information on how to download the project file, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "Remote Management" - "Download your project to the target device".
- If you are downloading the project file to Edge Box HMI for the first time, refer to the following.  
Edge Box HMI Setup Procedure, page 17

Hardware Configuration

INFORMATION   ETHERNET   COM   USB   **DOWNLOAD**   SITEMANAGER   SECURITY   SYSTEM

Enable Project File Download

Submit

## SITEMANAGER

Set up when configuring a system that includes EcoStruxure Secure Connect Advisor (sold separately). Refer to the following for the set-up process.  
Settings for Using EcoStruxure Secure Connect Advisor, page 16

Hardware Configuration

INFORMATION   ETHERNET   COM   USB   DOWNLOAD   **SITEMANAGER**   SECURITY   SYSTEM

Enable Remote Management

SiteManager Embedded Version v6140\_621096032 (arm)

GateManager Address

Domain Token

Appliance Name

Proxy Address

Proxy User

Proxy Password

Factory Reset | Submit

## SECURITY

Change the password. You can also perform operations such as check the previous login information and download that information. The downloaded security data file is "log.csv".

**NOTE:** For password setup requirements, refer to About the Login Password, page 8.

Hardware Configuration

INFORMATION ETHERNET COM USB DOWNLOAD SITEMANAGER SECURITY SYSTEM

Change Password

Current Password \*

New Password \*

Confirm Password \*

Submit

Login Statistics

Current Login 4:32  
Previous Login 4:16  
Number of failed login 1

Download Log Data

Download

## SYSTEM

In the **Date and Time** tab, set the internal clock of the product. You can also set up an NTP server to synchronize the clock.

Hardware Configuration

INFORMATION ETHERNET COM USB DOWNLOAD SITEMANAGER SECURITY SYSTEM

Date and Time Firmware Update Factory Reset Backup and Restore Configuration

Date  
10/20/2021

Time  
07:31:23 PM

Time-zone  
(UTC+00:00) UTC

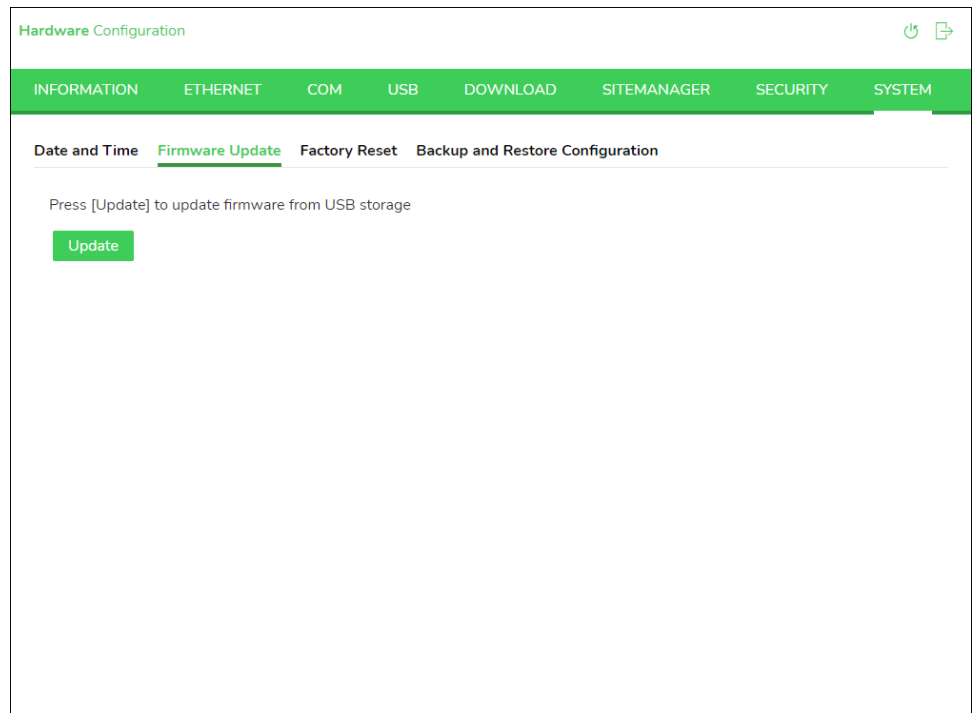
Synchronized with NTP Server

NTP Server

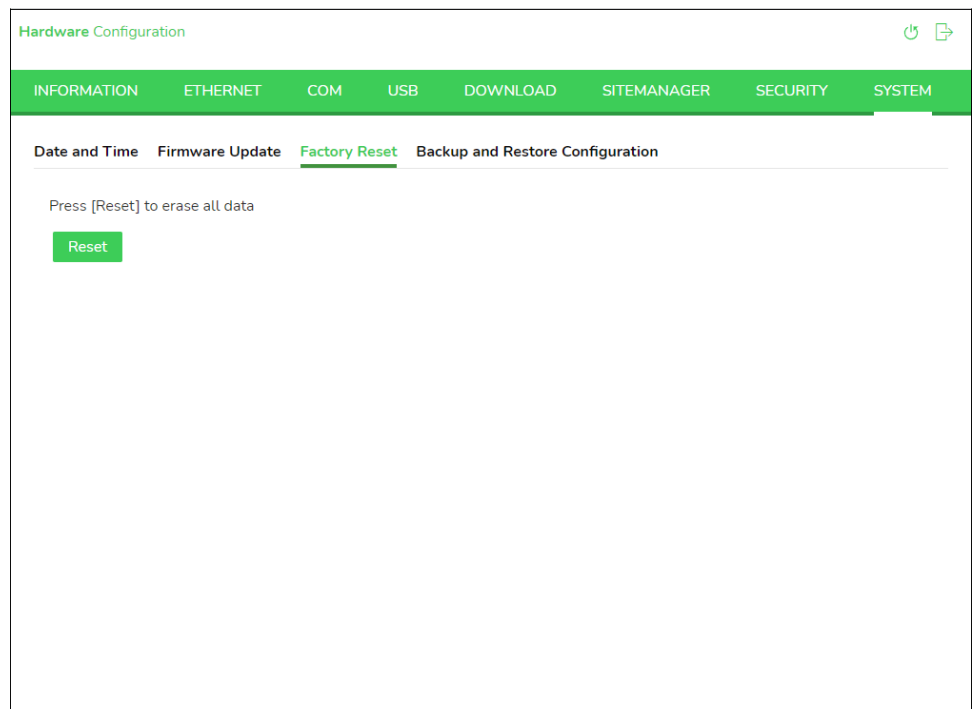
Submit

In the **Firmware Update** tab, update the firmware. Refer to the following for the update process.

## Updating the Firmware, page 15





In the **Factory Reset** tab, you can reset the product to the factory default settings.



In the **Backup and Restore Configuration** tab, you can back up the settings in **Hardware Configuration**. The downloaded backup data file is "config.bin". You can also use the backup file to restore the settings of Hardware Configuration. However, please note that the following settings are not backed up or restored.

- **SECURITY** tab
- **Date and Time** tab in the **SYSTEM** tab

Hardware Configuration  

INFORMATION   ETHERNET   COM   USB   DOWNLOAD   SITEMANAGER   SECURITY   SYSTEM

Date and Time   Firmware Update   Factory Reset   Backup and Restore Configuration

Press [Download] to backup configuration

Press [Upload] to restore configuration

Select backup file for restoration

No file chosen

## Updating the Firmware

We recommend updating the firmware regularly to keep the system up-to-date.

1. Download the firmware from our website and save it to a USB storage device.  
[www.se.com](http://www.se.com)
2. Confirm that the files BOOTOS13.SYS and BOOTLD13.SYS are in the root folder of the USB storage device and then connect the USB storage device to the product.
3. Login to **Hardware Configuration**.
4. Open the **SYSTEM** tab. In the **Firmware Update** tab, click **Update**.

# Settings for Using EcoStruxure Secure Connect Advisor

When using a PC or tablet to display and operate HMI products installed in remote locations, it is necessary to build a system that prevents unauthorized access by external entities. By installing EcoStruxure Secure Connect Advisor (sold separately), you can build a secure remote access system.

EcoStruxure Secure Connect Advisor consists of our products on the work site (SiteManager), computers or tablets in the office (LinkManager), and a server to connect them (GateManager).

This section describes how to set up **SiteManager**.

1. Log in to **Hardware Configuration**.
2. Open the **SITEMANAGER** tab and select the **Enable Remote Management** check box.
3. Enter the IP address of the **GateManager** you want to access and the password (token) to connect to the **GateManager**. This information can be found at the bottom of the **GateManager X.509** certificate emailed to you from **GateManager**.

The screenshot shows the 'Hardware Configuration' page with the 'SITEMANAGER' tab active. The 'Enable Remote Management' checkbox is checked. The 'SiteManager Embedded Version' is v6140\_621096032 (arm). The 'Connection Status' is 'Connected to GateManager'. The 'Attached on the GateManager' status is 'no'. There are input fields for 'GateManager Address \*', 'Domain Token \*', 'Appliance Name', 'Proxy Address', 'Proxy User', and 'Proxy Password'. At the bottom, there are 'Factory Reset' and 'Submit' buttons.

4. In **Appliance Name**, enter the name of the target device (the name of **SiteManager**). The name set here is displayed on the **GateManager**.
5. If required, enter the proxy server IP address, account name, and password. For proxy server information, consult your network administrator.
6. Click **Submit**.
7. Click the **Reboot** icon in the top-right corner of the screen. The product is restarted.

#### NOTE:

- For more information about EcoStruxure Secure Connect Advisor, refer to our [website](http://www.se.com).
- When you delete the registered **SiteManager** from **GateManager**, you need to initialize **SiteManager** and reassign the license. Click **Reset to Default** and request the **GateManager** administrator to reassign the license. (You cannot use the same license. Reissuing a license will take 24 hours.)

# Edge Box HMI Setup Procedure

## What's in This Chapter

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## Introduction

The Edge Box HMI (part number: HMISTM6BOXIOT) includes an HMI Runtime license (500 tags supported) and a Mobile Access license. There is no need to activate them. Since the Edge Box HMI does not have a display, you can use the Mobile Access feature to access the Edge Box HMI from a web browser on your computer (development environment).

The development environment requires a HTML5 compatible browser (recommended: Google Chrome) to be installed.

**NOTE:**

- For more information on Mobile Access features, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "Thin Client and Mobile Access" - "Mobile Access".
- If you want to increase the number of tags or access the Edge Box HMI from multiple computers, please check our website for license information.
- There are limitations to the functions available in HMI Runtime. For information, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "HMI Runtime" - "Supported Features".

## Prerequisite

The following settings are required in EcoStruxure Machine SCADA Expert to enable using a project to Edge Box HMI.

1. On the **Project** tab of the ribbon, in **Web** group, click **Mobile Access**. Select the **Enable CGI** check box and save the settings.
2. After creating and editing all the screens, from the **File** menu click **Save All as HTML**. All screens and screen groups in the project are saved in HTML format.

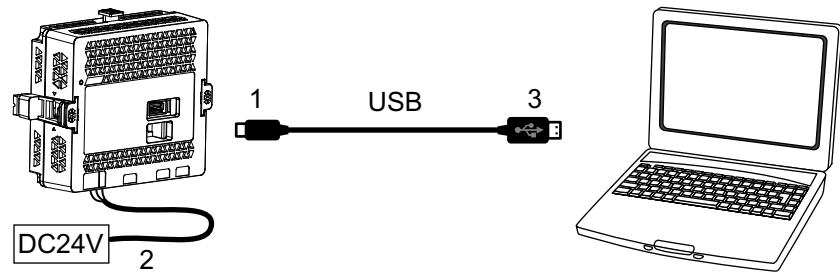
The following section describes the setup procedure when using the Edge Box HMI as the target device.

When Transferring via USB Cable, page 17

When Transferring via Ethernet, page 22

## When Transferring via USB Cable

This procedure is intended for users who are transferring a project to the Edge Box HMI for the first time.



1. Connect a USB transfer cable to the Edge Box HMI.
2. Turn on the Edge Box HMI. The status LED flashes orange.
3. Connect the PC (development environment) to the Edge Box HMI via the USB transfer cable.

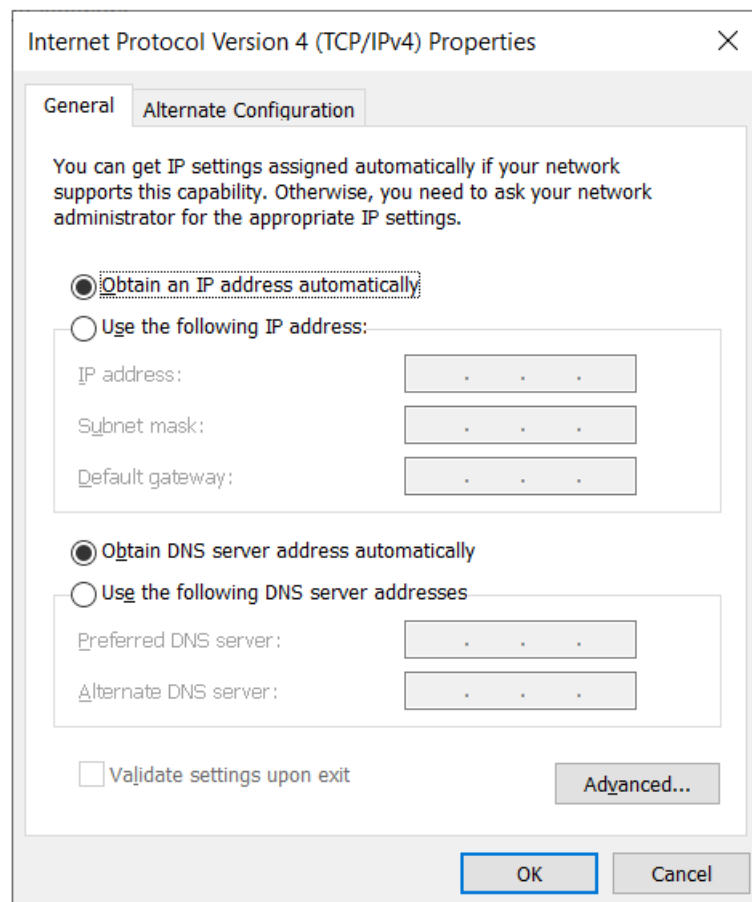
**NOTE:** When connected to the PC via the USB device port on the Edge Box HMI, it is recognized as an Ethernet device on the PC. (Device name: Remote NDIS Compatible Device)

4. Check that your computer is set up to obtain an IP address automatically.

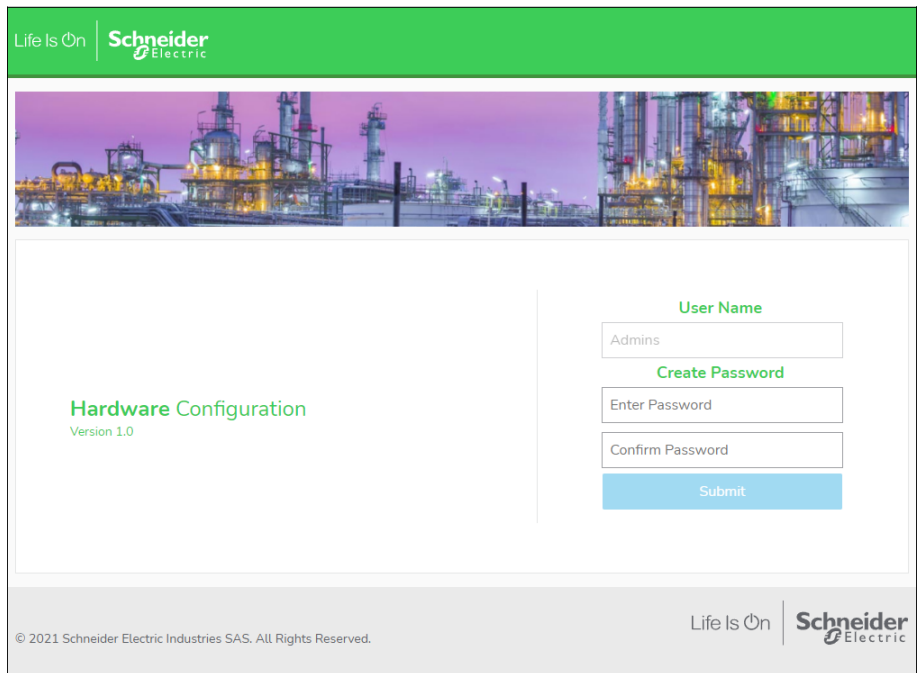
**NOTE:** If you are using Windows 10, use the following to check your IP address settings.

From the **Start** menu, select **Settings > Network and Internet > Change adapter options**.

Right-click the Ethernet connection and select **Properties**. In the **Internet Protocol version 4 (TCP/IPv4)** properties, check if the **Obtain an IP address automatically** option is selected.



5. Open a browser and in the address bar enter the IP address of the Edge Box HMI (https://169.254.100.100). The message **"Your connection is not private"** is displayed. To continue, click **Advanced** and then click **Proceed to \*\*\*** (\*\*\*) is the IP address).
6. The **Hardware Configuration** screen is displayed. Set a login password and click **Submit**.



**NOTE:**

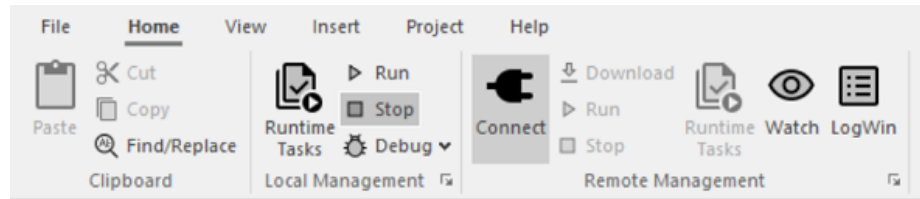
- The user name is "Admins" and cannot be changed.
- The password must meet the following requirements:

Number of characters	At least 8 single-byte characters, up to 64 characters
Types of characters	Use at least one of each of the following types of characters: <ul style="list-style-type: none"> <li>◦ Uppercase letter (A-Z)</li> <li>◦ Lowercase letter (a-z)</li> <li>◦ Number (0-9)</li> <li>◦ Symbol (special character): ! # - = _ .</li> </ul>

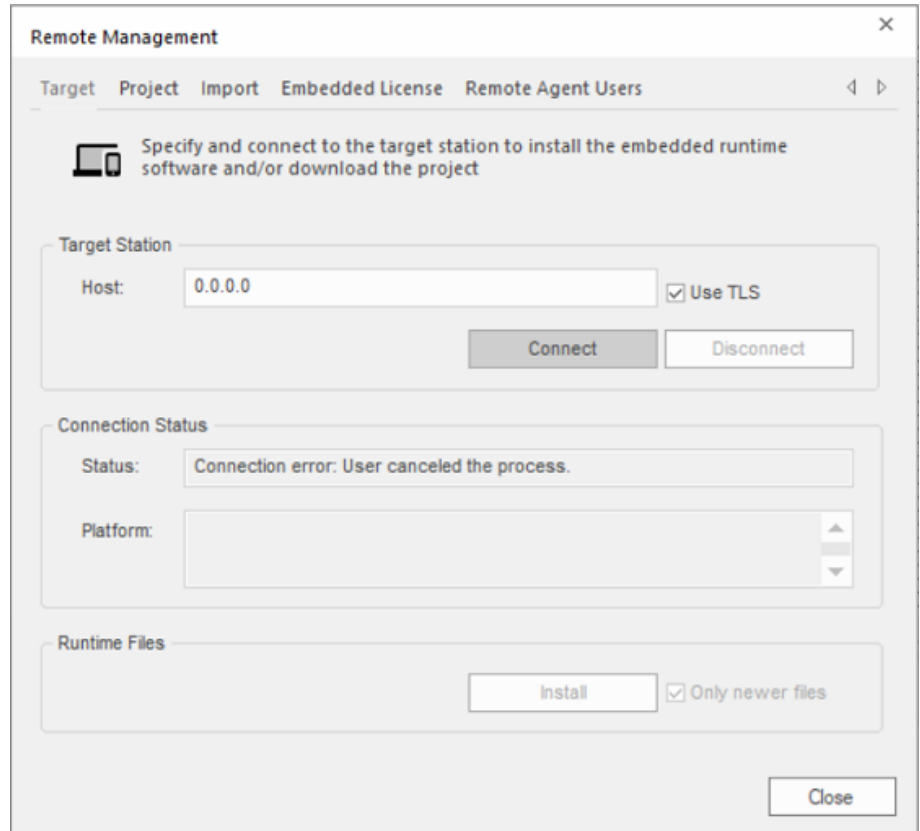
If you forget the password, note that you will not be able to reset it. To restore the Edge Box HMI to its original state (at time of purchase), contact your local distributor. All user data in the product will be lost.

7. Open the **SYSTEM** tab. Set time of the internal clock on the **Date and Time** tab, and click **Submit**.
8. Open the **DOWNLOAD** tab. Select the **Enable Project File Download** check box, and click **Submit**.
9. Click the **Reboot** icon in the top-right corner of the screen. The Edge Box HMI is restarted.
10. In EcoStruxure Machine SCADA Expert, open the project file that you want to transfer to the Edge Box HMI.

11. On the **Home** tab of the ribbon, in the **Remote Management** group, click **Connect**. The **Remote Management** dialog box is displayed.



12. From the **Target** tab, in the **Host** field enter the IP address (169.254.100.100) of the Edge Box HMI.

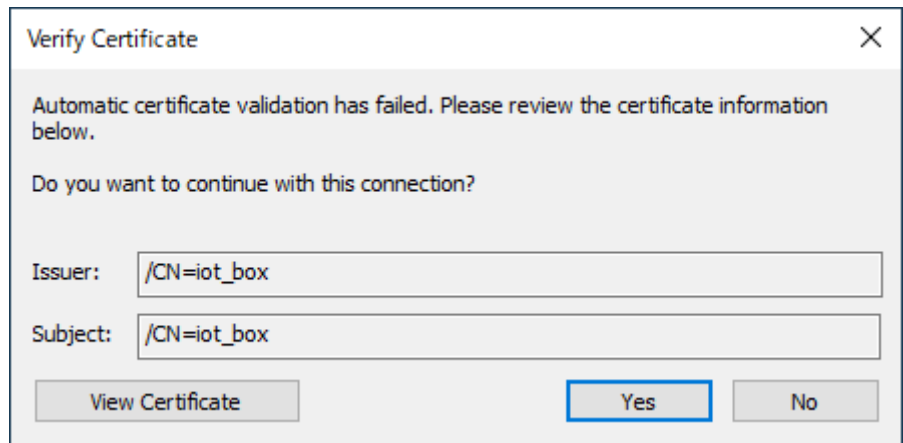


13. Select the **Use TLS** check box, and click **Connect**.

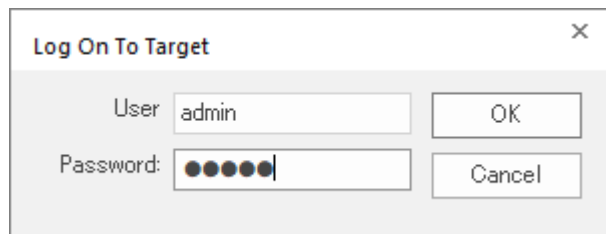
**NOTE:**

- The first time booting up after enabling download, the Edge Box HMI creates a certificate file for TLS connections. As a result, it may take several minutes before the connection is ready.
- When using products with system version earlier than 1.2.0, clear the **Use TLS** check box. After clicking **Connect**, go to step 16. You can check the system version from the **INFORMATION** tab in the **Hardware Configuration**.

- The **Verify Certificate** dialog box is displayed. Click **Yes**.



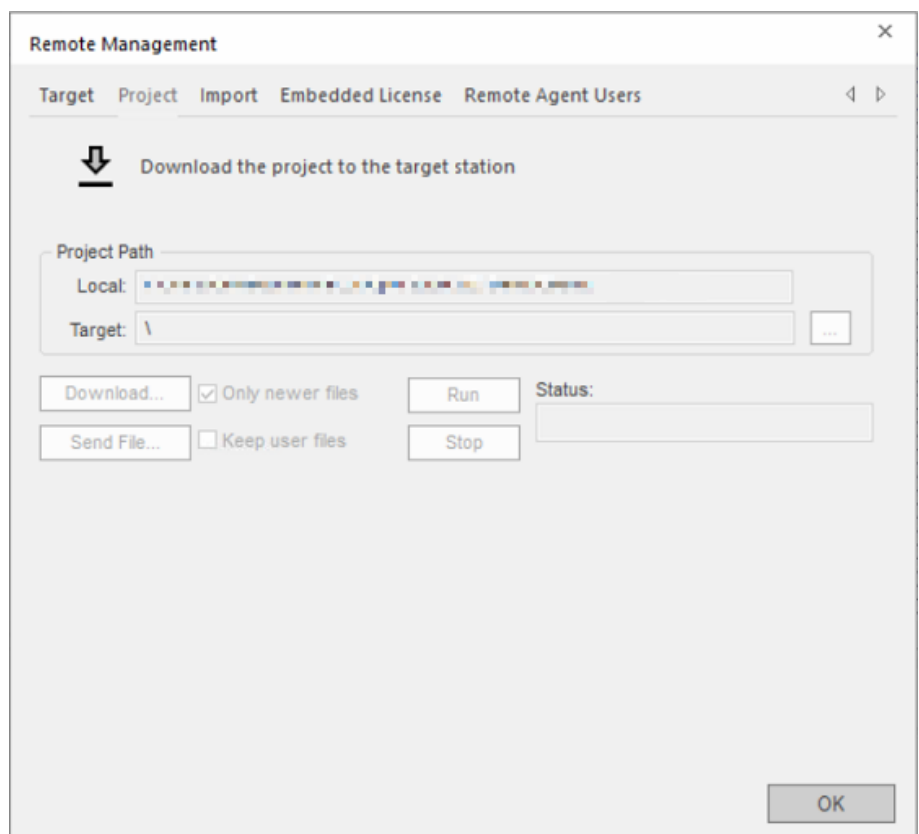
- The **Log On To Target** dialog box is displayed. When connecting for the first time, enter the following user name and initial password and click **OK**.  
**User: admin**  
**Password: admin**



- After confirming that the **Remote Management** tool connected to the Edge Box HMI and its status is displayed, click **Install runtime files**.

**NOTE:** It will take awhile to install HMI Runtime.

- In the dialog box, click the **Project** tab. In the **Local** box, you should see the location of the project that is currently open in your development environment. This is the project that is downloaded to the Edge Box HMI.

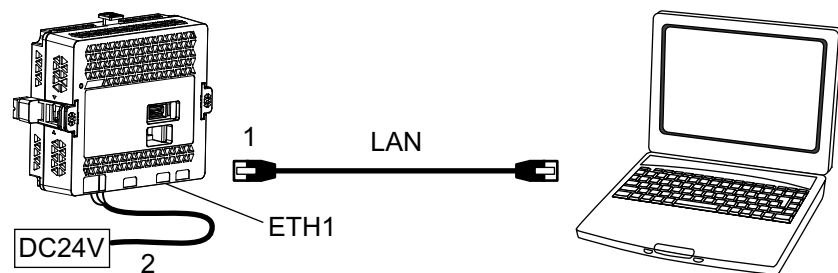


18. Click **Download**. The project is downloaded to the Edge Box HMI.  
**NOTE:** After downloading the project, the status LED of the Edge Box HMI continues flashing orange.
19. In the dialog box, click the **Remote Agent Users** tab. Be sure the initial password is set to a secure password. For information, refer to the "EcoStruxure Machine SCADA Expert Help Manual".
20. Click **OK** to close the dialog box.
21. From **Hardware Configuration**, open the **DOWNLOAD** tab. Clear the **Enable Project File Download** check box and click **Submit**.
22. Click the **Reboot** icon. Edge Box HMI restarts and operation begins.  
**NOTE:** After restart, the status LED of the Edge Box HMI turns green.

The next time you download a project, you do not need to install HMI Runtime unless you are purposely updating HMI Runtime. For information about the download procedure, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "Remote Management" - "Download your project to the target device".

## When Transferring via Ethernet

This procedure is intended for users who are transferring a project to the Edge Box HMI for the first time.



1. Connect to the same network as the PC (development environment) using the ETH1 port of the Edge Box HMI.
2. Turn on the Edge Box HMI. The status LED flashes orange.

- Set the IP address of your computer as follows.  
IP address: 192.168.1.\* (any address other than 192.168.1.80)  
Subnet Mask: 255.255.255.0

**NOTE:** If you are using Windows 10, use the following to set your IP address.

From the **Start** menu, select **Settings > Network & Internet > Change adapter options**.

Right-click the Ethernet connection and select Properties. In the **Internet Protocol Version 4 (TCP/IPv4)** properties, select the **Use the following address** option.

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address: 192 . 168 . 1 . 5

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

Validate settings upon exit

Advanced...

OK Cancel

- Open a browser and in the address bar enter the IP address of the Edge Box HMI (<https://192.168.1.80>). The message "**Your connection is not private**" is displayed. To continue, click **Advanced** and then click **Proceed to \*\*\*** (\*\*\*) is the IP address).

5. The **Hardware Configuration** screen is displayed. Set a login password and click **Submit**.

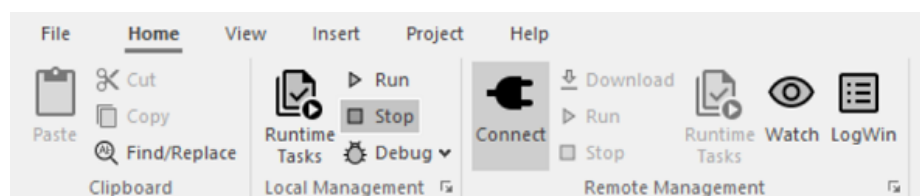
**NOTE:**

- The user name is "Admins" and cannot be changed.
- The password must meet the following requirements:

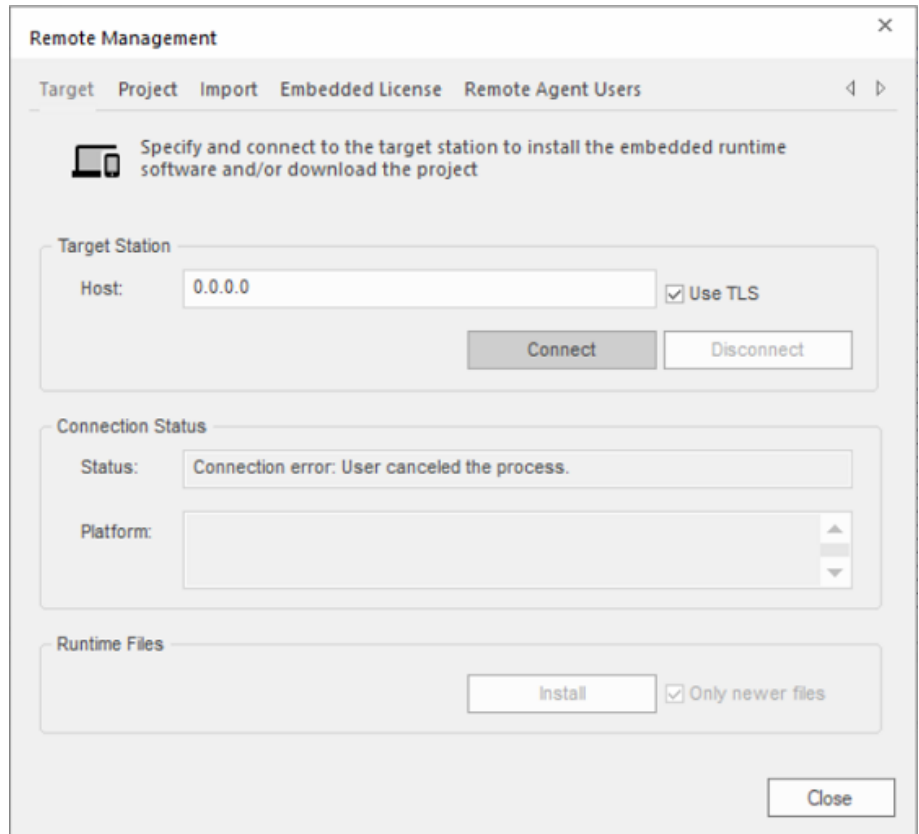
Number of characters	At least 8 single-byte characters, up to 64 characters
Types of characters	Use at least one of each of the following types of characters: <ul style="list-style-type: none"> <li>◦ Uppercase letter (A-Z)</li> <li>◦ Lowercase letter (a-z)</li> <li>◦ Number (0-9)</li> <li>◦ Symbol (special character): ! # - = _ .</li> </ul>

If you forget the password, note that you will not be able to reset it. To restore the Edge Box HMI to its original state (at time of purchase), contact your local distributor. All user data in the Edge Box HMI will be lost.

6. Open the **SYSTEM** tab. Set time of the internal clock on the **Date and Time** tab, and click **Submit**.
7. Open the **DOWNLOAD** tab. Select the **Enable Project File Download** check box, and click **Submit**.
8. Click the **Reboot** icon in the top-right corner of the screen. The Edge Box HMI is restarted.
9. In EcoStruxure Machine SCADA Expert, open the project file that you want to transfer to the Edge Box HMI.
10. On the **Home** tab of the ribbon, in the **Remote Management** group, click **Connect**. The **Remote Management** dialog box is displayed.



11. From the **Target** tab, in the **Host** field enter the IP address (192.168.1.80) of the Edge Box HMI.

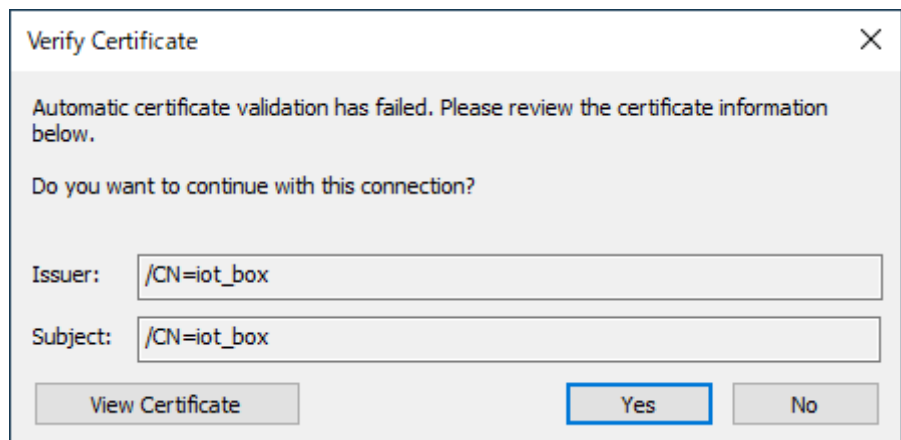


12. Select the **Use TLS** check box, and click **Connect**.

**NOTE:**

- The first time booting up after enabling download, the Edge Box HMI creates a certificate file for TLS connections. As a result, it may take several minutes before the connection is ready.
- When using products with system version earlier than 1.2.0, clear the **Use TLS** check box. After clicking **Connect**, go to step 15. You can check the system version from the **INFORMATION** tab in the **Hardware Configuration**.

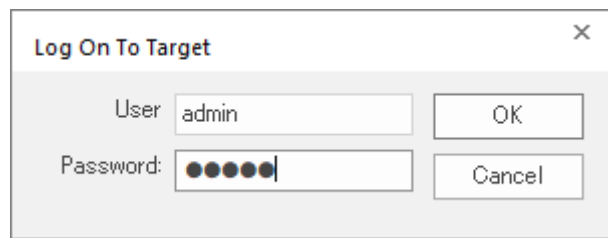
13. The **Verify Certificate** dialog box is displayed. Click **Yes**.



14. The **Log On To Target** dialog box is displayed. When connecting for the first time, enter the following user name and initial password and click **OK**.

**User: admin**

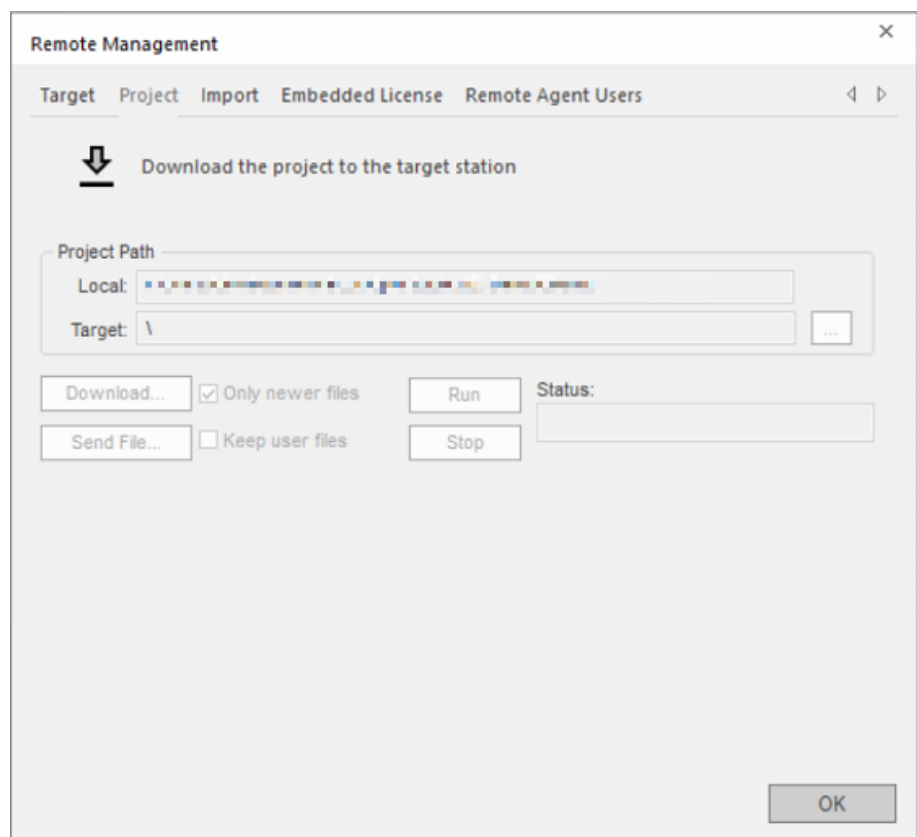
**Password: admin**



15. After confirming that the **Remote Management** tool connected to the Edge Box HMI and its status is displayed, click **Install runtime files**.

**NOTE:** It will take awhile to install HMI Runtime.

16. In the dialog box, click the **Project** tab. In the **Local** box, you should see the location of the project that is currently open in your development environment. This is the project that is downloaded to the Edge Box HMI.



17. Click **Download**. The project is downloaded to the Edge Box HMI.

**NOTE:** After downloading the project, the status LED of the Edge Box HMI continues flashing orange.

18. In the dialog box, click the **Remote Agent Users** tab. Be sure the initial password is set to a secure password. For information, refer to the "EcoStruxure Machine SCADA Expert Help Manual".

19. Click **OK** to close the dialog box.

20. From **Hardware Configuration**, open the **DOWNLOAD** tab. Clear the **Enable Project File Download** check box and click **Submit**.

21. Click the **Reboot** icon. Edge Box HMI restarts and operation begins.

**NOTE:** After restart, the status LED of the Edge Box HMI turns green.

The next time you download a project, you do not need to install HMI Runtime unless you are purposely updating HMI Runtime. For information about the download procedure, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "Remote Management" - "Download your project to the target device".

# Appendix

## What's in This Chapter

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## Status LED Indication

Color	Indicator	HMI Operation
Green	ON	In operation
Orange	Flashing	Software starting up
Red	ON	Power is ON.
	Flashing	System Error/Runtime Error*1
–	OFF	Power is OFF.

\*1 You can find the information in **Status** on the **INFORMATION** tab of the Hardware Configuration.

## Accessories

Products may change or be discontinued without notice. Please check our website for the latest information.

[www.se.com](http://www.se.com)

The optional items that can be used for each interface of the model on which HMI Runtime is installed are as follows.

Product name	Product number	Description
<b>Serial interface</b>		
RJ-45 to D-Sub 25 pin Conversion Cable	XBTZG939	Connects a D-Sub 25-pin cable to this product (RJ-45).
9-pin-to-25-pin RS-232C Conversion Cable	XBTZG919	Connects a standard RS-232C cable (D-Sub 25-pin socket) to this product (D-Sub 9 pin plug).
COM Port Conversion Adapter	XBTZGCOM1	Connects optional RS-422 communication items to serial interface (RS-232C).
RS-485 Isolation Unit	XBTZGI485	Connects a host controller to this product with isolation.
<b>USB (Type A) interface</b>		
USB Front Cable (1 m)	XBTZGUSB	Extension cable that attaches USB interface to front panel.
<b>USB (micro-B) interface</b>		
USB Transfer Cable	HMIZG936	Cable for transferring screen data from a PC (USB Type A) to this product (USB micro-B).
USB (micro-B) Front Cable	HMIZSUSBB2	Extension cable that attaches USB interface to front panel.

## Precautions When Setting the Project

This section describes things to note when you set a project in EcoStruxure Machine SCADA Expert.

## Supported Features

There are limitations to the functions available on the models where HMI Runtime is installed. For information, refer to "EcoStruxure Machine SCADA Expert Technical Reference Manual" (Help Manual) - "HMI Runtime" - "Supported Features".

## Serial Port Setting

When using a serial communication driver, the COM setting differs depending on the SIO type.

Model	Port / SIO type	Communication setting
Edge Box HMI (HMISTM6BOXIOT)	COM1 / RS-232C	/dev/ttyS1
	COM1 / RS-485	/dev/ttyS2

## Saving Data to Storage Device

When you connect an external storage device to a physical port for saving data, the data save location (path) is as follows:

Model	External storage	Save location (path)
Edge Box HMI (HMISTM6BOXIOT)	USB storage	/misc/usb/

You need to format (initialize) the external storage device in FAT32 or FAT. Format using your computer.

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As standards, specifications, and design change from time to time,  
please ask for confirmation of the information given in this publication.

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