



## Software Installation Guide

Ver. 1.1.0 Nov. 2025





# Logging Foot Installation Guide

## Revision History

Version	Date	Description
1.1.0.1	Nov. 2025	Initial release



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## 1. Introduction

Thank you very much for downloading Logging Foot (hereafter referred to as 'this software'). Please read this manual thoroughly before using the software.

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### 1.1. About This Software

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In this document, the term “*this Software*” refers to a set of related software components, including FTSDK, the Viewer application, and other associated programs described herein. These components are stored within the respective folders extracted into the installation directory.

Each object contained within these folders may be redistributed under the conditions of use specified in Section [1.3 Copyright and License Terms](#).

The software described in this document refers to a series of related software programs, including FTSDK and Viewer applications, which will be described later.

By implementing the API set provided by this software (hereinafter referred to as FTSDK) into your program, you can use various functions such as real-time log display, search, extraction, and saving on the Viewer application provided by this software to analyze and verify program operation, or to record end-user operation logs.

This contributes to reducing the burden of development and operation, such as debugging work in program development and analysis of logs output during operation.

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### 1.2. Precautions for Use and Disclaimer

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- Do not output highly confidential information such as personal or sensitive data using this software.
- Do not use this software in systems that require high reliability, such as medical or financial systems.
- The author shall not be held liable for any damage or loss caused by the use of this software.
- When introducing this software, consider using the free and trial versions provided, and do so at your own risk.
- If any bugs or malfunctions are found, the author will endeavor to improve them but is not obligated to do so.



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## 1.3. Copyright and License Terms

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By using this software, you agree to the following terms and conditions:

- The copyright of this document and software belongs to the author, **Quantityworks Software**. You are prohibited from reprinting, reproducing, modifying, distributing, or selling the software or this document without the author's permission.
- You may use the Software solely for the purpose of enabling the functions provided by the Software to operate correctly.
- You may incorporate the software into your program, provided that its functions operate normally, and reproduce and redistribute it with your program.
- You may use this software in your own program, regardless of whether it is for commercial or noncommercial use, under the aforementioned conditions.

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## 1.4. System Requirements

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OS: Windows10(64bit)、Windows11(64bit)

CPU: Intel 4h generation or later or compatible CPU (recommended)

RAM: 4GB or more (recommended)

STRAGE: 32MB or more free space (\* However, this excludes stored log data.)

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## 1.5. Performance

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- Minimum output log interval:  
2 to 3 ms or less (\* Verified results using Intel 8th generation CPU)
- Viewer Application:
  - Maximum number of log lines displayed: 10,000 lines  
Note: Any lines exceeding this number will be deleted from the top.
  - Maximum output byte count per log entry: 4KB  
Note: Any bytes exceeding this number will not be output.
  - Log output supported languages: English, Japanese  
Note: Special characters and symbols are not supported. They will be garbled
  - Minimum display interval: 16 ms  
Note: If output occurs at intervals shorter than this, it will be buffered internally.  
Output logs will not be lost.  
Therefore, if output continues at intervals shorter than the minimum display interval, memory usage will increase.



## 2. Logging Foot Structure

This chapter provides a description of the installation structure and the overall software configuration.

### 2.1. Installation Structure

Upon successful installation, the folders are extracted by default into the directory:

C:\Program Files\Logging Foot

The folder structure will be organized as outlined below. The contents of these folders may be redistributed under the conditions of use specified in [1.3 Copyright and License Terms](#).

Folder name	Description
doc\jp	<b>Japanese Documentation</b> <ul style="list-style-type: none"><li>- FTSDK-API Specification (LoggingFoot_API-JP.pdf)</li><li>- Software User Guide (LoggingFoot_Guide-JP.pdf)</li><li>- Viewer Application Operation Guide (LoggingFoot_Man-JP.pdf)</li><li>- Setup Guide (LoggingFoot_Setup-JP.pdf)</li></ul>
doc\en	<b>English Documentation</b> <ul style="list-style-type: none"><li>- FTSDK-API Specification (LoggingFoot_API-EN.pdf)</li><li>- Software User Guide (LoggingFoot_Guide-EN.pdf)</li><li>- Viewer Application Operation Guide (LoggingFoot_Man-EN.pdf)</li><li>- Setup Guide (LoggingFoot_Setup-EN.pdf)</li></ul>
ftsdk	<ul style="list-style-type: none"><li>- Client modules implementing APIs for integration into customer applications.</li><li>- Wrapper programs corresponding to various programming languages</li></ul>
ftviewer	The Viewer application and its related modules.
sample	Sample programs demonstrating the usage of the FTSDK-API.
ftsetup	<b>Available only in the licensed version</b> <p>Setup and uninstallation programs used to preconfigure the behavior of the Software when embedded in customer applications and executed at the end-user environment.</p> <p>These programs are primarily intended for integration into the installer of the customer's application.</p>
ftsetup\ SetupSample	A sample installer project demonstrating how to use the setup program is included.



## 2.2. Software Structure Overview

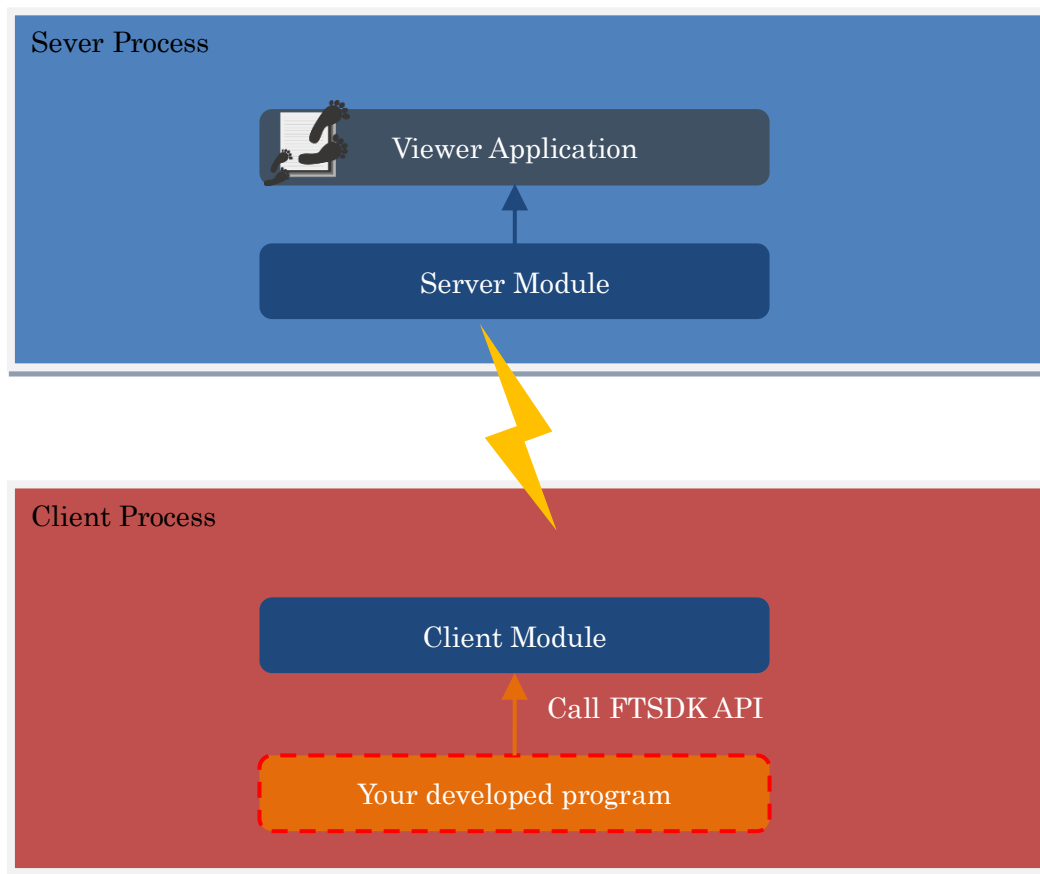
The Software is broadly composed of a server process and a client process.

The customer's application under development is structured as a client process.

When the customer's program outputs logs using the FTSDK API, the client module posts messages to the server module.

The Viewer application, upon receiving notifications from the server module, displays the logs generated by the customer's program.

Communication between the client and server modules is fully asynchronous and executed in separate process spaces. Once a message is posted to the server module, the client module immediately returns control, ensuring that log output does not impose additional load or affect the operation of the customer's program.





## 2.3. Structure Patterns

The Software can be structured in one of the following ways:

- **One-to-One (1:1)** A single server process with a single client process.
- **One-to-Many (1:N)** A single server process with multiple client processes.

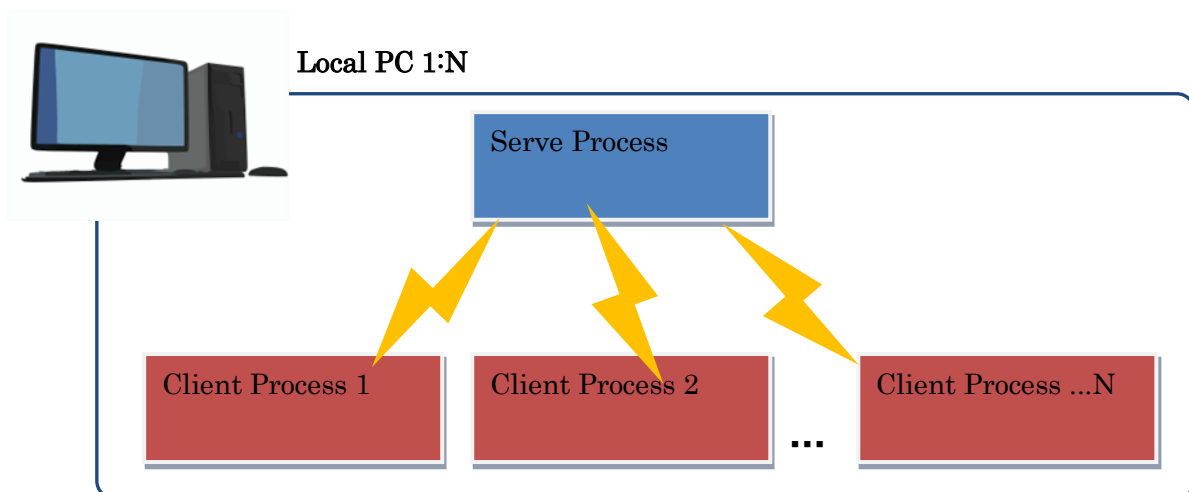
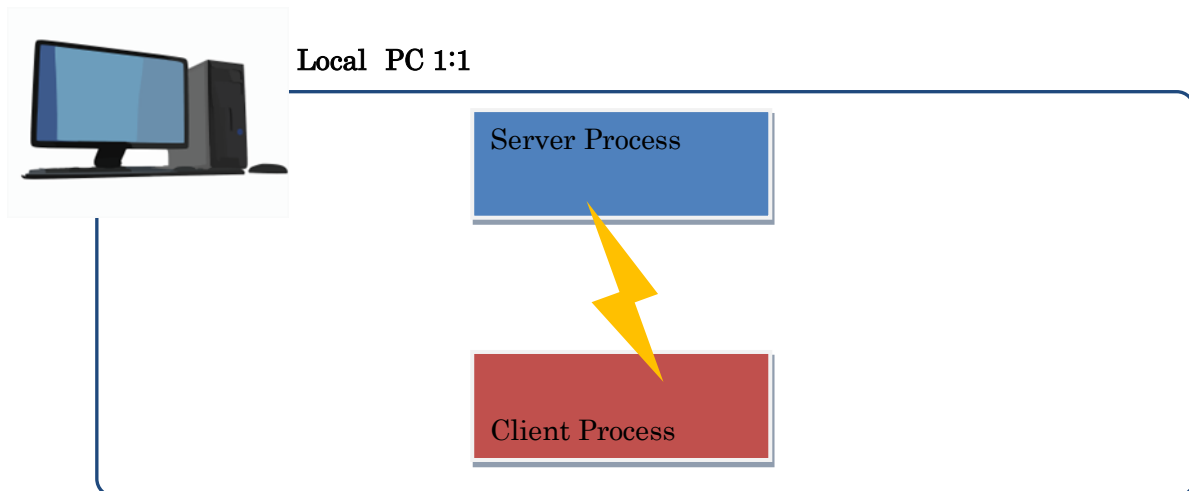
(The maximum processes is 64 for the free version, and 1024 for the paid version.)

The server process and client processes are not required to reside on the same PC; they may also be configured on remote PCs.

On a single PC, it is possible to launch multiple server processes. However, only the first server process started can establish communication with client processes.

### 2.3.1. Local PC Structure Pattern

In a one-to-many (1:N) structure, a single Viewer application within the server process handles the output logs from all client processes.

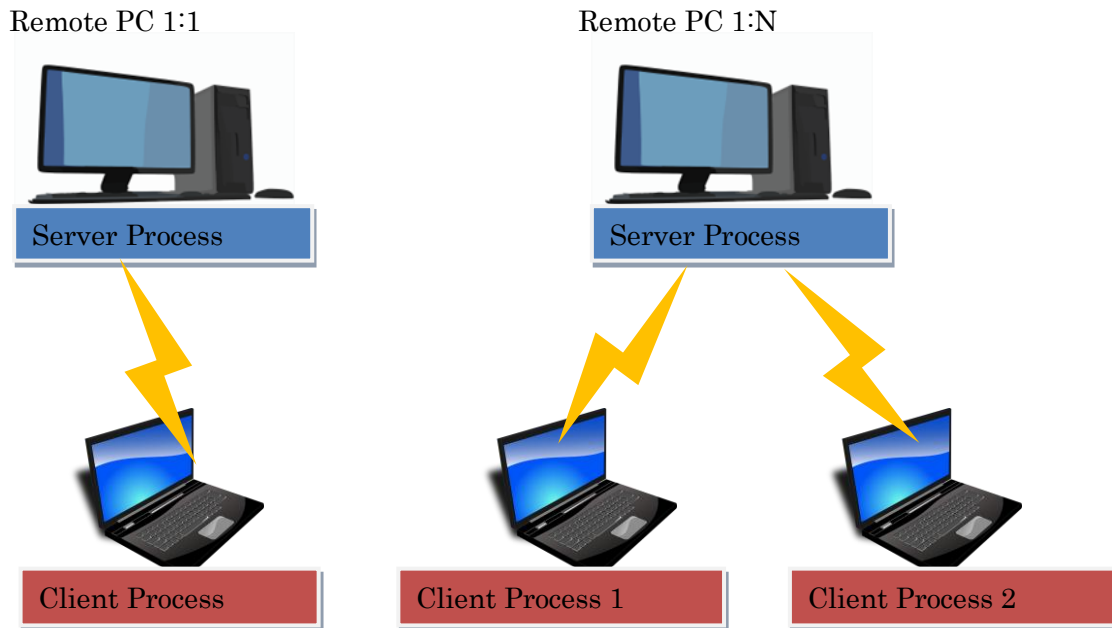






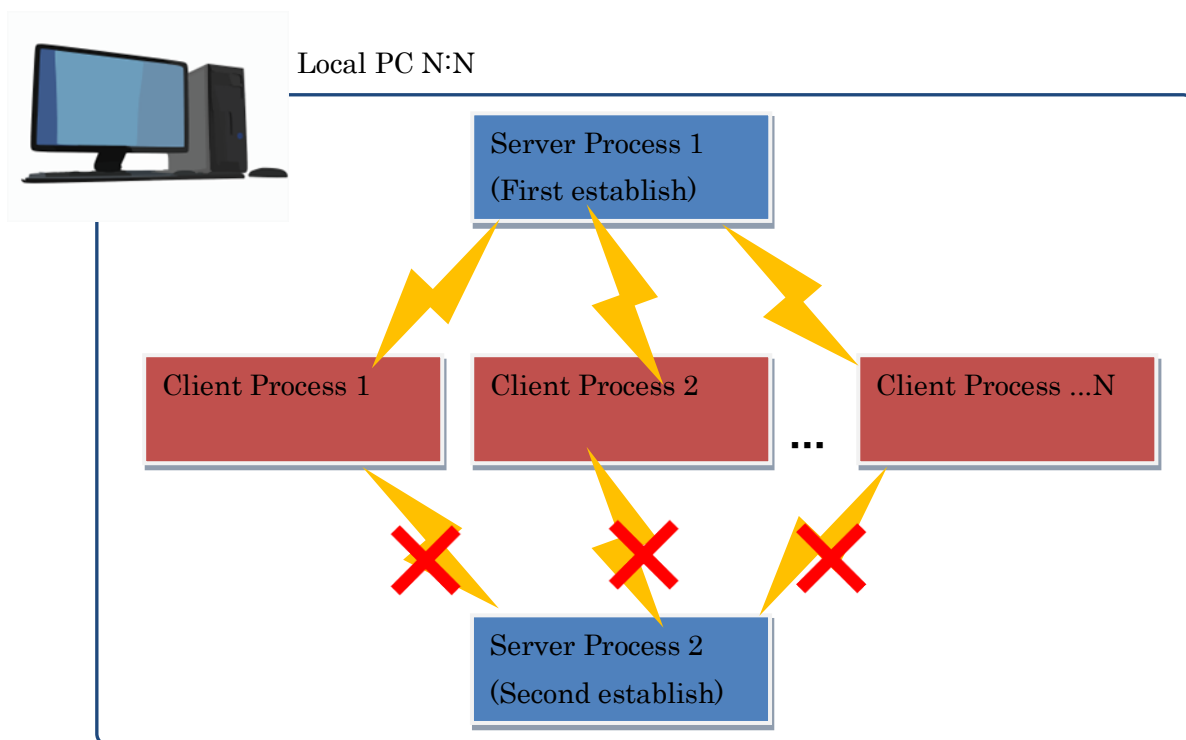
## 2.3.2. Remote PC Structure Pattern

In a remote PC structure, the server and client processes must reside on the same network segment.



## 2.3.3. Multiple Server Process Startup

On the same PC, only the first server process started can establish communication with client processes.





## 3. Logging Procedures Overview

Logs generated by the customer's application using the FTSDK are displayed and saved in real time by the Viewer application. In this document, the entire process from log generation to display and storage is referred to as **logging**.

Detailed information on each API is not provided here. Please refer to the separate document, **FTSDK API Specification**, for API details.

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### 3.1. Starting Logging

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There are two methods to start logging, as described below.

#### 3.1.1. Starting Logging by Launching the Viewer Application

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This method involves directly launching the Viewer application (ft\_viewer.exe).

The customer's program should implement the FTSDK API as described in Section 3. and start in the following sequence:

- (1) Launch the Viewer application.
- (2) Start the customer's program.
- (3) Call **FTCORE\_StartProcess()**

#### 3.1.2. Starting Logging from the Your Program

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This method involves starting logging directly from the customer's program that has integrated the FTSDK API (client-trigger launch).

Your program should implement one of the following FTSDK APIs:

- **FTCORE\_StartTriggerWithParam()**
- **FTCORE\_StartTriggerWithSetup()**

When either of these APIs is called, the Viewer application is automatically launched, followed by the start of the client process.

In this case, the Viewer application cannot be directly operated or terminated manually; it can only be terminated by calling **FTCORE\_ExitTrigger()**.

For the licensed version, behavior can be configured through the Viewer application's option settings. The unlicensed version operates with default settings.

In both methods (3.1.1 and 3.1.2), once communication with the server process is successfully established, the message



## Logging Server accepted request.

is displayed in the Viewer application's message log. From this point onward, all FTSDK APIs become available for use.

### 3.1.3. Display of Windows Security Warnings

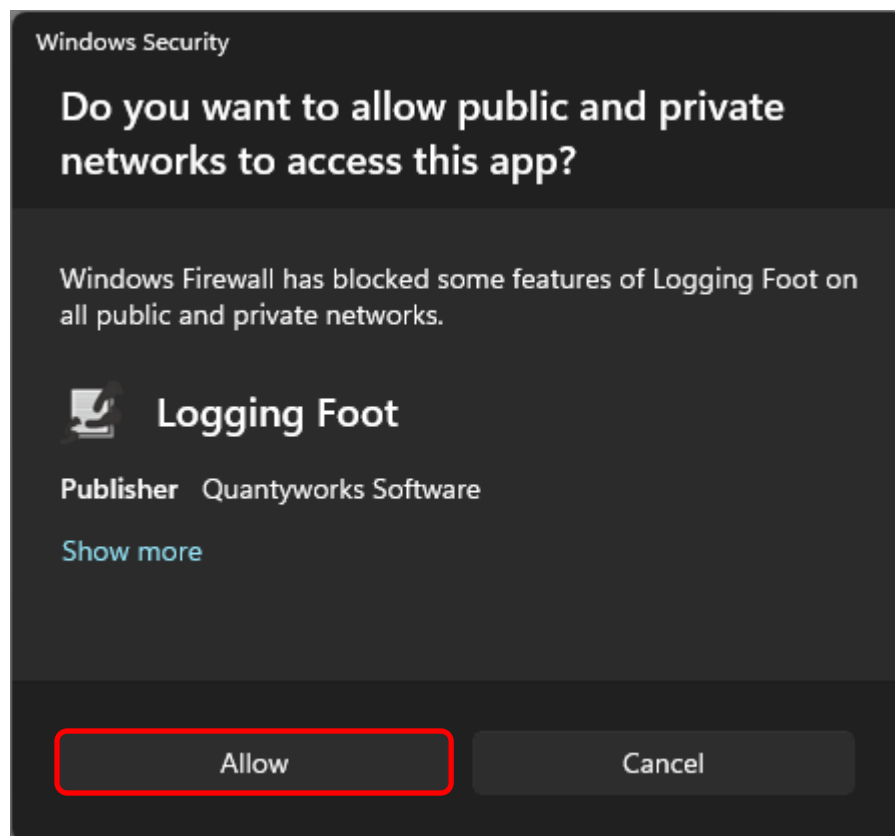
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When the Viewer application is launched for the first time, a critical Windows Security warning window may appear depending on the PC's firewall settings or security policies. This occurs because the Viewer application needs to access specific network ports.

In such cases, clicking the **[Allow]** button will normally prevent the warning from appearing in subsequent launches.

This warning may potentially cause issues when the customer's program, which incorporates the Software, is executed on an end-user's PC.

By using the setup tools included in the licensed edition, this warning can be avoided. For more details, please refer to the separate document, **Setup Guide**.





## 3.1.4. False Positives by Antivirus Software

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Depending on your antivirus software, the Viewer application may be falsely flagged due to the reasons mentioned earlier. If this occurs, please follow the procedures provided by your antivirus software to adjust its settings—such as creating an exception rule—to prevent further false detections.

## 3.2. Log Output

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To output logs at any desired location within the program, call the FTSDK API function **FTCORE\_SendMessage()**. This function allows you to specify not only the main content of the log message but also additional information useful for later analysis, such as the log category and severity level.

Customers may define their own log categories as needed.

For detailed instructions, please refer to the separate document, **Viewer Application Operation Guide**.

## 3.3. Ending Logging

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To end logging, it is necessary to call the API corresponding to the one used to start logging.

### (1) When logging was started with **FTCORE\_StartProcess()**

The customer's program should implement the FTSDK API **FTCORE\_ExitProcess()** to terminate the client process, following this sequence:

1. Call **FTCORE\_ExitProcess()**.
2. Terminate the Viewer application.
3. Exit the customer's program.

*Note: Steps 2 and 3 can be performed in any order.*

### (2) When logging was started with **FTCORE\_StartTriggerWithParam()** or **FTCORE\_StartTriggerWithSetup()**

Calling **FTCORE\_ExitTrigger()** automatically terminates the Viewer application first, followed by the client process.



## 4. Edition Types

The following editions are available. The paid version is scheduled for release in the near future.

Edition	Free Free	Professional Paid	Trial 30 Free
Primary Usage			
Debugging, verification	✓	✓	✓
Personal development applications	✓	✓	✓
In-house applications	✓	✓	✓
Commercial product applications	--	✓	✓
Contact development applications	--	✓	✓
Paid Features			
Include Setup Tool	--	✓	✓
Enables commercial operation of applications incorporating paid features	--	✓	--
Inter-Process Communication			
Maximum Number of Concurrent Processes	64	1024	1024
Token-Based Mutual Authentication	✓	✓	✓
TLS-PSK Encryption	--	✓	✓
Credit/Branding Requirement			
Logging Foot logo displayed at startup	Yes	None	None
Credit statement required in your documents, etc.	Yes	None	None
Usage Restrictions			
Limited period	None	None	30 days



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## 4.1. Edition Descriptions

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### 4.1.1. Free Edition (No-cost)

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The Free Edition allows you to embed this software into your program and redistribute it together, regardless of whether the purpose of your program is commercial or non-commercial. Typical use cases include debugging and verification during development, personal projects, or in-house applications. However, integration into commercial applications or outsourced development projects is not restricted.

In this edition, the "**Logging Foot**" logo will be displayed when the application starts.

In addition, your program's documentation or user manual is required to include a credit statement indicating that it uses "**Logging Foot.**"

### 4.1.2. Professional Edition (Paid)

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The Professional Edition can be used without restriction for your commercial activities, within the scope defined in Section [1.3 Copyright and License Terms](#).

In this edition, the "**Logging Foot**" startup logo will **not** be displayed.

There is also **no obligation** to include credit statements.

### 4.1.3. Trial 30 Edition

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The Trial 30 Edition allows you to try the Professional Edition (Paid) free of charge for **30 days**. As days pass from the initial use, a notification message displaying the remaining trial period will appear at application startup.

Programs that embed this edition **cannot be used for commercial operation**.

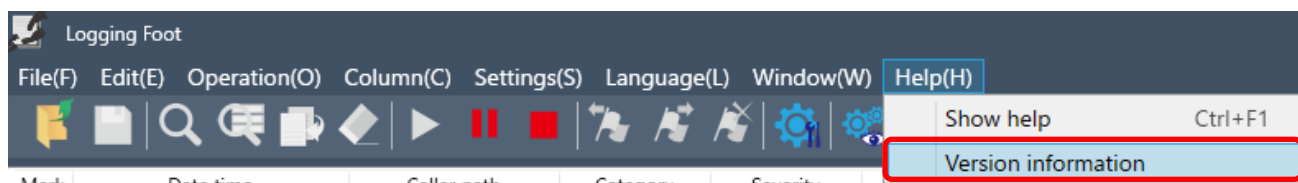
After the trial period, you can continue using the application in one of the following ways:

1. Switch to the Free Edition (see Section [4.2 Switching to the Free Edition](#)).
2. Purchase and register a license for the Paid Edition (see Section [4.3 Registering a License](#)).
3. Purchase the Paid Edition (uninstall the Trial Edition and install the purchased Paid Edition).



## 4.2. Switching to the Free Edition

To switch to the Free Edition, select **[Help (H) > Version information]** from the main menu. This will open the About dialog box.



In the *Version information* dialog box shown below, click the **[Perform]** button.

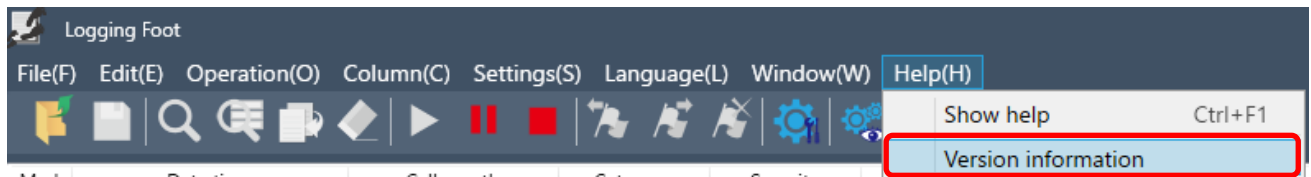




## 4.3. Registering a License

Depending on the purchase method, this software may require license file registration. In such cases, the software will initially launch as the Free Edition or Trial Edition. By registering the license file obtained from your point of purchase or included in the package according to the following procedure, the paid features will be enabled.

Select **[Help (H) > Version information]** from the main menu to open the **Version information** dialog.



### 4.3.1. Registering the License File

In the **About** window shown below, click the **[Register]** button.

A file selection dialog will open, where you must select the license file (.lic) obtained from your vendor.



When the license is successfully authenticated, the dialog shown below will be displayed.

