NexAIoT Co., Ltd.

IoT Studio

User Manual

NexAIoT Co., Ltd.
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PREFACE

Disclaimer

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Acknowledgements

The IoT Studio is a trademark of NexAIoT Co., Ltd. All other product names mentioned herein are registered trademarks of their respective owners.

Revision History

Version	Date	Description
v2.0	March 2019	Initial release
v2.1	September 2019	1. Added mysql node, one-click deploy to edge server & one-click deploy to cloud. 2. Added SOP for creating a virtual machine for Google / Azure / AWS Cloud.
v2.2	June 2021	Support Windows Utility
v3.00	Oct 2022	1. Support Client / Server structure 2. Upgrade node-red 3.0.2

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Chapter 1: Using the IoT Studio

1.1 Introduction

The IoT Studio is a kind of protocols integrated gateway builder suites for Operational Technology (OT) and Information Technology (IT) integration. It is powered by Node.js and IBM Node-RED, it is a web-based configuration tool to spur developers to swiftly build up IoT applications with simple clicks, drags, and drops of the integral functions or the ideas of innovation can come true sooner and the inventions can spread wider.

The Suites provide security management: SSL/Cert, account policies Dashboard for pairing a visual monitoring screen, and Video Wall, It can create an enterprise war room.

Check the operating system requirement before installing the IoT Studio. The following are the supported operating systems:

- Microsoft Windows 11, Windows 10, Windows 7 with Service Pack 1, Windows Embedded Standard 7 with Service Pack 1

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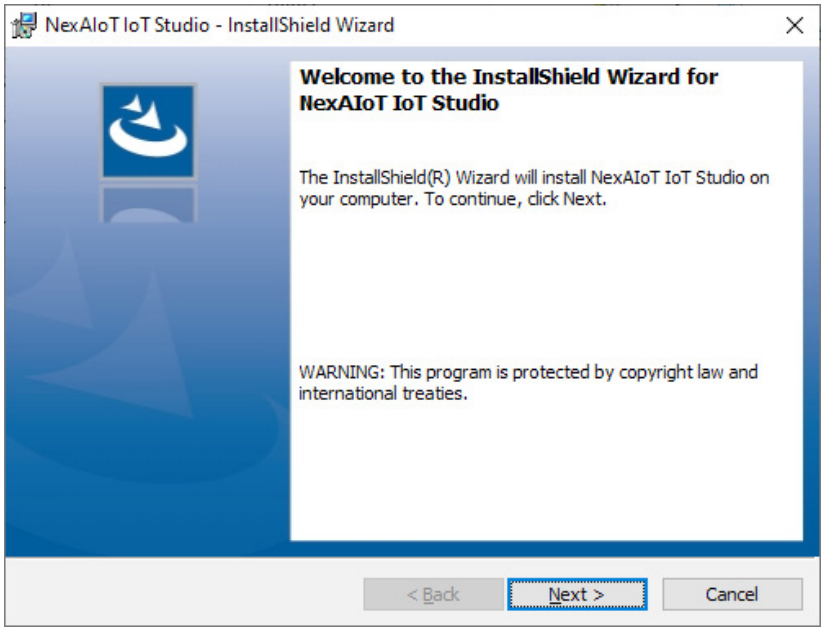
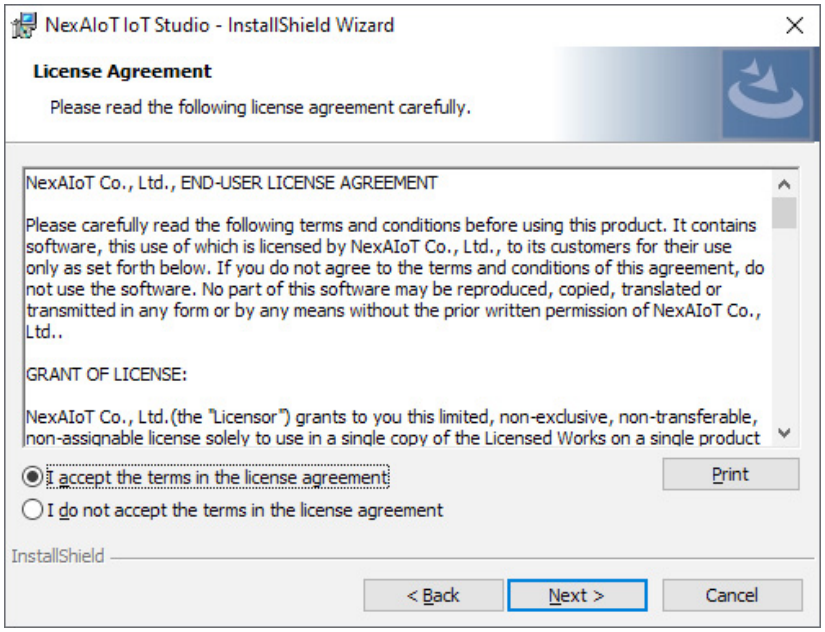
1.2 Installing IoT Studio

1. Double click on the filename of the IoT Studio setup file, the installation wizard will prepare the setup process.



2. Check the **I accept the terms in the license agreement** option, and click **Next** to proceed.



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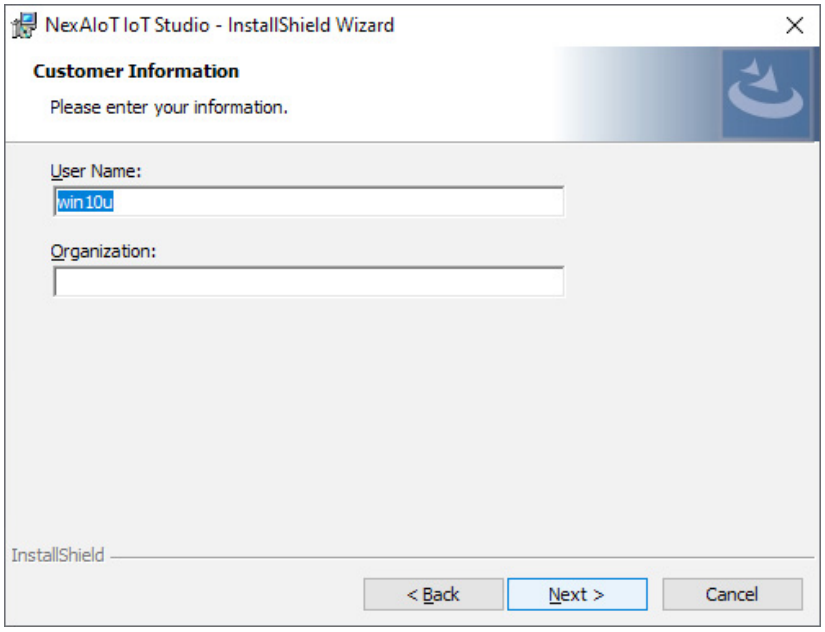
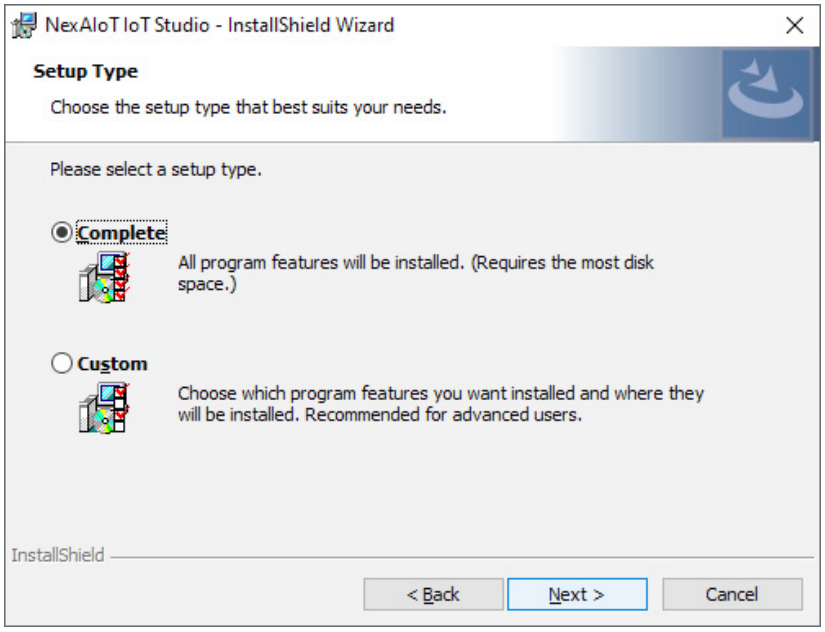
3. Enter the user information.



4. Select **Complete**, click **Next** to proceed.



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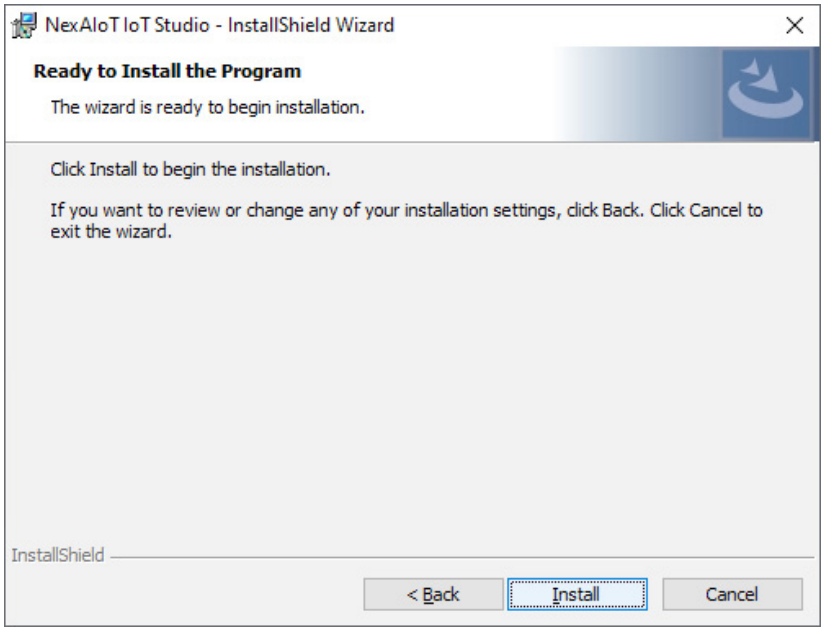
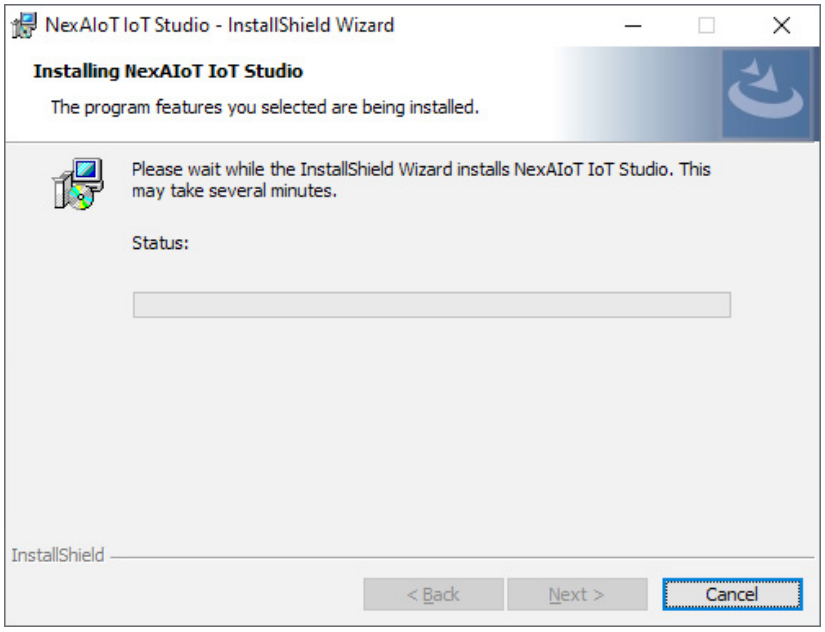
5. Click **Install** to begin the installation.



6. The installation will begin and may take a while.



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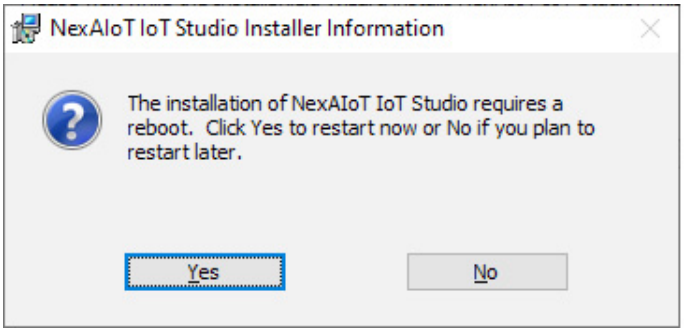
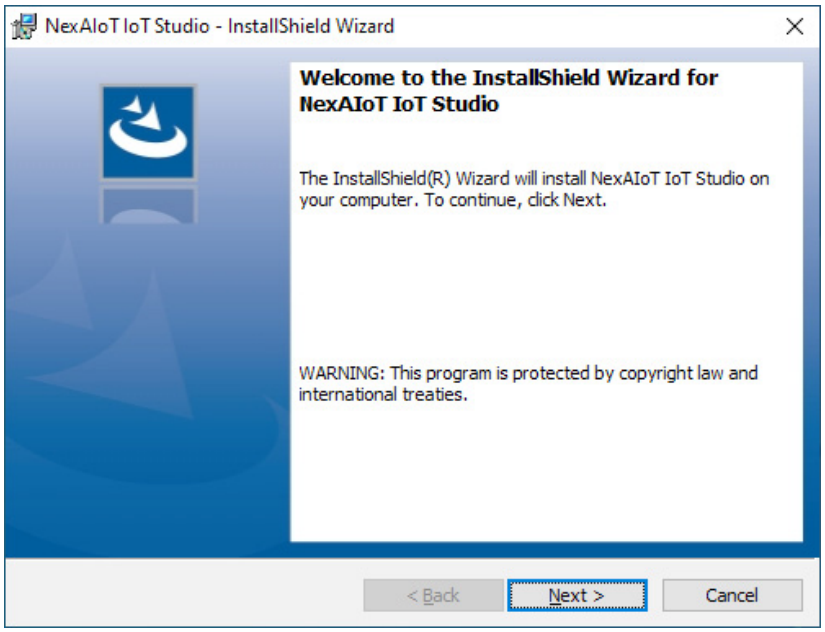
Note: Click **Yes** to reboot the system when the reminder dialog window appears on the screen.



Note: Once the system is rebooted, the procedure will return to step 3. Please login again to continue the installation.

7. Once the installation is completed, click **Finish** to exit.



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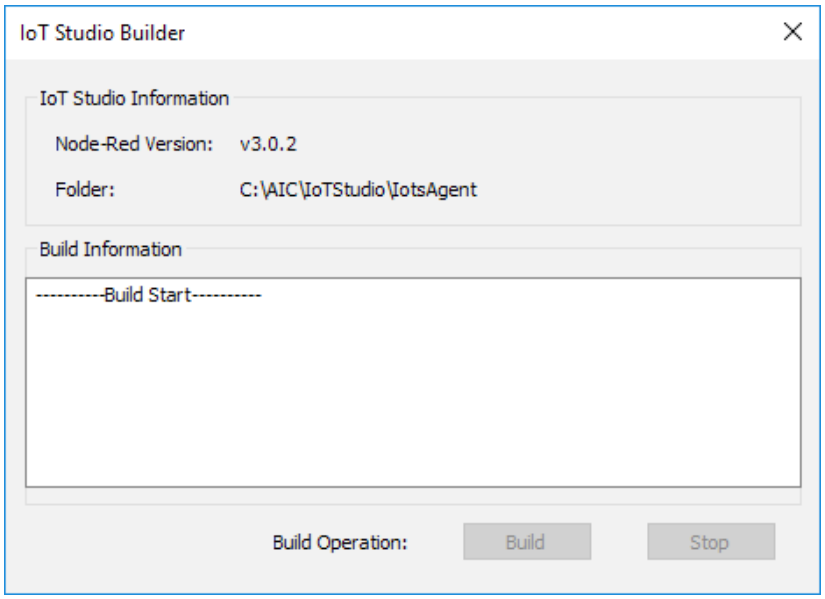
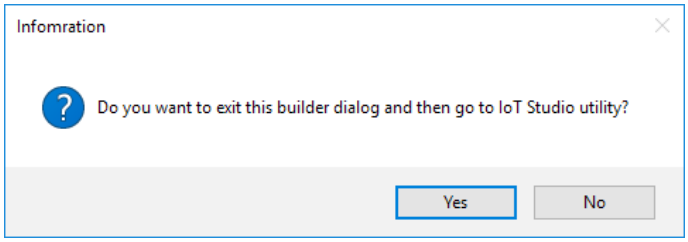
8. The IoT Studio Builder will appear on the screen automatically. Click **Build** to build an IoT Studio.



**Click the IoT Studio icon ( ) to launch if the Builder application is not auto-run.*

9. When an IoT Studio has been created, click **Yes** to launch the IoT Studio Utility or click **No** to close the dialog window.



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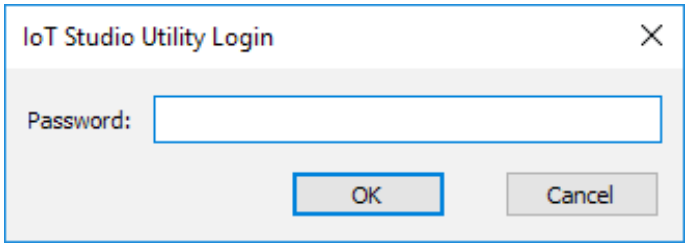
1.3 Launching IoT Studio

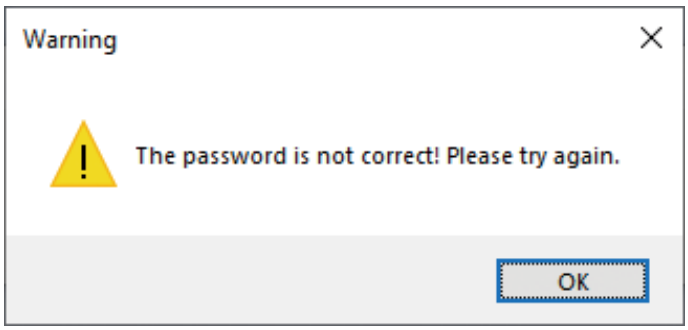
1. Once installed, you should be able to find the program named **IoT Studio** in the **All Programs** list. Click on it to launch the utility.

2. Enter the password in the respective field and click **OK**.



Note:

1. Use the default Password: *0000* to log in if you are logging in for the first time.
2. Remember to change the password frequently and keep it in a safe place to avoid hacking. Refer to License for setting the password.



**A warning message will be prompted if an incorrect password is entered.*

3. The GUI of IoT Studio will be displayed on the screen.

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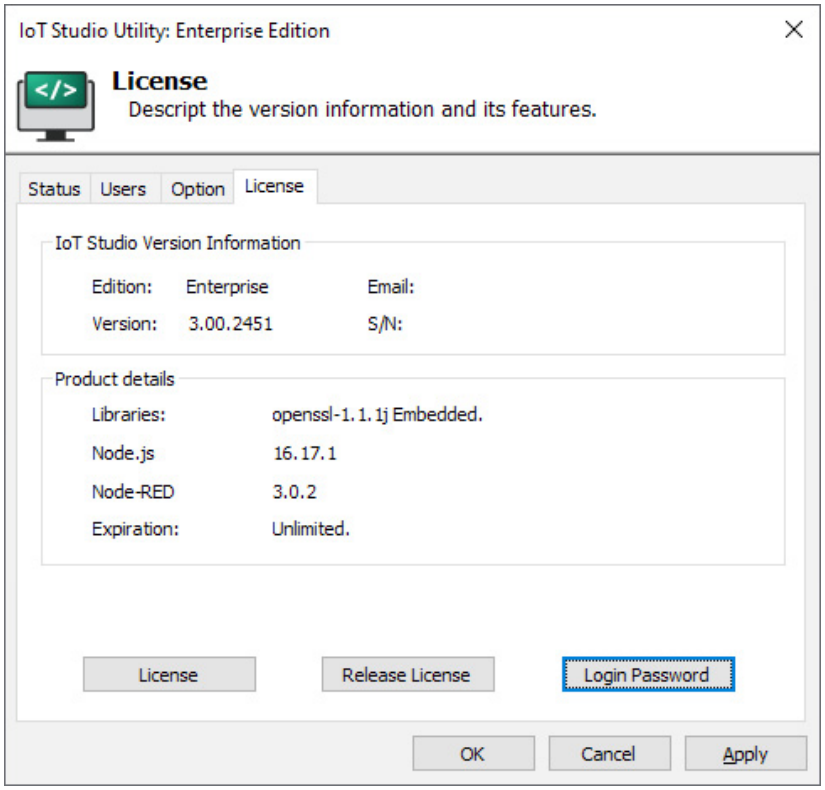
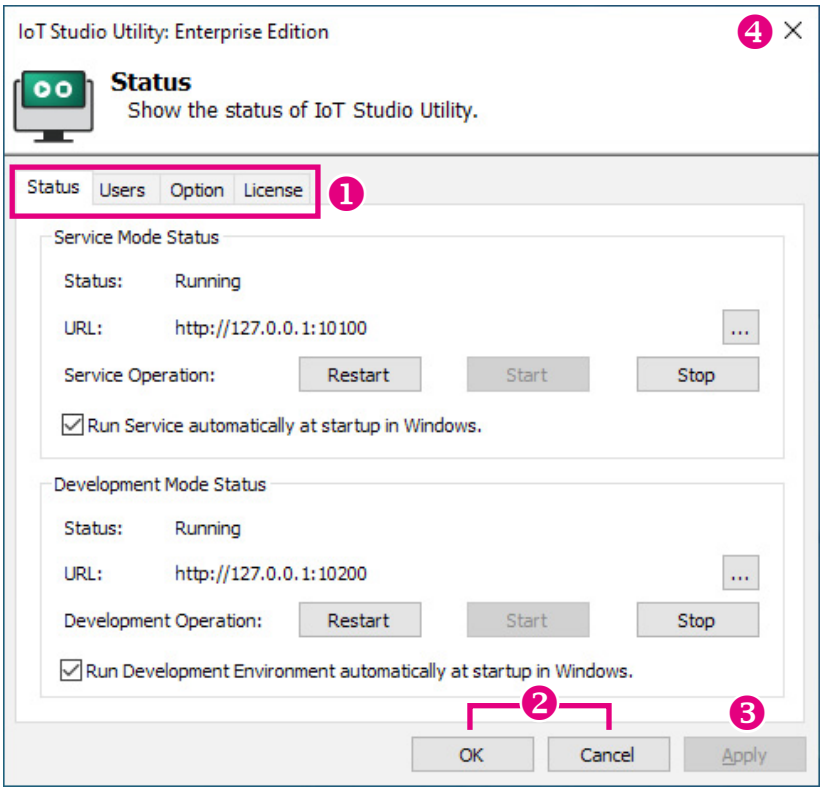

IoT Studio Utility: Enterprise Edition
License
Descript the version information and its features.
Status
Users
Option
License
IoT Studio Version Information
Edition: Enterprise
Email:
Version: 3.00.2451
S/N:
Product details
Libraries: openssl-1.1.1j Embedded.
Node.js 16.17.1
Node-RED 3.0.2
Expiration: Unlimited.
License
Release License
Login Password
OK
Cancel
Apply

Chapter 2: IoT Studio Basics

The IoT Studio consists 4 pages of information and menus for server status and configurable parameters. Simply click on the respective tab for further configuration purposes with the IoT Studio.



Item	Description
1	**Menu Bar:** Use the cursor to select the desired function menu for configuration.
2	Click **OK** or **Cancel** to hide the interface in the background.
3	Click **Apply** to make the configured parameters take effect. A message will prompt you with the option to restart the server.
4	Click on the **X** button to exit the IoT Studio.

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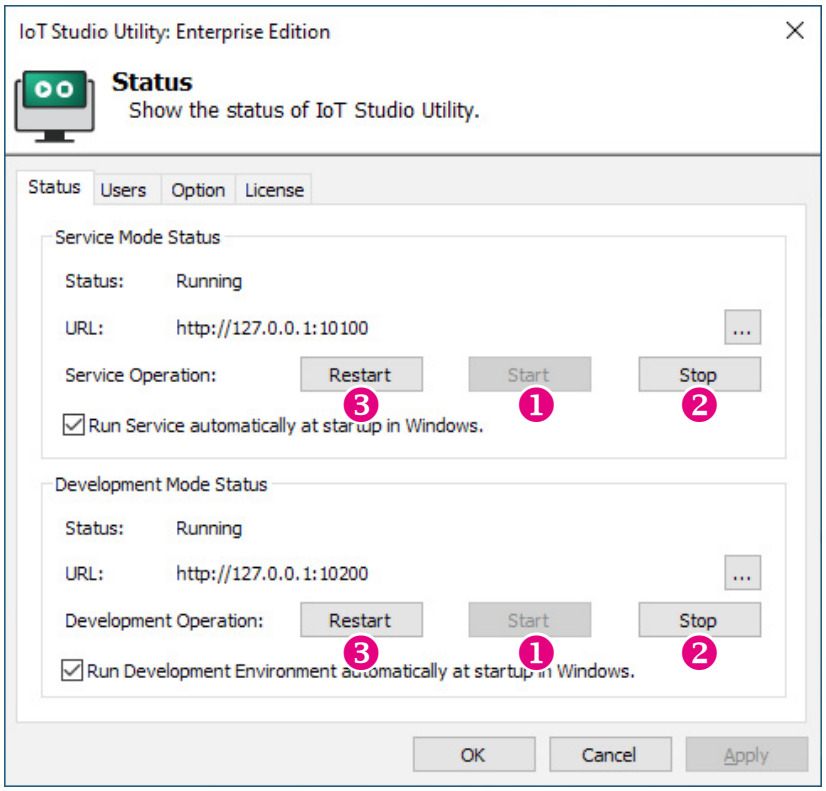
2.1 Status

The Status page displays the brief information about the current server status. When the IoT Studio is launched, the server operation is initially stopped by default. Once the IoT Studio is up and running, the connection addresses will be displayed respectively, allowing browser to use the addresses to connect the IoT Studio.



Item	Description
1	Click **Start** to get the server/development mode running.
2	Click **Stop** to stop the server/development operation.
3	Click **Restart** to stop and start the server/development operation.

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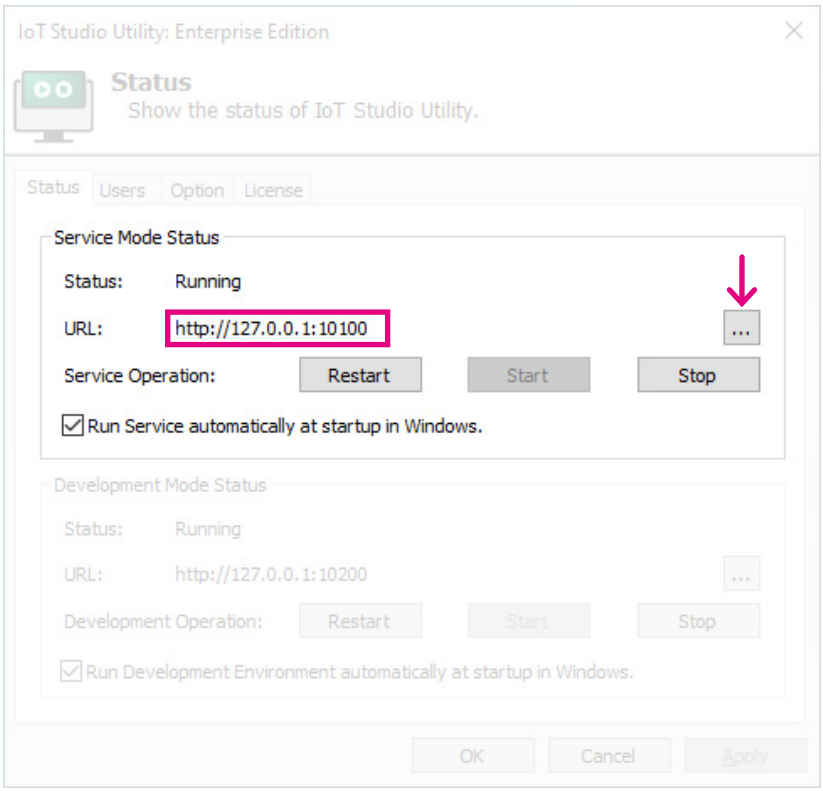
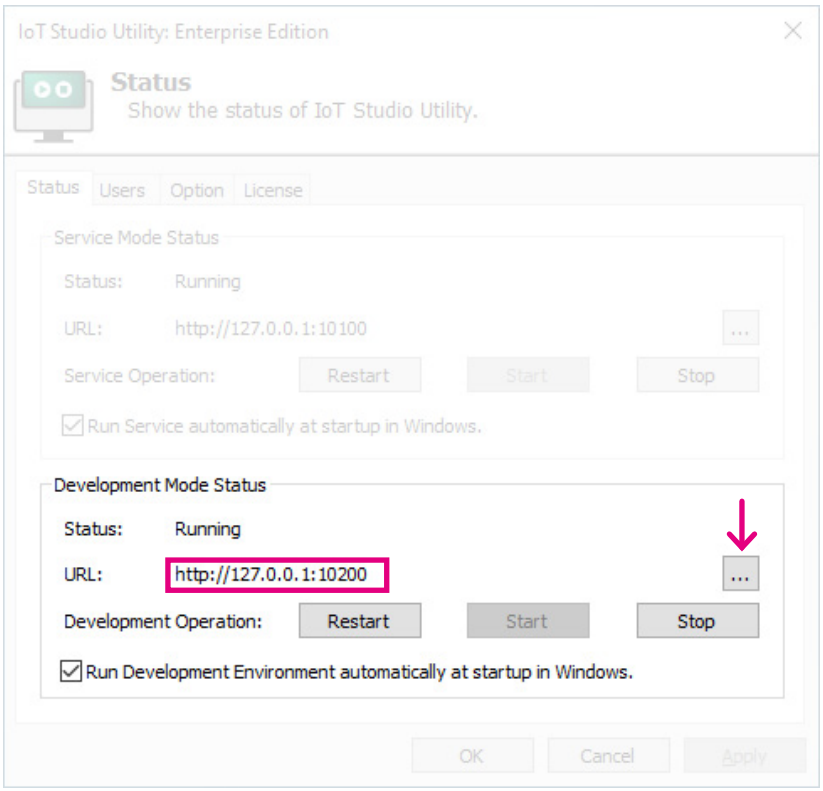
2.1.1 Service Mode

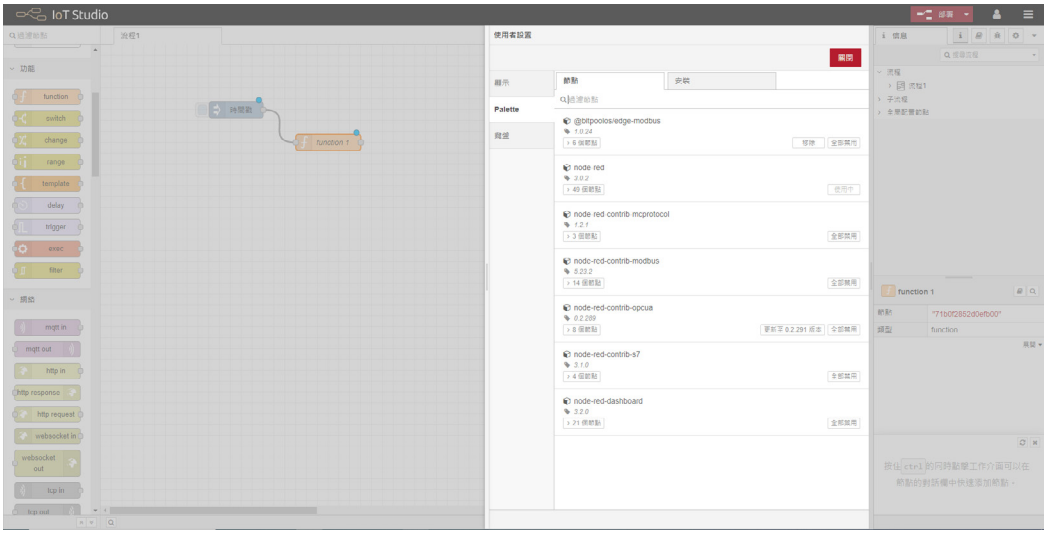
When all the configurations are ready, you can change the connection port number by clicking ..., or use the mouse right click to copy the URL address to a browser to deploy the Light-weight Service Run-time to the client device.



2.1.2 Development Mode

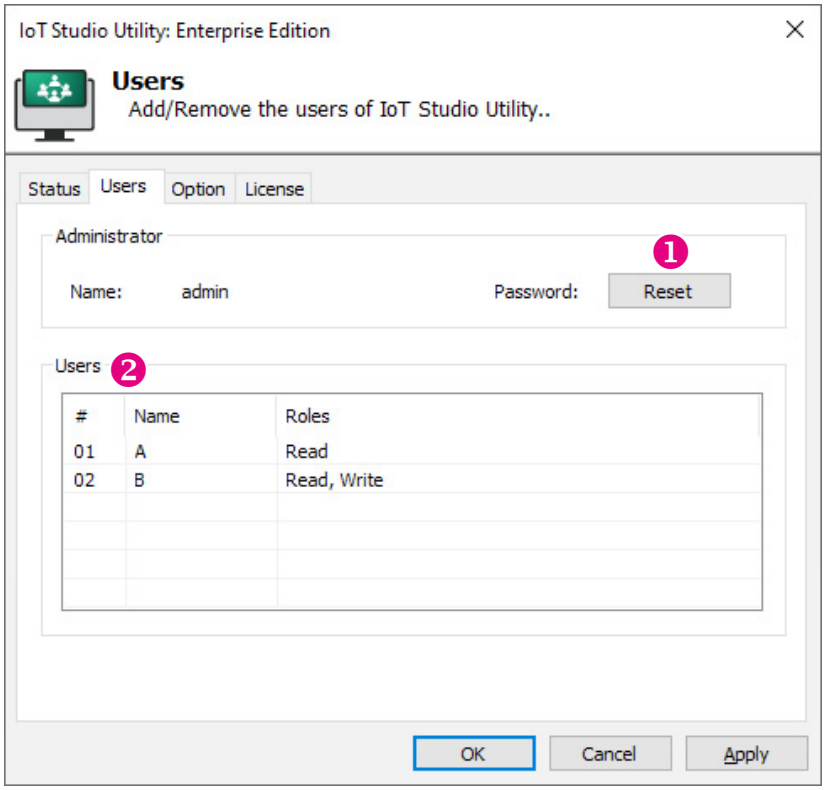
In Development Mode, you can use all the Node-Red palettes. You can change the connection port number by clicking ..., or use the mouse right click to copy the URL address to a browser to launch the development mode.

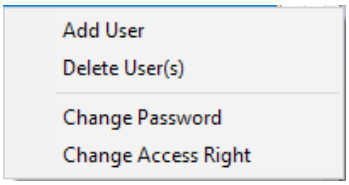




2.2 Users

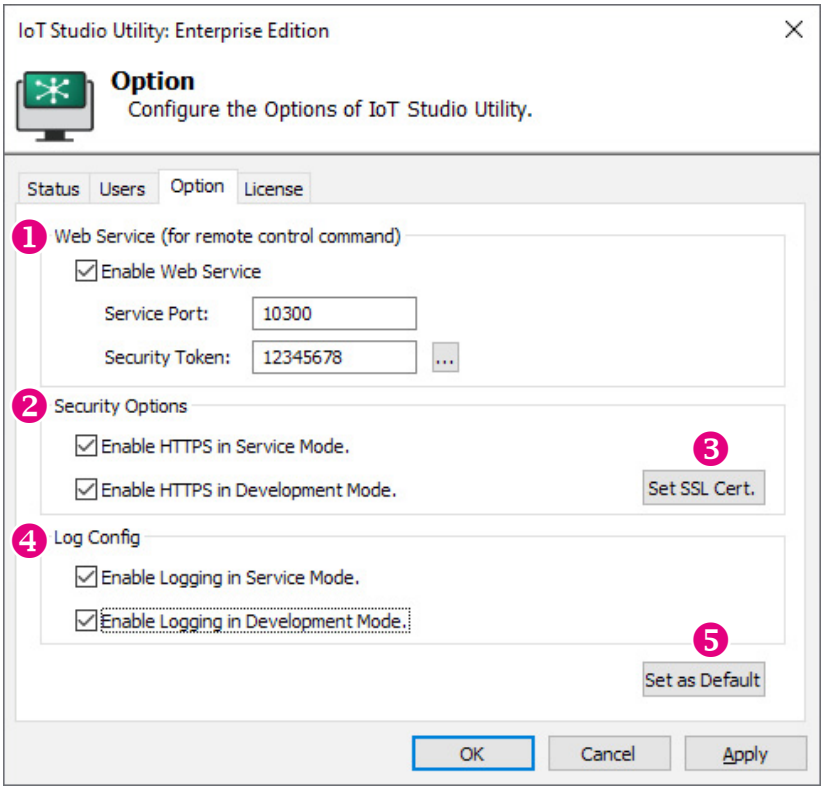
The Users page displays user authentication settings. Connections to the IoT Studio can be authenticated with the username/password.



Item	Description
1	Click **Reset** to change the password of the **Administrator**.
2	**Server Users** Right click on the table to **Add** a user, **Delete** one or multiple users, **Change Password** of a user, and **Change Access Right** of a user.  **Note:** Press and hold the Shift key and click on the name of the user to select multiple users.
	Add User Select **Add User** in the pop-up window to add a new account. Enter the required information in the respective fields, and select the required Access Right option by selecting the respective checkboxes. Click **OK** when done.

2.3 Option

The Option page is designed for configuring the IoT Studio Utility.



Item	Description
1	**Web Service (for remote command)** It is for remote control restful service command. You can enable the Web Service to assign the service port and security token.
2	**Security Options** It is enabling HTTPS for service mode and development mode.
3	**SSL Cert.** Click to change the SSL key.
4	**Log Config** It is for debugging and log information, you can enable for service mode and development mode.
5	**Set as Default** Restore to the default options.

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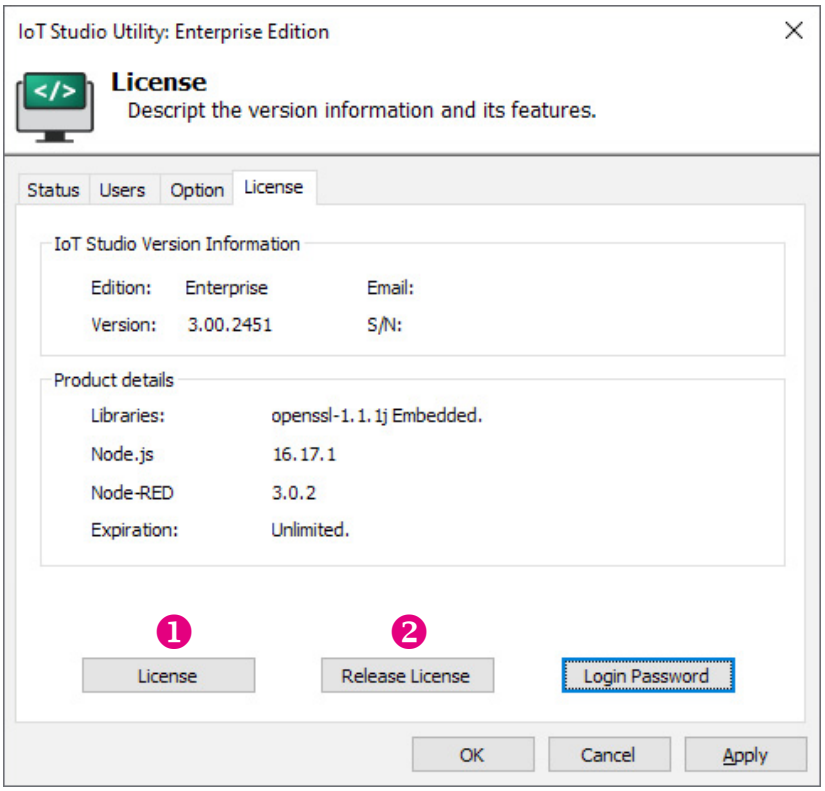
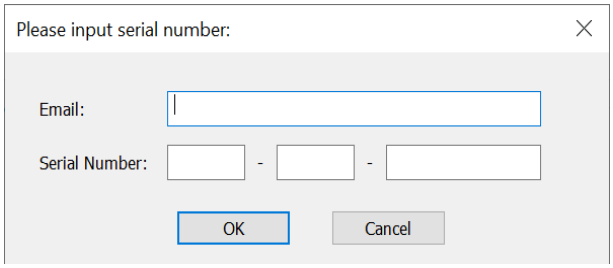
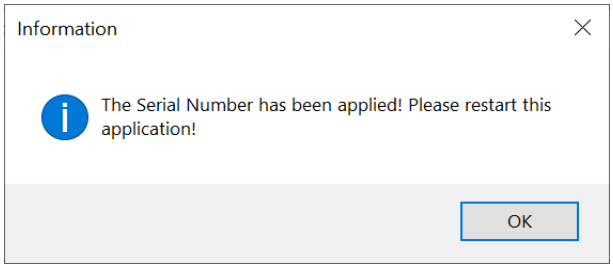
2.4 License

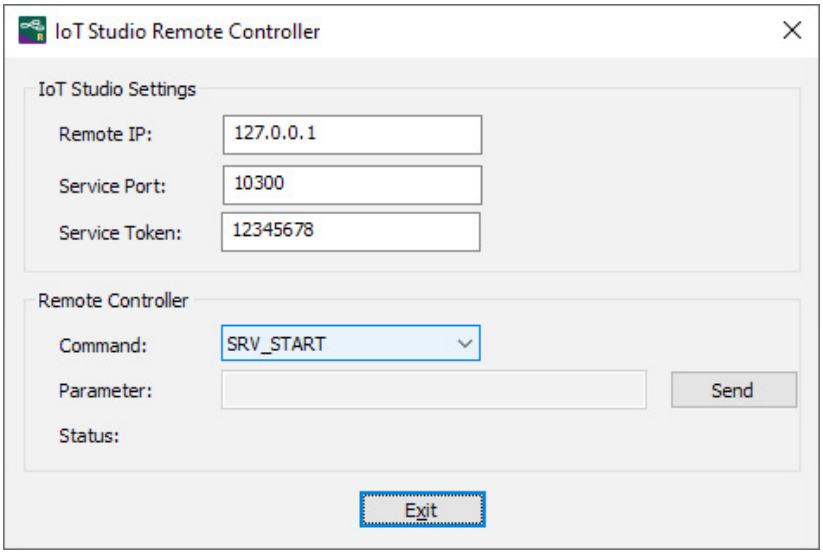
The License page displays the **IoT Studio Version Information** and the **Product details**. Also, this page allows you to register the product key.



Item	Description
1	**License** Click **License** button to enter a valid license email and serial number. Click **OK** when done.  A pop-up window appears to remind you to restart the application. 
2	**Release License** Click it to release the license key on the current device, then you can use the license key in the other device.

Chapter 3: IoT Studio Remote Controller

The IoT Studio offers remote control functions such as start or stop in both development and service mode. You can find the program named IoT Studio\IoT Studio Remote ( ) in the All Programs list, then click it to launch.



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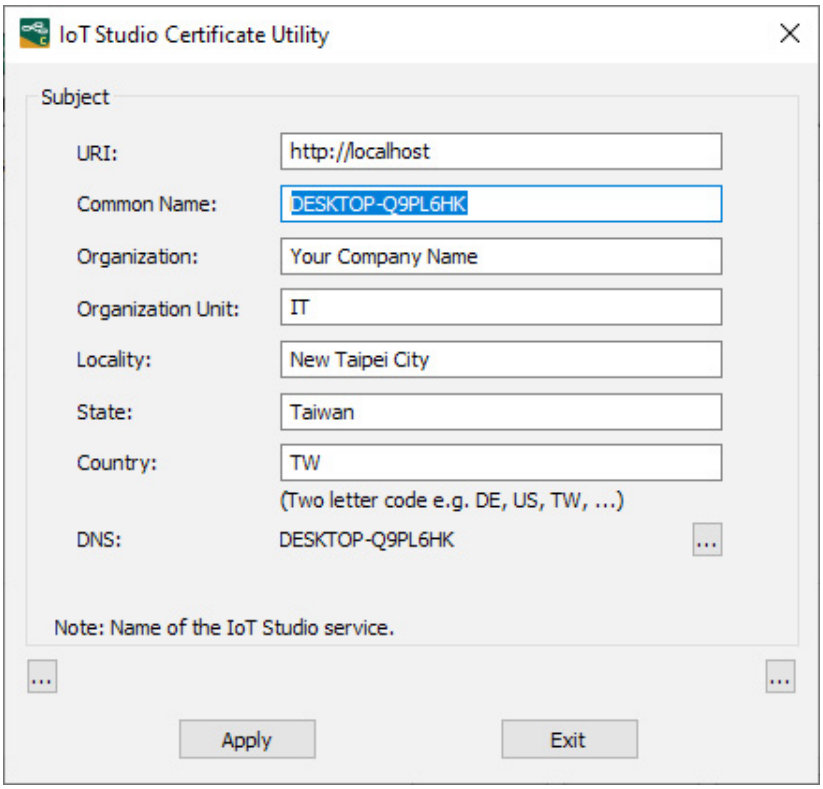
Chapter 4: IoT Studio Certificate Utility

The IoT Studio provides security management: SSL/Cert, and account policies. You can find the program named IoT Studio\IoT Studio Cert ( ) in the All Programs list. Click it to launch.



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