NLAT Guideline

NLAT, the complete name is “Network Licenses Analysis Tool”, with this tool users could collect data which generated from the Network License Manager. The data type includes “floating/borrow license information”, “license usage information”,” denied information” etc. With these data licenses administrator could better manage licenses.

In this article we will show you how to use NLAT tool by 4 parts, click the title to jump to relevant content. Let’s get started!

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1. System Requirement

Operated System: Mircrosoft® Windows Server 2008 R2 SP1 or higher.

Other Component requirement: .NET Framework 4.7 or higher.

2. Launch & Uninstall

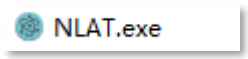
Noted: The program only support windows 7/windows server 2008 R2 or advanced operating system，both 32 bit or 64bit are available.

How to install?

When you first time acquire the package it should be a compressed package, unzip the package to specified path, the installation is finished.

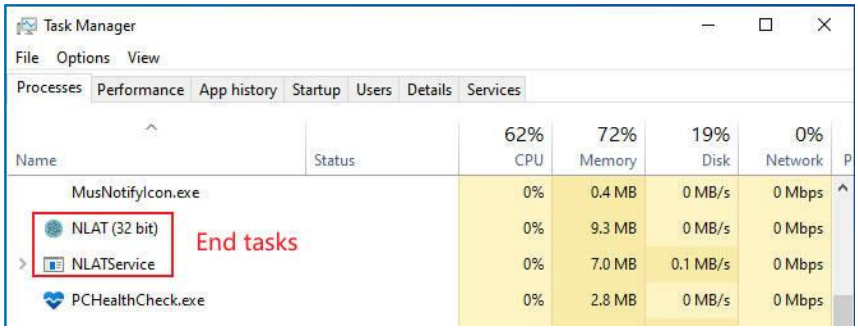
How to launch?

Open the NLAT folder, locate NLAT.exe, and launch it as an administrator.



How to uninstall the program?

You can simply right-click and delete the NLAT folder to remove the tool. If you encounter a prompt that the program is in use during the deletion process, you can open Task Manager, stop the "NLATcore" and "NLATservice" processes first, and then delete the folder.



How to replace the old version?

1. Copy the **Db folder** from the old version's NLAT folder to your desktop. This file is crucial as it contains licenses data. Do not delete it casually.

   Default path for **Db folder**: "X:\ NLAT-2.x.x\NLMA\Db"

2. After copy the **Db folder**, delete the old version's NLAT folder.
3. Extract the compressed file of the new NLAT version.
4. Paste the original **Db folder** into the same path within the new folder.
5. Double-click NLAT.exe to launch the software (launch as an administrator).

3. Work with NLAT

NLAT has two primary functions: viewing the usage of license nodes in the ZWSOFT network and configuring user permissions to obtain authorization. Next, I'll outline these main functionalities.

3.1 Viewing License Number Data

Under normal circumstances, upon launching the NLAT software, it automatically begins retrieving data from the authorization server and displays the information on the interface. On the left side of the software interface, various tabs represent different data types. There are a total of four types of data available for viewing, namely:

3.1.1 Licenses

The Real-time Data page allows you to observe the usage status of license numbers at the current time point. Placing the cursor over the bar data displays specific information, including "Total Activations," "Unused license," "Float license," and "Borrowed license." The top right corner of the interface displays the timestamp of the most recent data update.

In version 2.6.3, "Refresh" button has been added. When there is a significant difference between the newest time and the current time, you can try using the "Refresh" button to update the page information.

Note: The "Refresh" button cannot fetch and update information from the server in real time. It can only refresh data that has been updated but not yet displayed on the page.

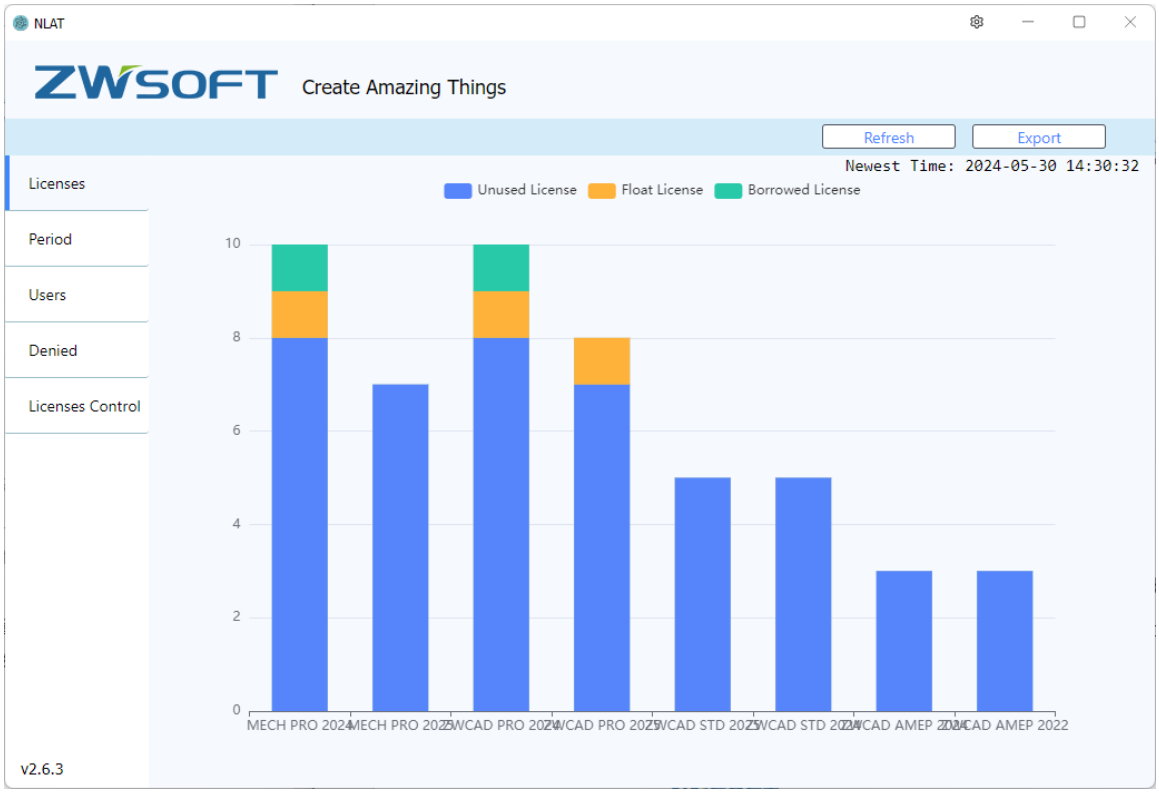


Figure 1. Licenses page of NLAT

3.1.2 Period

The “Period” page allows you to observe node activations and node usage within a specific time frame. Use the date filter on the interface to select the desired period, then click "Query" to view the usage of content node quantities within that specified time frame.

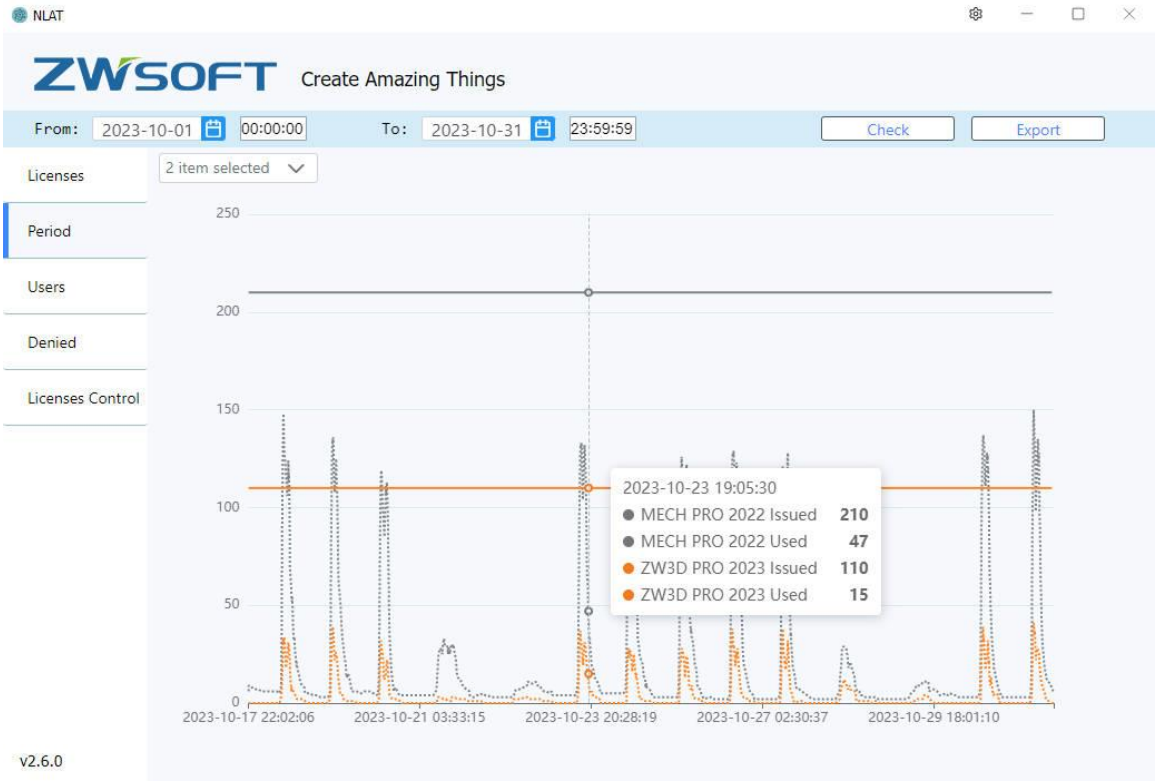


Figure 2. View the specific usage of license numbers within a particular time

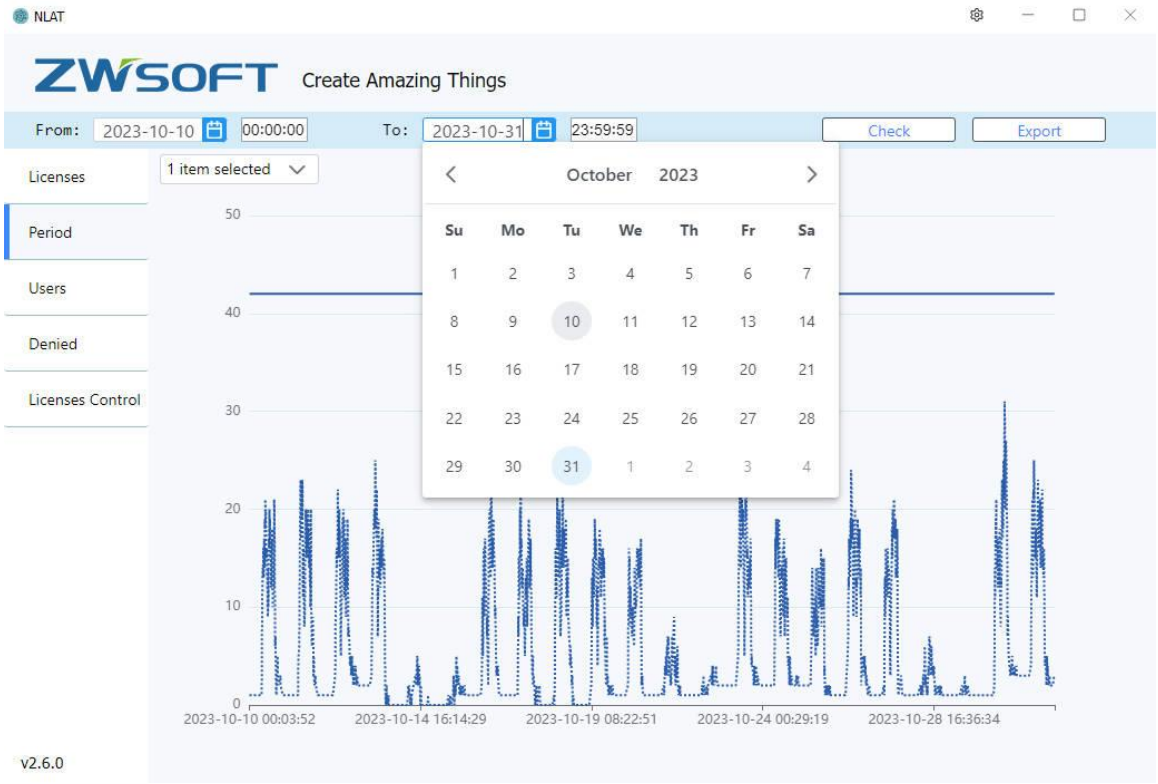


Figure 3. The date filter enables the selection of a specific time frame to view the data.

When multiple products are activated on the server simultaneously, by default, all data appears in the table, which might seem cluttered. In such cases, you can use the product filter to select one or multiple products for data viewing.

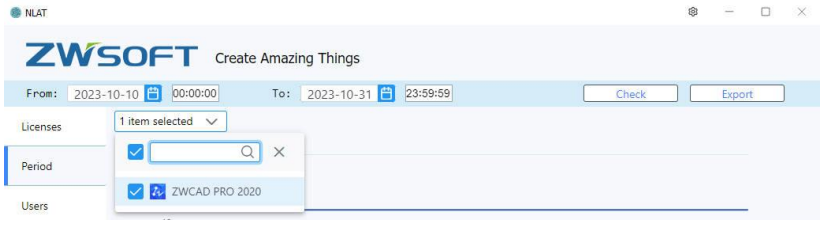


Figure 4. The product filter allows you to view data for specific products.

3.1.3 Users

The Users page tracks the time users spend using CAD; it records the time each user initiates and closes the software. There might be some delay in data retrieval from the server, causing slight deviations in the data, but it serves as a reference. Green data bars represent users who obtained node through borrowing, while yellow indicates users with floating licenses. Placing the cursor over the data bar

reveals detailed information. Similar to the previous interface, the date filter allows viewing user CAD usage duration within a specific timeframe.

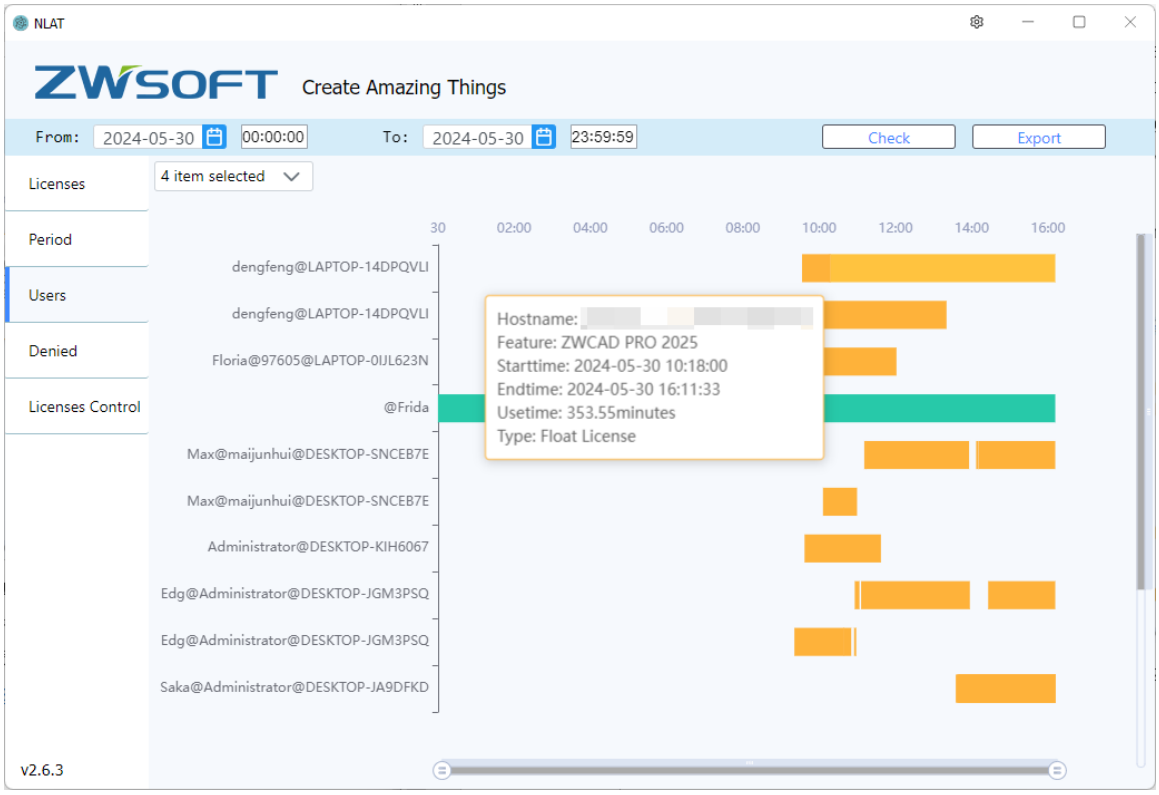


Figure 5 Viewing the duration of users utilizing ZWSOFT

Version 2.6.3 introduces the features 【Grouped User Duration Viewing】and 【Custom User Name Display for Duration】. If you have set up groups on the Licenses Control page, you can view the usage duration of group members using the filter.

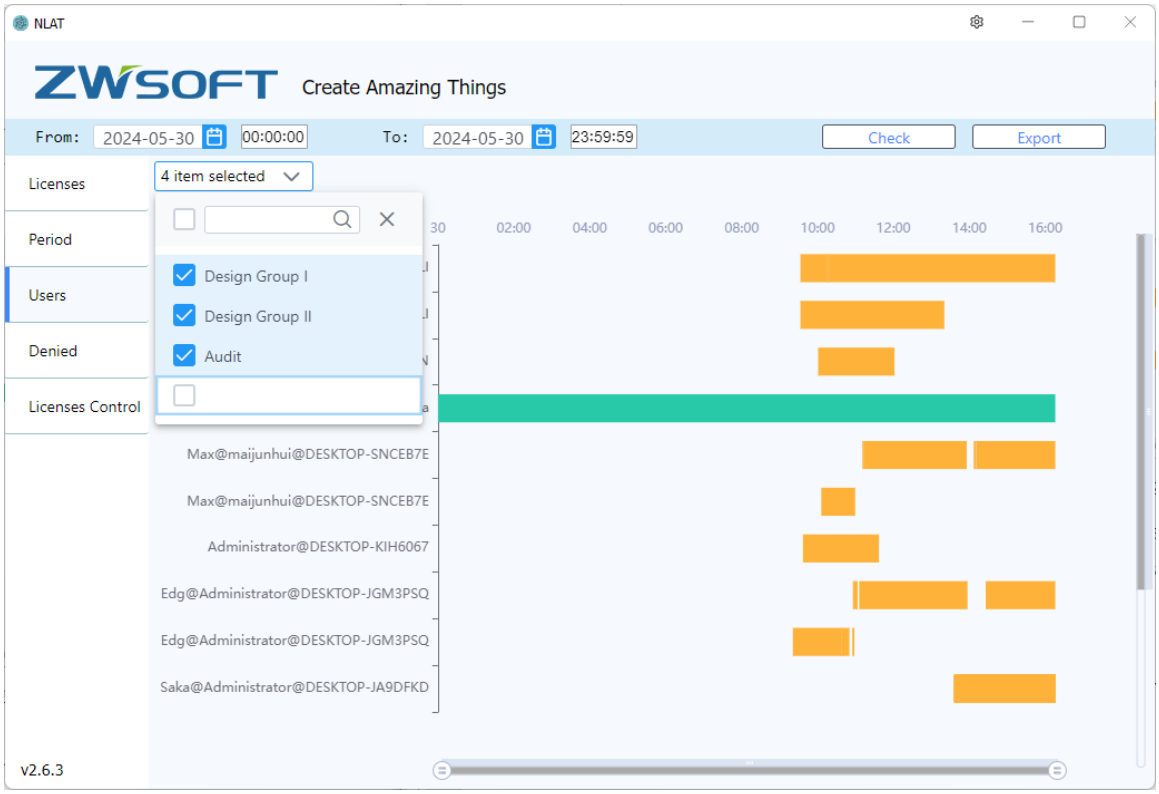


Figure 6. view the licenses usage of members within a group

Note: For information on how to customize user display names and create groups , please refer to section [3.3.3 User information management](), [3.3.4 Group Creation.]()

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3.1.4 Denied

In certain instances, users might encounter authorization failures while retrieving authorization from the server. There can be various reasons for these failures, such as depleted nodes or being listed in a blacklist. Through this page, administrators can view detailed reasons for user authorization failures, facilitating informed decision-making for the next steps.

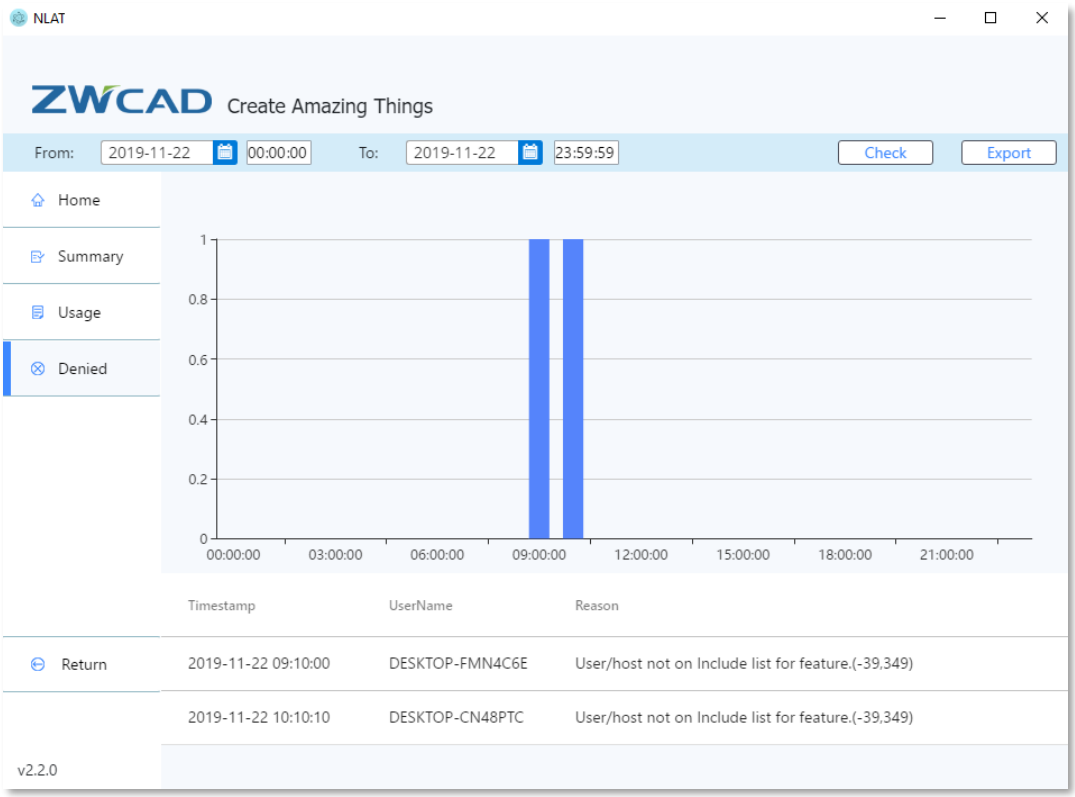


Figure 7. Reason of failing to get node will show here

3.2 Exporting License Number Data

Apart from viewing data on the panel, users can directly export the data. The four mentioned interfaces have an export button located at the top right corner, allowing users to export the data.

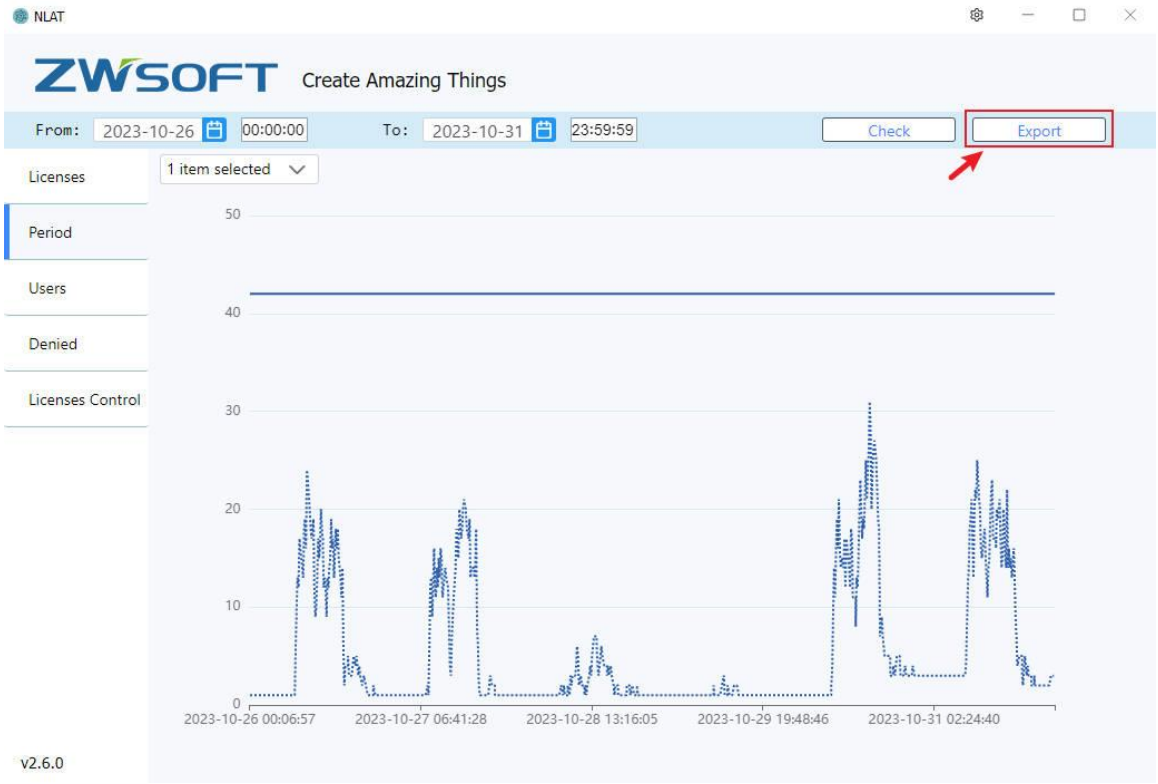


Figure 8. The "Export" button allows for data export

In addition to the raw license number usage data, the exported data also includes hourly peak data, aiding IT managers in better data management and analysis.

	MECH PRO 2022 Issued	MECH PRO 2022 Used	ZW3D PRO 2023 Issued	ZW3D PRO 2023 Used
2023-08-02	210	107	110	31
2023-08-02	210	103	110	27
2023-08-02	210	105	110	29
2023-08-02	210	101	110	30
2023-08-02	210	93	110	31
2023-08-02	210	88	110	32
2023-08-02	210	85	110	30
2023-08-02	210	89	110	25
2023-08-02	210	92	110	26
2023-08-02	210	97	110	24
2023-08-02	210	96	110	21
2023-08-02	210	103	110	27
2023-08-02	210	111	110	26
2023-08-02	210	112	110	30
2023-08-02	210	110	110	30
2023-08-02	210	109	110	31
2023-08-02	210	115	110	31
2023-08-02	210	113	110	30
2023-08-02	210	104	110	23
2023-08-02	210	91	110	21
2023-08-02	210	84	110	16

Figure 9. Exporting raw data

	00:00 - 01:00	01:00 - 02:00	02:00 - 03:00	03:00 - 04:00	04:00 - 05:00	05:00 - 06:00	06:00 - 07:00	07:00 - 08:00	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00	15:00 - 16:00	16:00 - 17:00	17:00 - 18:00	18:00 - 19:00	19:00 - 20:00	20:00 - 21:00	21:00 - 2
2023-08-03	4	4	4	4	4	4	4	10	85	109	111	106	112	101	102	100	92	72	43	29	18	11
2023-08-04	4	3	3	3	3	3	3	7	82	114	115	98	97	97	112	109	101	50	23	13	5	2
2023-08-05	2	2	2	2	2	2	2	2	7	18	21	30	30	27	27	23	17	10	8	6	4	3
2023-08-06	1	1	1	1	1	1	1	1	1	3	5	8	10	9	9	9	9	5	3	2	1	1
2023-08-07	1	1	1	1	1	1	1	1	9	76	113	120	122	119	103	110	111	110	93	60	44	27	14
2023-08-08	4	3	3	3	3	3	3	8	84	112	118	96	93	100	112	115	117	105	74	46	24	12
2023-08-09	5	3	2	2	2	2	2	6	82	111	121	117	114	97	98	107	105	85	63	37	21	8
2023-08-10	3	2	2	2	2	2	2	11	86	112	115	115	107	101	114	119	103	88	55	28	16	10
2023-08-11	2	2	2	2	2	2	2	11	93	112	115	110	108	107	114	115	88	50	22	13	10	6
2023-08-12	5	3	3	3	2	2	2	2	13	17	29	33	28	23	25	22	15	8	6	3	3	3
2023-08-13	2	2	2	2	2	2	2	2	3	3	4	5	5	6	6	5	5	5	3	3	3	3
2023-08-14	2	2	2	2	2	2	2	7	68	103	122	117	113	111	120	122	110	94	53	29	16	12
2023-08-15	3	2	2	2	2	2	2	9	80	116	116	103	95	94	100	107	107	95	65	29	19	15
2023-08-16	5	4	4	4	3	3	3	9	82	103	126	120	115	98	103	110	112	93	64	42	24	11
2023-08-17	2	3	3	3	2	2	3	13	73	109	114	109	102	96	105	111	105	87	63	34	19	10
2023-08-18	2	2	2	2	2	2	2	8	80	114	117	110	98	100	110	107	106	55	28	14	9	5
2023-08-19	4	4	4	4	4	4	4	5	10	24	31	28	25	27	28	26	18	11	10	8	5	5
2023-08-20	5	5	5	5	5	5	5	6	8	9	13	13	11	9	9	9	7	6	8	7	6	6
2023-08-21	5	5	5	5	5	5	5	6	83	108	120	110	110	97	107	106	99	88	60	42	32	20
2023-08-22	7	7	7	7	6	6	6	14	71	117	120	113	96	82	103	104	109	80	48	22	15	8
2023-08-23	5	5	4	4	5	5	5	8	94	124	122	112	107	101	114	114	111	103	68	37	28	17
2023-08-24	5	4	4	4	4	4	4	13	87	114	115	114	108	101	113	123	126	101	74	45	28	12
2023-08-25	4	4	4	4	4	4	4	15	83	119	119	106	97	98	110	117	103	44	26	11	7	4
2023-08-26	3	3	3	3	3	3	3	3	5	11	27	27	24	20	20	17	17	9	9	6	4	4
2023-08-27	3	3	3	3	3	3	3	3	4	5	7	7	7	11	11	11	9	8	6	4	3	3
2023-08-28	3	3	3	3	3	3	3	8	81	117	123	127	117	111	125	124	117	95	62	42	25	12
2023-08-29	5	5	4	4	4	4	4	5	75	118	128	119	111	104	123	121	117	86	64	41	23	14
2023-08-30	4	4	4	4	4	4	5	9	76	123	145	146	127	103	120	120	126	90	79	47	26	16
2023-08-31	6	5	4	4	4	4	4	8	78	113	123	115	116	105	104	110	114	95	69	50	38	21

Figure 10. Automatically tallying the peak usage count per hour

3.3 License Control

In this part we will introduce you how to use license control to set license usage limitation.

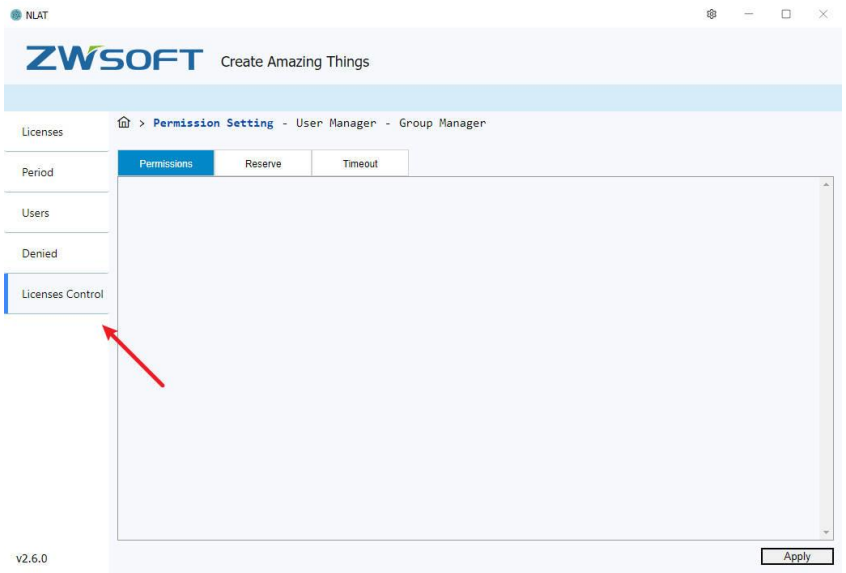


Figure 11. The "Licenses Control" page enables the configuration of user authorization permissions.

3.3.1 Set OPT file's path

Open the settings panel, select the correct path in the OPT file path, and click "Apply."

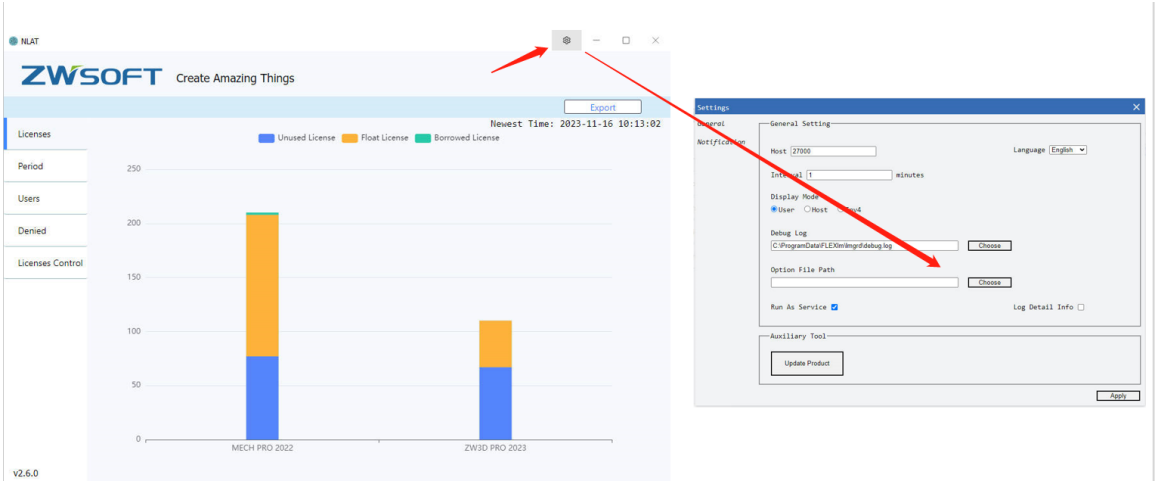


Figure 12. Set the correct opt file

3.3.2 Licenses code management

Click the “Licenses Control” →User Manager→License, select “Add,” input the license number, including the product type and authorization code. If there are input errors in the authorization code, it can be modified using the “Edit” button.

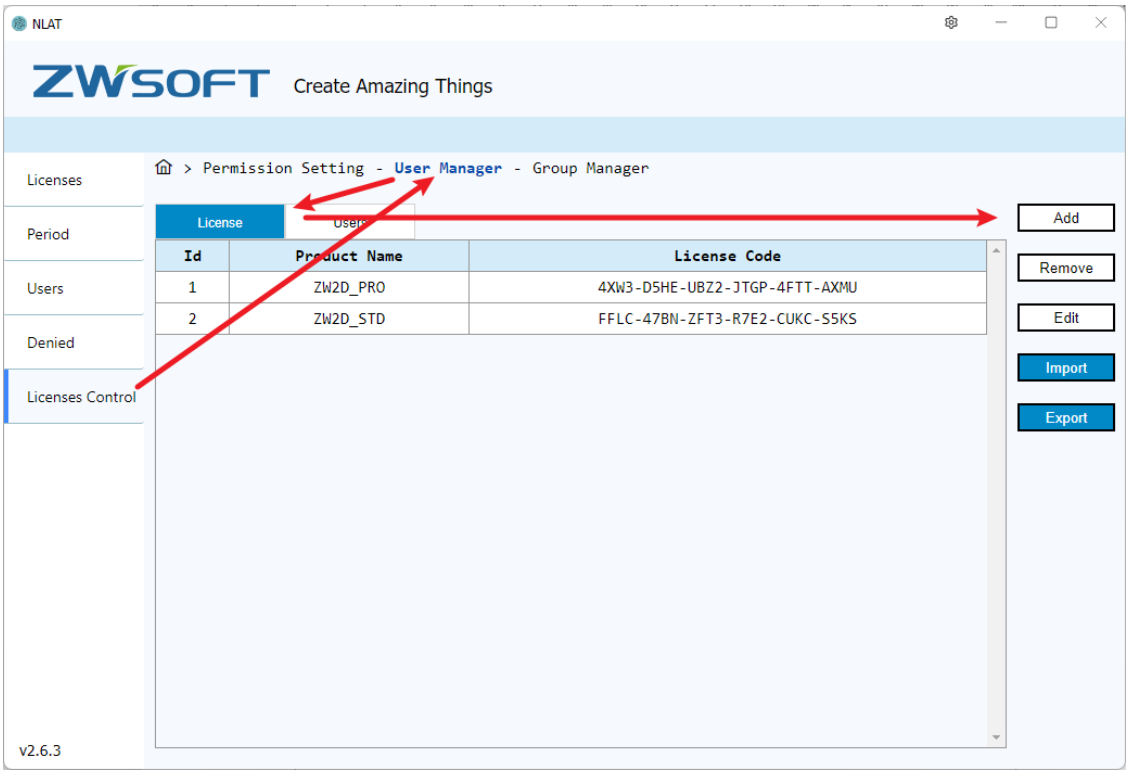
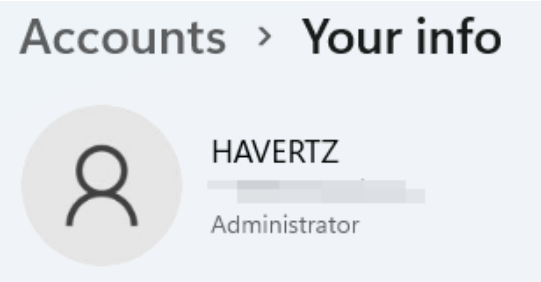


Figure 13. Add the license code information

3.3.3 User information management

Click the “Licenses Control” →User Manager→User, On the user information page, you can input custom name, windows account name, host name, and IP. It’s recommended to fill in all available information, but if some information is missing, **input at least one item.** The relevant terms are explained as follows.

- **Name**: Custome name, using this name can quickly and accurately locate user identity, prepare for permission settings faster, and view user usage duration more quickly.
- **Windows Account:** The user name used when logging into the Windows system.



- **Hostname：** The name of the computer device.

Item	Value
OS Name	Microsoft Windows 11 专业版
Version	10.0.22621 Build 22621
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	VICTOR0827
System Manufacturer	ASUS
System Model	System Product Name

- **Ipv4:** Leave it blank if using a non-static IP.

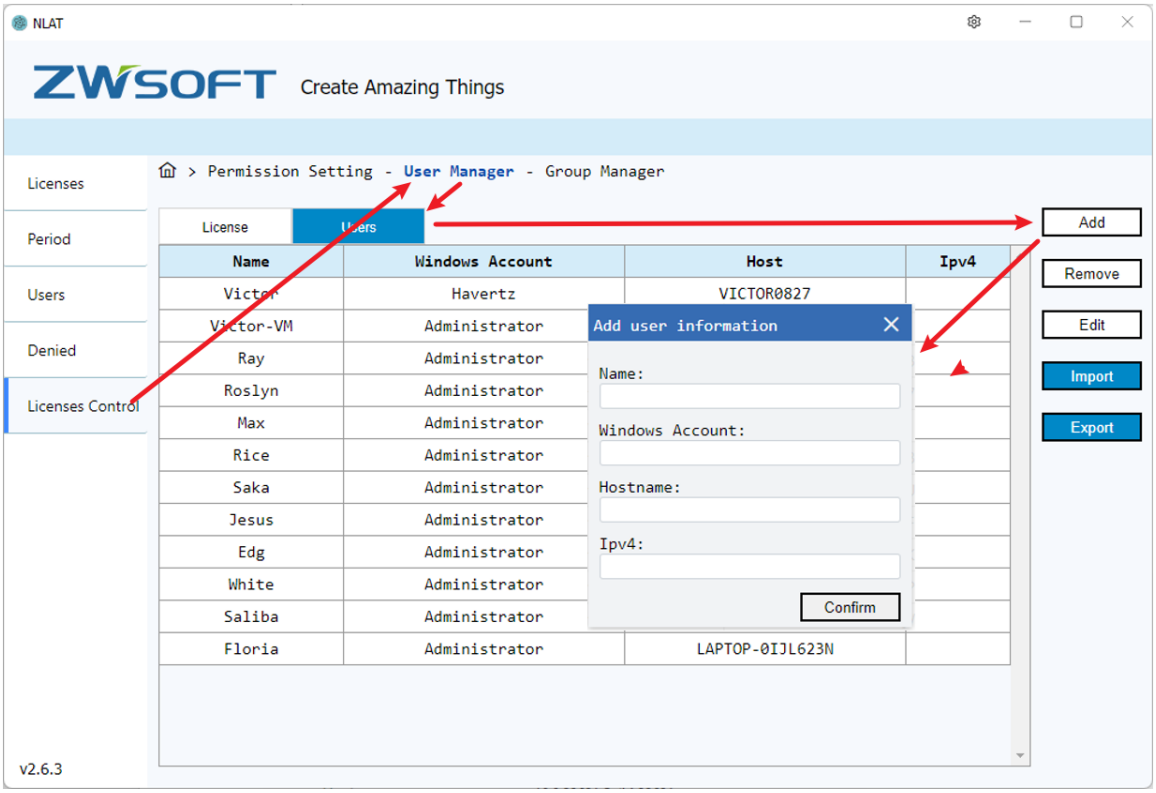


Figure 14. Add the user information

The tool supports exporting and backing up entered authorization numbers and user information, ensuring the data can be reused. For instance, if a client needs to change servers or faces unforeseen circumstances requiring tool reinstallation, they can directly import the information into the tool, avoiding the need for customers to re-enter data.

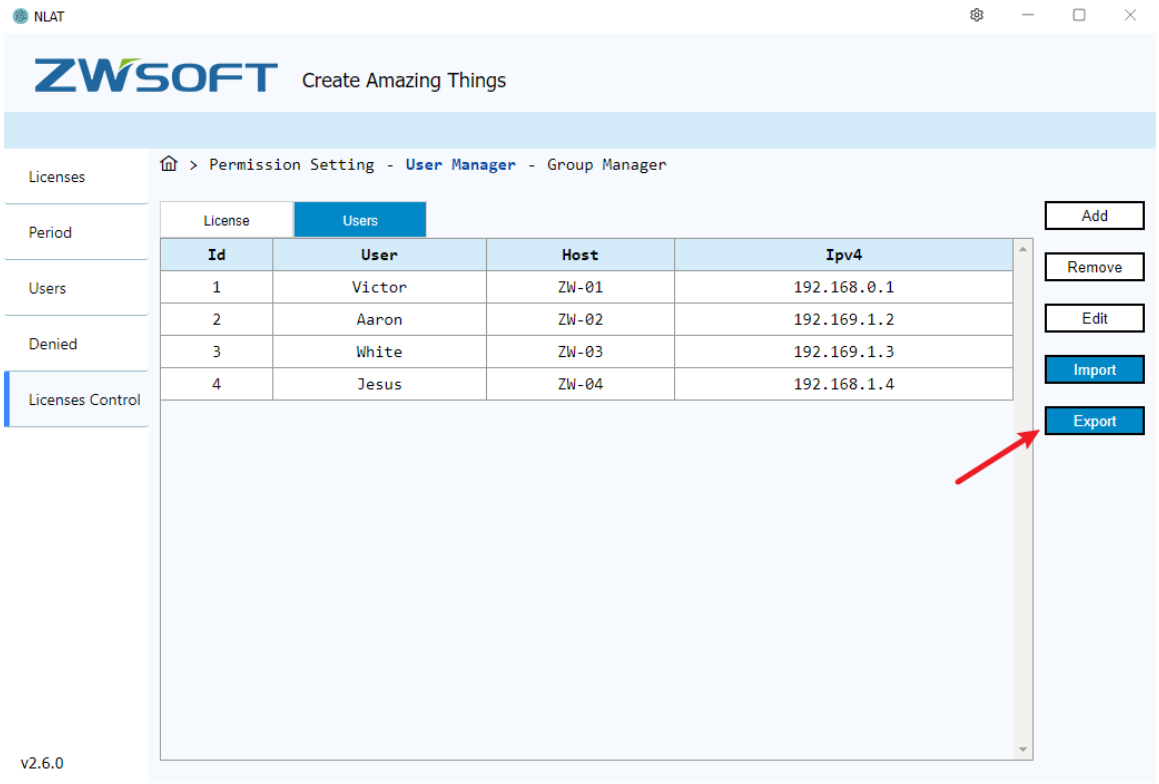


Figure 15. The configured information can be exported for convenient reuse.

3.3.4 Group Creation

Click the “Licenses Control” →Group Manager. You can create groups by assigning specific users to it. Once the group is created, it can be edited, allowing actions like adding or removing members. This method facilitates setting permissions for multiple members within a group. This step is optional and can be performed based on specific requirements.

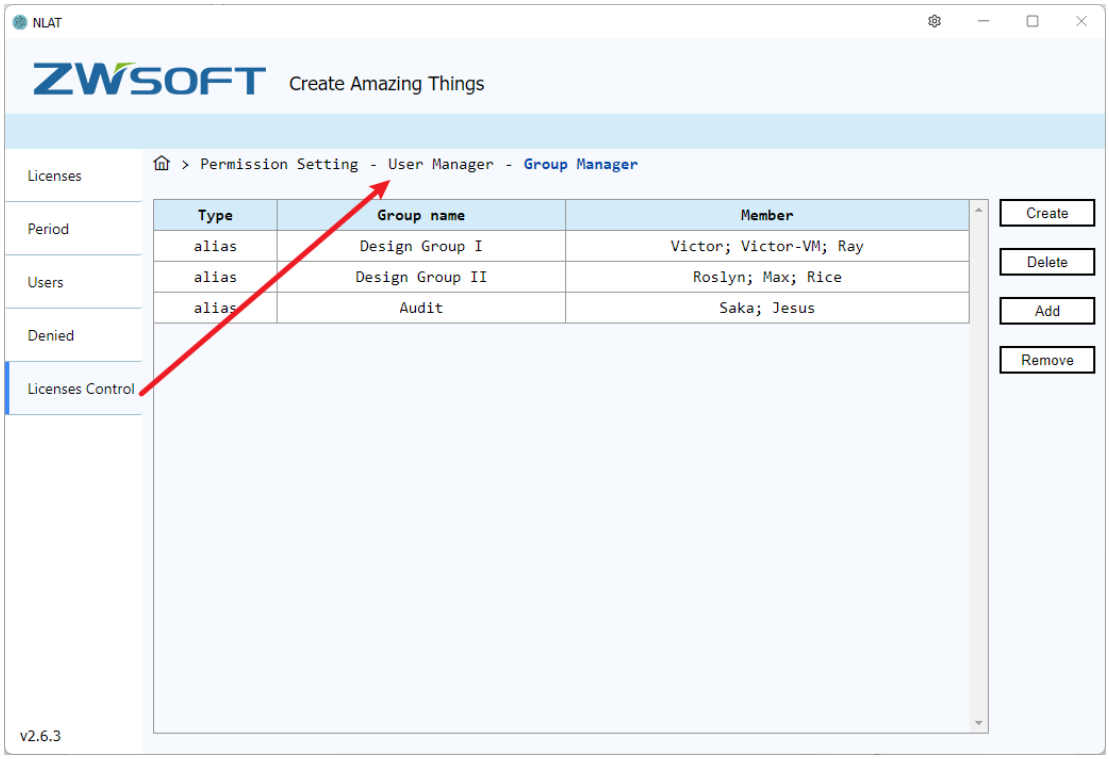


Figure 16. Create a group by designating specific members for easier management.

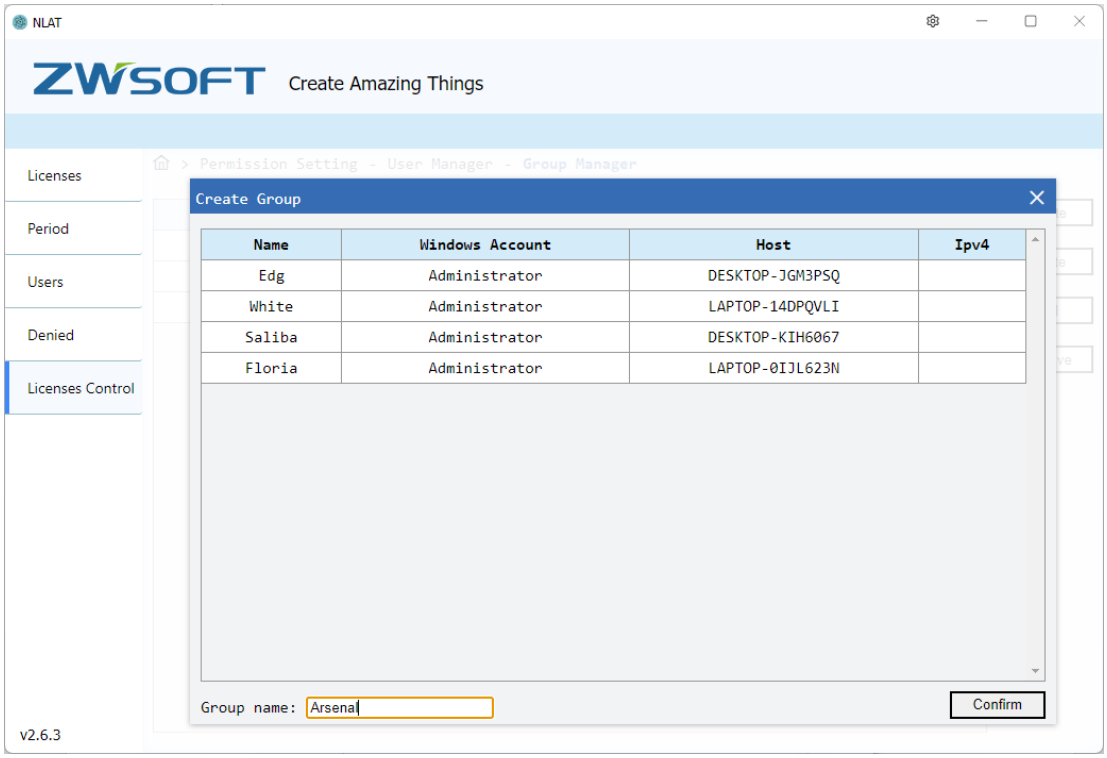


Figure 17. Easy to create a group

3.3.5 Allow/Disallow Authorization Access

Once license code and user information are filled in, clicking on the “Permission Settings” tab allows you to configure user permissions. You can enable or disable authorization access for users by checking/unchecking boxes. After setting permissions, click “Apply” for the changes to take effect. This applies to both floating and borrowed authorizations.

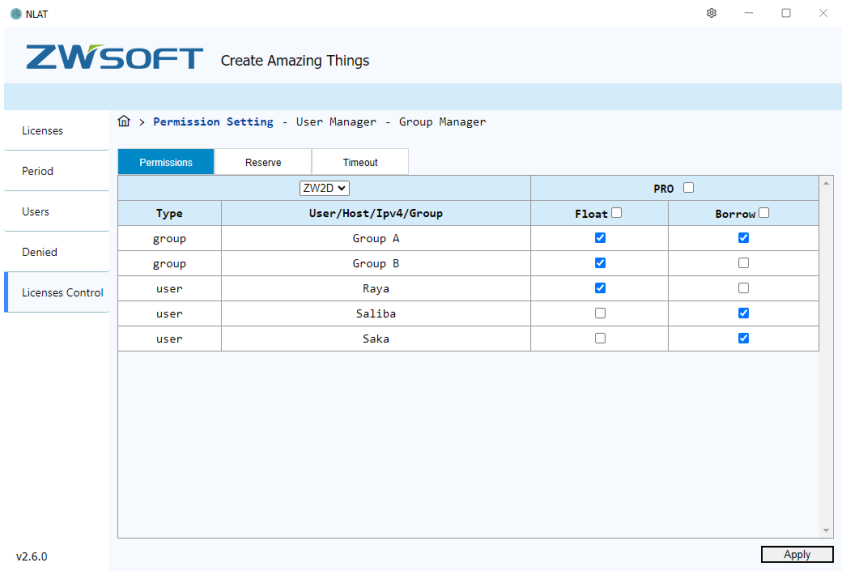


Figure 18. Setting user authorization access permissions by checking boxes

3.3.6 Reserve nodes

In certain cases, insufficient purchased nodes might prevent core designers within a department from obtaining authorization and, consequently, hinder their work. To address this, the tool offers a “Reserved Nodes” feature. This feature allows for reserving a specified number of nodes for designated users or group members, ensuring that crucial members maintain authorization access even when nodes are limited.

To use this feature, navigate to the “Permission Settings” tab, then switch to the “Reserve” page. Select the product type, specify the number of reserved nodes,

input user information, and click the “Append” button to add the reservation details to the table. If multiple reservations need to be made, repeat the steps. Once done, clicking “Apply” will confirm the reservations. When the page displays a “Read Successful” prompt, it indicates that the node reservation was successful.

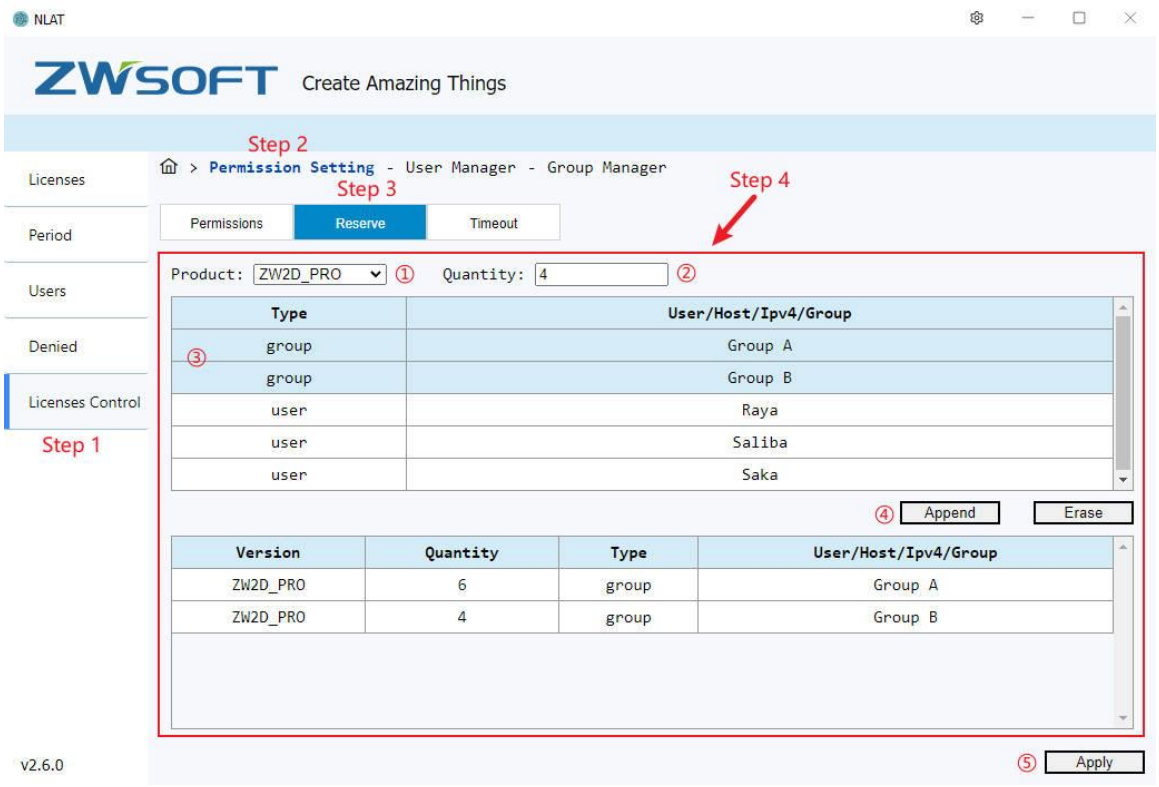


Figure 19. Follow the instructions shown in the screenshot to complete the process of reserving nodes.

3.3.7 Timeout Settings

Set a specified time limit, if a user doesn’t run CAD within this defined timeframe, they’ll be considered inactive. Nodes allocated to inactive users will be automatically reclaimed when nodes are insufficient. The minimum timeout setting is 900 seconds (15 minutes).

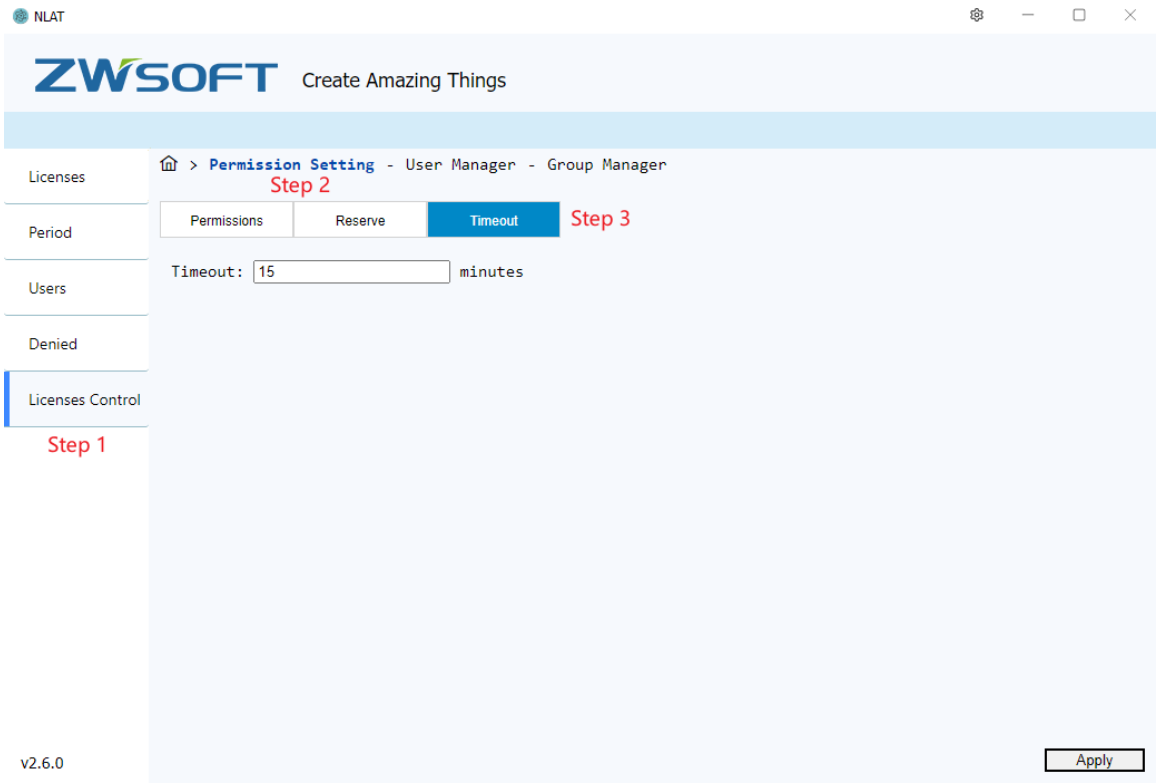


Figure 20. Timeout Setting

3.4 General Settings

In this part we will introduce you some basic settings. You can find the setting button on the right top corner.

Host

Here input the port number, mostly the default port is 27000, if user have changed to another port, set the new port number here.

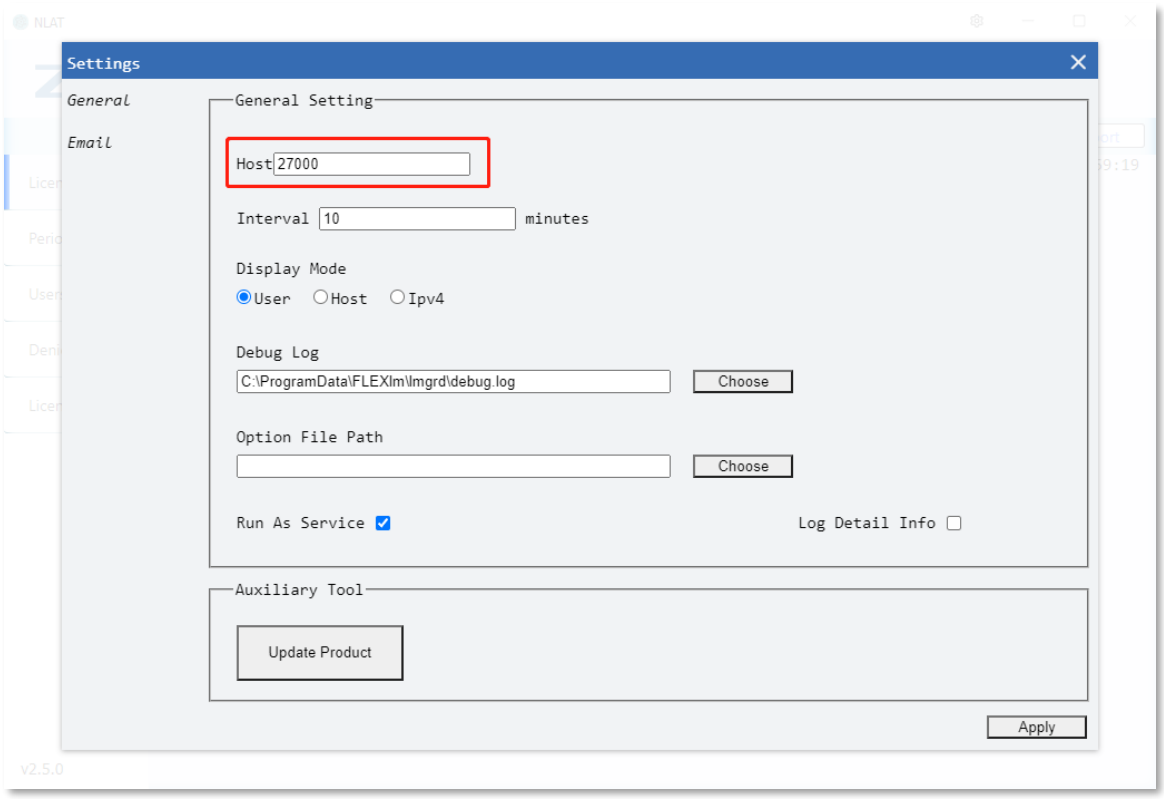


Figure 21. Default port is 27000

Update Interval

Update Interval is used to control data update period and log information update period. Default is 10 minutes, minimum unit is 1 minute and maximum unit is 100 minutes.

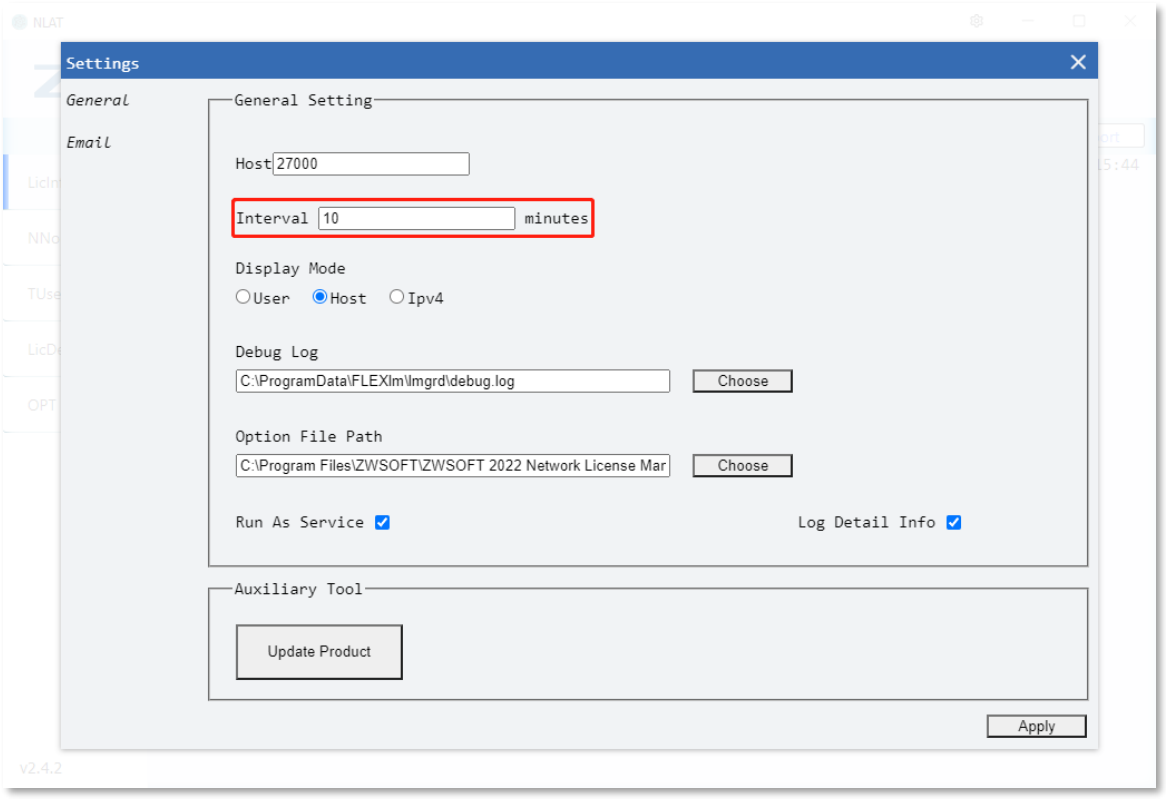


Figure 22. Set interval at which data needs to be updated

Display Mode

Control the type of displayed name, 4 types can be selected, Name, Windows Account, Hostname and IP. This setting will take nform on “User”, “Licences Control” page.

Debug log

Some license information is collected from the debug.log file, so it’s important to locate the correct path. The default path is “C:\ProgramData\FLEXlm\lmgrd\debug.log”, if you move debug file to other place, please select the correct path.

Option File Path

Option File Path (OPT file) mainly use for controlling users' permission to get the license, if you want to control users' permission, this path is required. This file is saved in NLM's folder called "zwflex.opt".

Run As Service

Run as service enable user to collect license nformation in the background which means even you close NLAT, it will keep collecting information.

Log Detail Info

Generally, you do not need to check this item, it's mainly used for debugging when NLAT has problems.

Language

6 language version to be chosen: English, Traditional Chinese, Korean, Japanese, Spanish, Simplify Chinese. The default language is English. (For now we only have English version, all other languages version will be released on 2.5.1 version)

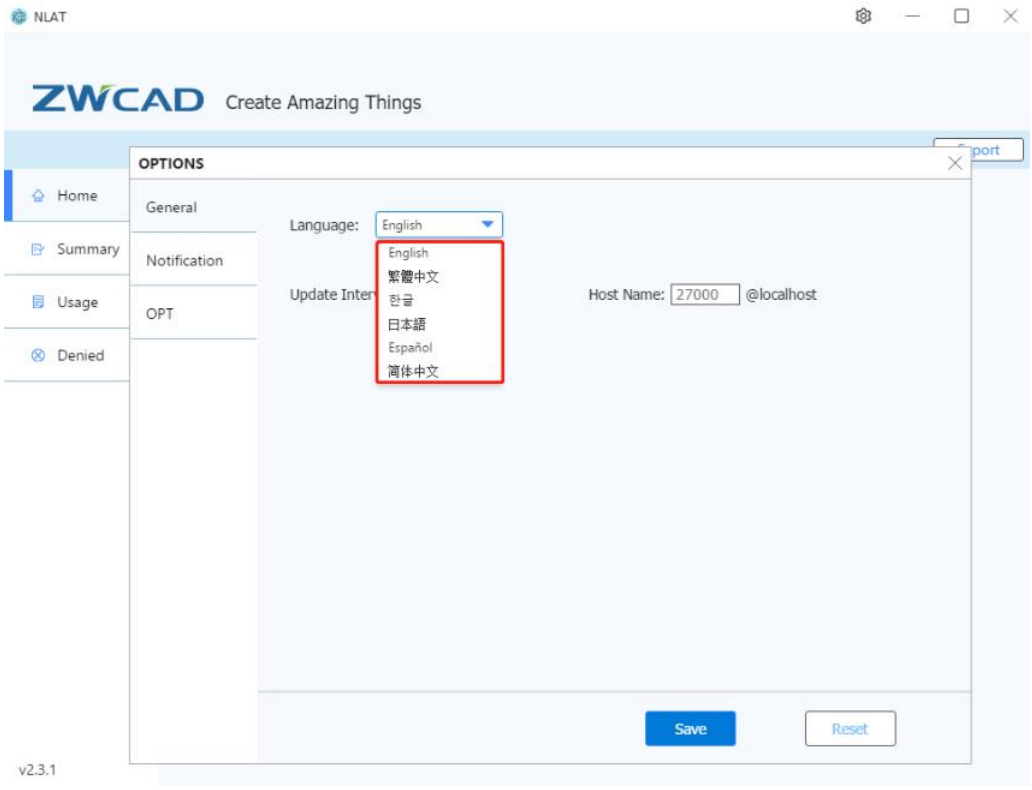


Figure 23. Language option

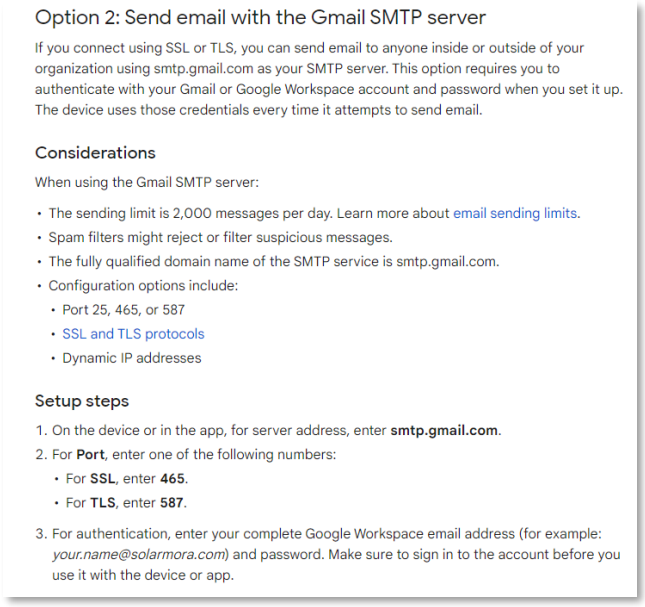
3.5 Email Alert Settings

The data anomaly alert function in NLAT allows the system to detect anomalies during data collection and send emails to specified contacts, promptly notifying them of any unusual situations. Currently, NLAT can set up automatic alerts for two types of data anomalies:

1) When the usage count of authorized nodes reaches a defined threshold, an automatic notification email can be sent to a specified email address, alerting the administrator about the authorization usage.
2) When NLAT ceases to collect data, it can send an email to designated recipients as a notification.

To use this function, initial configuration for the sending email is required. We need to gather information about the SMTP address, port, SSL protocol usage, email account, and authorization code. Different email service providers have varying server addresses and password rules. Access the email settings page to locate the method for configuring the SMTP server. Here is an example using gmail SMTP setup method:

(Reference URL: https://support.google.com/a/answer/176600?hl=en)



Option 2: Send email with the Gmail SMTP server

If you connect using SSL or TLS, you can send email to anyone inside or outside of your organization using smtp.gmail.com as your SMTP server. This option requires you to authenticate with your Gmail or Google Workspace account and password when you set it up. The device uses those credentials every time it attempts to send email.

Considerations

When using the Gmail SMTP server:

- The sending limit is 2,000 messages per day. Learn more about email sending limits.
- Spam filters might reject or filter suspicious messages.
- The fully qualified domain name of the SMTP service is smtp.gmail.com.
- Configuration options include:
  - Port 25, 465, or 587
  - SSL and TLS protocols
  - Dynamic IP addresses

Setup steps

1. On the device or in the app, for server address, enter **smtp.gmail.com**.
2. For **Port**, enter one of the following numbers:
   - For **SSL**, enter **465**.
   - For **TLS**, enter **587**.
3. For authentication, enter your complete Google Workspace email address (for example: *your.name@solarmora.com*) and password. Make sure to sign in to the account before you use it with the device or app.

Figure 24. different email provider have different rules.

After obtaining the "**SMTP server address**," "**email account**," "**port**," "**SSL service usage**," and "**login password**," go to the "Email Notification Settings" section within the NLAT setup interface. Input the content for these five parameters here. This step is crucial.

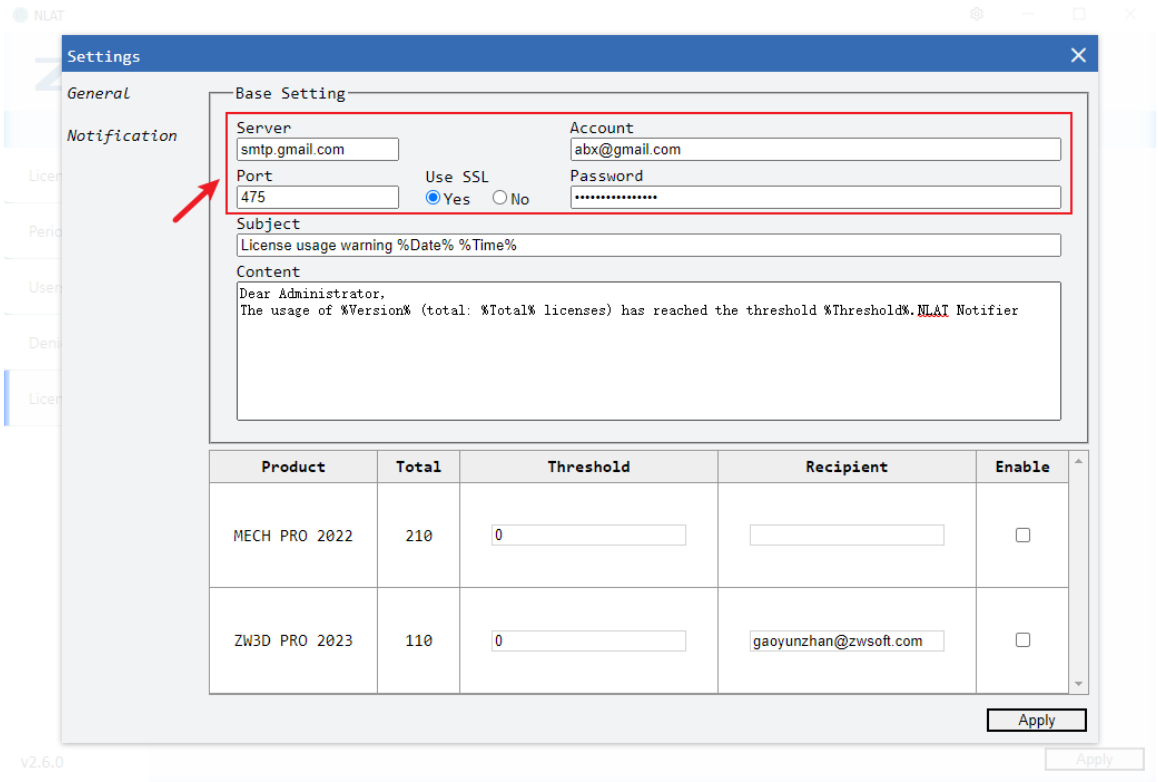


Figure 25. Enter the relevant parameters for the email

Regarding situation 1), after setting up the sending email parameters, you can customize the content of the reminder email. NLAT comes with email template, and users can also manually edit the email content. The "%XX%" fields in the template are special placeholders, and their corresponding content is as follows:

%Date%: Date when the threshold was triggered

%Time%: Time when the threshold was triggered

%Threshold%: Quantity of the threshold

%Version%: Product type triggering the threshold

%Total%: Total number of authorizations for the product triggering the threshold

Users can improve the effectiveness of their written content by combining it with the provided fields. Finally, **set the threshold for sending notification emails based on the product quantity, choose the recipient's email address** (supports multiple recipients separated by commas), and check the "Apply" button to complete the setup.

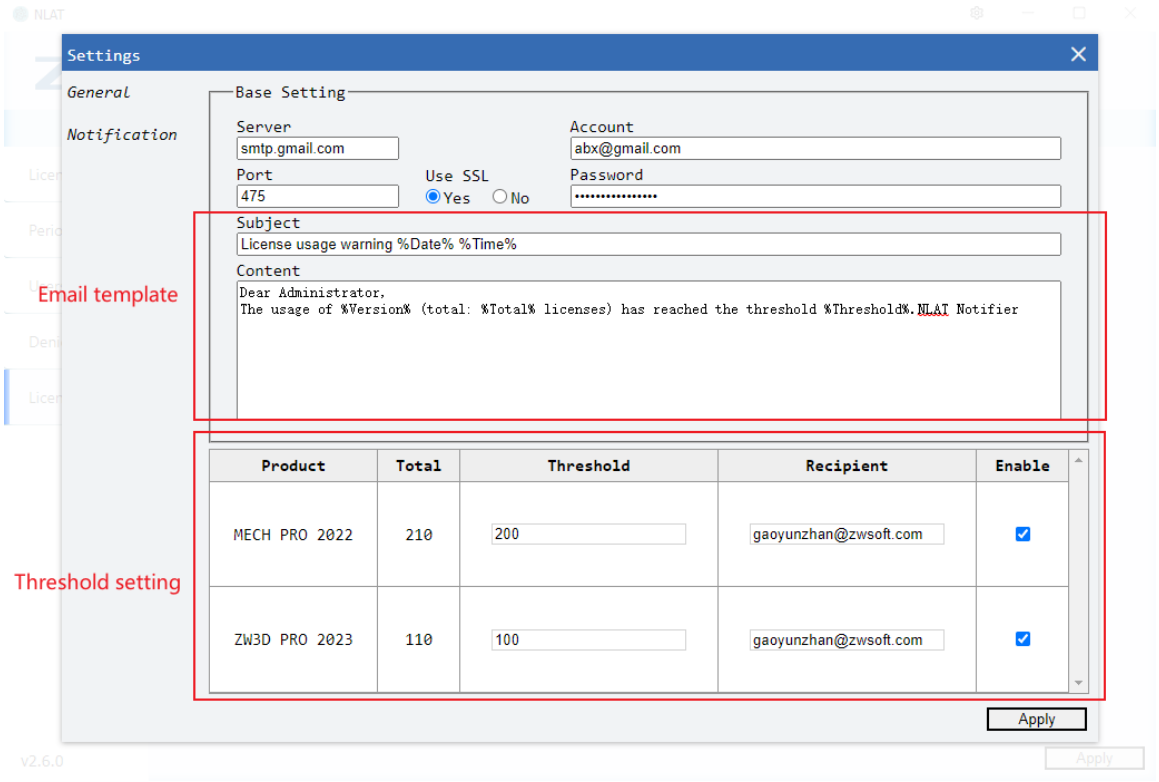


Figure 26. Set email template and the product threshold and recipient information.

For situation 2), when NLAT stops collecting data, NLAT will automatically send an email to notify the recipient(s) without the need for customizing the email content. The recipient's data will default to the information of the first recipient's email, unrelated to other information.