



NODE.X
Explore **X** World

NODE.X

Remote Device Management System

User Manual

Version 1.0.0

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Revision History

0.0.1	Initial version
0.0.2	Add introductions for Deploy Container, Device Container, Docker Install, Agent Update, Registry and Add Registry.
1.0.0	Add Device Map

Table of Contents

1. Overview	7
1.1. Architecture	7
1.2. NODE.X Server	7
1.3. NODE.X Agent	7
2. Quick Start.....	9
2.1. Create an Account for Your Organization.....	9
2.2. Login.....	9
2.3. Install NODE.X Agent on Device.....	10
2.4. Register the Device.....	10
2.5. Add New Users to Your Organization.....	12
3. Home.....	14
3.1. Devices Overview	14
3.2. Device Map/List	14
3.3. Add Location.....	15
3.4. Edit Location.....	15
3.5. Show/Hide	16
3.6. Mark Location	16

4. Account	18
4.1. User Management.....	18
4.2. Organization Token.....	18
5. Device	20
5.1. Device List	20
5.2. Deploy Container.....	20
5.3. Device Information.....	21
5.4. Remote Terminal	21
5.5. Docker Install	22
5.6. Agent Update.....	22
5.7. Device Container	23
6. Registry	25
6.1. Registry List.....	25
6.2. Add Registry	25
7. History	28
8. Contact Us.....	30

Chapter 1

Overview

- 1.1 Architecture
- 1.2 NODE.X Server
- 1.3 NODE.X Agent

1. Overview

1.1. Architecture

NODE.X is a remote device management system that allows users to access or monitor the status of managed devices remotely.

1.2. NODE.X Server

NODE.X Server (<https://nodex.portwell.tw>) provides centralized device management and a web UI, enabling administrators to check device status and troubleshoot remotely in real time.



Figure 1. NODE.X Server

1.3. NODE.X Agent

The NODE.X Agent runs on managed devices and establishes a bi-directional connection with the NODE.X Server. This connection enables the orchestration of management features by the NODE.X Server.

Operating Systems supported:

Operating System	Kernel
Ubuntu 20.04	5.15.0-125-generic
Ubuntu 22.04	6.8.0-45-generic

Chapter 2

Quick Start

- 2.1 Create an Account for Your Organization
- 2.2 Login
- 2.3 Install NODE.X Agent on Device
- 2.4 Register the Device
- 2.5 Add New Users to Your Organization

2. Quick Start

2.1. Create an Account for Your Organization

This step creates an organization and designates an administrator for the organization. If there are additional users within the same organization, please follow the steps below to add new users to the existing organization. Click on the "Register" text to be redirected to the sign-up page.



Figure 2. Register

Fill in the information for the organization and administrator; the account will be created.



Figure 3. Sign Up Page

2.2. Login

Log in using the email address and password of the administrator from step 2.1.

2.3. Install NODE.X Agent on Device

Copy the .deb file to your device and install it using the command below:

```
# dpkg -i NodexAgent_[version].deb
```

Enable the NODE.X Agent service and start the service to connect to NODE.X Server.

```
# systemctl enable rmsagent.service
# systemctl start rmsagent.service
```

2.4. Register the Device

Click the “Account” button and copy the organization token.

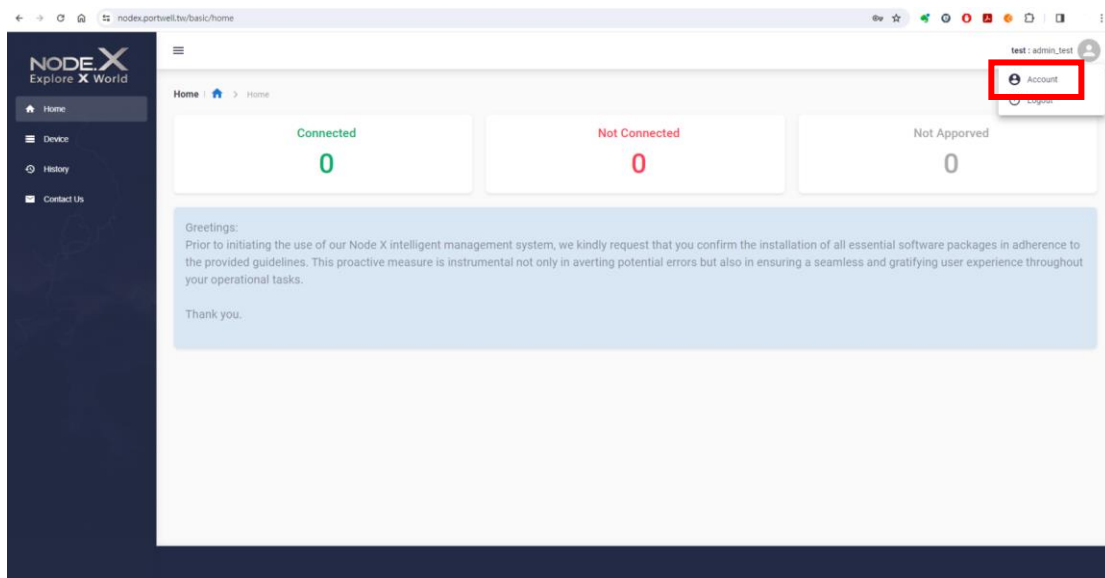


Figure 4. Account

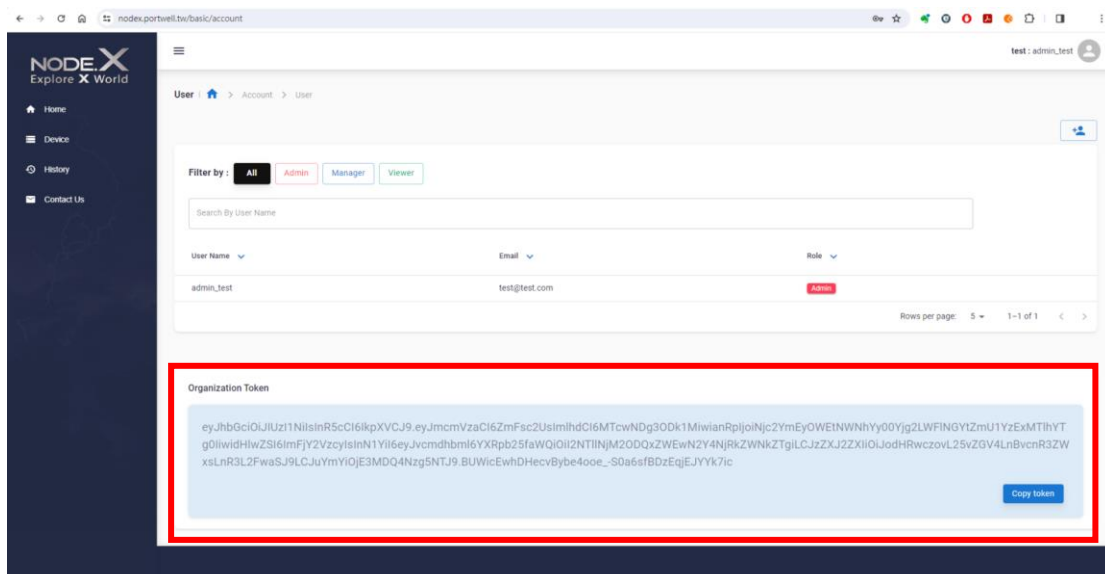


Figure 5. Organization Token

Connect to the device via direct console or SSH connection. Add the token to the device using a text editor such as vi or nano.

```
vi /usr/local/etc/rms/rmsagent/org_token
```

After a few seconds, a new "Not Approved" device will appear on the Home page of the web UI.

Click on "Device" in the sidebar; there will be a new "Not Approved" device in the list.

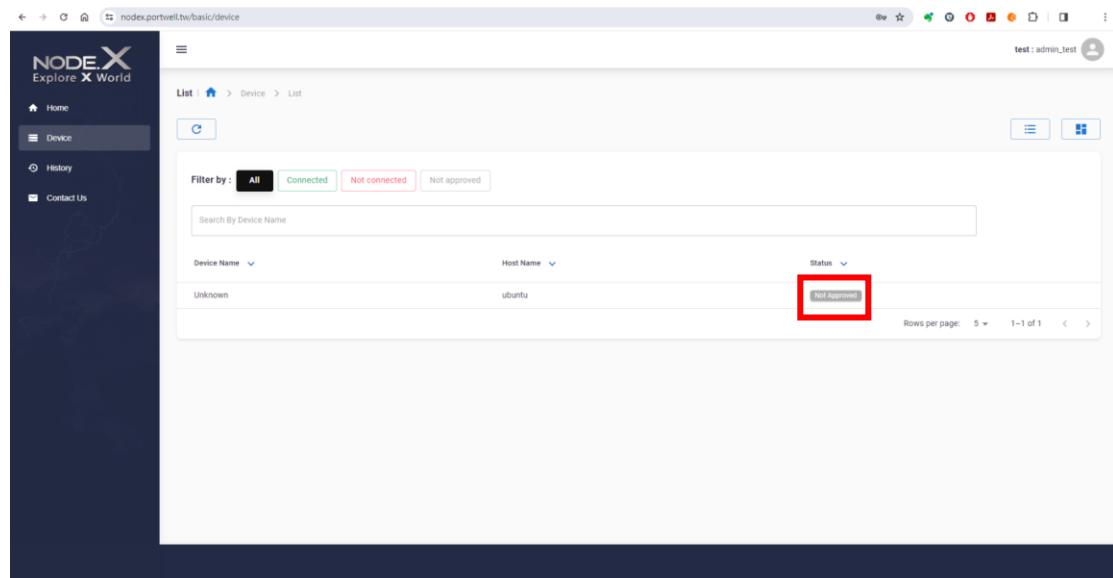


Figure 6. Device List

Click on the "Not Approved" device and toggle the switch to approve this device in the NODE.X Server.

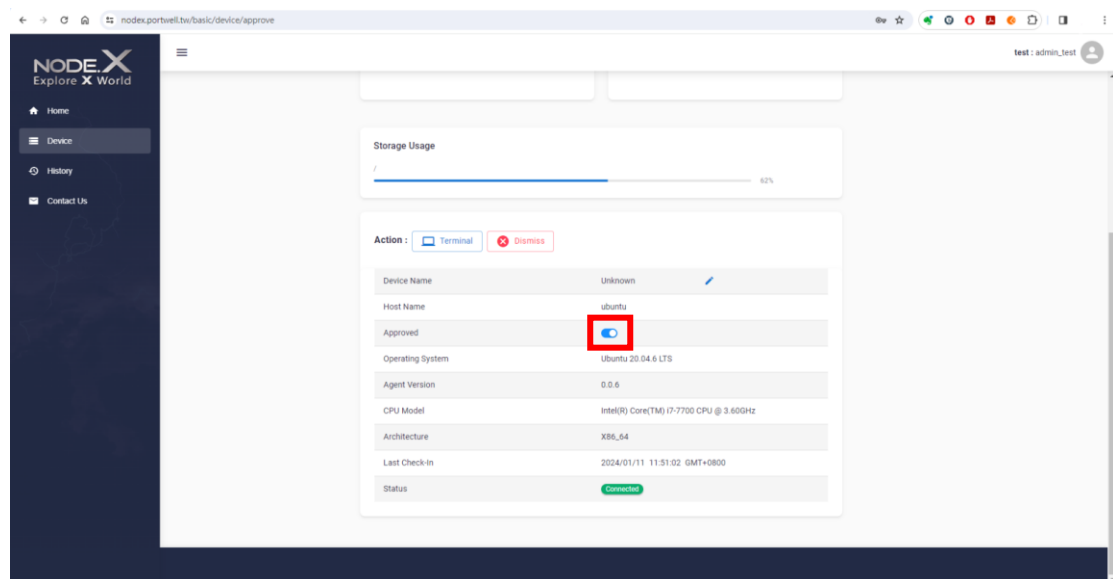


Figure 7. Approve the Device

2.5. Add New Users to Your Organization

Click the “Add User” icon on the account page.

Fill in the information for the new user and click the “Add” button.

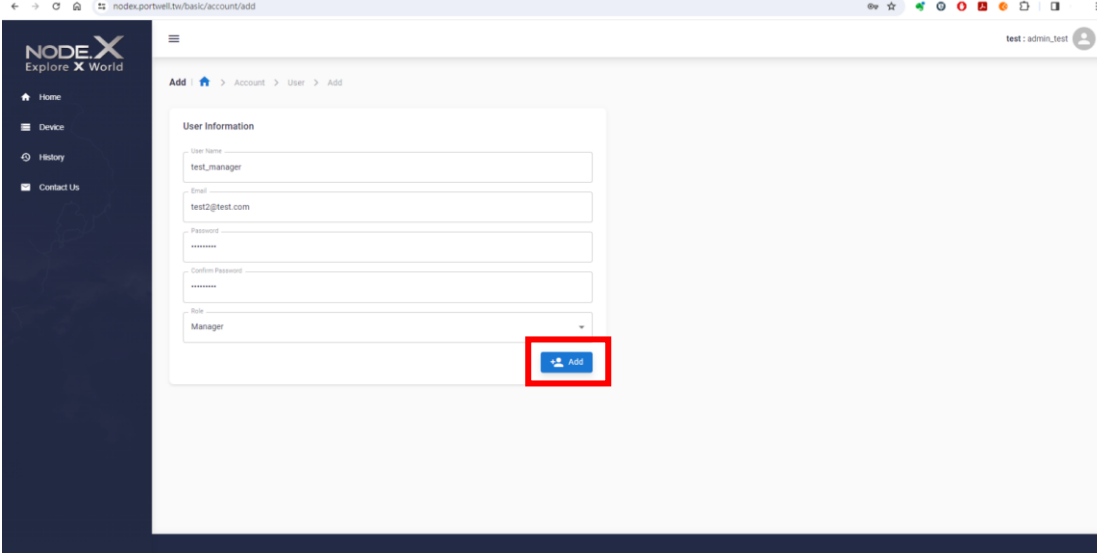
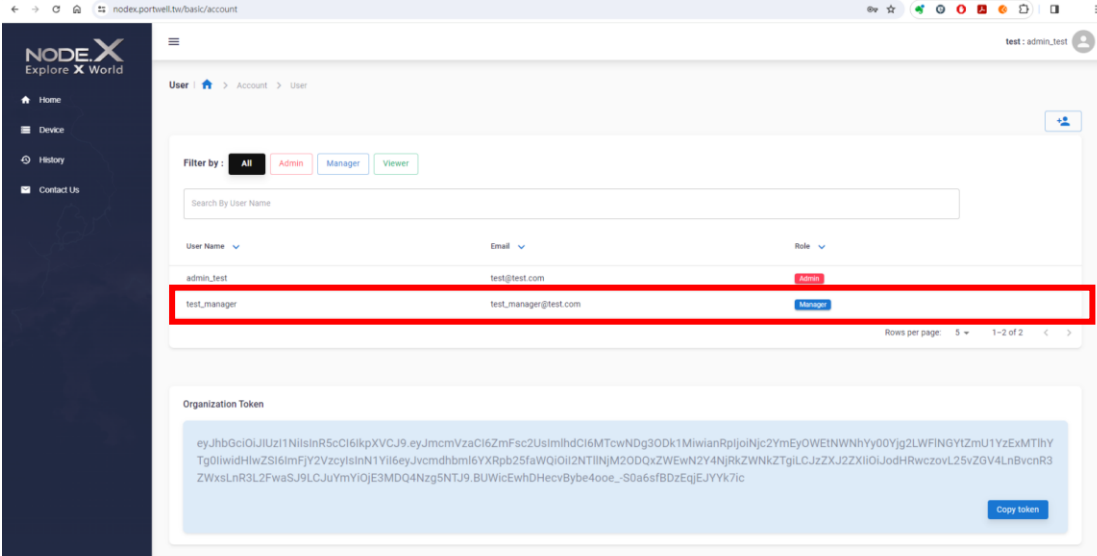


Figure 8. New User



User Name	Email	Role
admin_test	test@test.com	Admin
test_manager	test_manager@test.com	Manager

Rows per page: 5 1-2 of 2

Organization Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJmcmVzaCI6ZmFsc2UsImhhdCI6MTowNDg3ODk1MiwianRpIjoIjC2YmEyOWEiOiJodHRwczovL25vZGV4LnBvcnR3ZWxsLnR3L2FwaSJ9LCJyYmYiOiJlE3MDQ4Nzg5NTJ9.BUWicEwhDHecvBybe4oe_-S0a6sfBDzEqjEJYYk7ic

Copy token

Figure 9. User List

Chapter 3

Home

- 3.1 Overview Devices
- 3.2 Device Map/List
- 3.3 Add Location
- 3.4 Edit Location
- 3.5 Show/Hide
- 3.6 Mark Location

3. Home

3.1. Devices Overview

The section displays the connection status of managed devices.

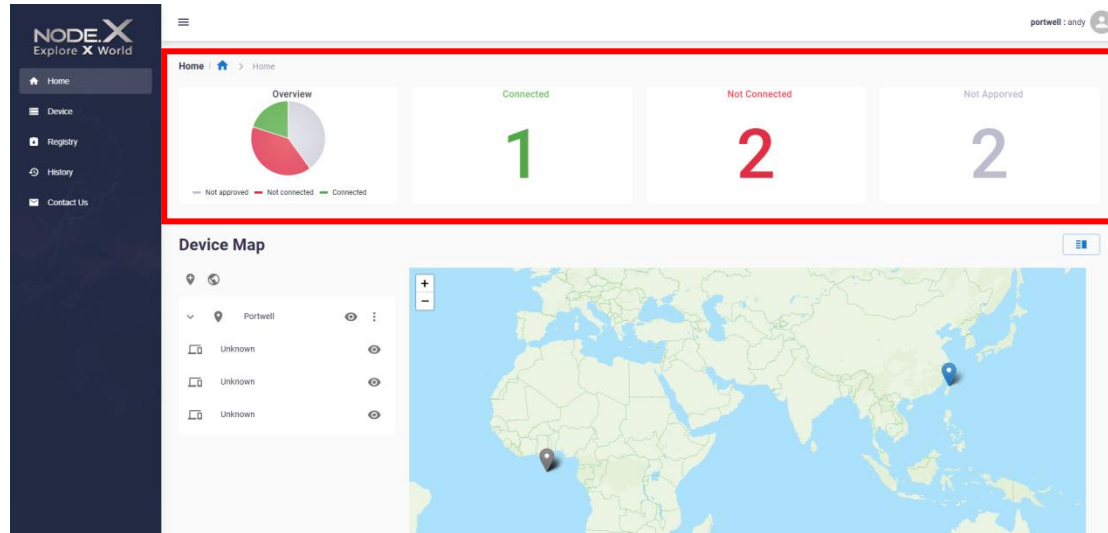


Figure 10. Devices Overview

3.2. Device Map/List

This page displays the positions of devices and locations on a map. The list on the left side shows all locations and devices.

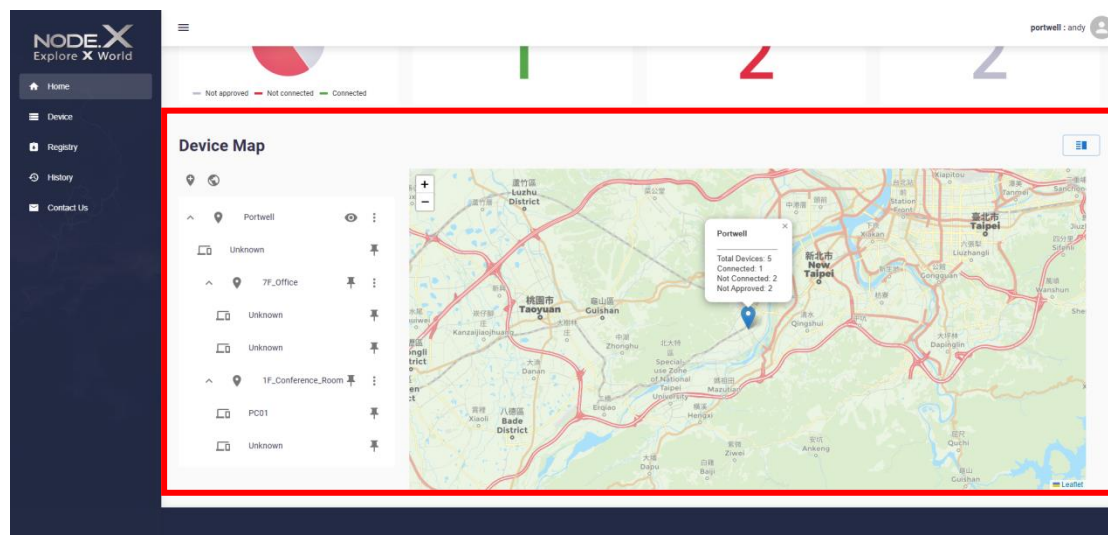
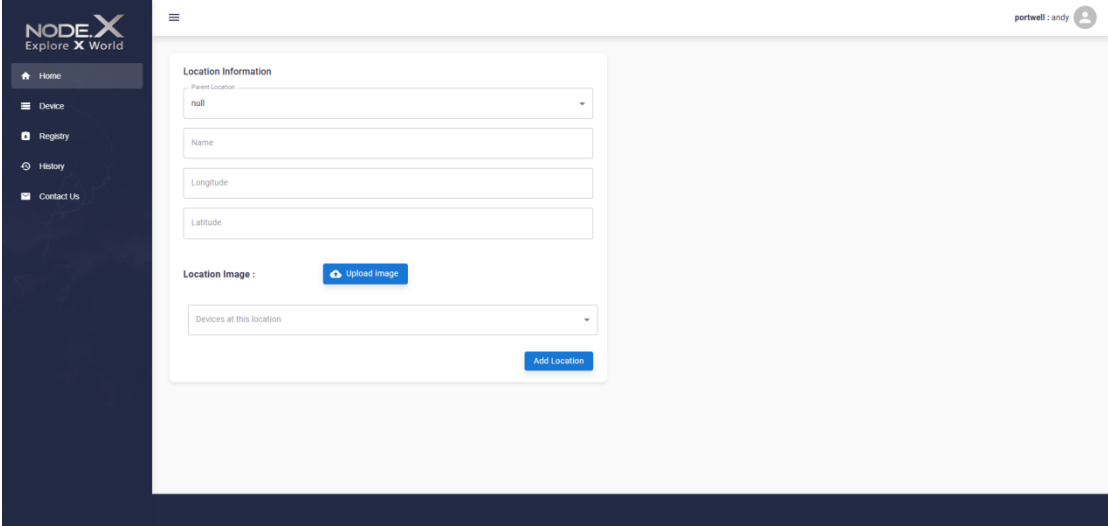


Figure 11. Device Map

3.3. Add Location

Clicking the "Add Location" button navigates to the Add Location page. From there, new locations can be added.

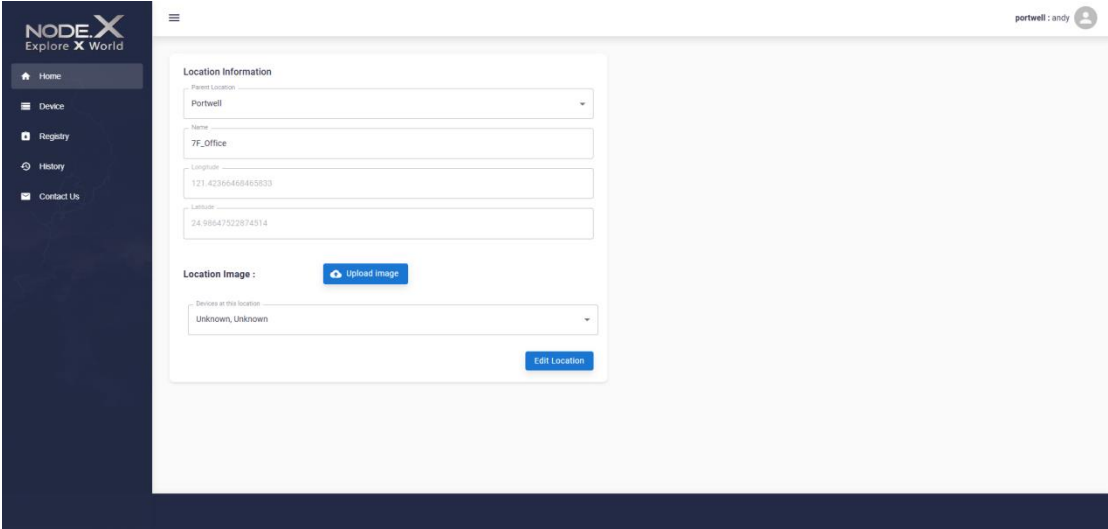


The screenshot shows the 'Add Location' page in the NODE.X interface. On the left is a dark sidebar with the 'NODE.X Explore X World' logo and navigation links: Home, Device, Registry, History, and Contact Us. The main content area has a light gray background. At the top right of the main area, it says 'portwell : andy' next to a user icon. The 'Add Location' form is centered and contains the following fields: 'Parent Location' (a dropdown menu with 'null' selected), 'Name' (a text input field), 'Longitude' (a text input field), 'Latitude' (a text input field), 'Location Image' (a blue button with a cloud and upload icon labeled 'Upload Image'), and 'Devices at this location' (a dropdown menu with 'Devices at this location' selected). A blue 'Add Location' button is at the bottom right of the form.

Figure 12. Add Location

3.4. Edit Location

Clicking the "Edit Location" button navigates to the Edit Location page. From there, existing locations can be edited.



The screenshot shows the 'Edit Location' page in the NODE.X interface. The layout is identical to the 'Add Location' page, but the form fields are pre-filled with existing data. The 'Parent Location' dropdown shows 'Portwell'. The 'Name' field contains '7F_Office'. The 'Longitude' field contains '121.42366468463833'. The 'Latitude' field contains '24.98647322874514'. The 'Location Image' button is still 'Upload Image'. The 'Devices at this location' dropdown shows 'Unknown, Unknown'. A blue 'Edit Location' button is at the bottom right of the form.

Figure 13. Edit Location

3.5. Show/Hide

Clicking the "Show/Hide" button on the Device List controls whether a specific device or location is displayed on the map.

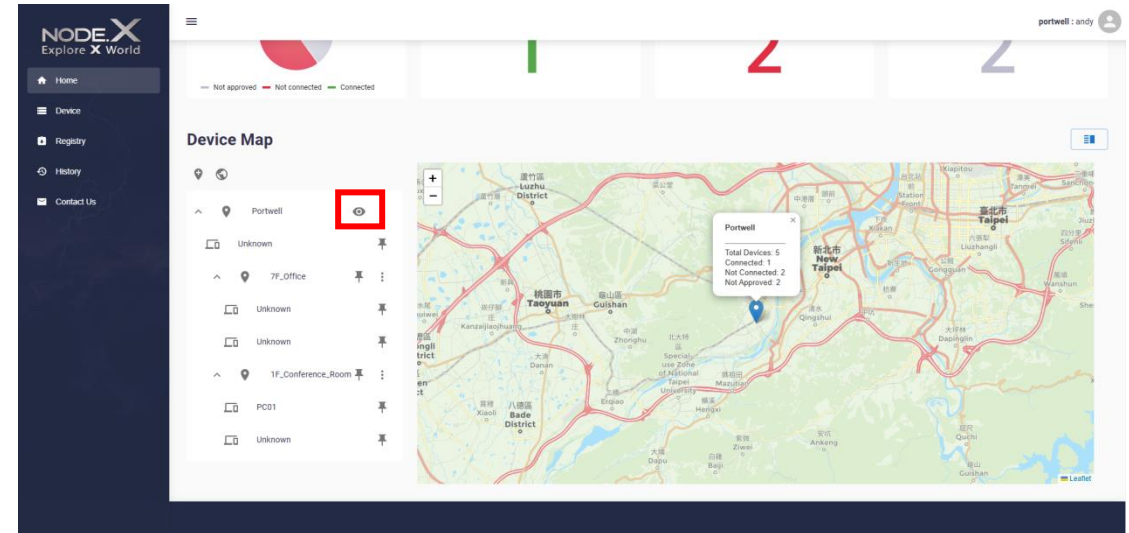


Figure 14. Show/Hide

3.6. Mark Location

Clicking the "Mark Location" button on the Device List marks the position of the selected location and device on the map.

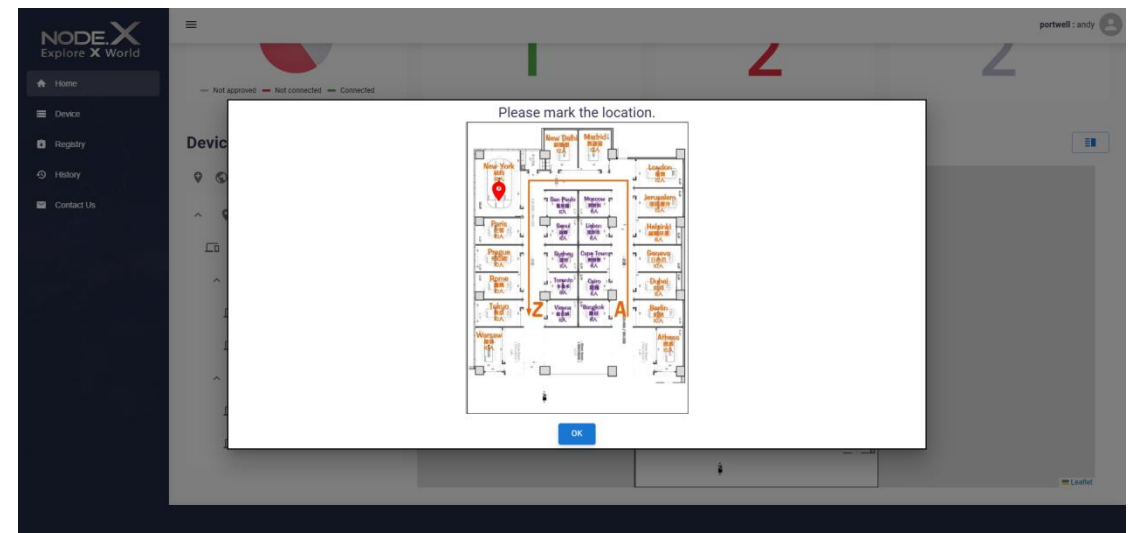


Figure 15. Mark Location

Chapter 4

Account

- 4.1 User Management
- 4.2 Organization Token

4. Account

The account page consists of two sections: user management and organization token.

4.1. User Management

The account page displays all members in the organization, allowing users to add/remove members, change user roles or information.

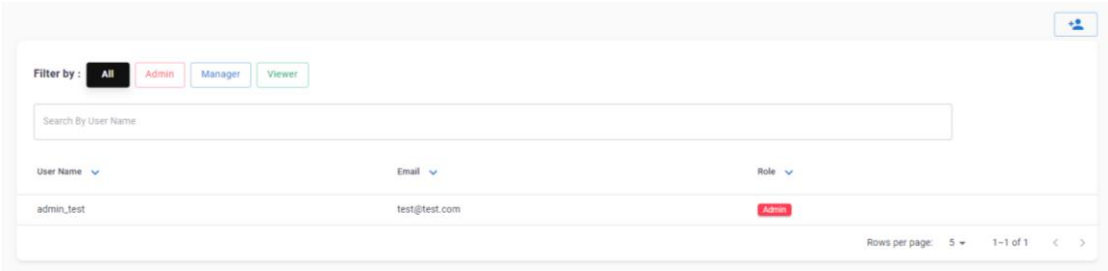


Figure 16. User Management

4.2. Organization Token

This section shows the organization's token for NODE.X Agent to be managed by a specific organization.

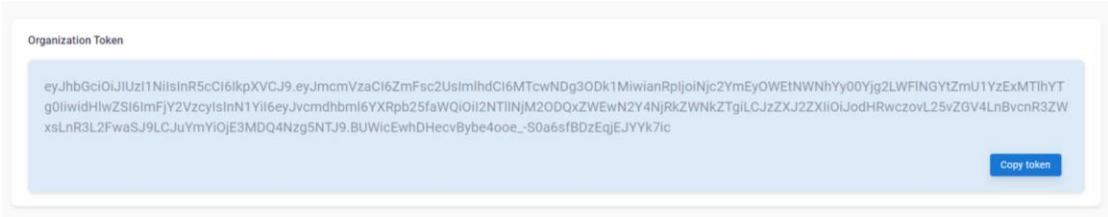


Figure 17. Organization Token

Chapter 5

Device

- 5.1 Device List
- 5.2 Deploy Container
- 5.3 Device Information
- 5.4 Remote Terminal
- 5.5 Docker Install
- 5.6 Agent Update
- 5.7 Device Container

5. Device

5.1. Device List

This page displays all managed devices and their connection status. Operations such as deploying containers, approving devices, updating agents, and dismissing devices can be performed from this page.

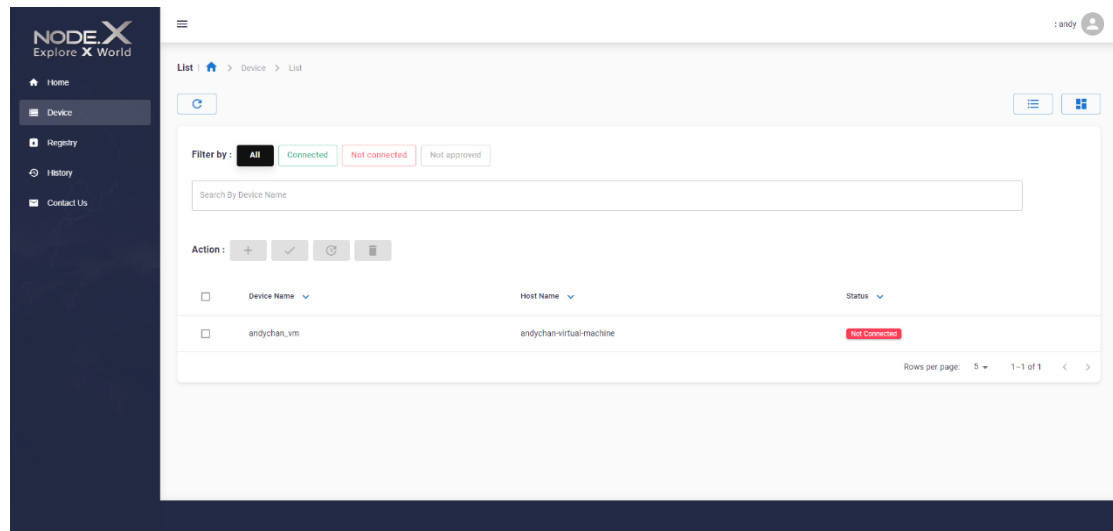


Figure 18. Device List

5.2. Deploy Container

Select the device for container deployment and click the "Deploy Container" button to access the Deploy Container page. Containers can be deployed using images from Docker hub or Custom registry.

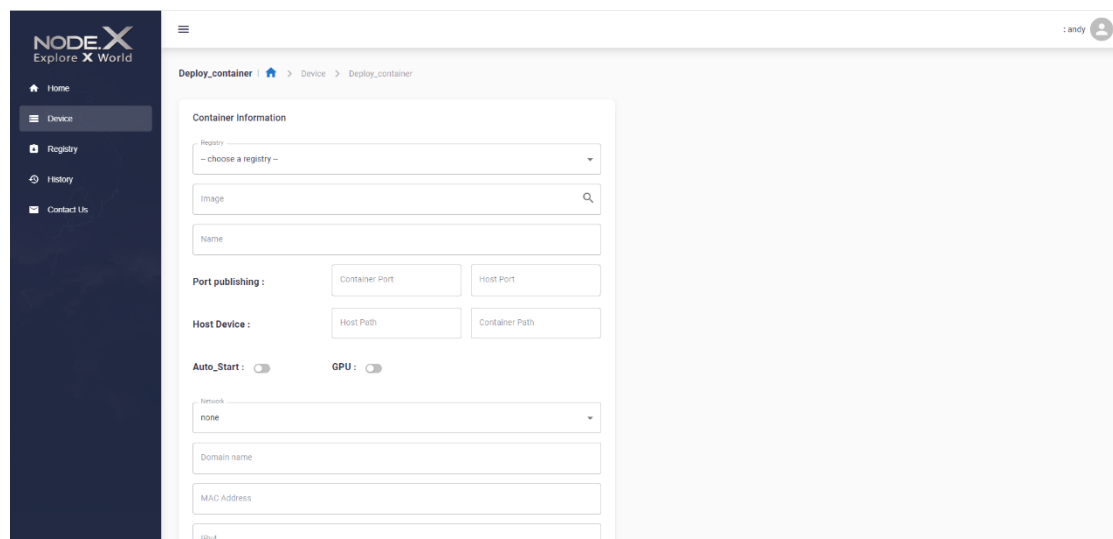


Figure 19. Deploy Container

5.3. Device Information

By clicking on each device, detailed information about the device is shown on the page.

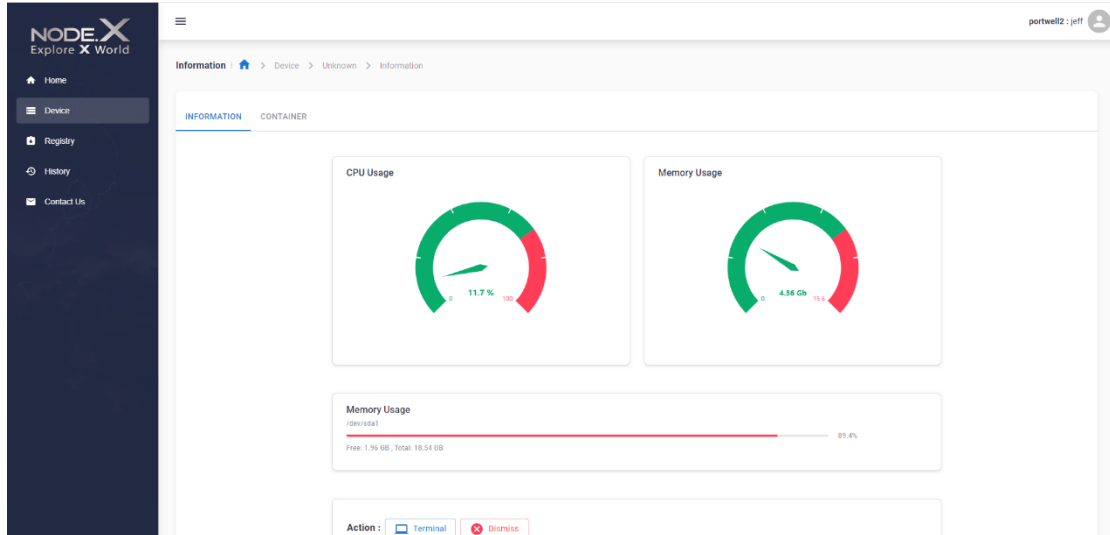


Figure 20. Device Information

5.4. Remote Terminal

Each managed device can be accessed by clicking the “Terminal” icon on the Device Information page. The command line interface can be operated in the same way as in the local terminal through the Server-Agent connection.

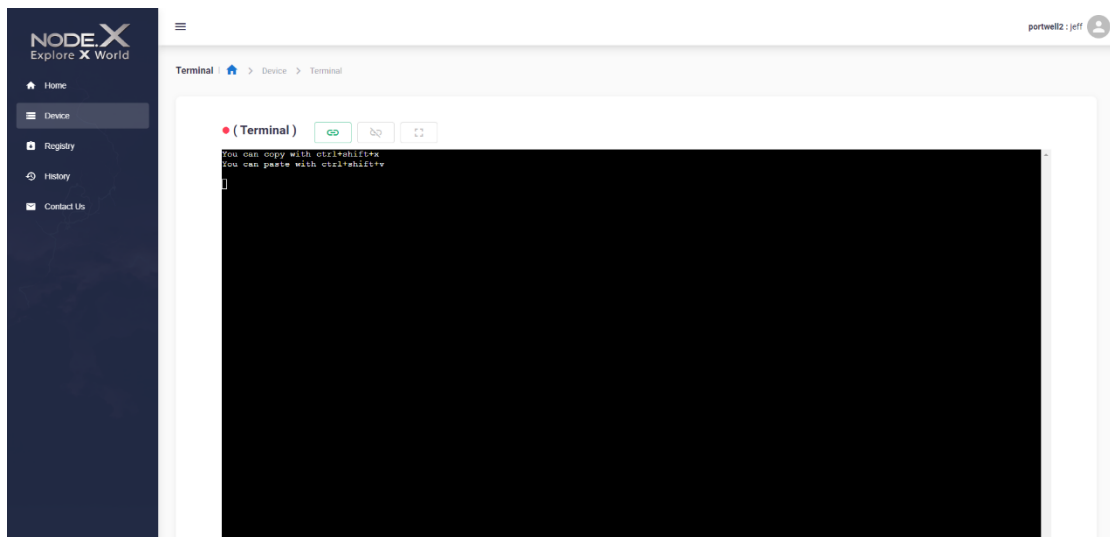


Figure 21. Remote Terminal

5.5. Docker Install

Click the "Docker Install" button to install Docker on the selected device.

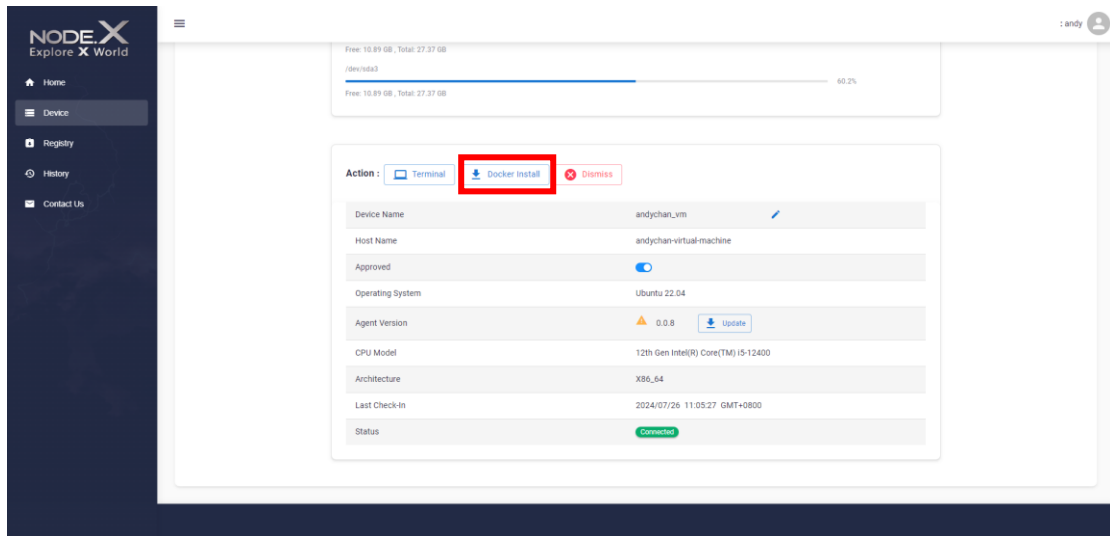


Figure 22. Docker Install

5.6. Agent Update

Click the "Agent Update" button to install the latest version of the Agent on the device.

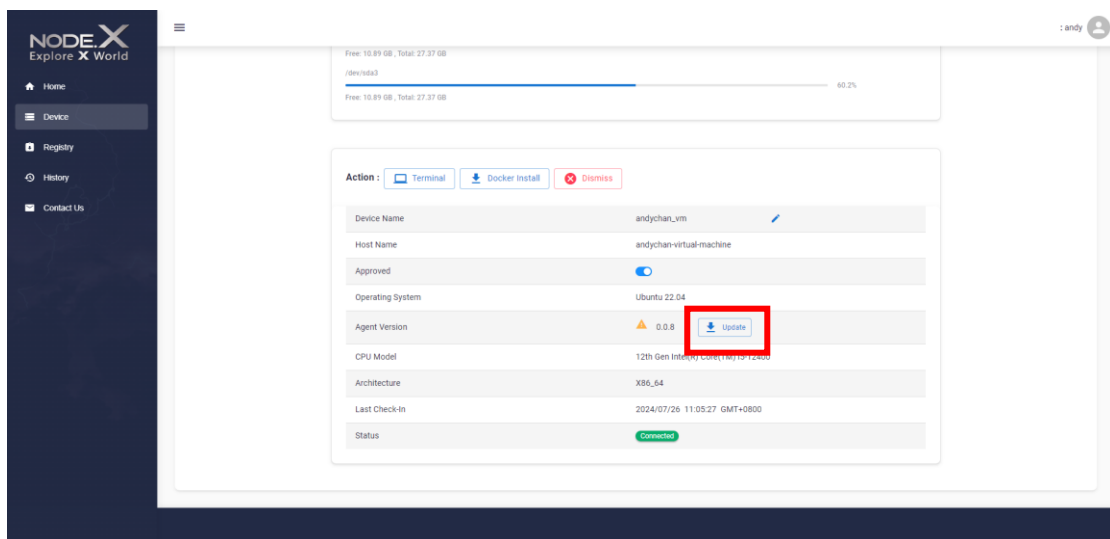


Figure 23. Agent Update

5.7. Device Container

This page displays all containers on the device. It also provides operations for managing the containers on the device, such as start, pause, stop, restart, and dismiss.

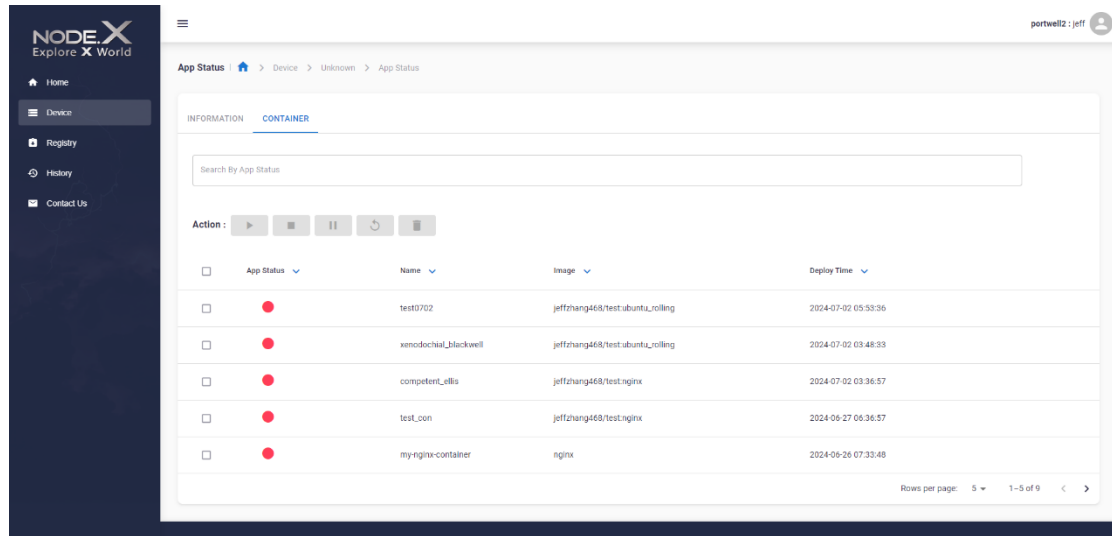


Figure 24. Device Container

Chapter 6

Registry

- 6.1 Registry List
- 6.2 Add Registry

6. Registry

6.1. Registry List

This page displays all registries and their information. Operations such as adding and deleting registries can be performed from this page.

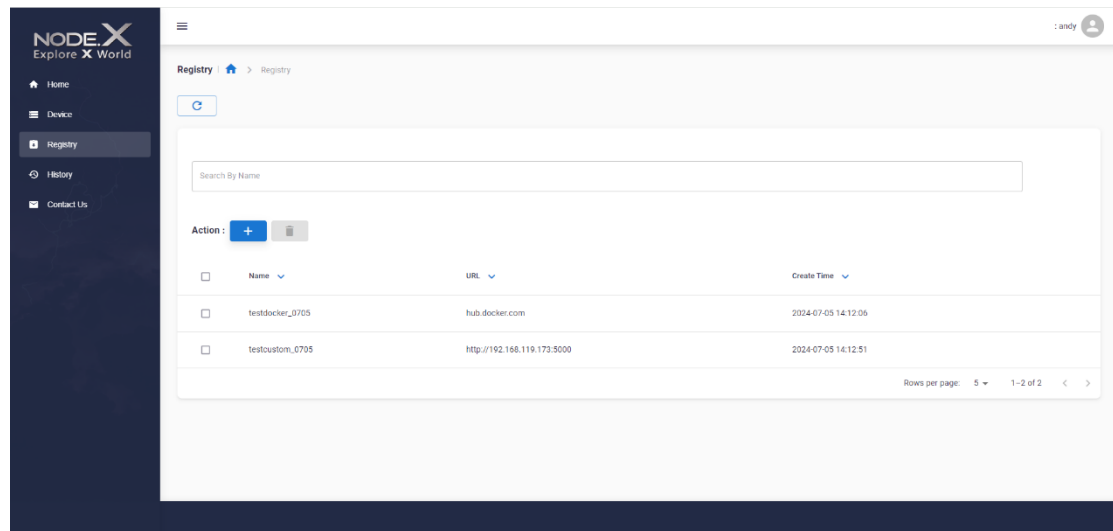


Figure 25. Registry

6.2. Add Registry

Clicking the "Add Registry" button navigates to the Add Registry page. From there, select either Docker Hub or Custom Registry to create a new registry.

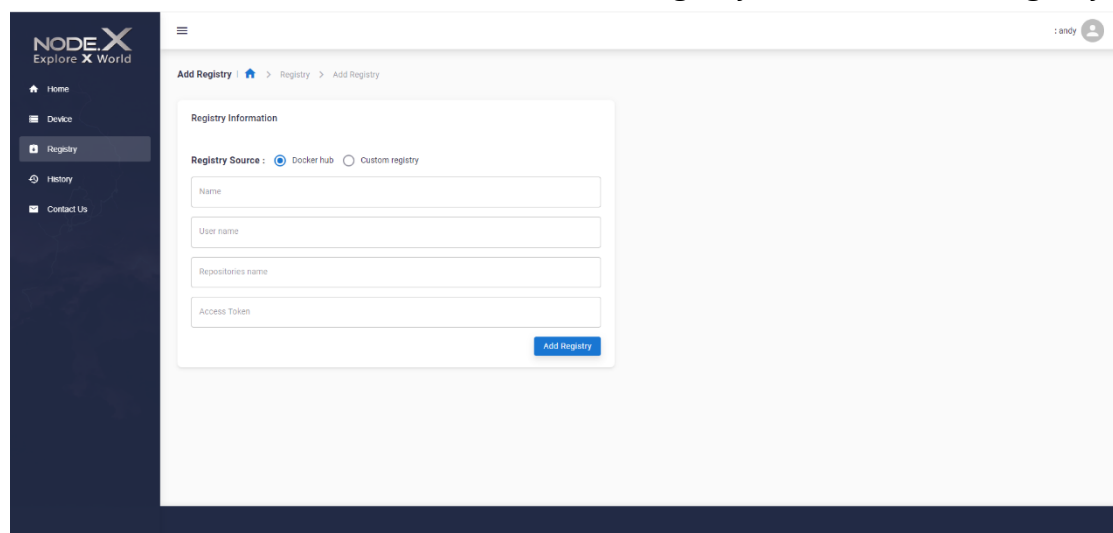


Figure 26. Add Registry by Selecting Docker Hub

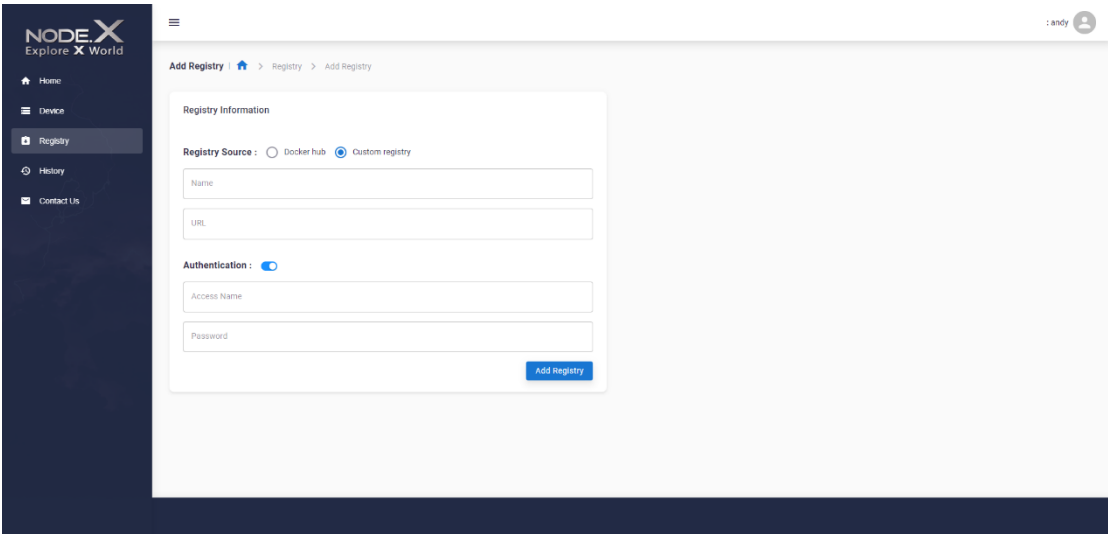


Figure 27. Add Registry by Selecting Custom Registry

Chapter 7

History

7. History

The History page displays events such as user login/logout, device connection status, and other system-related events.

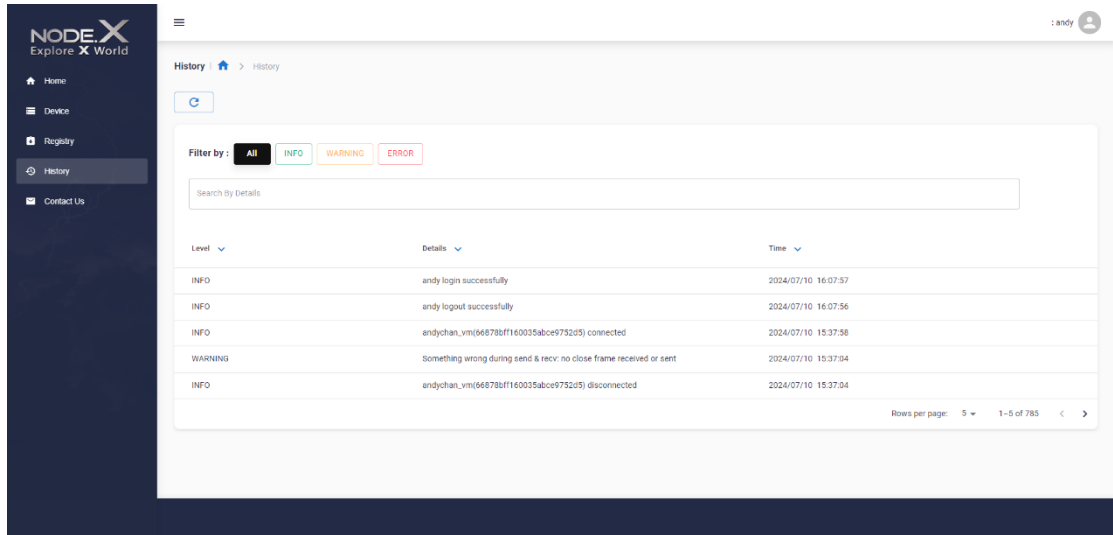


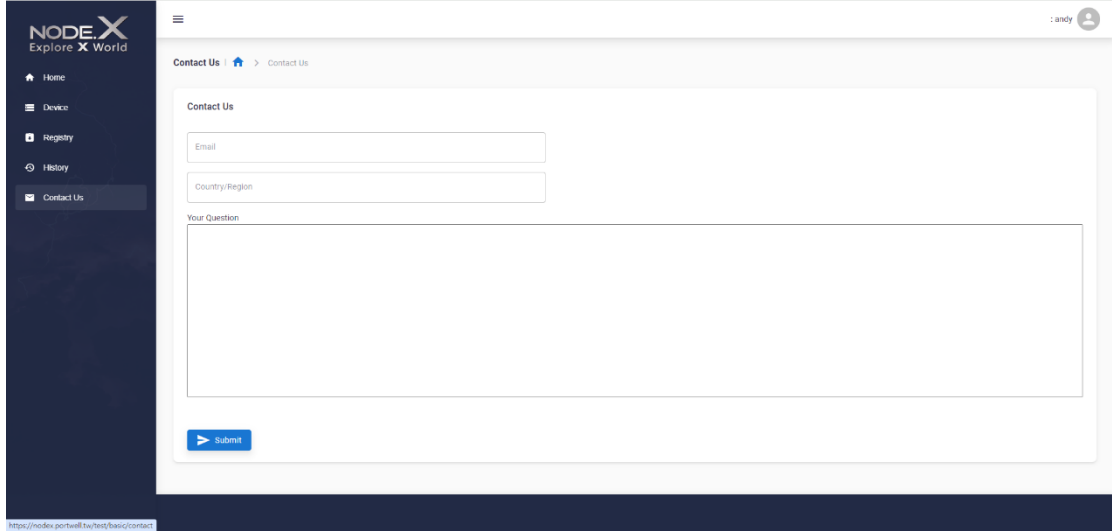
Figure 28. History

Chapter 8

Contact Us

8. Contact Us

If you have any questions, you can fill out the form on the "Contact Us" page and submit it for assistance.



The screenshot displays the 'Contact Us' interface within the NODE.X Explore X World application. On the left, a dark sidebar contains navigation options: Home, Device, Registry, History, and Contact Us. The main content area features a header with 'Contact Us' and a home icon, followed by a breadcrumb 'Contact Us'. The form itself is titled 'Contact Us' and includes two input fields for 'Email' and 'Country/Region'. Below these is a large text area for 'Your Question'. A blue 'Submit' button is located at the bottom left of the form. The top right corner of the application shows a user profile icon labeled ': andy'.

Figure 29. Contact Us



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