

User Manual of NcCloud® Industrial Internet Platform

(For Web Version)

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1 About Weihong IIoT Solution

Weihong Industrial Internet of Things Solution (hereinafter referred to as **Weihong IIoT Solution**) is independently developed by **Shanghai Weihong Electronic Technology Co., Ltd** (hereinafter referred to as **Weihong**). Based on monitoring of CNC systems, it offers a solution to production management, device management and business innovation.

Weihong IIoT Solution includes the following:

- **NcGateway Data Gateway** (Previously known as **NcCloud Assistant**.)
 - It provides data interfaces and communication protocols for the CNC system to connect to the Internet.
 - At present, it is built in most of Weihong CNC systems.

- **xFactory Smart Factory System** (Previously known as **NcCloud Smart Factory**. Hereinafter referred to as **xFactory**.)

A standard solution for CNC systems to connect to the Internet.

It provides the following:

- The standard MES (Manufacturing Execution System).
 - The data interfaces for all information systems.
- **NcCloud Industrial Internet Platform** (Previously known as **NcCloud Service**. Hereinafter referred to as **NcCloud**.)

It provides the following:

- Remotely monitoring machine tools based on the public cloud.
- Production management and device maintenance.
- Technical support, equipment leasing and other functions for cooperation among multiple enterprises.
- Cloud data interfaces for system integrators and service providers to use advanced applications.
- Two versions, Web and WeChat, for production monitoring.

2 Introduction

NcCloud is an important component of Weihong IIoT solution. Based on public cloud, it can achieve remote monitoring of the CNC devices.

The online functions of **NcCloud** keep updating. Some advanced functions are only open to paying users or privileged users. Please contact Weihong sales for details.

2.1 Service Scenario

For production monitoring in different scenarios, **NcCloud** has the following versions:

- [Web](#).
- [WeChat](#).

You can register an account in either [the official website](#) or WeChat official account. The same account can be used on both Web and WeChat. And devices that has been monitored in either version can be shown in the other in real-time.

2.2 Features

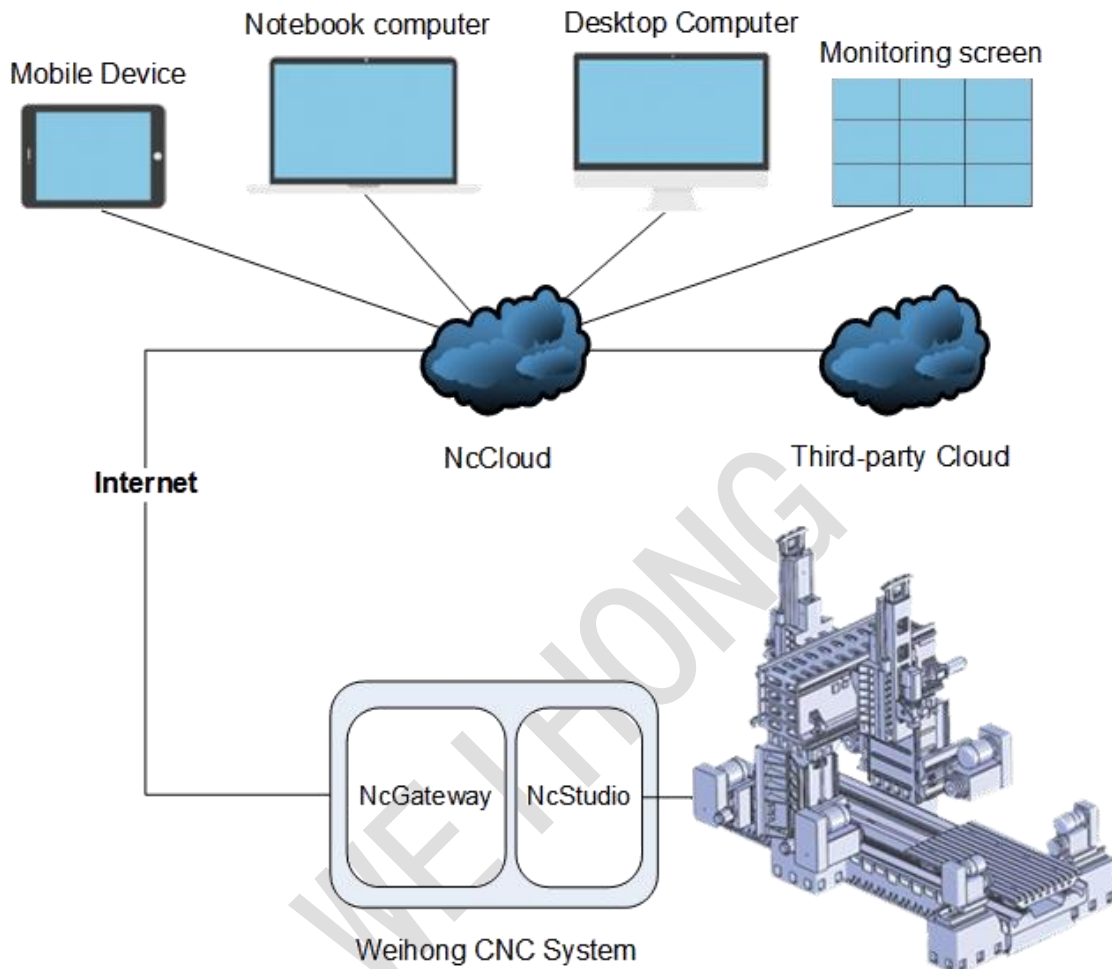
The main functions of **NcCloud** and their description are as follows:

Function	Description	Web Version	WeChat Version
Remote monitoring	It is used to check the production status and status of machine tools and customize smart alarms.	√	√
Operation performance	It is used to help you know production efficiency of machine tools and improve it.	√	√
Market analysis	It is used to check the geographical distribution, utilization rate and OEE of machine tools at home and aboard.	√	√
Reliability assessment	It provides a platform for reliability assessment where multiple staffs can collect and input data about machine tools for the calculation of reliability assessment at the same time.	√	√
My documents	It is used to publish, manage and update manuals online.	√	√

Function	Description	Web Version	WeChat Version
Process management	It is used to upload, issue and centrally manage program files through NcCloud .	√	√
Tool management	It is used to manage tools and trace their utilization and consumption online.	√	√
My leasing	It is used to create a lease service, add the machine tool to the lease service, and trace the leased machine tools	√	√
Product registration	It is used to register the CNC system.	√	√
Registration application	It is used to apply for registration by scanning the QR code.	-	√
Registration approval	It is used to check, examine and approve registration applications.	-	√
Product inquiry	It is used to help you check if the Weihong product is counterfeit.	√	√
Online repair	It is used to ask for a repair service of machine tools online and get real-time feedback.	√	√
Remote assistance	It used to remotely log in your CNC system for support professionals and maintainers, so that they can remotely respond your requests as soon as possible and solve your problems.	√	√
System setup	It is used to add work shifts and friends, check and set personal information, and set preferences.	√	√
My kanban	It is used to create a kanban and add the target machine tools to the kanban, so as to monitor them in one kanban.	√	-
Supplementary information	It is used to inquire FAQs, get the introduction to NcCloud and product documents and log in the Web version of NcCloud through your mobile phone.	-	√

2.3 System Architecture

The system architecture of **NcCloud** is as follows:



The **NcGateway** built in the latest Weihong CNC system, as a data interface, transmits data to the cloud server after the CNC system has been connected to Internet.

3 Quick Start

This part introduces how to how to quickly set **NcCloud** on the web so as to start monitoring your machine tools by **NcCloud** on the web.

The basic procedure is as follows:

1. [Register NcCloud.](#)
2. [Add machine tools.](#)
3. [Add applications.](#)

3.1 Register NcCloud

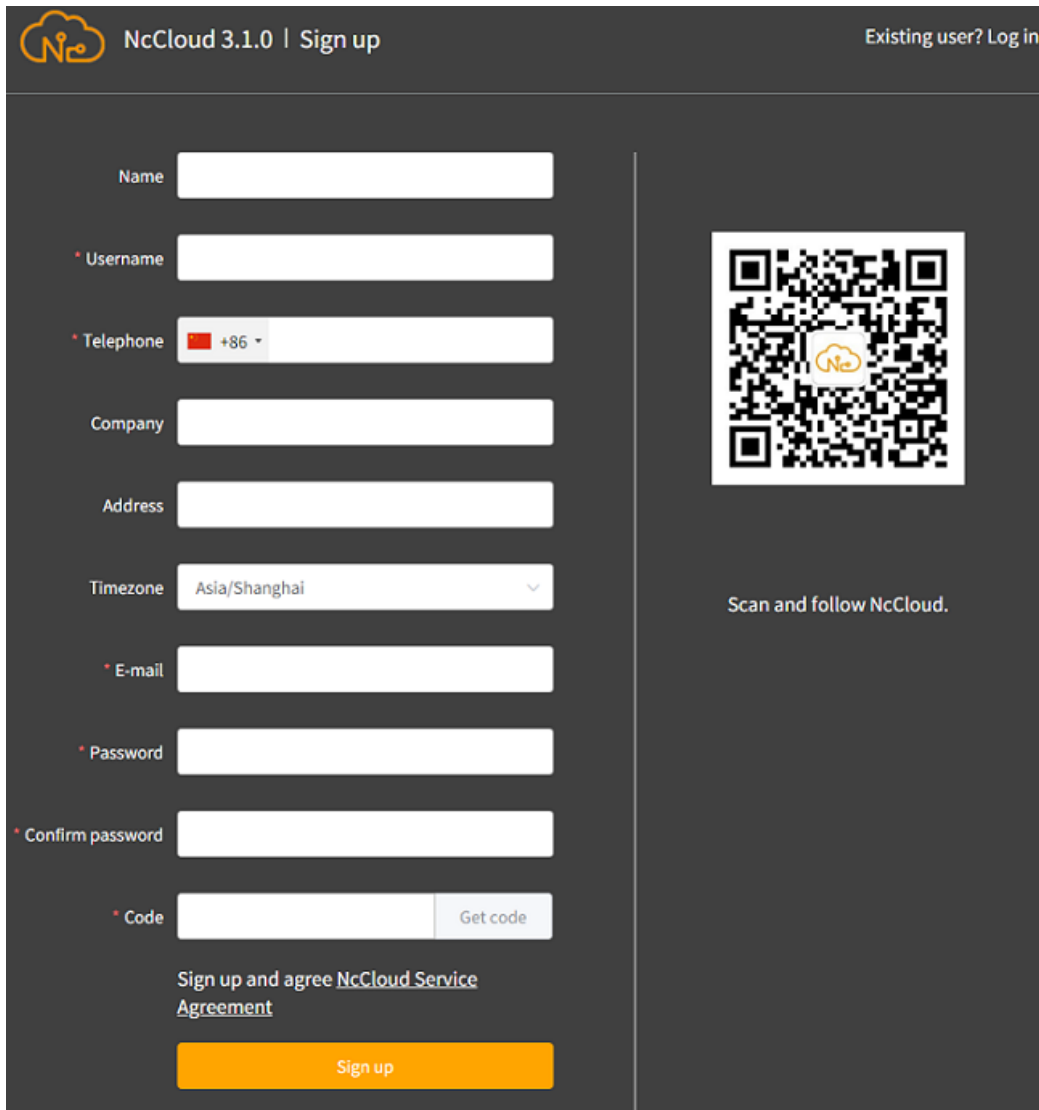
This operation is used to register a **NcCloud** account for **NcCloud** services at your first use.

Note: The account registered on the web can be used on WeChat, and the same is true for the account registered on WeChat.

To register **NcCloud**, do the following:

1. To enter the login interface of **NcCloud**, enter [the official website of NcCloud](#) and click **Login/Register**.
2. To switch to English interface, click **English** in the upper right corner.

- To enter the following interface, click **Sign up**:



NcCloud 3.1.0 | Sign up Existing user? Log in.

Name

* Username

* Telephone 🇨🇳 +86 ▾

Company

Address

Timezone Asia/Shanghai ▾


* E-mail

* Password

* Confirm password

* Code

Sign up and agree [NcCloud Service Agreement](#)



Scan and follow NcCloud.

- Do related settings.
- Optional:** Scan the QR code on the right with a mobile phone and follow WeChat official account **NcCloud**.
- Click **Sign up**.

3.2 Add Machine Tools

This operation is used to add machine tools to **NcCloud** for monitoring their running status and production conditions in real time.

Before adding machine tools, do the following:

- Install **NcStudio** software.
If you are not sure whether it has been installed or not, contact Weihong corporation.
- [Install NcGateway.](#)
- [Register an NcCloud account.](#)
- [Connect the CNC system to the Internet.](#)
- [Get the device ID and verification code through NcGateway.](#)

To add machine tools, do the following:

1. Log in [the official website of Nccloud](#), click **System Setup** in the upper right of the menu bar and **Binding Device** in the navigation bar.

2. Click . **Type new-added device info** dialog box pops up:

Type new-added device info: ×

Open the NcGateway Data Gateway page on the device, go to Remote Monitoring, and click Binding NcCloud to get the device number and verification code.

* Device ID

Example: EEEE-QQQQ-WWWW-AAAA

* Code

* Alias

3. Input the device ID, verification code and alias, and click **OK**.

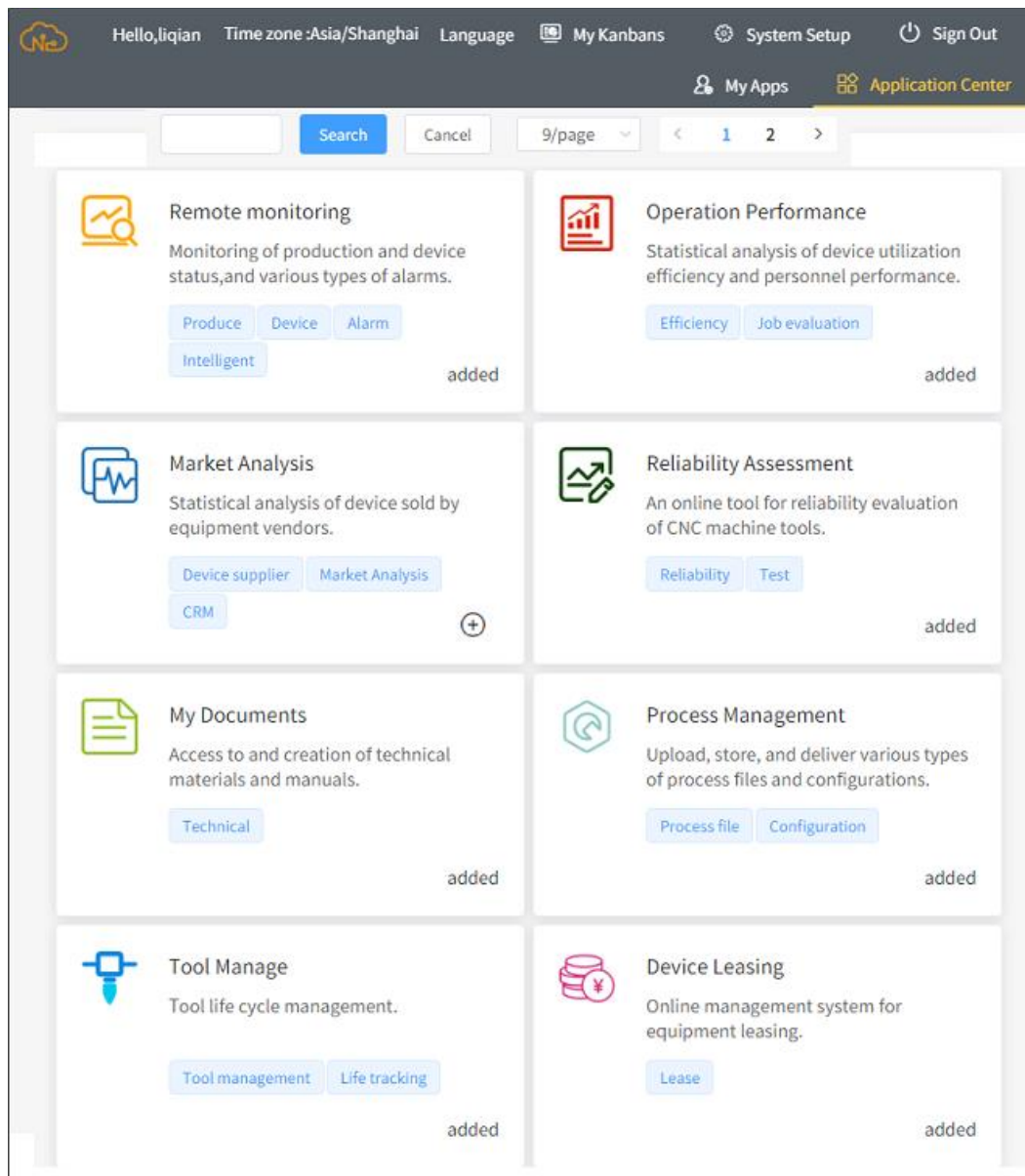
3.3 Add Applications

For the first time to use **NcCloud**, you can add your favorite applications to **My Apps**.

Remote Monitoring, Online Repair, My Documents, and Process Management are default services in **My Apps**.

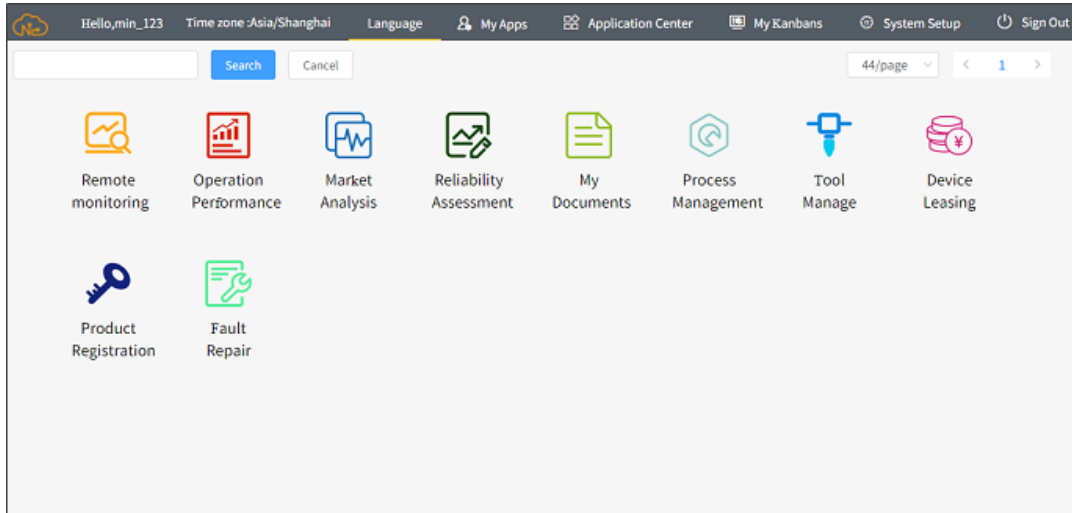
To add applications, do the following:

1. To enter **Application Center** interface, log in [the official website of Nccloud](#) and click **Application Center**:



- To add target applications to **My Apps**, click  in the lower right corner of target applications.

After adding the target applications, **My Apps** interface shows as follows:



If you want to remove applications from **My Apps**, move your mouse over the icon of the target application and click X symbol in the upper right corner.

4 Use NcCloud

The web version of **NcCloud**, a cloud CCR (Centralized Control Room), is used to monitor production. Compared with the WeChat version, the web version provides more information, which can be displayed in one or several screens or projects. So you can use the web version in the office, centralized control room, etc. with desktops, laptops, tablets, projects, etc.

The web version of **NcCloud** is continuously updated at present, the following content is for your reference only.

Before logging in **NcCloud** on the web, ensure the following:

- The target **NcStudio** has been networked. See [Connect the Internet for NcStudio](#) for details.
- You has been registered a **NcCloud** account. See [Registered NcCloud](#) for details.
- The target machine tools has been added to your **NcCloud** account. See [Add Machine Tools](#) for details.
- All target applications have been added to **My Apps**. See [Add Applications](#) for details.

To log in **NcCloud** on the web, do the following:

1. To enter the official website of **NcCloud**, open a browser, input the URL <https://nccloud.weihong.com.cn/> and click **Enter**.
2. To switch to English interface, click **English** in the upper right corner.
3. To enter the login page of **NcCloud**, click **Register/Login**.
4. Log in with a **NcCloud** account.

4.1 Use Remote Monitoring

This operation is used to remotely monitor the production status and status of machine tools, set smart alarms, so as to check and repair machine tools in time.

To use remote monitoring, do the following:

- [Monitor the production status.](#)
- [Monitor the status of machine tools.](#)
- [Check alarm logs.](#)
- [Check alarm statistics.](#)

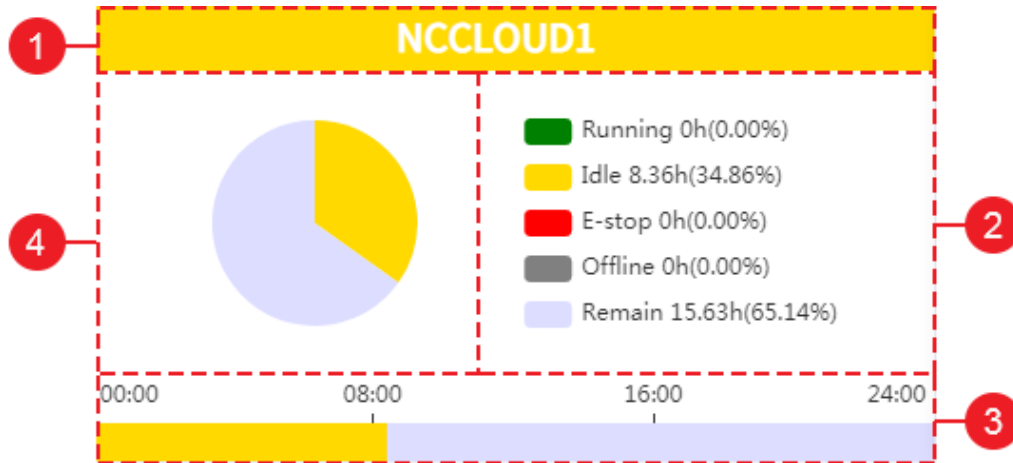
4.1.1 Monitor the Production Status

This operation is used to monitor the production status of all machine tools.

To monitor the production status, do the following:

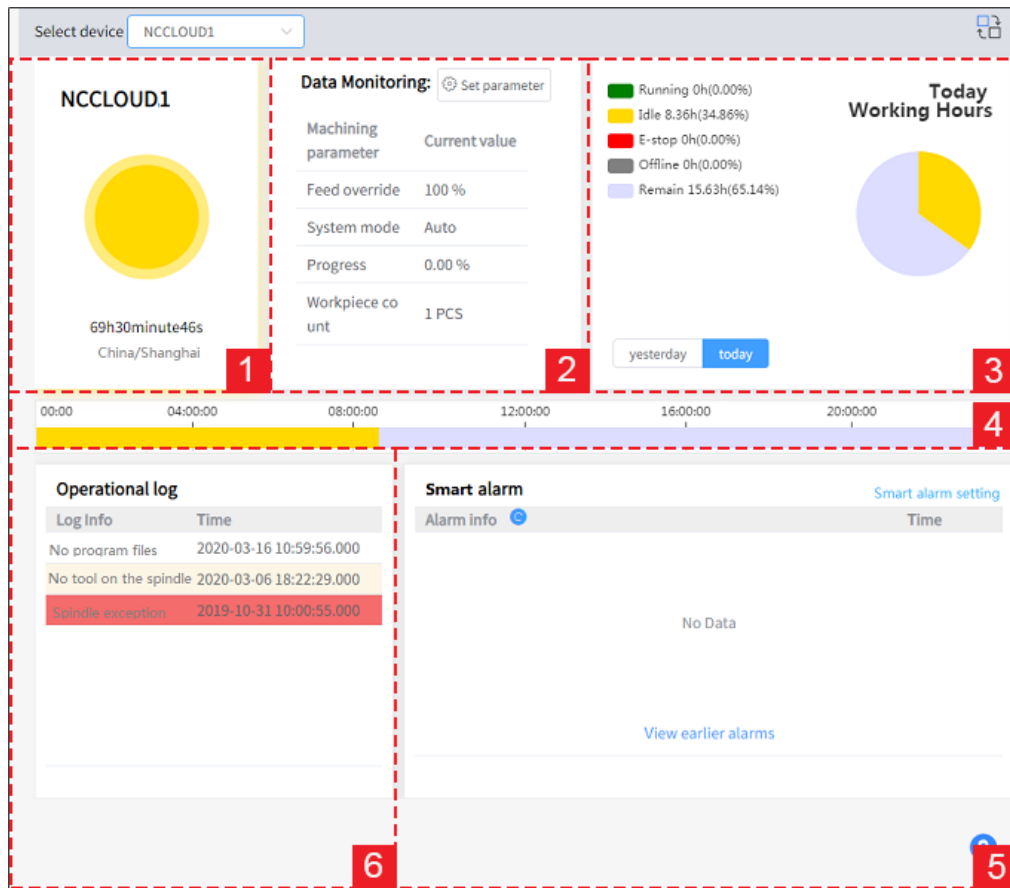
1. To enter **Remote Monitoring** interface, click **Remote Monitoring**.

2. To monitor multiple machine tools in **Production Status** interface, click :




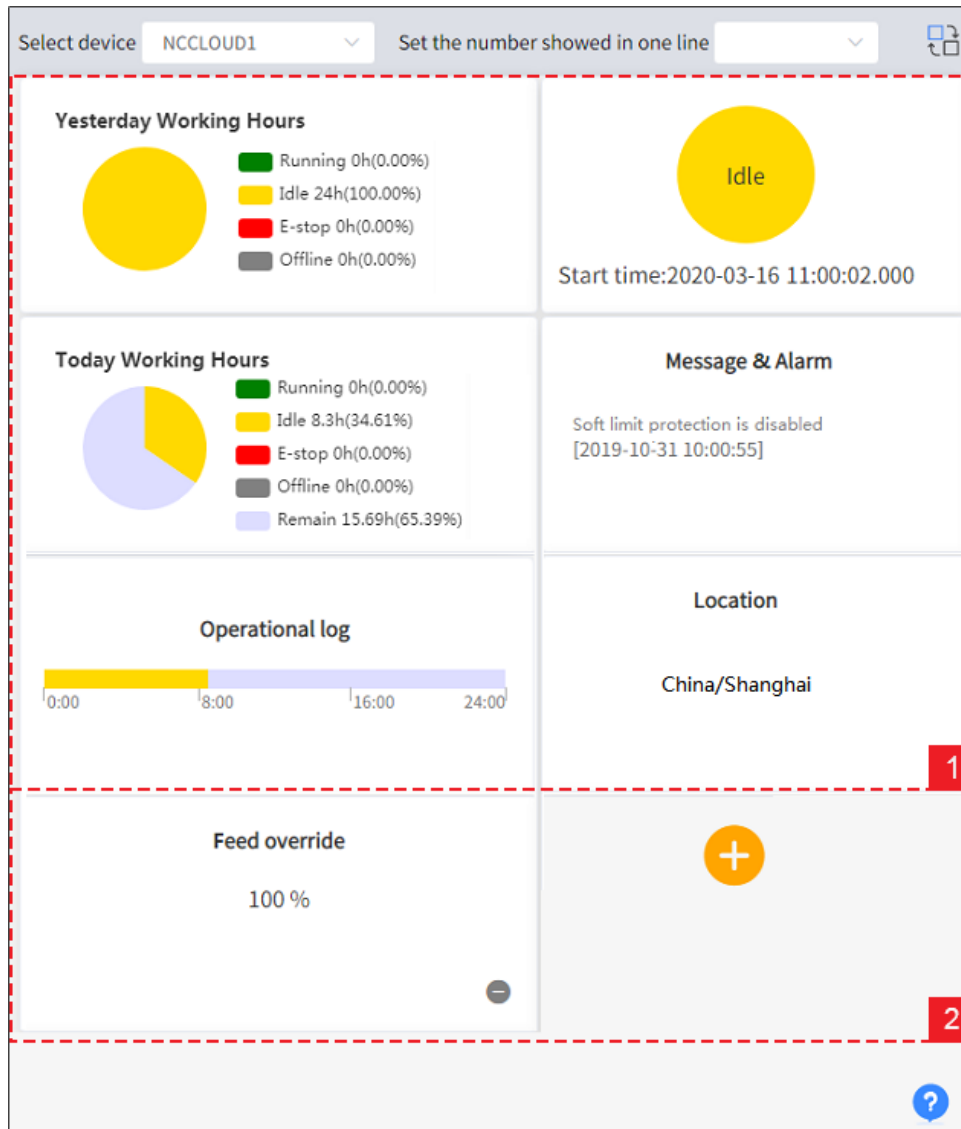
1. The current production status:
 - Green: Running status.
 - Yellow: Idle status.
 - Red: E-stop status.
 - Dark gray: Unavailable status.
2. The distribution of working hour.
3. The time distribution of the production status on the timeline.
4. The proportion of the production status on the pie chart.

- To monitor a single machine tool for detailed data, click the module of the target machine tool and enter the detail interface:



- It is used to show the current production status:
 - Green: Running status.
 - Yellow: Idle status.
 - Red: E-stop status.
 - Dark gray: Unavailable status.
- It is used to show machining parameters and their values collected from **NcStudio**, and customizing parameters that show on the interface by clicking **Set parameter** and selecting the target parameters.
- It is used to show the distribution of working hours.
- It is used to show time distribution of the production status on the timeline.
- It is used to show smart alarms. About setting smart alarms, see [Check Device Alarms/Smart Alarms](#).
- It is used to show the operational logs.

4. **Optional:** To switch the means of display, click  in the upper right corner:



1. Area for running parameters: The distribution of yesterday's working hours, current running status, distribution of today's working hours, alarms, operational logs and login location.
2. Area for customized parameters: Including feedrate, name of program file, system mode, machining progress, workpiece counts and so on.

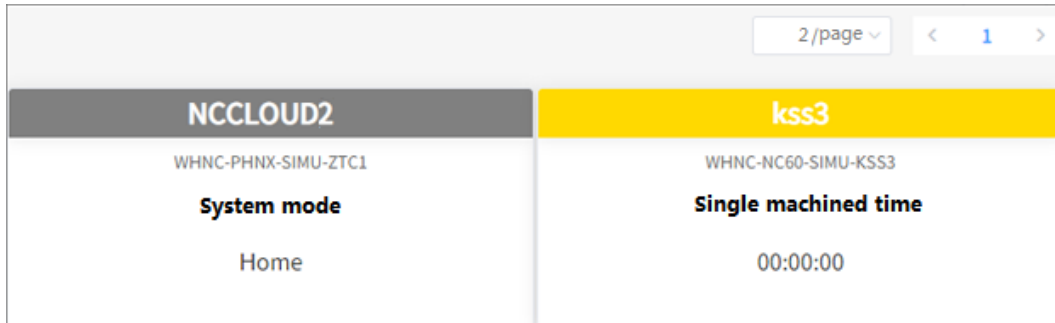
4.1.2 Monitor the Status of Machine Tools



This operation is used to monitor key machining parameters of all machine tools.

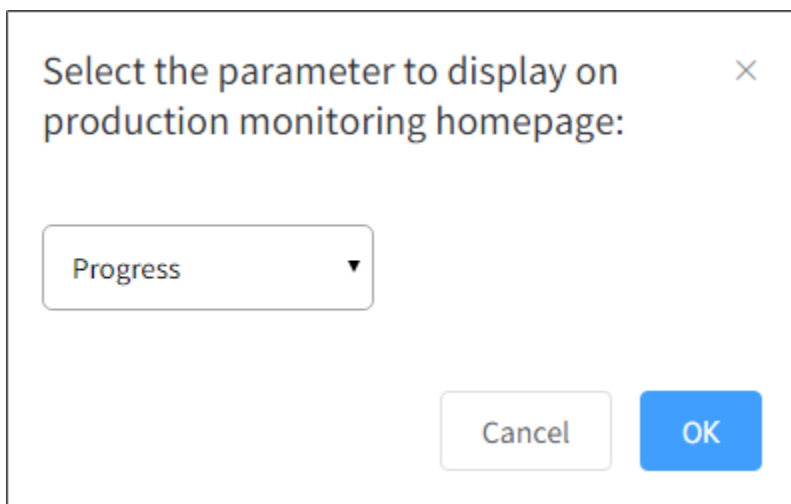
To monitor the status of machine tools, do the following:

1. To enter **Remote Monitoring** interface, click **Remote Monitoring**.

2. To enter **Device Status** interface, click :



3. Check device IDs and key running parameters.
4. **Optional:** To customize the target machining parameter, do one of the following:
 - Click  in the lower right of the target module in **Device Status** interface and select the target parameter in **Select parameter displayed on production monitoring homepage** dialog box.
 - Click **System Setup** → , click the parameter name in the target module and select the target parameter in **Select parameter displayed on production monitoring homepage** dialog box.



4.1.3 Check Alarm Logs

This operation is used to check alarms from both **NcStudio** and **NcCloud** and set smart alarms in **NcCloud**.

It includes the following:

- Check device alarms/smart alarms.
- Set smart alarms.

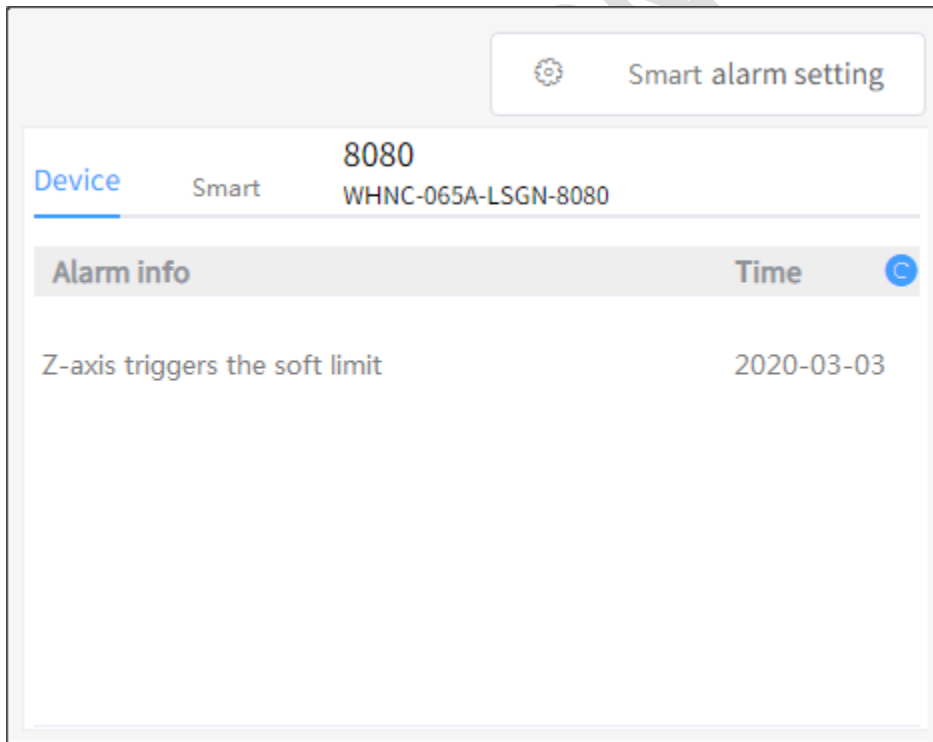
4.1.3.1 Check Device Alarms/Smart Alarms

This operation is used to check alarms from both **NcStudio** and **NcCloud** in **NcCloud**.

To check device alarms or smart alarms, do the following:

1. To enter **Remote Monitoring** interface, click **Remote Monitoring**.

2. To enter **Alarm Log** interface, click :




3. To check device alarms or smart alarms, click **Device** or **Smart**.

4.1.3.2 Set Smart Alarms

This operation is used to set smart alarms by setting the limit alarm, condition alarm and time of wearing part.


To set smart alarms, do the following:

1. To enter **Remote Monitoring** interface, click **Remote Monitoring**.
2. To enter **Alarm Log** interface, click .
3. To enter the following interface, click **Smart alarm setting** in the upper right corner:

Select device NCCLOUD1

Limit alarm
Condition alarm
Time of wearing part

Status variable	Alarm lower limit	Alarm upper limit	Time interval(s)	Operation
Feedrate	<input type="text" value=""/> mm/min	<input type="text" value=""/> mm/min	<input type="text" value="1800"/>	clear
Spindle override	<input type="text" value=""/> %	<input type="text" value=""/> %	<input type="text" value="1800"/>	clear
Spindle speed	<input type="text" value=""/> rpm	<input type="text" value=""/> rpm	<input type="text" value="1800"/>	clear
Feed override	<input type="text" value="90"/> %	<input type="text" value=""/> %	<input type="text" value="10"/>	clear
Progress	<input type="text" value=""/> %	<input type="text" value=""/> %	<input type="text" value="1800"/>	clear

Save 

4. Click **Limit alarm / Condition alarm / Time of wearing part** and do related settings:
 - **Limit alarm:** Set the upper limit and lower limit to report alarms, and alarm interval between limit alarms.
 - **Condition alarm:** Set the alarm conditions and alarm interval between condition alarms.
 - **Time of wearing part:** Set the alarm time of wearing parts in advance, service life of wearing parts, and alarm interval between alarms of wearing parts.

With **Synchronize** checked, alarm settings about wearing parts in **NcCloud** is updated to be the same with that in CNC device.

When an alarm is triggered, a dialog box pops up. Historical smart alarms show in **Smart alarm** interface.

Note: If an alarm is triggered again within the set alarm interval, no dialog box will pop up.


4.1.4 Check Alarm Statistics

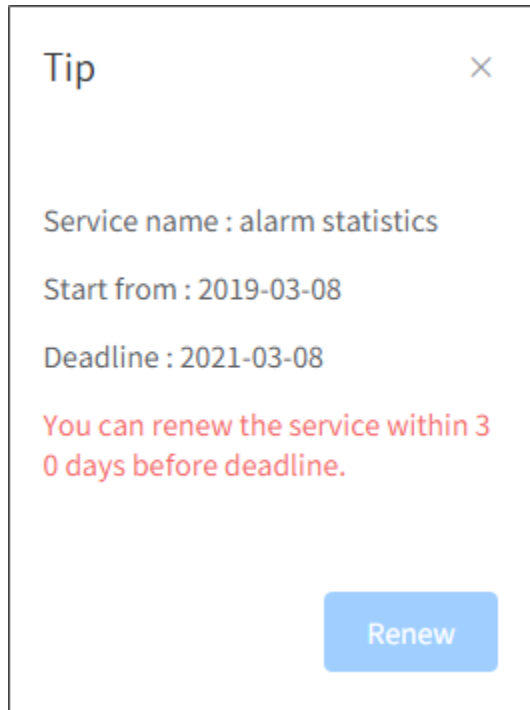
This operation is used to check alarm statistics of a single machine tool in the set work shift, including top ten errors and warnings with the highest frequency.

To check alarm statistics, do the following:


1. To enter **Remote Monitoring** interface, click **Remote Monitoring**.

2. To enter **Alarm Statistic** interface, click .


3. **Optional:** If it is your first time to use service **Alarm Statistic** or you need to renew the service, click  in the upper right corner, and click **Test** or **Renew** in **Tip** dialog box:



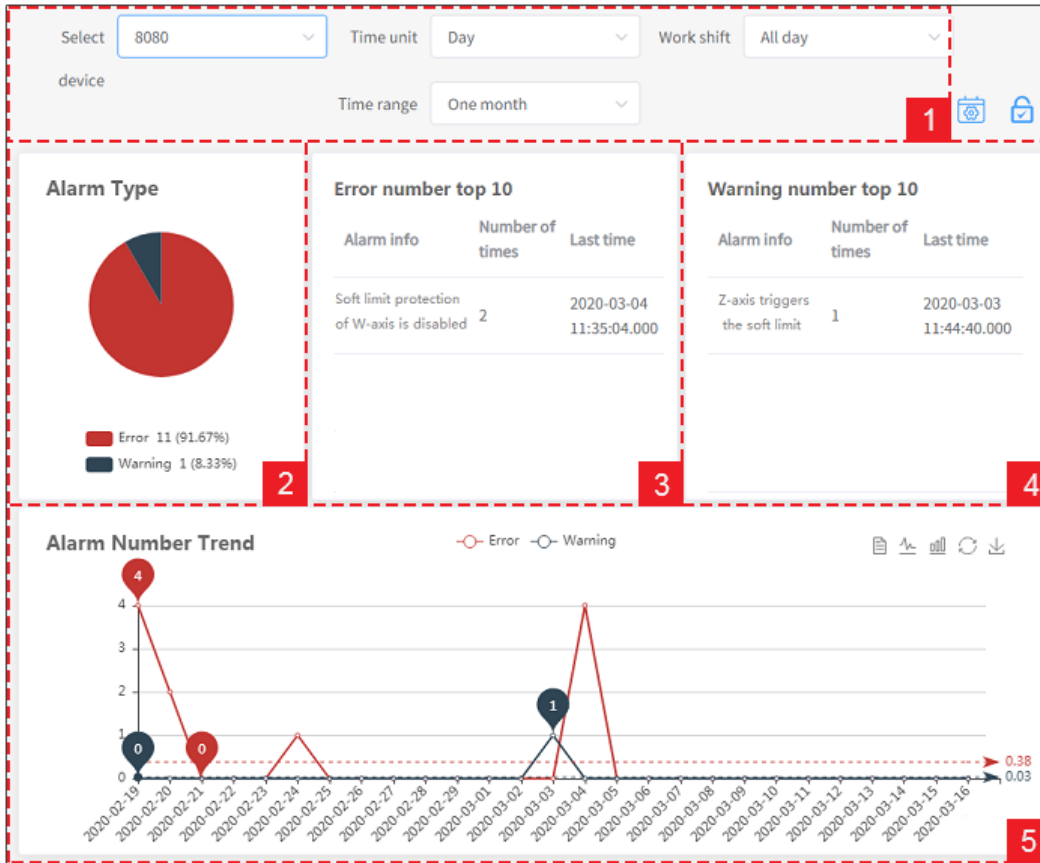
For the first time, the service time is 60 days. And you can renew the service within 30 days before the deadline. If you do not renew the service beyond 30 days after the deadline, the historical statistics are missing.

4. **Optional:** To customize the work shift, do one of the following:
- Click  in the upper right corner and do related settings in the upper area of **Alarm Statistic** interface.
 - Click **System Setup** → **Work Shift Setting** and do related settings.

See [Set the Work Shift](#) for details.

5. To check the corresponding errors and warnings, select the target machine tool, time unit, time range and work shift in the upper area of **Alarm Statistic** interface.
6. **Optional:** To check help information, click  in the lower right corner.

Taking the following machine tool, time unit, work shift and time range as an example:



1. It is used to select the target machine tool, time unit, work shift and time range.
2. It is used to respectively show the number of errors and warnings in the set work shift within the set time range and their ratios to the total number of errors and warnings in the set work shift within the set time range.
3. It is used to show top ten errors with the highest frequency, their times and last time to report an alarm.
4. It is used to show top ten warnings with the highest frequency, their times and last time to report an alarm.
5. It is used to show the trend of errors and warnings in the set work shift within the set time range.

4.2 Use Operation Performance

Based on the distribution of working hours, **NcCloud** computes utilization rate and OEE of the target machine tool to show the production efficiency of the machine tool, so as to help you improve production efficiency.

The definition of utilization rate and OEE is as follows:

- Utilization rate: The ratio of the actual utilized time to the total counting hours (Default: 24h/day).

$$\text{Utilization rate} = (\text{Running hours} + \text{Idle hours} + \text{E-stop hours}) / \text{total counting hours} * 100\%$$

- OEE: The ratio of running hours to the actual utilized time.

$$\text{OEE} = \text{Running hours} / (\text{Running hours} + \text{Idle hours} + \text{E-stop hours}) * 100\%$$

Before using operation performance, add service **Operation Performance** into **My Apps**.

To use operation performance, do the following:

- [Use asset performance.](#)
- [Use working performance.](#)

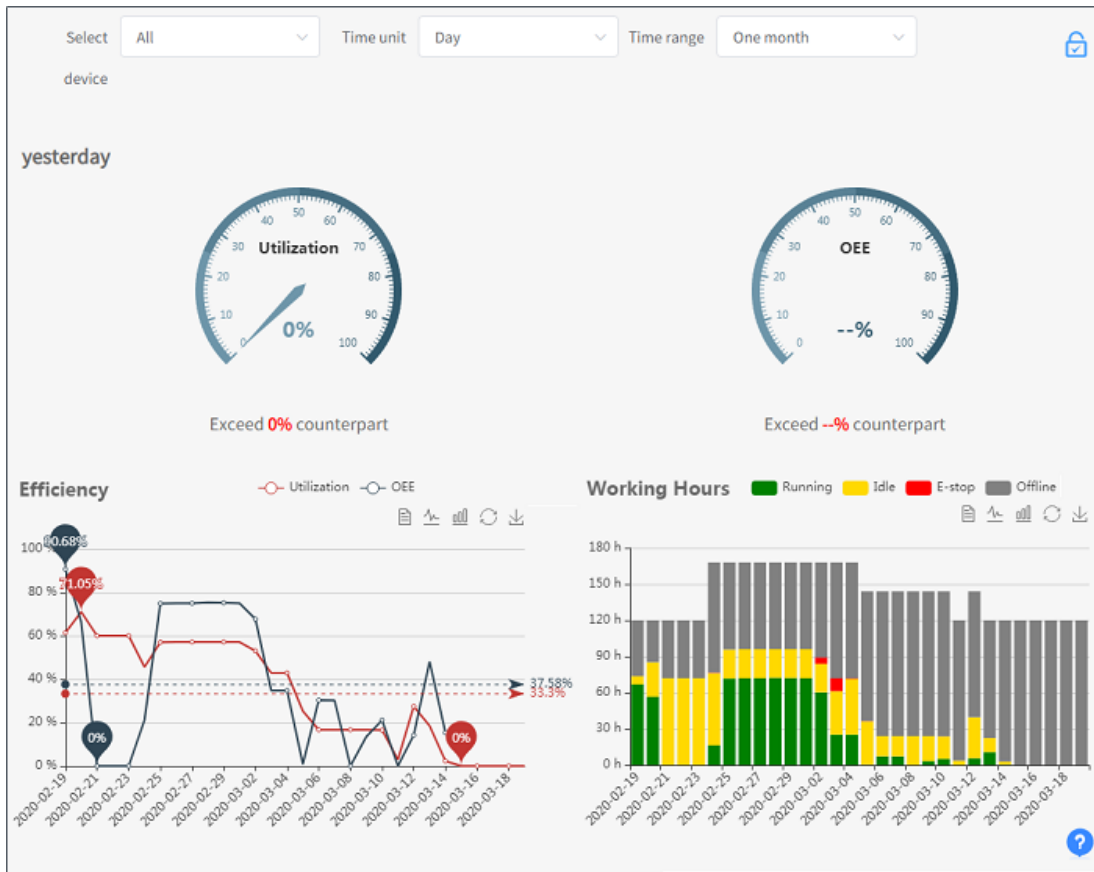
4.2.1 Use Asset Performance


This operation is used to do statistics of every day's distribution of working hours and production efficiency, and compare utilization rate and OEE with counterparts.

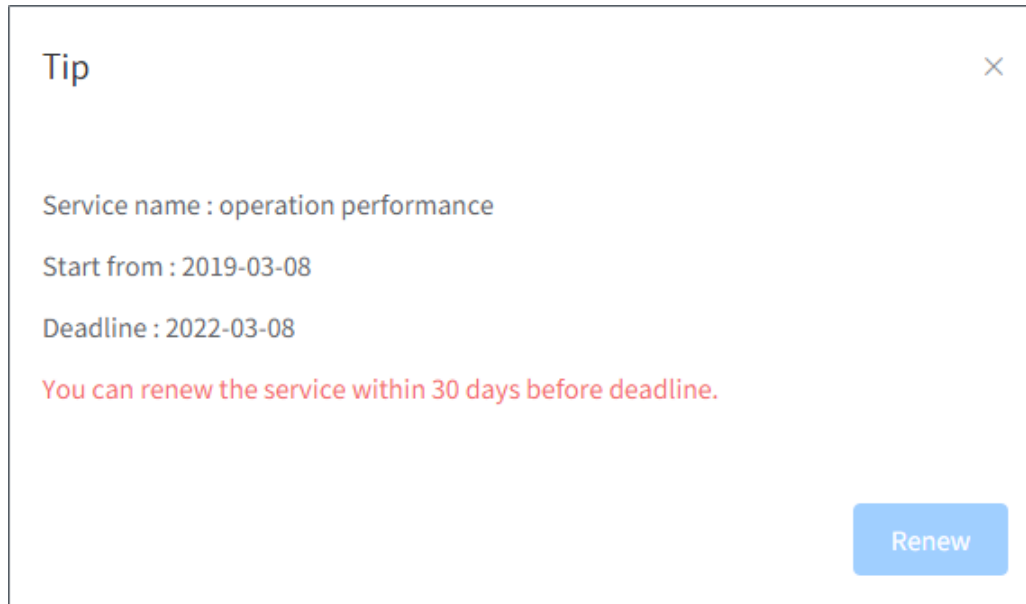
To use asset performance, do the following:

1. To enter **Operation Performance** interface, click **Operation Performance**.

2. To enter **Asset Performance** interface, click click :



3. **Optional:** If it is your first time to use service **Operation Performance** or if you need to renew the service, click  in the upper right corner, and click **Test** or **Renew** in **Tip** dialog box:



For the first time, the service time is 60 days. And you can renew the service within 30 days before the deadline. If you do not renew the service beyond 30 days after the deadline, the historical statistics are missing.

4. To check the corresponding charts of production efficiency and working hours, select the target machine tool, time unit and time range in the upper of **Asset Performance** interface.

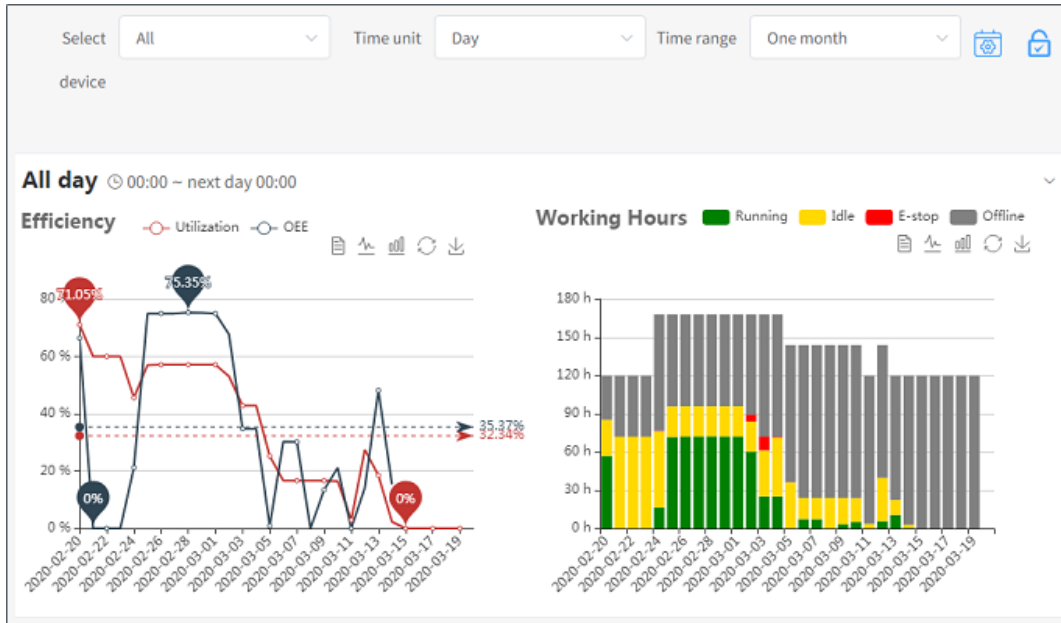
4.2.2 Use Working Performance


This operation is used to check production efficiency in the set work shift.

To use working performance, do the following:

1. To enter **Operation Performance** interface, click **Operation Performance**.

2. To enter **Working Performance** interface, click :



3. **Optional:** If it is your first time to use service **Operational Performance** or you need to renew the service, click  in the upper right corner, and click **Test** or **Renew** in **Tip** dialog box:

Tip ✕

Service name : operation performance


Start from : 2019-03-08

Deadline : 2022-03-08

You can renew the service within 30 days before deadline.

Renew

4. **Optional:** To customize the work shift, do one of the following:

- Click  in the upper right corner and do related settings in the upper area of **Alarm Statistic** interface.
- Click **System Setup** → **Work Shift Setting** and do related settings.

See [Set the Work Shift](#) for details.

5. To check the corresponding efficiency chart and chart of working hours, select the target machine tool, time unit and time range in the upper area of **Working Performance** interface.

4.3 Use Market Analysis

This operation is used to check the geographical distribution, utilization rate and OEE of machine tools at home and aboard online for a good command of the market, so as to scientifically develop and improve products. Compared with the traditional means, doing market analysis through **NcCloud** is more effective and low-cost.

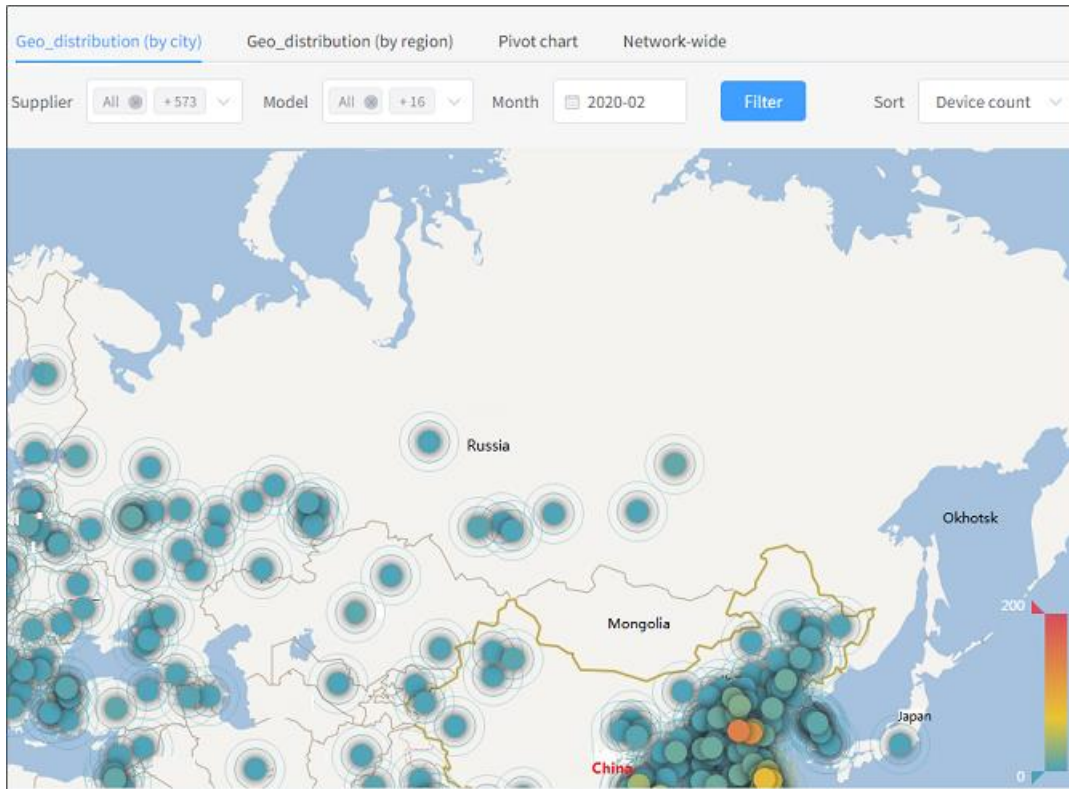
Before using market analysis, do the following:

- Add the service **Market Analysis** into **My Apps**.
- Apply for the service **Market Analysis** from **NcCloud**.

When it is unavailable, the prompt *You have not yet opened this service, so current data is virtual. If you need to open it, please contact with local sales or dial 400-882-9188* in **Market Analysis** interface.

To use market analysis, do the following:

1. To enter **Market Analysis** interface, click **Market Analysis**.
2. To check the distribution of machine tools according to cities, click **Geo-distribution(by city)**, select the target suppliers, model of machine tools, month, and sorted means among **Device count**, **Utilization** and **OEE**:



- To check the distribution of machine tools according to provinces with a chart, click **Geo-distribution(by region)**, select the target suppliers, model of machine tools, month, and sorted means among **Device count, Utilization** and **OEE**:

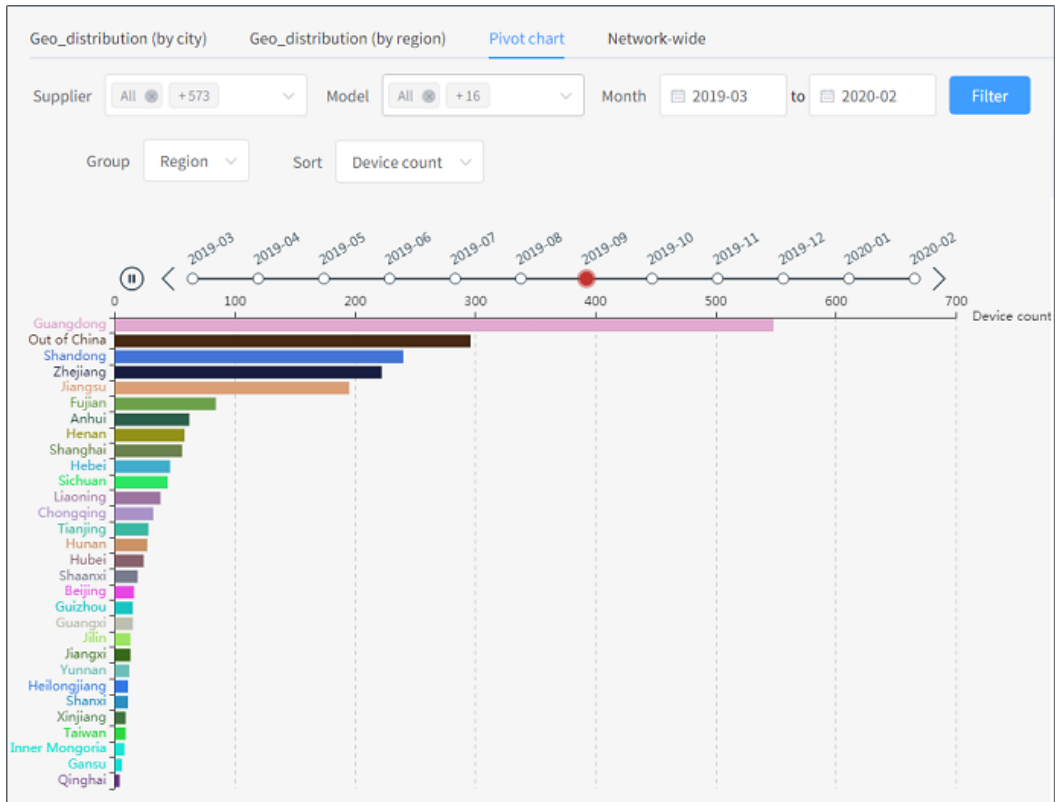


You can save the chart as a PNG file by clicking download icon.

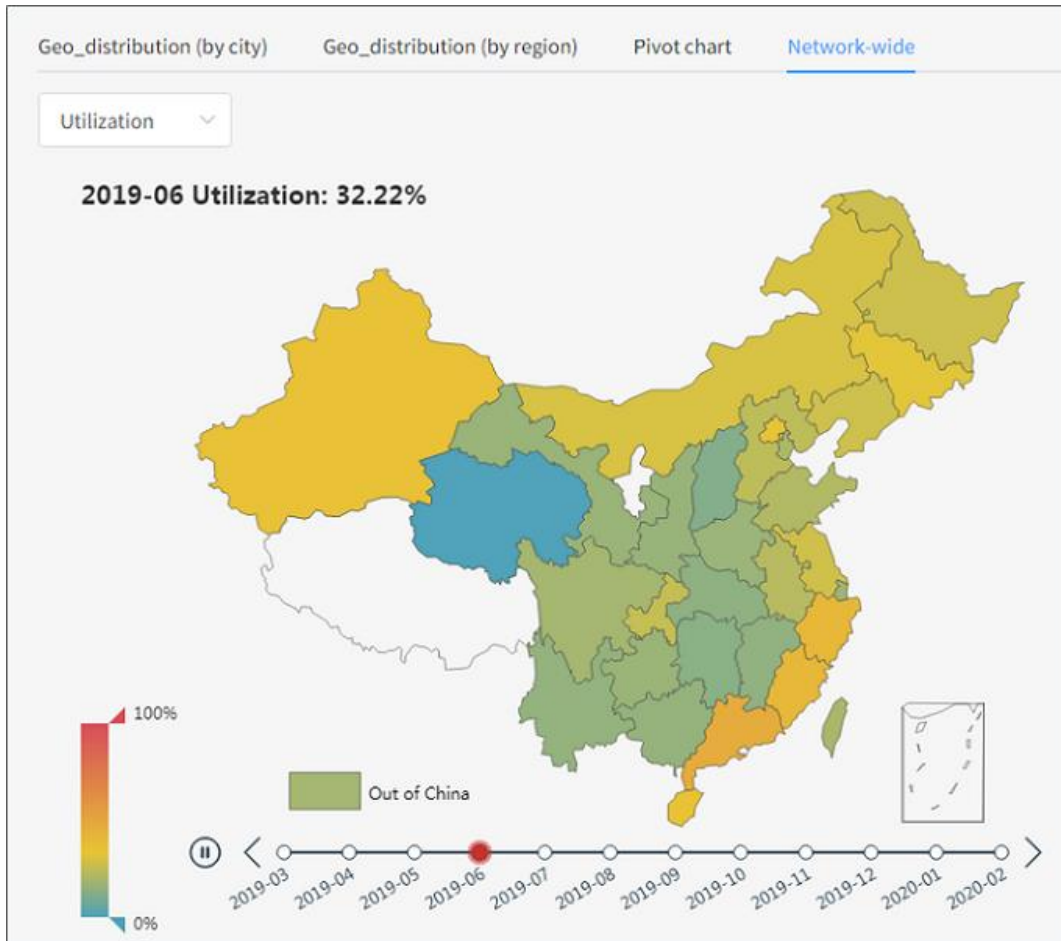
- Optional:** To check the distribution of machine tools according to provinces with a table, click **Chart/ Table** in the upper right corner of **Geo-distribution(by region)** interface.

To deal with data in the table, you can save the table as an EXCEL file by clicking **Download as excel**.

- To check the precise data and comparison, click **Pivot chart**, select the target suppliers, model of machine tools, month, sorted means among **Province**, **Model** and **Supplier** and data type among **Device count**, **Utilization** and **OEE**:



- To check the utilization rate or OEE of all networked machine tools, click **Network-wide** and select **Utilization** or **OEE** in the upper left corner:



Note: **NcCloud** is used to gather and manage the data from networked machine tools of all suppliers. To comply with the related laws and regulations and protect your privacy, , it will never disclose information about individuals, products and other counterparts. If you want to know the product details of a specified product owner, you need to be granted by the product owner and add this machine tools to your **NcCloud** according to the information supplied by its owner.

4.4 Use Reliability Assessment

NcCloud provides a platform for reliability assessment where multiple staffs can add test periods, fault records and preventive maintenance about tested machine tools at the same time, then **NcCloud** starts calculation for reliability assessment.

Before using reliability assessment, add service **Reliability Assessment** into **My Apps**.

To use reliability assessment, do the following:

- Create a test.
- Add a test period.
- Add a fault record.
- Add a piece of preventive maintenance.
- Set basic information.
- Check test logs.
- Generate a test report.

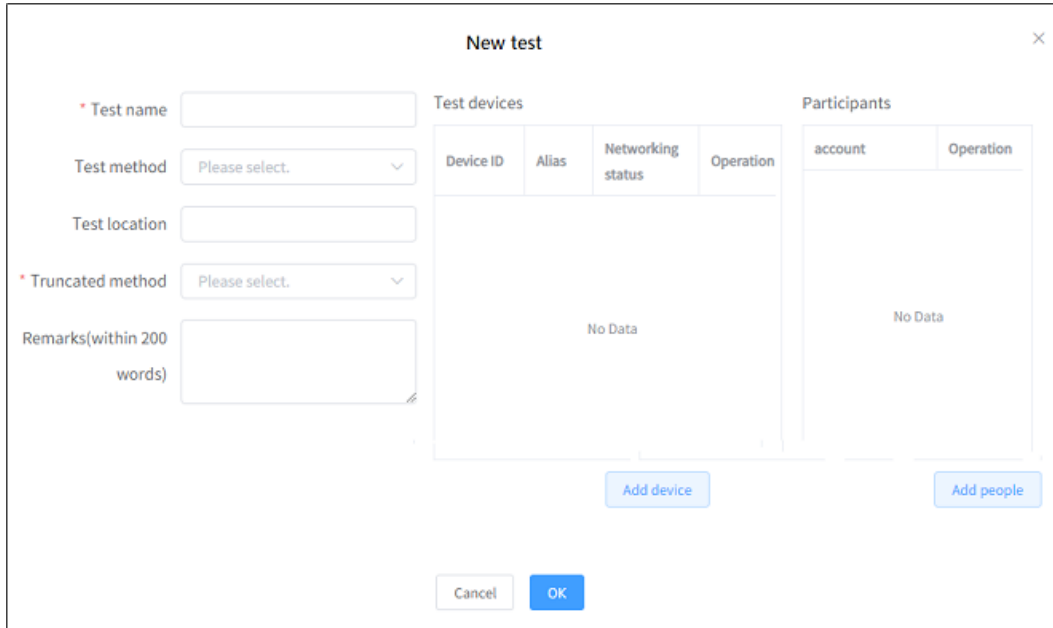
4.4.1 Create a Test

To create a test, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**:

Test No	Test name	Principal	Create time	Cumulative test time(T)	Number of associated failures(r)	Truncated condition	Execution status	Operation
31	C	liqian	2019-12-26 09:42:10	0h	0	/	Cancelled	Details Restore
21	7	liqian	2019-08-06 13:40:13	0h	3	r >= 3	Processing	Details Complete Cancel
20	T	liqian	2019-08-06 12:01:40	169.25h	3	T >= 32h	Processing	Details Complete Cancel
18	qw	zhaomin	2019-08-05 09:43:44	0h	0	r >= 23	Processing	Details Withdraw
17	3	zhaomin	2019-08-01 16:39:42	0h	1	T >= 56h	Completed	Details Withdraw

2. Click **New test** in the upper right corner, do related settings and click **OK**:



The screenshot shows a 'New test' dialog box with the following elements:

- Test name:** A text input field.
- Test method:** A dropdown menu with 'Please select.' as the current selection.
- Test location:** A text input field.
- Truncated method:** A dropdown menu with 'Please select.' as the current selection.
- Remarks (within 200 words):** A text area.
- Test devices table:**

Device ID	Alias	Networking status	Operation
No Data			
- Participants table:**

account	Operation
No Data	
- Buttons:** 'Add device', 'Add people', 'Cancel', and 'OK'.

Truncation method:

- **Timing truncation:** When the total test time is beyond the truncated period, you cannot add a test period, or the prompt *Total test time has reached truncated period* pops up.
- **Fixed-number truncation:** You need to set the fault number. When the number of related faults is up to the set number, you cannot add a fault record, or the prompt *Fault number has reached the set number* pops up.
- **Sequential truncation:** No truncated conditions. You can judge the truncated time during a test.

4.4.2 Add a Test Period

This operation is used to add a test period and check the test period and test status by searching the keyword.

To add a test period, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.
2. To enter **Test Period** interface of the corresponding test, click **Details** in **Operation** column of the corresponding test and click **Test Period**:

Test Period											
Fault Record		Preventive Maintenance		Basic Information		Test Log		Test Report			
All		All				Search		Cancel		New test period	
No.	Create time	Device alias	Start time	End time	Remarks	Status	Operation				
1	2020-03-20 08:43:56	CSGN0002	2020-03-02 00:00:00	2020-03-04 00:00:00		Stopped	Details Submit Delete				
Total : 1											
										< 1 >	

3. To add a test period, click **New test period** and do related settings:

New test period ✕

Test No

Test name

* Device ID

* Start time

* End time

Remarks(within 20
0 words)

After adding a test period, check the test status in the target test period and execute available operations:

Status	Available Operations
Processing	Change / Delete
Stopped	Change / Submit / Delete
Pending approval	View / Delete
Approved	View / Delete
Cancelled	Change / Resubmit/ Delete

4.4.3 Add a Fault Record

A fault record is an evaluating indicator of reliability. This operation is used to add a fault record for reliability evaluation and check fault records and fault status by searching the keyword.

To add a fault record, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.
2. To enter **Fault Record** interface of the corresponding test, click **Details** in **Operation** column of the corresponding test and click **Fault Record**:

Test Period		Fault Record		Preventive Maintenance		Basic Information		Test Log		Test Report					
All		All		All				Search		Cancel		Add fault		Device Alarm	
No.	Create time	Device alias	Found failure time	Repair time	Fault phenomenon	Fault location	Fault reason	Action taken on the fault	Fault classification	Status	Operation				
1	2019-08-06 13:25:58	CSGN0 004	2019-08-06 00:00:00						Non-associated fault	Unsubmitted	Details Submit Delete				
Total: 1												< 1 >			

3. To add a fault record, click **Add fault** in the upper right corner and do related settings:

Add fault ×

Test No

Test name

* Device ID ▼

* Found failure time

Repair time

Fault location

Fault phenomenon
(within 60 words)

Fault description (within 200 words)

Fault reason ▼

Fault classification Associated fault Non-associated fault

Action taken on the fault ▼

4. **Optional:** To add a device alarm, click **Device alarm** in the upper right corner, select the target device, check the corresponding alarms, and click **Add as fault**:

Device Alarm ×

* Device ID CSGN0004 (WHNC-0000-CSGN-0004) ▼

2020-03-18 13:30:36.000 #F# The axis has not returned to the machine origin. Cannot excute this operation.

Cancel
Add as fault

After adding a fault record, check the fault status and execute available operations:

Status	Available Operations
Unsubmitted	Change / Delete / Submit
Stopped	Change / Submit / Delete
Pending approval	View / Delete
Approved	View / Delete
Withdrew	Change / Resubmit/ Delete

4.4.4 Add a Piece of Preventive Maintenance

This operation is used to add a piece of preventive maintenance about wearing parts, and check information of preventive maintenance and the maintenance status by searching the keyword, so as to timely replace wearing parts.

To add a piece of preventive maintenance, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.
2. To enter **Preventive Maintenance** interface of the corresponding test, click **Details in Operation** column of the corresponding test and click **Preventive Maintenance**.

WEIHONG

3. To add a piece of preventive maintenance, click **Add preventive maintenance** in the upper right corner and do related settings:

Add preventive maintenance ✕

Test No

Test name

* Device ID

* Start time

End time

Maintenance content (within 60 words)

Remarks (within 200 words)

After adding a piece of preventive maintenance, check the maintenance status and execute available operations:

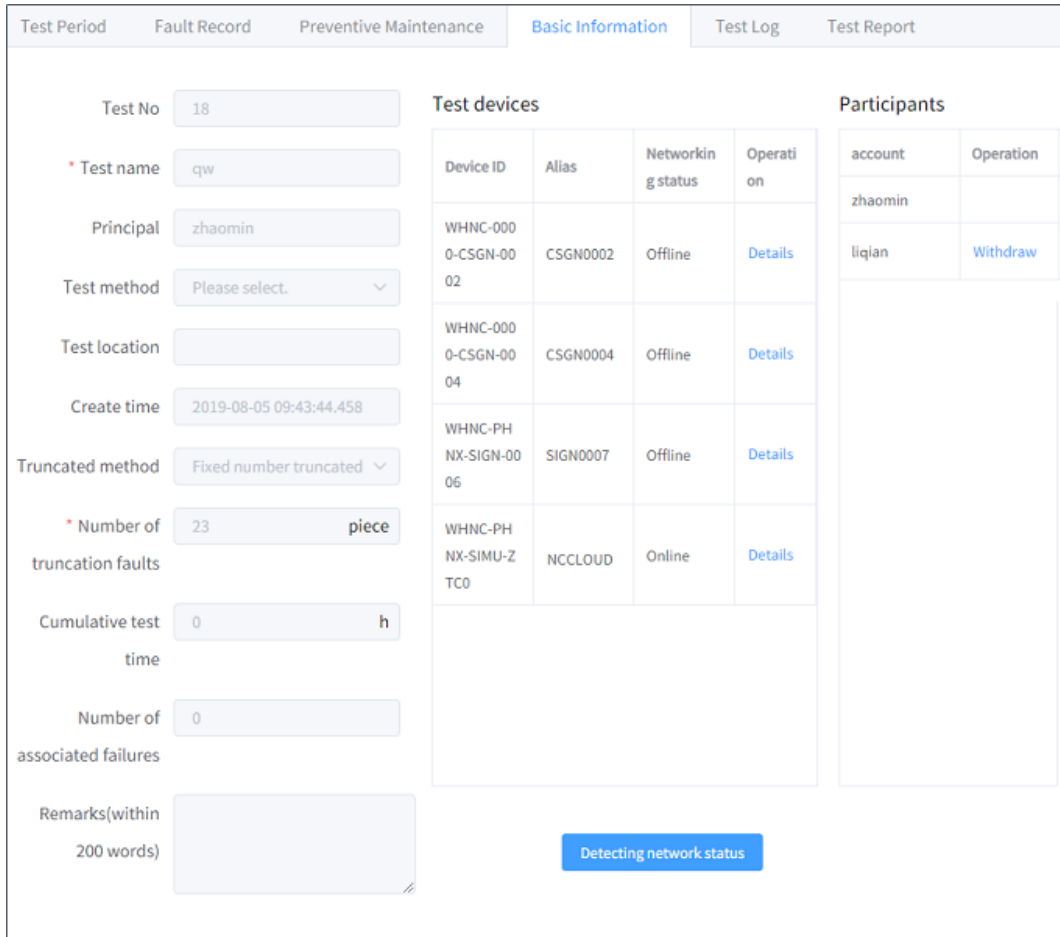
Status	Available Operations
Unsubmitted	Change / Delete / Submit
Stopped	Change / Submit / Delete
Pending approval	View / Delete
Approved	View / Delete
Withdrew	Change / Resubmit/ Delete

4.4.5 Set Basic Information

This operation is used to add the target machine tool and participant.

To set basic information, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.
2. To enter **Basic Information** interface of the corresponding test, click **Details** in **Operation** column of the corresponding test and click **Basic Information**:



Device ID	Alias	Network status	Operation
WHNC-000 0-CSGN-00 02	CSGN0002	Offline	Details
WHNC-000 0-CSGN-00 04	CSGN0004	Offline	Details
WHNC-PH NX-SIGN-00 06	SIGN0007	Offline	Details
WHNC-PH NX-SIMU-Z TC0	NCCLLOUD	Online	Details

account	Operation
zhaomin	
liqian	Withdraw

3. To add the target machine tool, click **Add device** in **Test devices** module and do related settings.
4. To add the target participant, click **Add people** in **Participants** module and do related settings.

4.4.6 Check Test Logs

This operation is used to check the target test logs within the set date by searching the keyword for a clear command of operations during the test.

To check test logs, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.
2. To enter **Test Log** interface of the corresponding test, click **Details** in **Operation** column of the corresponding test and click **Test Log**:

Test period	Fault Record	Preventive Maintenance	Basic Information	Test Log	Test Report
<input type="text"/> Start time to <input type="text"/> End time		<input type="text"/>		<input type="button" value="Search"/>	<input type="button" value="Cancel"/>
Create time	Operator	Log details			
2019-08-06 11:58:06	liqian	Approve the test 3.			
2019-08-06 11:58:04	liqian	Submit the test 3.			
2019-08-06 11:57:45	liqian	Submit the test 2.			
Total : 52					
<input type="button" value="1"/> <input type="button" value="2"/> <input type="button" value="3"/> <input type="button" value="4"/> <input type="button" value="5"/> <input type="button" value="6"/>					

3. To check the target test logs, select the start time and end time, input the keyword and click **Search**.

4.4.7 Generate a Test Report

This operation is used to generate a test report and download it to the local.

To generate a report, do the following:

1. To enter **Reliability Assessment** interface, click **Reliability Assessment**.

- To enter **Test Report** interface of the corresponding test, click **Details** in **Operation** column of the corresponding test and click **Test Report**:

Test Report											
Generate report											
No.	Generation time	Start time	End time	Cumulative test time	Cumulative working time	Number of associated failures	Cumulative repair time	MTBF	MTTR	Remarks	Operation
1	2019-08-05 16:07:34			31.98h	31.98h	0	0	95.95h			Download Delete

< 1 >

- To generate a report, click **Generate report** in the upper right corner.
- To download the report as an Excel table, click **Download** in **Operation** column of **Test Report** interface.

4.5 Use My Documents

This operation is used to save cost from keeping and updating physical manuals and achieve to publish, manage and update manuals online. Meanwhile, you can check manuals published by others online. As a result, it is more convenient to share information.

It includes the following:

- [Collect a document.](#)
- [Check the library.](#)
- [Share a document.](#)
- [Publish a document.](#)

4.5.1 Collect a Document

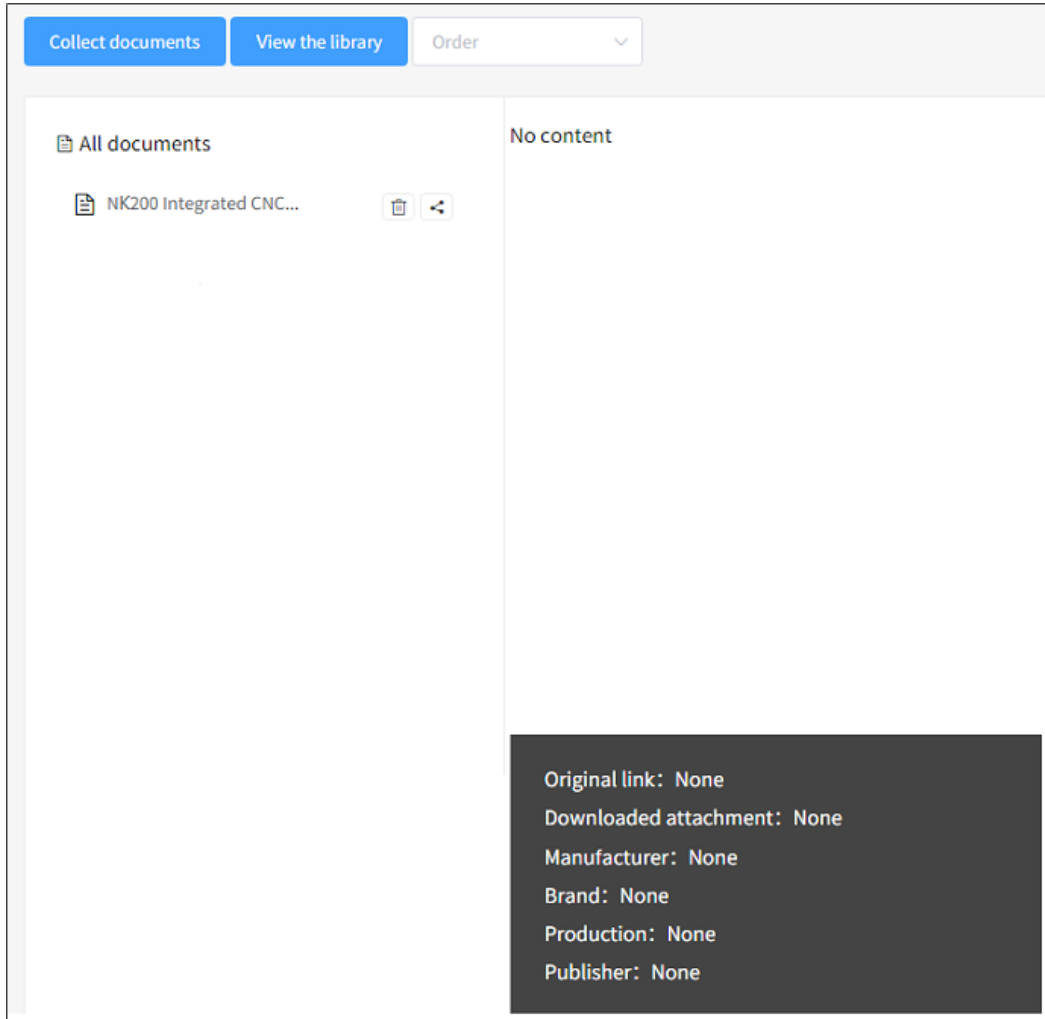
To collect documents, do one of the following:

- [Collect a document through an ID or a sharing code.](#)
- [Collect a document through the library.](#)

4.5.1.1 Collect a Document through an ID or a Sharing Code

To collect a document by an ID or a sharing code, do the following:

1. To enter **My Documents** interface, click **My Documents**:



2. Click **Collect Documents** and input the document ID or sharing code:

Share

Please type document ID or sharing code(confidential documents can only be collected through sharing code).

Sharing code

The system monitored that you are trying to collect the following document:

- Manufacturer :
- Brand :
- Model :

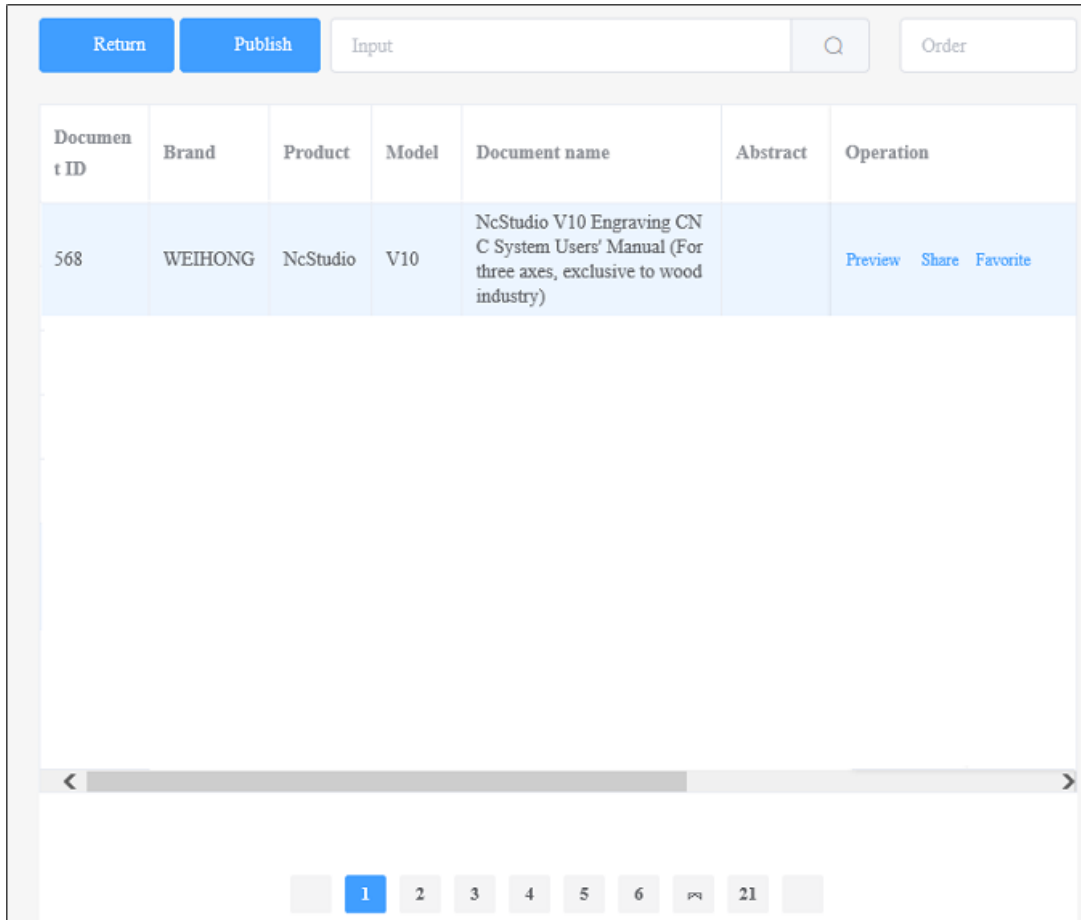
Note: The sharing code is provided by the document publisher.

3. Click **View** and check if the searched result is your target document according to the manufacturer, brand and model.
4. After confirmation, click **OK**.

4.5.1.2 Collect a Document through the Library

To collect a document through the library, do the following:

1. To enter **My Documents** interface, click **My Documents**.
2. To enter **Library** interface, click **View the library**:



Document ID	Brand	Product	Model	Document name	Abstract	Operation
568	WEIHONG	NcStudio	V10	NcStudio V10 Engraving CNC System Users' Manual (For three axes, exclusive to wood industry)		Preview Share Favorite

3. To search the target document, input the keyword in the search box and click



4. To collect the target document, click **Favorite** in **Operation** column.


If the confidentiality of the target document is **Only for users who have sharing code**, to collect it, click **Favorite** in **Operation** column and input the sharing code.

4.5.2 Check the Library

This operation is used to check all published documents. All documents are listed in descending order according to document IDs by default.

To check the library, do the following:

1. To enter **My Documents** interface, click **My Documents**.
2. To enter **Library** interface, click **View the library**.
3. To customize the display order of documents, click **Order** and select the way to sort documents among **Brand, Product, Document name, Document ID** and **Updated**.
4. To search the target document, input one of the following keywords in the

search box and click .


- Document ID
- Brand
- Product
- Model
- Document name
- Abstract
- Label

4.5.3 Share a Document

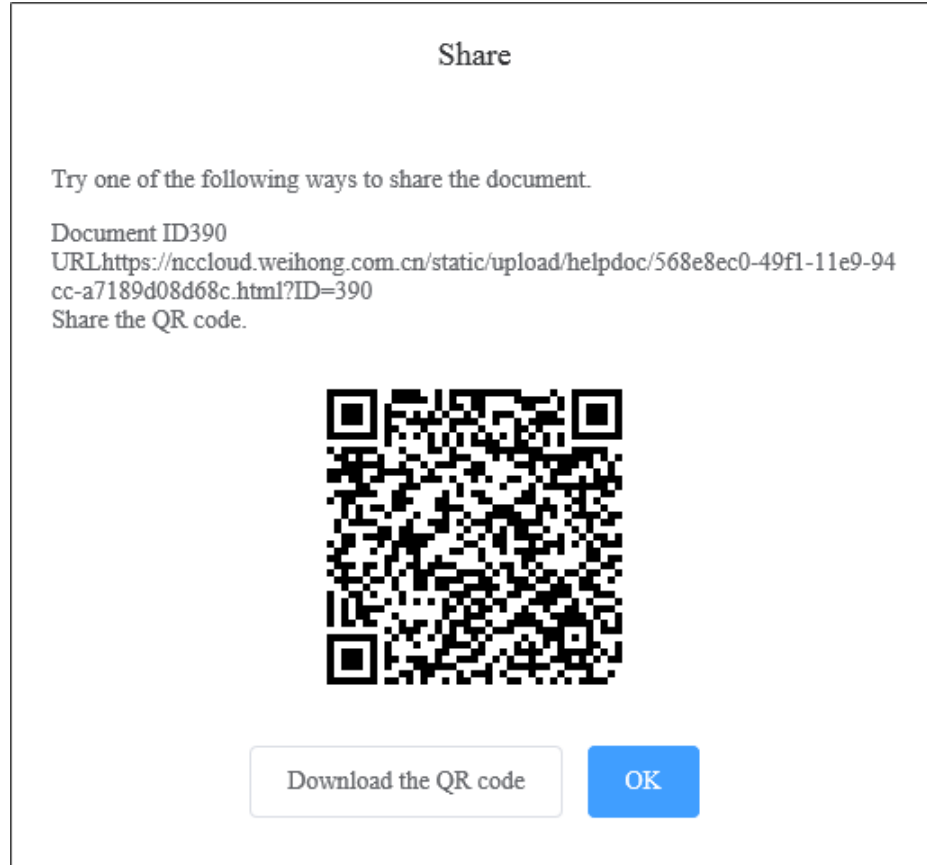
This operation is used to share a document to users who have registered **NcCloud** or not.

To share a document, do the following:

1. To enter **My Documents** interface, click **My Apps** → **My Documents**.

- To get the QR code of the target document, do one of the following:
 - Click  in the left of **My Documents** interface.

- Click **View the library** and click **Share** in the **Operation** column:



- To download and share the QR code, click **Download the QR code**.

4.5.4 Publish a Document

This operation is used to do related settings for publishing the target document and submit the document for approval. After the approval from **NcCloud**, the document is successfully published and automatically added to the list of **My Documents**. You can check all published documents in the library.

To publish a document, do the following:

- To enter **My Documents** interface, click **My Documents**.

- To do related settings for publishing the target document, click **View the library** → **Publish** → **New** and do related settings:

Reset
Preview
Cancel
Save
Save & Publish

No.

* Document
name

Confidentiality Public: For all users.

Confidential: Only for users who have sharing code.

Confidential: Only for users who use specific device model.















* Manufacturer Brand Production





Model Please separate the labels with "space" if the document supports multiple models.

Label Please separate the multiple supported labels with "space".

Abstract

Detailed

B I U   
H1 H2  
x₂ x²  
 
Normal  Normal  Sans Serif 
 

Insert text here ...

Download No file is selected

Original link

- To set the confidentiality, select one of the following:
 - Public: For all users.
 - Confidential: Only for users with the sharing code.
 - Confidential: Only for users who use machine tools with specific models.
- To select the downloaded document, click **Select file**, and select the target document as an attachment.
- To import the text from the external link, input a link in **Original link** input box and click **Import from external link**. The text is imported to **Detail** input box.

You can freely edit the text.

3. **Optional:** After doing related settings for publishing the target document, do one of the following by operations in the upper area of **New** interface:
 - To preview the document, click **Preview**.
 - To reset the document, click **Reset**.
 - To cancel settings of the document, click **Cancel**.
4. According to the time to publish the document, do one of the following by operations in the upper of **New** interface:
 - To directly publish the document and wait for the approval from **NcCloud**, click **Save & Publish**.
 - To save settings of the document and publish the document later, click **Save**.

The display automatically turns to **Publish** interface:

<input type="button" value="Return"/> <input type="button" value="Publish"/> <input type="button" value="Recall"/> <input type="button" value="Delete"/> <input type="button" value="New"/>							Deadline : 2020-03-17 Apply for trial Online : 0 Pending approval : 0	
<input type="checkbox"/>	Document ID	Brand	Model	Production	Document name	Abstract	Operation	
<input type="checkbox"/>	618				CC		Publish Edit Delete View Log	

You can publish the saved document later by clicking **Publish** in **Operation** column and waiting for the approval from **NcCloud**.

You can delete the document whether it has been published / submitted or not. After publishing a document, to edit it again, click **Recall** in **Operation** column of **Publish** interface and edit it.

Note: After deleting the document, it disappears from **My Documents** and **Library**.

4.6 Use Process Management

For avoiding the high-cost management and misoperations brought by traditionally managing program files, this operation centrally archives and saves program files by uploading program files to **NcCloud** to establish a program library, and then issue program files to the CNC system through **NcCloud**.

It should match with **NcGateway** with 3.6.0 version or above. You can download the free **NcGateway** from the [official website of NcCloud](#).

To use process management, do the following:

1. To enter **Process Management** interface, click **Process Management**:

Add Group
Add file

to

Search

	File name	Version	Uploaded ↕	Label	Description	Operation
Friends sharing files						
1 Edit Delete	1/201912121 41139.jpg		2020-01-03 14:19:07.407			Edit Issued Delete More
2 Edit Delete	2/Tip.png		2020-01-03 14:18:29.832			Edit Issued Delete More
	1/G00x4x10. nc		2019-12-07 14:53:51.885			Edit Issued Delete More

Group : All

Description : All files

Number :3

1

2. **Optional:** To create a group, click **New group** and do related settings:

Group name

Description

3. To add the target file to the existing group, click **Add file** and do related settings:

Edit File

Select file

File name

File size

Version

Description

Label

Group

Abandoned clear OK

4. **Optional:** To do the target operation (issue/delete/preview...) for the added file, select the group in the group list in the left, and do one of the following in **Operation** column of the target file:

- To issue the program file to the target CNC system, click **Issued**, select the target CNC system and click **Issue file**.

File path of the CNC system: D:\Ncfiles.

You cannot issue the program file to unavailable CNC systems.

- To preview, simply modify and save the program file, click **More** → **Preview**, modify it and click **Save**.
- To share the program file as a link, click **More** → **Share**, set the expired date of the link, and click **Generate share link** → **Click to copy and share**.
- To share the program file with your **NcCloud** friends, click **More** → **Share with your friends**, select the target friends and click **Confirm sharing**.

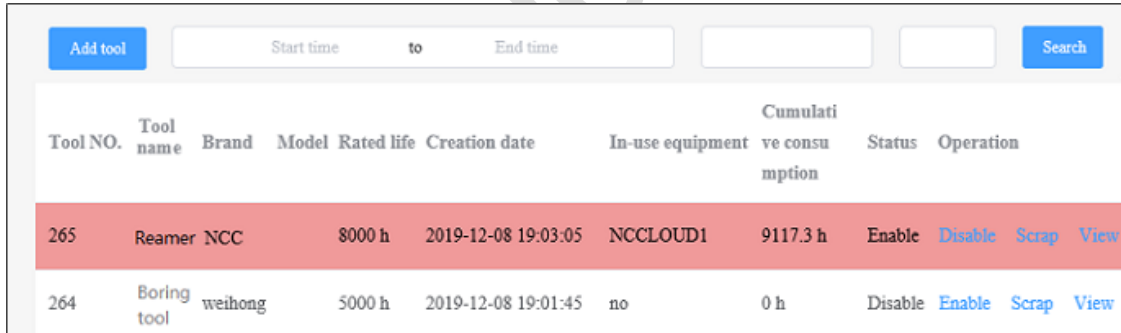
4.7 Use Tool Management

This operation is used to manage tools and trace their utilization and consumption online. The change of machine tools will not affect the previous total consumed service life and the set service life of tools, so the consumed service life is still accumulated.

Before using tool management, add service **Tool Management** into **My Apps**.

To use tool management, do the following:

1. To enter **Tool Management** interface, click **Tool Management**:



Tool NO.	Tool name	Brand	Model	Rated life	Creation date	In-use equipment	Cumulative consumption	Status	Operation
265	Reamer	NCC		8000 h	2019-12-08 19:03:05	NCCLOUD1	9117.3 h	Enable	Disable Scrap View
264	Boring tool	weihong		5000 h	2019-12-08 19:01:45	no	0 h	Disable	Enable Scrap View

2. To add the target tool for management, click **Add tool** and do related settings:

Add tool

Tool NO. 297

Tool name

Brand

Model

Rated life (Work Hour)

Add pre-consumption (Work Hour)

Life loss alarm advance (Work Hour)

In-use equipment

Tool ID

Remarks

- Rated life: The service life of tools.
- Consumption before adding: The consumed service life of tools before adding them.
- Time for alarms in advance: The time for alarms when the remaining service life is less than this set value.

3. **Optional:** To search the target tool records, do one of the following and click **Search**:
 - Select the start time and end time.
 - Input one of the following keywords in the search box.
 - Tool number
 - Tool name
 - Brand
 - Model
4. **Optional:** Do one of the following in **Operation** column of **Tool Management** interface for the target tool:
 - To enable it, click **Enable**.
 - To disable it, click **Disable**.
 - To scrap it, click **Scrap**.
 - To view its details, click **View**.

4.8 Use Device Leasing

Matched with the registration algorithm that is built in the Weihong CNC systems, the service **Device Leasing** provides an overall leasing management to manage the leased machine tools and leases online by creating a lease service, adding the machine tool to the lease service, and tracing the leased machine tools.

The service **Device Leasing** needs an approval from **NcCloud**. When it is unavailable, the prompt *You device leasing function has not been opened yet. Please contact us for more details.* shows in **Device Leasing** interface. After opening it, the lessee can use all leased machine tools.

Matched with the services [Remote Monitoring](#) and [Operational Performance](#), you can accurately monitor utilization rate of the leased machine tools and assess the repayment capacity of the lessee to early avoid a risk. Besides, matched with the service [Remote Assistance](#), you can provide technical supports online.

Before using device leasing, add service **Device Leasing** into **My Apps**.

To use device leasing, do the following:

- [Create a lease service.](#)
- [Manage a lease.](#)
- [Trace leased machine tools.](#)

4.8.1 Create a Lease Service

This operation is used to create a lease service and add the target machine tools to the lease service.

To create a lease service, do the following:

1. To enter **Device Leasing** interface, click **Device Leasing**.

2. To create a lease service, click  → **New Leasing Services**:

New Leasing Services

Lease service number: 247

* Lease service name:

Brand:

Model:

Vendor:

* Pricing method:

* Unit price (yuan):

Shelf status:

Remarks(within 200 words):

Device No	Device Alias	Networking status	Rental status	Usage status	Operation
No Data					

Automatically open after online payment

3. Set the pricing method:
 - Boot time (h): You can add multiple machine tools.
 - Nature day (day): You can add at most one machine tool.
4. **Optional:** To automatically open the lease after the lessee pays online, check **Automatically open after online payment**.

If you do not check it, you need to manually open the lease. See [Manage a lease](#) for details.

5. To add the target machine tool or multiple ones with similar functions to the lease service, click **Add device** and set the rental status as **Rent out**.
6. **Optional:** Check the following status for the new lease service in **Device Rack** interface:

Please select the shelf sta		Please enter key words		Search	New Leasing Services	All lease device		
Lease service name	Lease service number	Pricing method	Unit price (yuan)	Lease status	Networking status	Usage status	Shelf status	Operation
172	172	Boot time (h)	0.01	0/2	0/1	0/1	Shelf	Obtained Edit Delete

- Lease status: The number of opened leases and existing leases.
 - Networking status: The number of networked machine tools and machine tools added to the lease service.
 - Usage status: The number of used machine tools and machine tools added to the lease service.
7. **Optional:** Do one of the following in **Operation** column in **Device Rack** interface:
 - To take the lease service off the shelf, click **Obtained**.
During leasing, this operation is unavailable.

- To edit the brand, model, manufacturer, click **Edit** and do related settings:

New Leasing Services

Lease service number: 247

* Lease service name:

Brand:

Model:

Vendor:

* Pricing method:

* Unit price(yuan):

Shelf status:

Remarks(within 200 words):

Device No	Device Alias	Networking status	Rental status	Usage status	Operation
WHNC-065A-CDGN-01CE	01CE	Offline	Rent out	Unused	Delete Off-hire

Automatically open after online payment

The used machine tools cannot be deleted.


- To delete the lease service, click **Delete**.
During leasing, this operation is unavailable.

4.8.2 Manage a Lease


This operation is designed for the lessor to manage a lease. After opening a lease, the related WeChat message and SMS are sent to the lessee.

To manage a lease, do the following:

1. To enter **Device Leasing** interface, click **Device Leasing**.

2. To create a lease, click  → **New Lease:**

Lease number 503

Lessee 

* Payment status

* Leasing Services

* Unit price(yuan)


Pricing method Boot time (h)

Total price(yuan)

* Lease period

* Execution status

Remarks(within 200 words)

- Lessee: Input a **NcCloud** account or click  and select a friend group and a friend.
- Lease service: Input the name of the racked lease service.

3. Do one of the following in **Optional** column in **Lease Management** interface:

- To open the lease, click **Open**. The lessee (the applicant) receives a message that the application is accepted.


Note: The encrypted registration algorithm built in Weihong CNC systems makes the machine tool locked by default. After opening the lease, to use the machine tool, the lessee needs to enable the machine tool in **My leases** on the WeChat version of **NcCloud**. See [Use My Leases](#) for details.

- To cancel the lease, click **Cancel**. The lessee (the applicant) receives a message that the application is refused.

Note: If the opened lease is cancelled, the enabled machine tools in the lease are immediately disabled.

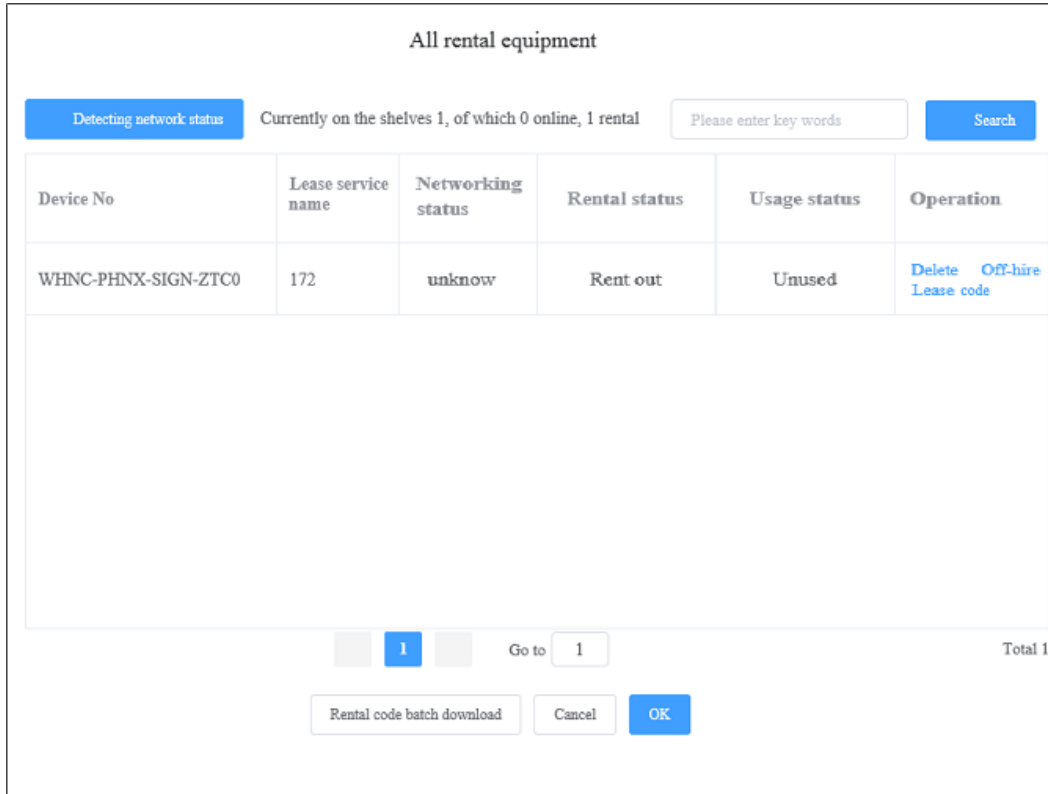
4.8.3 Trace Leased Machine Tools

To trace leased machine tools, do the following:

1. To enter **Device Rack** interface, click **Device Leasing** → :

Please select the shelf sta		Please enter key words		Search	New Leasing Services	All lease device		
Lease service name	Lease service number	Pricing method	Unit price (yuan)	Lease status	Networking status	Usage status	Shelf status	Operation
172	172	Boot time (h)	0.01	0/2	0/1	0/1	Shelf	Obtained Edit Delete

- To check the usage status of all machine tools in **All lease device** interface, click **All lease device**:



All rental equipment

Detecting network status
Currently on the shelves 1, of which 0 online, 1 rental

Search

Device No	Lease service name	Networking status	Rental status	Usage status	Operation
WHNC-PHNX-SIGN-ZTC0	172	unknow	Rent out	Unused	Delete Off-hire Lease code

1
Go to

Total 1

- Optional:** Do one of the following in **Operation** column in **All lease device** interface:
 - To rent out the machine tool or make the machine tool off hire, click **Rent out / Off-hired**.
 - To check the lease code, click **Lease code**.

You can right click the lease code and save it as an image.

Note: After the lessor opens the lease, the lessee can enable or disable machine tools and apply for registration by scanning the lease code on the WeChat version of **NcCloud**. See [Use My Leases](#) and [Use Registration](#) respectively for details.

4.9 Use Product Registration

This operation is used to register the CNC system.

Before using product registration, add service **Product Registration** into **My Apps**.

To use product registration, do the following:

1. To enter **Product Registration** interface, click **Product Registration**.
2. Do related settings and click **Login**.

4.10 Use Product Inquiry

This operation is used to help you check if the Weihong product is counterfeit.

Before using product inquiry, add service **Product Inquiry** into **My Apps**.

To use product inquiry, do the following:

1. To enter **Product Inquiry** interface, click **Product Inquiry**.
2. To switch to English interface, click  in the upper right corner.
3. Input the product ID and click **Go**.

4.11 Use Online Repair

This operation is used to ask for a repair service of machine tools online.

Before using online repair, add service **Online Repair** into **My Apps**.

To use online repair, do the following:

1. To enter **Online Repair** interface, click **Online Repair**:
2. Do related settings and click **Submit**.

4.12 Use Remote Assistance

This operation is used to let support professionals and maintainers remotely log in your CNC system, respond your requests as soon as possible and solve your problems through the Internet.

Before using remote assistance, add service **Remote Assistance** into **My Apps**.

To use remote assistance, do the following:

1. To enter **Remote Assistance** interface, click **Remote Assistance**.
2. Follow the manual in **Remote Assistance** interface and use remote assistance.

4.13 Use System Setup

This operation is used to do related settings for **NcCloud**.

It includes the following:

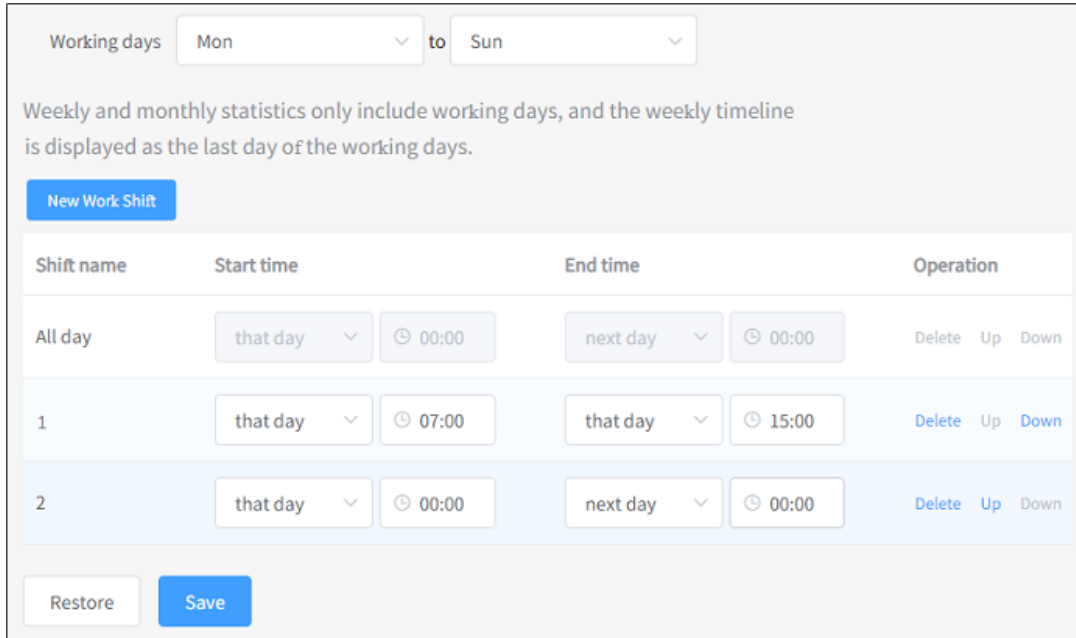
- [Set the work shift.](#)
- [Use my **NcCloud** friends.](#)
- [Check my information.](#)
- [Set preferences.](#)

4.13.1 Set the Work Shift

Serving for the services **Operation Performance** and **Alarm Statistic**, this operation is used to create a work shift, so as to check the operational performance and alarm statistics according to the work shift.

To set the work shift, do the following:

- To enter **Work Shift Setting** interface, click **System Setup** → :



The screenshot shows the 'Work Shift Setting' interface. At the top, there are dropdown menus for 'Working days' (set to 'Mon') and 'to' (set to 'Sun'). Below this is a note: 'Weekly and monthly statistics only include working days, and the weekly timeline is displayed as the last day of the working days.' A blue button labeled 'New Work Shift' is visible. Below the button is a table with columns: 'Shift name', 'Start time', 'End time', and 'Operation'.

Shift name	Start time	End time	Operation
All day	that day ▼ ⌚ 00:00	next day ▼ ⌚ 00:00	Delete Up Down
1	that day ▼ ⌚ 07:00	that day ▼ ⌚ 15:00	Delete Up Down
2	that day ▼ ⌚ 00:00	next day ▼ ⌚ 00:00	Delete Up Down

At the bottom of the interface, there are two buttons: 'Restore' and 'Save'.

- To create a work shift, click **New Work Shift**, input a name for the new work shift and click **OK**.
- Do related settings:
 - Working day: Only count the working hours of working days. That is, working hours on non-working days will not be accumulated to the total working hours of every week and month.

Note: If a certain work shift spans several days, for example, the night work shift is from today's 21:00 p.m. to tomorrow's 7:00 a.m., the working days are from Monday to Friday, the non-working days from Saturday to Sunday. Then the working hours from 21:00 p.m. on Friday to 7:00 a.m. on Saturday is valid, and the working hours from 21:00 p.m. on Sunday to 7:00 a.m. on Monday invalid.

- Start time / end time: The start time must be earlier than the end time.
You can choose among **previous day**, **that day** and **next day**:
 - Previous day: It refers to the day before that day.
 - That day: It refers to today, not a specified day.
 - Next day: It refers to the day after that day.


Examples of work shifts

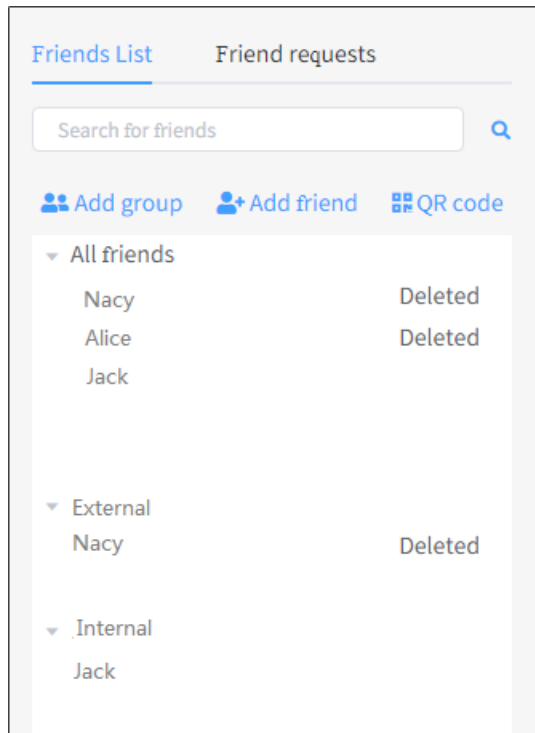
- Morning work shift: The statistic results from that day's 7:00 a.m. to that day's 14:00 p.m. belong to that day. For example, that day is the 24th, after that day's 14:00 p.m., if you select the morning work shift and check the statistic results by [working performance interface](#) or [alarm statistic interface](#), the statistic results belong to the 24th.
- Middle work shift: The statistic results from that day's 14:00 p.m. to that day's 21:00 p.m. belong to that day. For example, that day is the 24th, after that day's 21:00 p.m., if you select the middle work shift and check the statistic results by [working performance interface](#) or [alarm statistic interface](#), the statistic results belong to the 24th.
- Night work shift: The statistic results from that day's 21:00 p.m. to next day's 7:00 a.m. belong to that day. For example, that day is the 24th, after next day's 7:00 a.m., if you select the night work shift and check the statistic results by [working performance interface](#) or [alarm statistic interface](#), the statistic results belong to the 24th.

4.13.2 Use My NcCloud Friends

This operation is used to add **NcCloud** friends through their telephone numbers or **NcCloud** accounts. After their approvals, you become friends with them.

To use my **NcCloud** friends, do the following:

1. To enter **Friend** interface, click **System Setup** → :



2. To manage your groups and friends, click **Friends List** and do the following:
 1. To add a group, click **Add group**, input the group name and check the relationship:

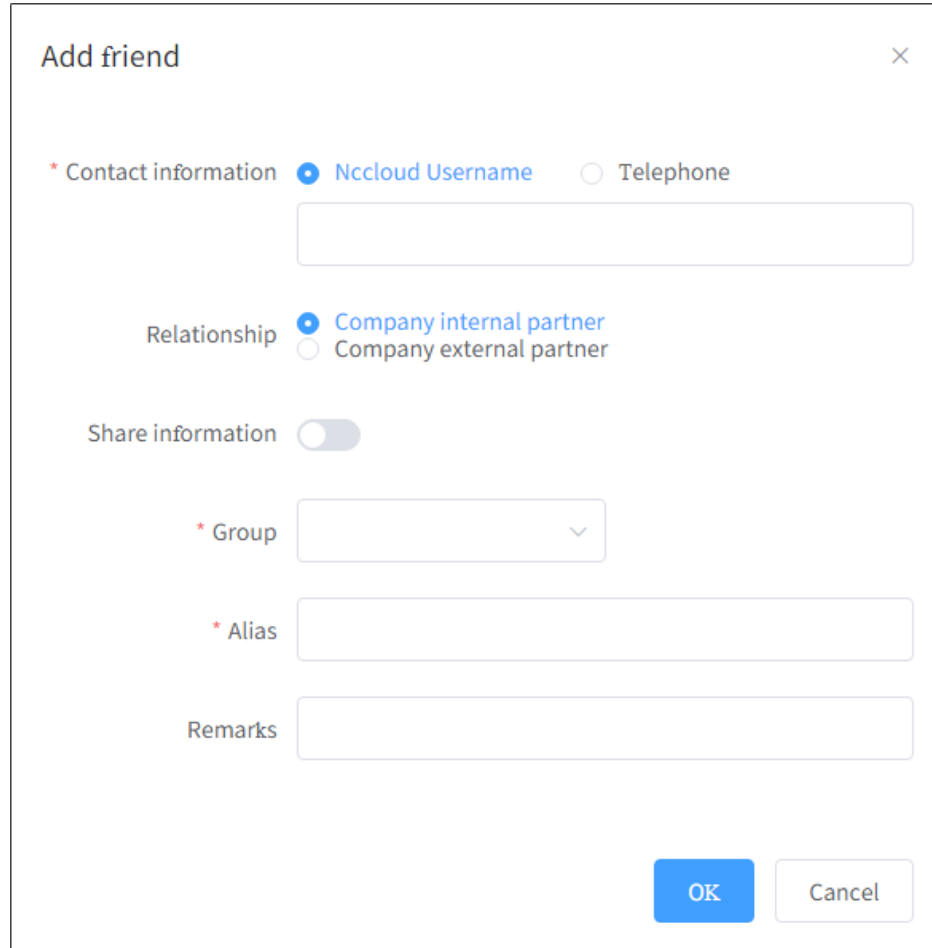
The screenshot shows a dialog box titled "Add group" with a close button (X) in the top right corner. The dialog contains the following elements:


- A text input field for "Group name" with an asterisk (*) indicating it is required.
- A section for "Relation" with an asterisk (*) indicating it is required, containing two checkboxes:
 - include colleagues within the company
 - include colleagues outside the company
- A text area for "Remarks" with a small icon in the bottom right corner.
- Two buttons at the bottom right: "OK" (blue) and "Cancel" (white with grey border).

Relationship:

- Including the internal partners: You cannot add external partners to the group.
- Including the external partners: You cannot add internal partners to the group.
- Including the internal partners & external partners: You can add both internal and external partners to the group.

- To add a friend, click **Add friend** and do related settings:




- If your friend has a **NcCloud** account, select **NcCloud Username** or **Telephone** as the contact information.
 - If your friend has no **NcCloud** account, select **Telephone** as the contact information.
- Optional:** To edit the group, click your friend's name and click  in the pop-up window and edit his or her group.
 - Optional:** To check friend applications from others, including agreeing or refusing applications, click **Friend Request** and do related operations.

4.13.3 Check My Information

This operation is used to check your information, including the user's name, account name, telephone number, company name, address, E-mail, timezone, and modify the password and phone number.

To check your information, do the following:

1. To enter **My Information** interface, click **System Setup** →  :


Detailed info	Modify password	Modify Phone NO.
Name	<input type="text" value="Nacy"/>	
Username	<input type="text" value="liqian"/>	
Telephone	<input type="text" value="15900715663"/>	
Company	<input type="text" value="weihong"/>	
Address	<input type="text" value="Shanghai"/>	
E-mail	<input type="text" value="liqian@weihong.com.cn"/>	
Timezone	<input type="text" value="Asia/Shanghai"/>	
<input type="button" value="Submit"/>		

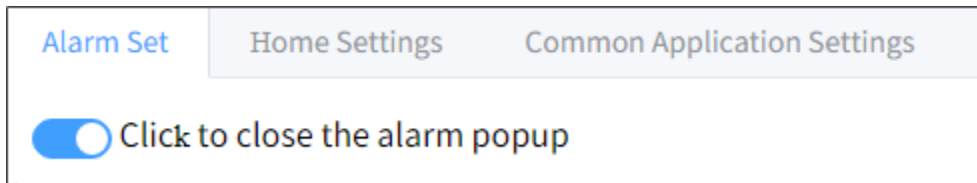
2. Check your information.
3. To modify the password, click **Modify Password** to switch to **Modify Password** interface and do related settings.
4. To modify the telephone number that is binding your **NcCloud** account, click **Modify Phone NO.** to switch to **Modify Phone NO.** interface and do related settings.

4.13.4 Set Preferences

This operation is used to set preferences of **NcCloud**, including the alarm settings, home settings and common application settings.

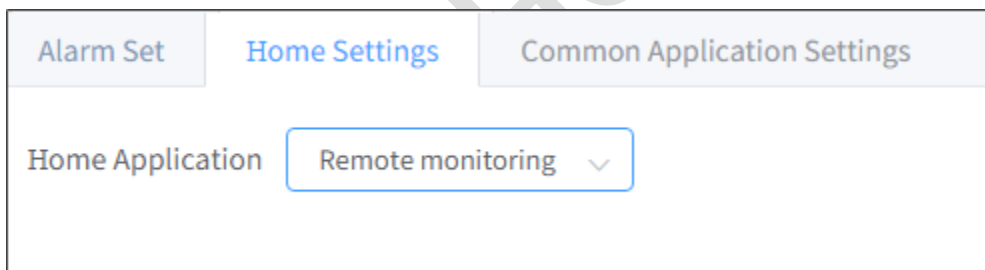
To set preferences, do the following:

1. To enter **Preference** interface, click **System Setup** → .
2. To open pop-up windows for alarms, click **Alarm Set** → **Click to open the alarm pop-up:**



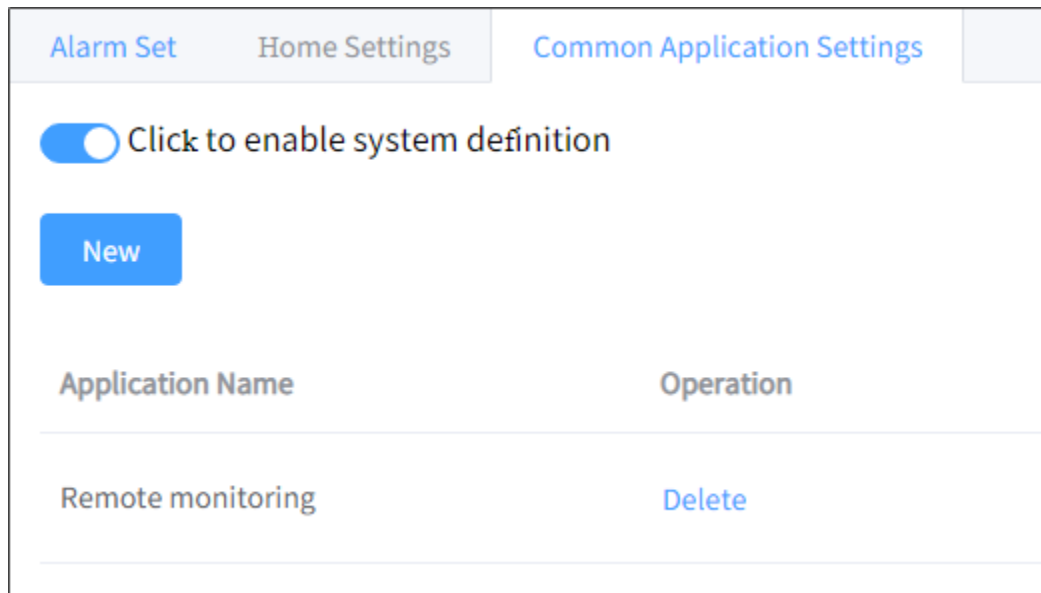
As a result, pops-up windows for alarms occur in the homepage of **Device/Smart alarm** interface.

3. To customize the application that shows on the homepage, click **Home Settings** and select the target application:



Note: Please ensure the selected application has already been added to **My Apps**. See [Add Applications](#) for details.

- To customize common applications in the dropdown box of **My Apps**, click **Click to enable customization**, select the target applications in the pop-up window and click **OK**:




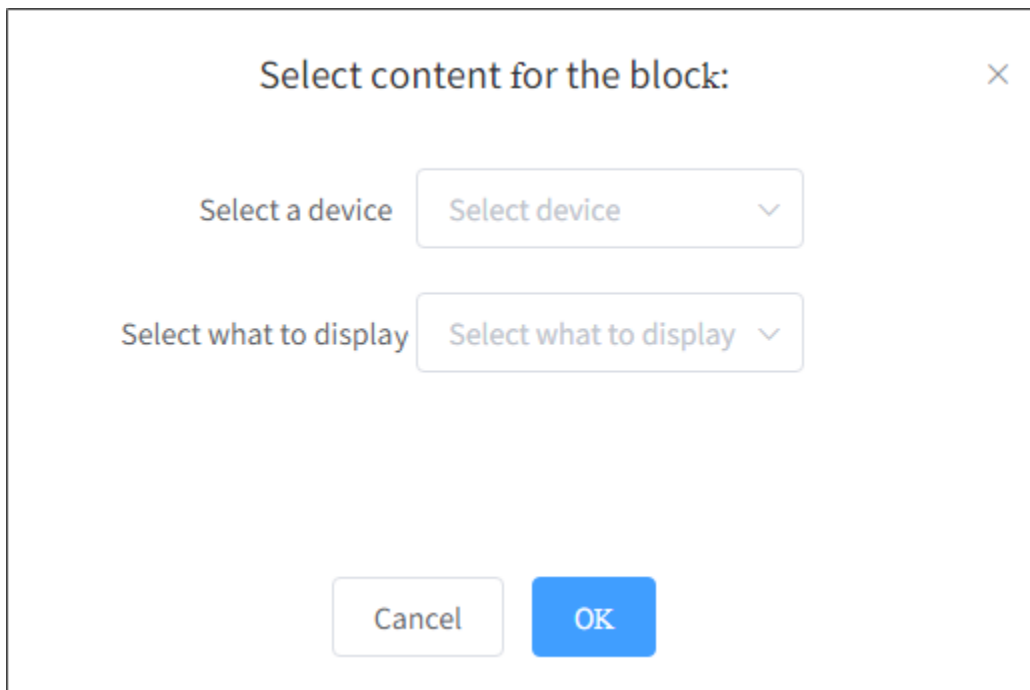
With **Click to enable system definition** disabled, **Remote Monitoring**, **My Documents**, **Program Management** and **Online Repair** are showed in the dropdown box of **My Apps** by default.

4.14 Use My Kanbans

This operation is used to create a kanban and add the target machine tools to the kanban, so as to monitor them in one kanban.

To use my kanbans, do the following:



1. To create a kanban, click **My Kanbans** in the menu bar and click **New KanBan**.
2. Input the kanban name and click **OK**.
3. To add a display module, click **My Kanbans** in the menu bar, select the added kanban, click  and select the target machine tool and display content:



Select content for the block: ×

Select a device

Select what to display

4. **Optional:** To delete the added display module, click  in its lower left corner.
5. **Optional:** To delete the kanban, click  in its upper right corner.

5 FAQs

This part includes frequently asked questions that you may have about the **NcCloud**.

5.1 How to know if NcGateway has been installed in the current system?

Phenomenon

It is not sure that **NcGateway** is installed in the current system.

Solution

To check if **NcGateway** has been installed in the current system, do one of the following:

- For integrated CNC devices: Check if there is a **NcGateway** button on the operation interface.
- For control cards: Click **Start** → **All Programs**, and check if there is a **NcGateway** folder.

5.2 What to do when the QR code and the verification code cannot be displayed on the homepage of NcGateway?

Phenomenon

After starting **NcGateway**, the QR code and the verification code cannot successfully be displayed.

Cause

1. The CNC system is not connected to the Internet.
2. Do not run **NcStudio** and **NcGateway** as an administrator.
3. The Internet condition is bad.

Solution

1. Check the networking condition and confirm that the CNC system is properly connected to the Internet.
2. Run **NcStudio** and **NcGateway** as an administrator.
3. Wait for 30 seconds and press **F5** to regain the QR code and the verification code. Or open the manager and end **NcCloudAdapter.exe**, click **Start** → **All programs** → **NcGateway**, run **NcCloudAdapter.exe** as an administrator and restart **NcGateway**.

5.3 What to do if NcGateway fails to work after restarting the computer?

Phenomenon

Cannot start **NcGateway** after restarting the computer.

Solution

Check if NcCloudAdapter.exe process exists in the task manager:

- If it exists, see [What to do when the QR code and the verification code cannot be displayed on the homepage of NcGateway?](#) for details
- If it does not exist, click **Start** → **All Programs** → **NcGateway**, and run NcCloudAdapter as an administrator.

To avoid such a problem next time, please check if **NcCloudFirstRun** is prohibited from automatic startup after starting the computer by security softwares, like Tencent PC Manager.

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