

# CipherLab

## User Guide

EnDeCloud Server Application  
For Android Mobile Computer

RK25

RK26

RK95

RS51

RS35

RS36

Version 1.3



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## RELEASE NOTES

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Version	Date	Notes
1.3	Oct. 17 <sup>th</sup> , 2023	<ul style="list-style-type: none"><li>· Add Chapter 3 "Export and Import Settings".</li><li>· Add Section 2.3.1 "Upgrade EnDeCloud Server (Only for the Version 1.4.0 or Later)".</li></ul>
1.2	Jan. 03 <sup>rd</sup> , 2023	<ul style="list-style-type: none"><li>· Modify the description of Section 2.3" Upgrade EnDecloud Server".</li><li>· Add Section 1.2.1"Verify OpenJDK Runtime Environment".</li></ul>
1.1	Dec. 28 <sup>th</sup> , 2022	<ul style="list-style-type: none"><li>· Modify the description of Section 2.2" Launch EnDeCloud Service".</li></ul>
1.0	Oct. 04 <sup>th</sup> , 2022	<ul style="list-style-type: none"><li>· Initial release</li></ul>

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## INTRODUCTION

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**EnDeCloud Server**, a web-based project configuration application, provides a convenient way for the user to manage configurations for the enrolled CipherLab mobile computers and deploy settings to these devices automatically.

## FEATURES

- ▶ The supported CipherLab Android mobile computers:
  - Android 7.0 Nougat (RK25)
  - Android 8.0 Oreo (RS51)
  - Android 9.0 Pie (RK25 & RK95)
  - Android 10 (RS35)
  - Android 11 (RK25 & RS35 & RS51)
  - Android 12 (RK26 & RK95 & RS36)
  
- ▶ Provide an easy management interface for the user to create/edit/save multiple projects
- ▶ EnDeCloud features the remote desktop function
- ▶ Support the ringing function in search of lost devices
- ▶ Support the password protection function
- ▶ Support the notification sending function from the system
- ▶ Support WMDS (Wireless Mobile Deployment System) to enroll multiple devices to EnDeCloud
- ▶ Integrate Agility Intelligence Service, the enterprise mobility analytics service provided by CipherLab, for the data detecting and analyzing across all your mobile devices enrolled onto EnDeCloud
- ▶ Allow to export and import the configuration for the system backup
- ▶ Support the user accounts management
- ▶ Support the devices management in groups
- ▶ Support multiple methods of the devices enrollment

# Chapter 1

## GETTING STARTED

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This chapter helps you get ready to build Java runtime environment for the installation of EnDeCloud server.

## 1.1 PREREQUISITES

In order for EnDeCloud server to work on your computer properly, please make sure the platform OS version is as follows before installing this program on your computer:

- ▶ Windows 10 (64bit)
- ▶ Windows Server 2019 Datacenter (64bit)
- ▶ Windows Server 2022 Datacenter (64bit)

**Java Runtime Environment** also must be installed in advance before starting to install EnDeCloud server. Since the subscription license of Oracle Java is required for business, if you do not have Oracle Java subscription license, you may install free and open source of Java which is called **OpenJDK**.

You can download **OpenJDK** program installer from <https://jdk.java.net/archive/> to your PC and run it by following its on-screen instructions. For more details on this, please refer to the following Section 1.2.

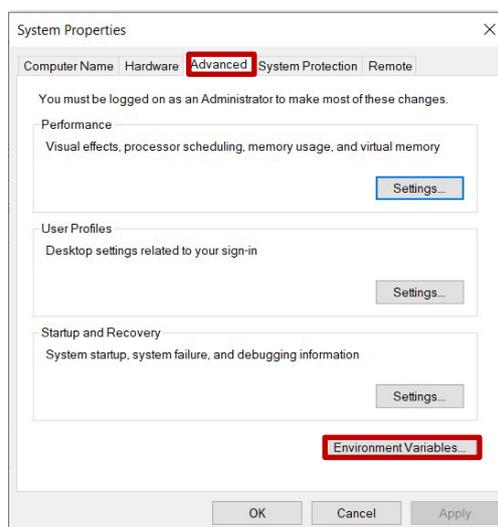
Note:

It's recommended that you can install OpenJDK 11.0.1, since this version has been tested with EnDeCloud server.

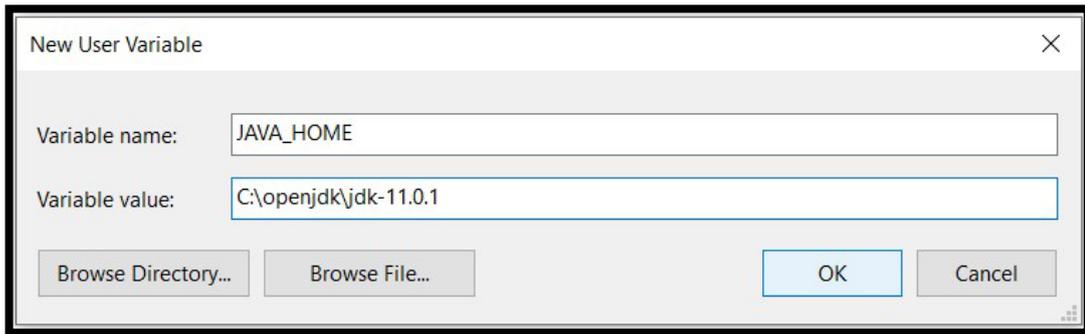
## 1.2 BUILD OPENJDK RUNTIME ENVIRONMENT

The following steps will guide you through the installation and configuration of OpenJDK:

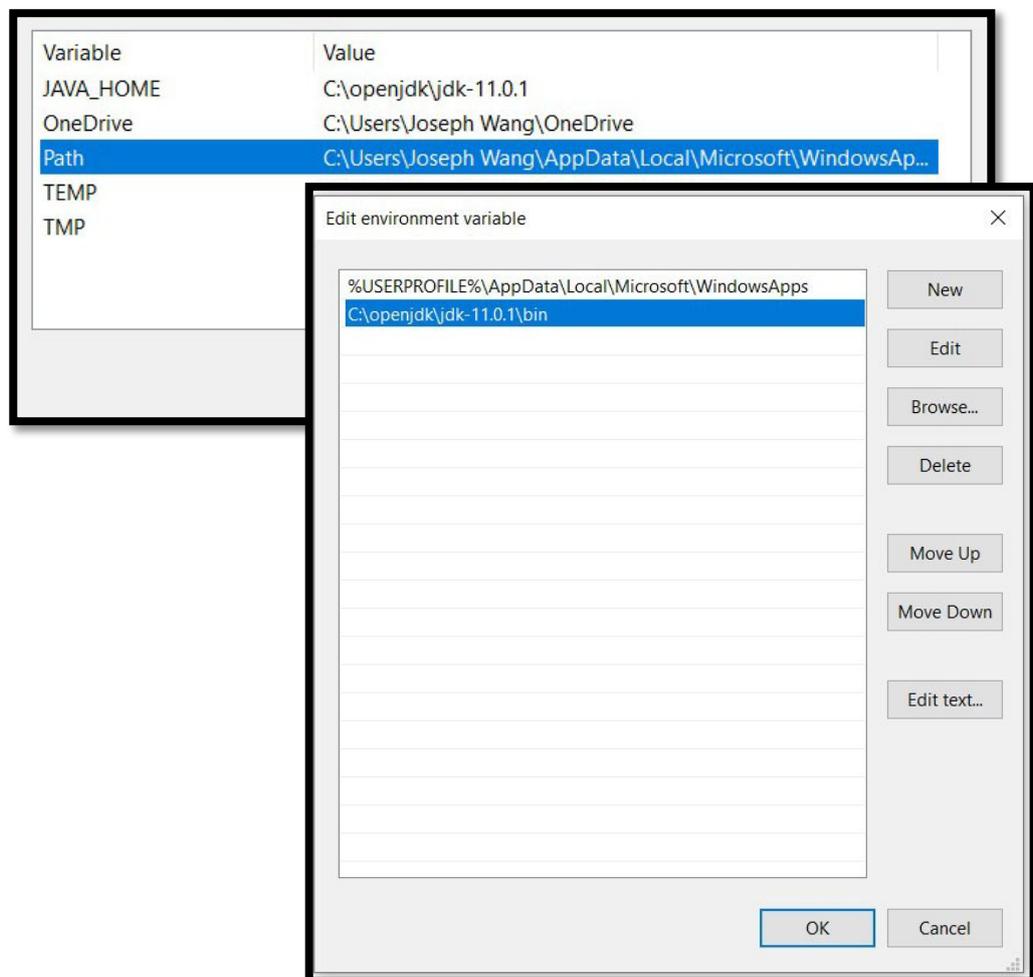
- 1) Download OpenJDK (e.g. 11.0.1) from the following address:  
URL: <https://jdk.java.net/archive/>
- 2) Once you download the OpenJDK zip file, then decompress this zip file in a folder. For example, C:\openjdk\jdk-11.0.1
- 3) Copy the openjdk path, and click **Advanced** tap in System Properties page.
- 4) Click **Environment Variables...** button.



- 5) Click **New...**, then input the exactly same string **JAVA\_HOME** as environment variable and paste the OpenJDK path where you just decompressed the OpenJDK zip file as variable value (see the figure below). Click **OK** when completing.



- 6) In OpenJDK path, there is a bin directory and we will also need to add this path to **Path** Environment variable. Double click **Path** variable to add OpenJDK bin path. For example, C:\openjdk\jdk-11.0.1\bin (see the figure below).



### 1.2.1 VERIFY OpenJDK RUNTIME ENVIRONMENT

To assure whether you have properly configured OpenJDK runtime environment is quite easy. Just simultaneously press both **WIN** and **R** keys to open Run dialog, then type **cmd** and press **Enter** key to open the command prompt. When the command prompt is opened, type **java -version** command and press **Enter** key.

As the figure shown below, once the OpenJDK runtime environment is configured correctly on your machine, you will see the command output which contains the versions of the OpenJDK and the virtual machine.

```
C:\>java -version
openjdk version "11.0.1" 2018-10-16
OpenJDK Runtime Environment 18.9 (build 11.0.1+13)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.1+13, mixed mode)
```

Please note that if your Java runtime environment is not OpenJDK, it stands that the OpenJDK may not be configured properly or there are other Java runtime environments installed on your machine.

Please check whether the **Path** variable mentioned previously contains other Java paths or not. If there are other Java paths which are not OpenJDK, you can move the OpenJDK bin path to the top to set it as the first priority for the running of Java, or you can remove other Java paths from **Path** variable to make sure that Java runtime environment is OpenJDK.

When both the setting of **JAVA\_HOME** and the adding of **OpenJDK bin** to Path Environment variable are completed correctly, you are ready to install EnDeCloud server.

## Chapter 2

### **INSTALLING EnDeCloud SERVER**

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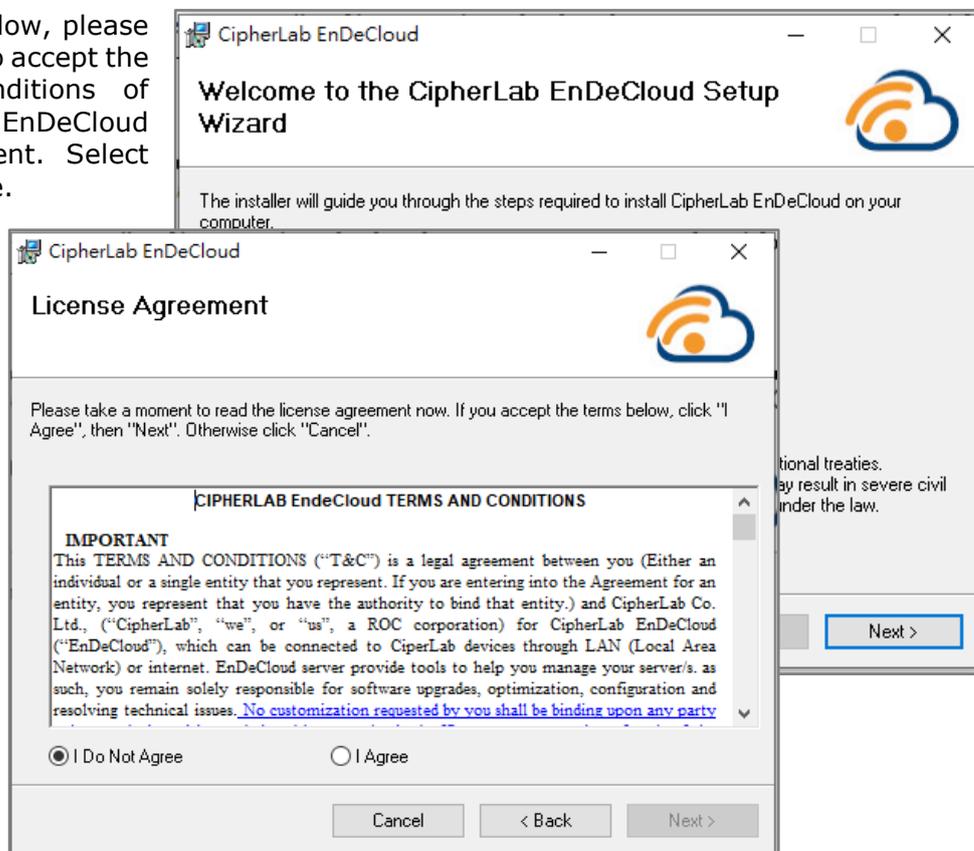
This chapter will teach you how to install EnDeCloud server once you have configured JAVA\_HOME and Path Environment variables.

## 2.1 INSTALL EnDeCloud SERVER

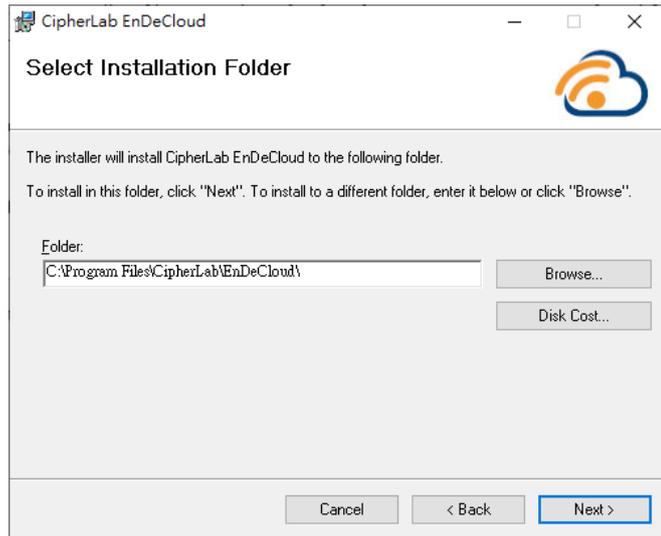
Installing the EnDeCloud server program is very simple. Simply double click to execute the EnDeCloud server installer file named **endecloud-setup-x.x.x-x64.msi** and follow the instructions provided by the installation wizard, and the installation should be completed. The steps are as follows:

1) Please select **Next** when you have seen the following screen.

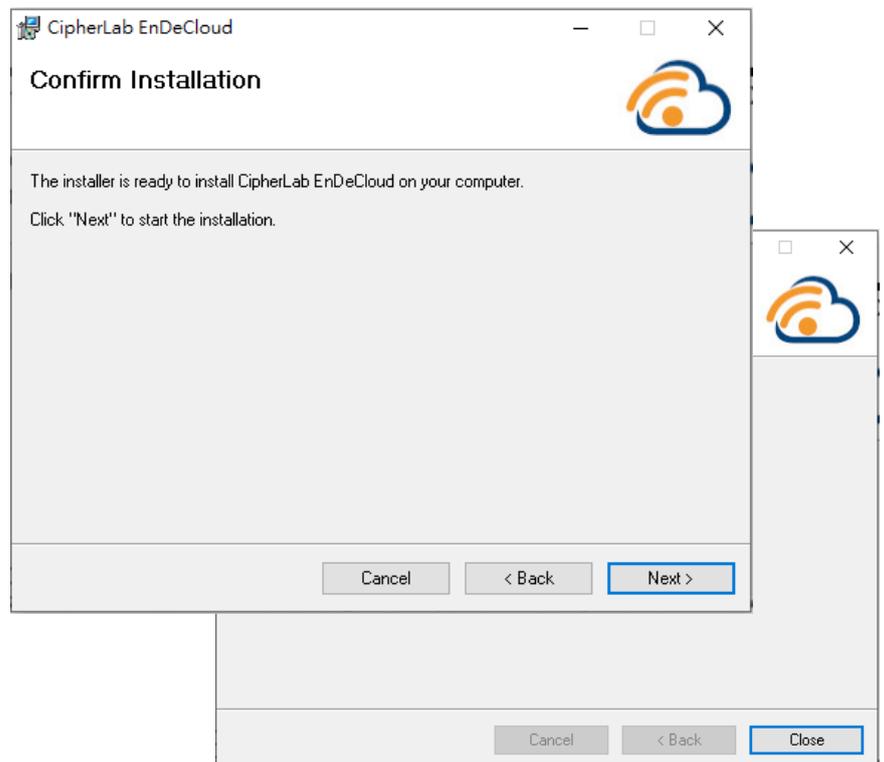
2) At the next window, please select **I Agree** to accept the terms and conditions of CIPHERLAB EnDeCloud license agreement. Select **Next** when done.



- 3) Use the default installation folder or select the desired folder by clicking **Browse...** to install EnDeCloud Server. Press **Next** when completing.



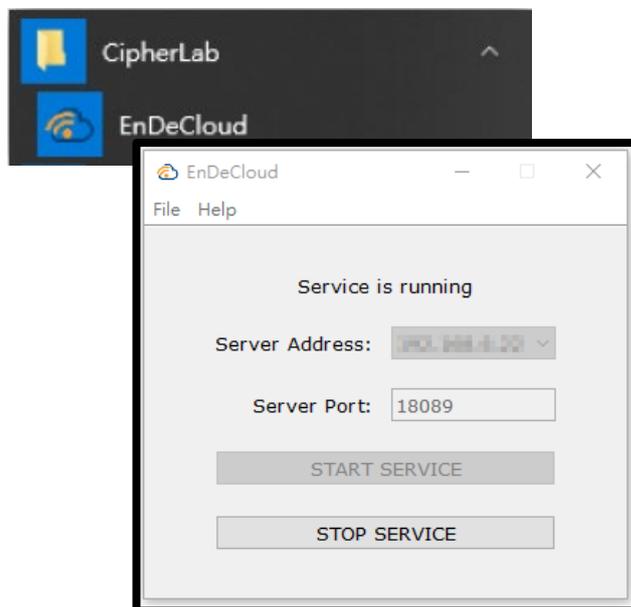
- 4) Press **Next** to initiate the installation. The installation will be done within few minutes. Also click **Close** to exit when the installation is complete. Once the installation is complete, you can start this program from your Start Menu.



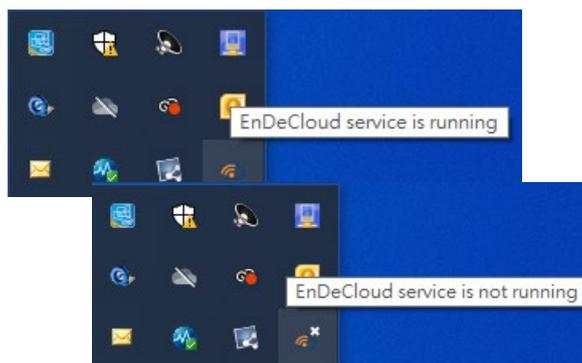
## 2.2 LAUNCH EnDeCloud SERVICE

Once EnDeCloud server installation have been completed, you will be allowed to launch EnDeCloud service to set up the IP address and port number of EnDeCloud server. To launch this service, also follow the steps listed below.

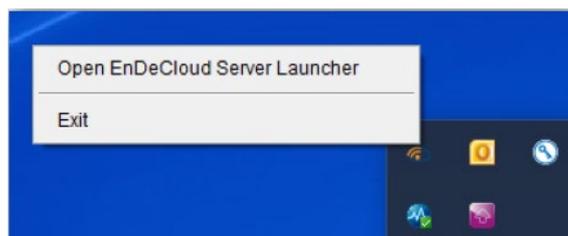
- 1) Click **Start** button of your PC and EnDeCloud server application can be found under CIPHERLab folder from your Start Menu. Click **EnDeCloud** item, EnDeCloud server launcher application will appear.
- 2) Select the IP address of PC's network card for the EnDeCloud server from the pull-down **Server Address** list and input the server port number or leave it as default.
- 3) Click **START SERVICE** button. If EnDeCloud service has been started properly, the message of "Service is running" will be shown on the top of the launcher.



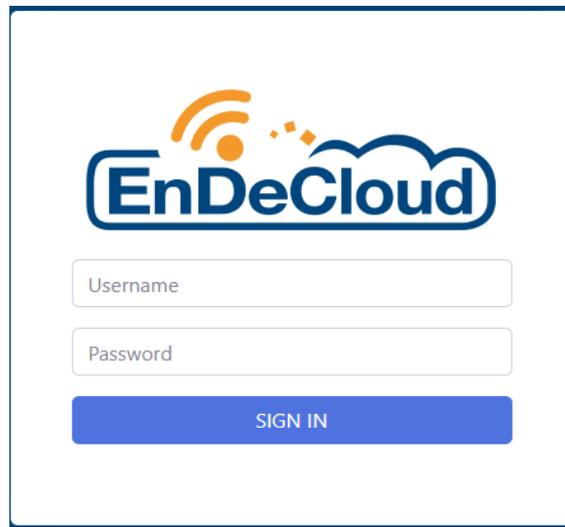
In case the version of your EnDeCloud server is 1.4.0 or later, you will see EnDeCloud  shortcut icon appear on the notification area of the taskbar after EnDeCloud server launcher is initiated. As the figures shown at the right side, you can know whether the current status of EnDeCloud service is running or not when moving the cursor to this icon.



Besides, by right clicking on this EnDeCloud icon on the notification area, you can either quickly initiate EnDeCloud Server launcher or exit from the pop-up menu of the application.

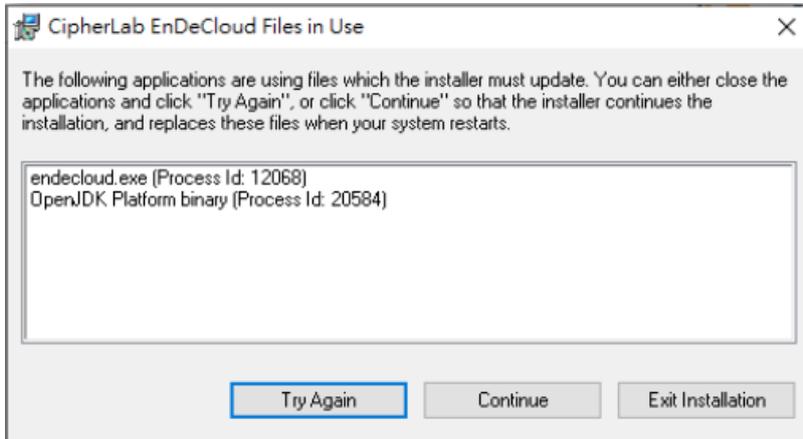


- 4) Initiate a web browser (e.g. Chrome or Firefox) compatible with EnDeCloud once EnDeCloud service has been started.
- 5) Enter the server IP address and server port number (e.g. <http://192.168.100.100:18089>) as you configured in **Step 2** in the launcher into the location bar of the web browser to reach your EnDeCloud server.
- 6) Once you gain the access of EnDeCloud server, the following login window will appear.



## 2.3 UPGRADE EnDeCloud SERVER

If you have already installed EnDeCloud Server with the previous version, please stop EnDeCloud service and exit the application completely before installing the new version to upgrade EnDeCloud service. You may see a dialog showing files with process id, which means that EnDeCloud service or EnDeCloud server launcher is running.

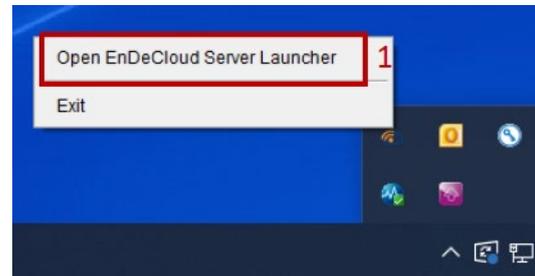


Jump to the next section upon the version of EnDeCloud server installed on your machine and follow the steps listed below to completely exit the running application. Please note that the process of upgrade varies slightly with the version of EnDeCloud server you had installed.

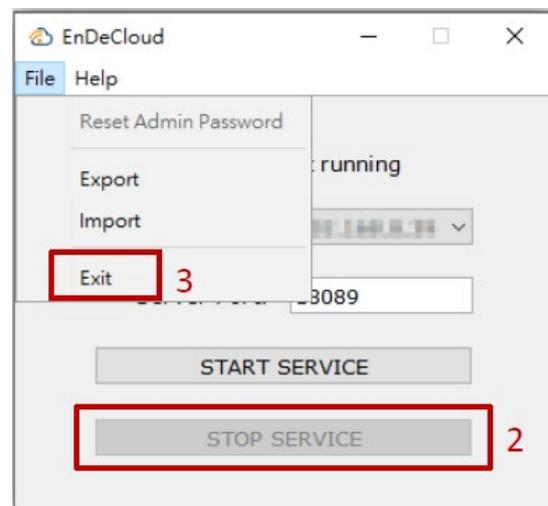
### 2.3.1 UPGRADE EnDeCloud SERVER (ONLY FOR THE VERSION 1.4.0 OR LATER)

If the version of your EnDeCloud server is 1.4.0 or later, please perform the following step-by-step procedures:

- 1) Initiate EnDeCloud server launcher by clicking EnDeCloud item under CipherLab folder from Start Menu of PC. Or you may right click on EnDeCloud  shortcut icon on the notification area of the taskbar and choose **Open EnDeCloud Server Launcher** from the pop-up menu if EnDeCloud server launcher has been initiated.



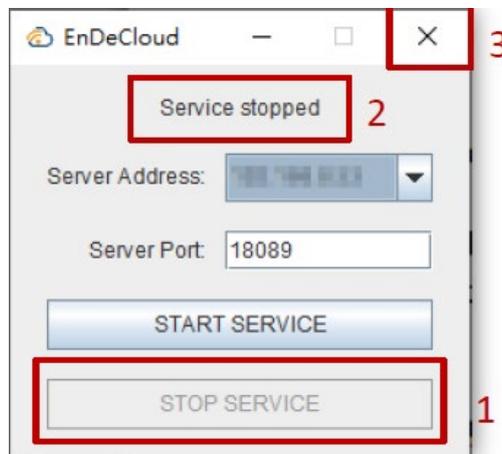
- 2) Once the window of sever launcher appears, if the service is running, then click **STOP SERVICE** button and make sure that service has been stopped (not running).
- 3) Click **Exit** item from the pull-down **File** menu, and then click **YES** for the confirmation of exiting the launcher application. Make sure that this application icon will be removed from the notification area.



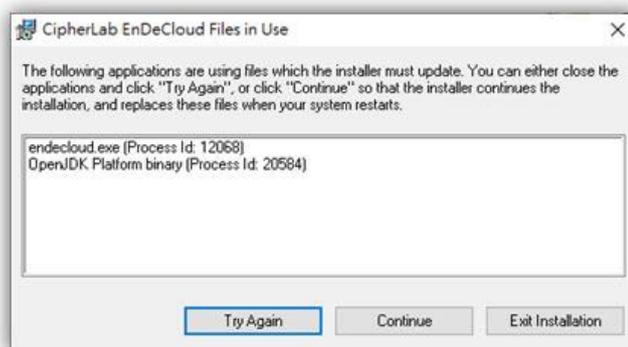
### 2.3.2 UPGRADE EnDeCloud SERVER (ONLY FOR THE VERSION 1.3.1 OR PRIOR)

If you have already installed EnDeCloud Server with the version 1.3.1 or prior, it is necessary of you to stop EnDeCloud service before installing the new version of EnDeCloud server to upgrade EnDeCloud service. Refer to [Section 2.2 "Launch EnDeCloud Service"](#) in this chapter to initiate EnDeCloud server launcher and follow the instructions listed below step by step to upgrade the existing EnDeCloud Server.

- 1) Click **STOP SERVICE** button.
- 2) Make sure that the service has been stopped.
- 3) Close the launcher.
- 4) Double click **endecloud-setup-x.x.x-x64.msi** file and follow the installation wizard to complete this upgrade.

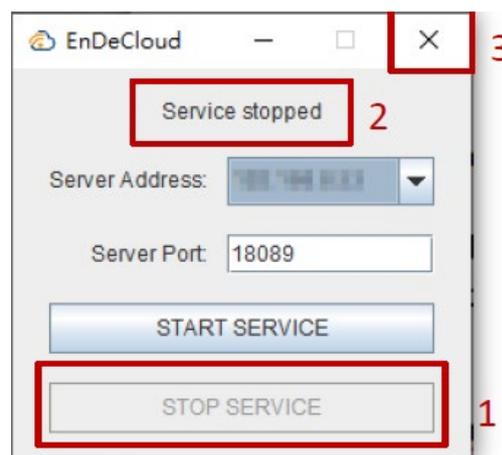


In case that EnDeCloud service has not been stopped yet before executing this upgrade by double clicking **endecloud-setup-x.x.x-x64.msi** file, you may see a dialog of "CipherLab EnDeCloud Files in Use" that shows files with process id, which means that EnDeCloud service is running.

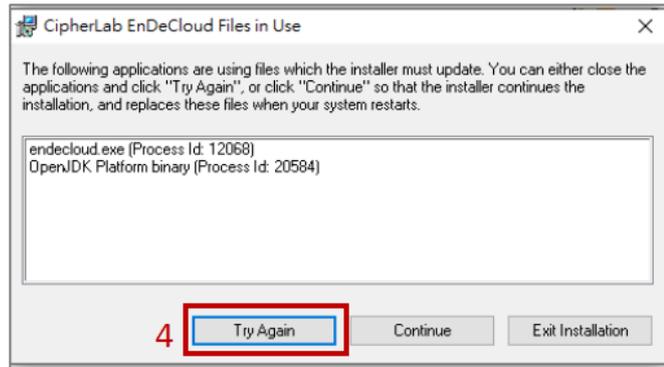


Also refer to [Section 2.2 "Launch EnDeCloud Service"](#) in this chapter to initiate EnDeCloud launcher and follow the instructions listed below step by step to continue the upgrade of the existing EnDeCloud Server.

- 1) Click **STOP SERVICE** button.
- 2) Make sure that the service has been stopped.
- 3) Close the launcher.



- 4) Click **Try Again** button to proceed the installation by following the installation wizard to complete this upgrade.



If this dialog continually appears, please check if the application is completely terminated with the steps mentioned above.

## Chapter 3

### EXPORT AND IMPORT SETTINGS

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This chapter will instruct you how to export and import the settings into/from a configuration file to backup or restore the system configuration.

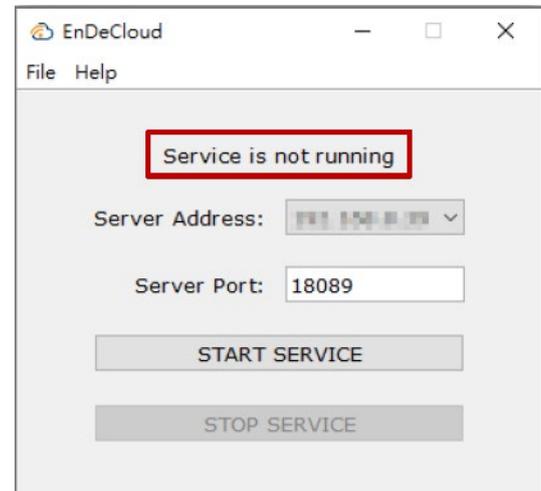
### 3.1 EXPORT SETTINGS

In order to prevent the server from the accidental failure, you may want to make a backup of your EnDeCloud server configuration. EnDeCloud provides a convenient way to make a backup and restore the configuration.

In this section, we will guide you through the process of exporting EnDeCloud server configuration step by step.

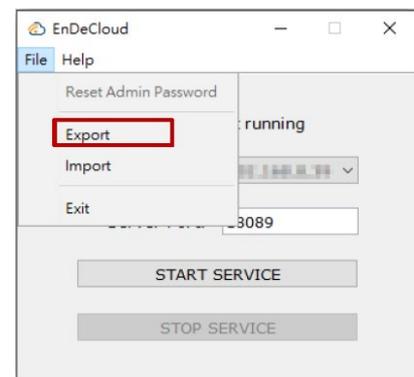
To export the configuration of EnDeCloud server, you have to stop the service first. Now initiate EnDeCloud server launcher (Refer to [Section 2.2 "Launch EnDeCloud Service"](#)), and make sure that the service is not running. In case the service is running, just click **STOP SERVICE** button to shutdown the service.

Once the service is stopped, you are ready to export the configuration of your EnDeCloud server.

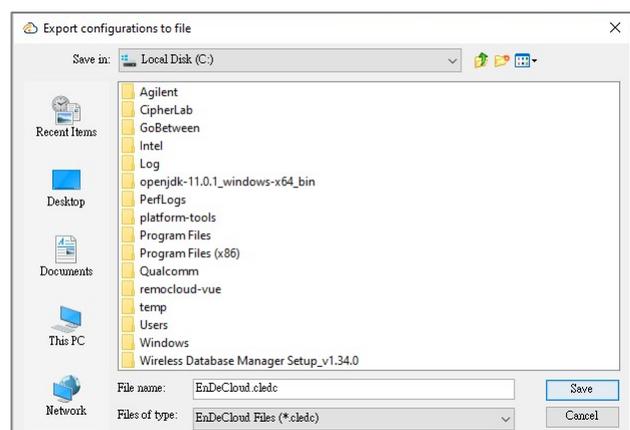


#### 3.1.1 EXPORT SETTINGS INTO A FILE

When EnDeCloud service is stopped, click **Export** item from the **File** pull-down menu. A dialog of "Export configurations to file" to generate the exported file by giving a filename and choosing the file directory in which this file will be placed will appear.

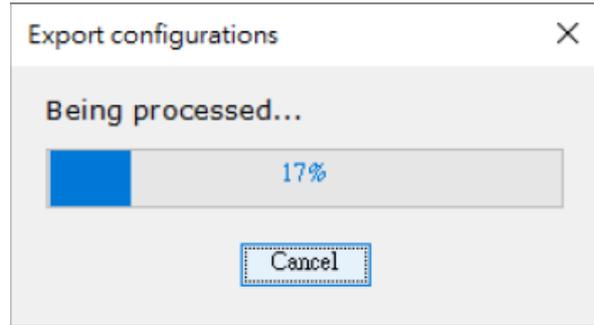


Now choose the file directory and enter the preferred filename with **.cledc** file extension. When the exporting file is set, click **Save** button to start exporting the configuration of your EnDeCloud Server.



Once the process of exporting configurations starts, a progress dialog will appear to indicate the progress of the exporting process.

Then, a message of "Configurations has been exported successfully" will be seen if the configuration is exported to a \*.cledc file successfully. Now you can go to the file directory you select and check if the exported file has been created.



Please note that this process may take several minutes to complete due to the data size of configuration, including the ADC and APK files you uploaded.

## 3.2 IMPORT SETTINGS

In this section, you will learn how to import the settings for your EnDeCloud server from a configuration file. To begin importing the configuration, please also make sure that EnDeCloud service is not running as well.

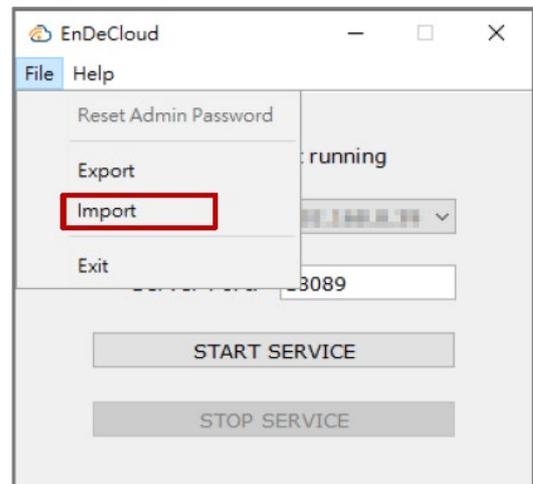
Please note that since the current configuration and the related files will be overwritten in the process of importing, it is highly recommended to make a backup of the current configuration of your EnDeCloud server in case the importing process fails.

### 3.2.1 IMPORT SETTINGS FROM A FILE

Once EnDeCloud service is not running, click **Import** item from the pull-down **File** menu.

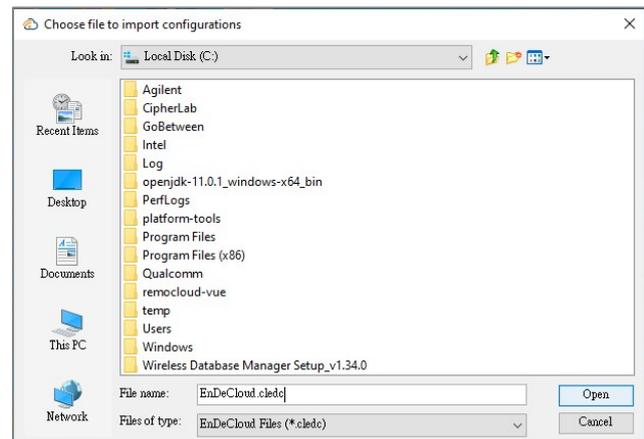
A warning message that indicates all related configurations, including the files you uploaded will be overwritten will appear when importing the configuration.

Click **YES** button to continue the importing process or click **NO** to cancel it.



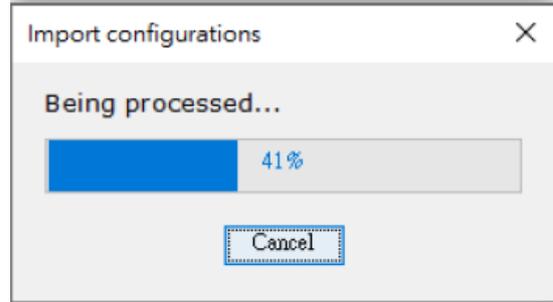
Once you click **YES** to continue the importing process, a dialog of "Choose file to import configurations" to select the file to be imported will appear.

Now choose the preferred file with **.cledc** file extension and click **Open** button to start importing the configuration of your EnDeCloud Server.



Once the process of importing the configuration starts, a progress dialog will appear to indicate the progress of the importing process.

A message of "Configurations has been imported successfully" will appear when the configuration is imported from the selected \*.cledc file successfully.



Now start EnDeCloud service and log in to EnDeCloud web to check if your EnDeCloud server works properly as you configure.

Please note that this process may take several minutes to complete due to the data size of the imported file you choose.