

# 集成软件 操作说明书（基本要素）

## 目录

集成软件 操作说明书（基本要素） .....	1
前言 .....	2
商标和注册商标 .....	2
关于本文件的内容 .....	2
概要 .....	3
运行环境 .....	4
支持设备 .....	5
关于网络/安全的请求 .....	6
关于连接设备的限制事项 .....	6
软件的安装 .....	7
电脑已安装自动追踪软件时的注意事项 .....	7
安装时的注意事项 .....	7
更新到新版本时 .....	8
软件安装步骤 .....	11
软件卸载步骤 .....	14
软件的启动和关闭 .....	16
启动软件 .....	16
退出软件 .....	17
软件使用流程 .....	18
关于管理窗口 .....	18
显示操作 GUI .....	20
注册管理员帐户 .....	22
登录操作 .....	23
设备注册 .....	23
设备操作 .....	23
界面说明 .....	25
基本的界面构成 .....	25
管理工具 .....	28
收集本软件的操作日志 .....	28
有关本产品的软件信息 .....	29

# 前言

---

## 商标和注册商标

- Microsoft®、Windows®、Windows® 10、Windows® 11 和 Microsoft Edge® 是 Microsoft Corporation 在美国和其他国家/地区的注册商标或商标。
- Apple、Mac、macOS、iPadOS、iPhone、iPad 和 Safari 是 Apple Inc. 在美国和其他国家/地区的商标。
- Android™ 和 Chrome™ 浏览器是 Google LLC 的商标。
- Intel® 和 Intel® Core™ 是英特尔公司在美国和其他国家的商标或注册商标。
- 文中所涉及的其他公司和产品名称可能是其各自所有者的商标或注册商标。

---

## 关于本文件的内容

- 本文件中的插图或界面显示可能与实际情况有所不同。
- 本文件中将个人电脑简称为“电脑”。

---

## 概要

- 本软件是一个新的软件平台，集成了各种软件，支持本公司制造的远程相机系统。可以将免费的基础软件和计划于将来发布的收费插件结合起来，根据用途进行定制。使用本软件可以构建兼顾易用性和现场高效性的远程相机系统。
- 安装本软件，即可使用免费的基础软件功能。基础软件包括设备管理功能（设备视图功能）和远程相机控制功能（PTZ 控制功能）。
  - 设备视图功能的用处
    - 设备的注册/编辑/删除
    - 设备信息显示
    - 设备电源管理
    - 自动检测联网的相机
    - 相机的网络设置
    - 相机的固件更新
    - 相机管理员批量注册
    - 相机的 NDI |HX / SMPTE ST 2110 激活
  - PTZ 控制功能的用处
    - 相机的平移/俯仰/变焦控制
    - 相机的预设注册/调用/删除、预设速度设置
    - 相机图像质量调整
    - 内置自动追踪功能的相机的自动追踪功能控制
    - 相机的开机 / 待机控制
- 在基础软件上激活收费插件，即可使用收费插件的功能。
- 基础软件和收费插件均支持服务器操作，可通过同一网络上的其他电脑，显示并操作图形用户界面。
- 备有外部 API，可通过外部系统控制本软件的功能，因而可与外部系统进行组合以灵活构建系统。※计划在将来的软件更新中提供

---

## 运行环境

使用本软件需要配备以下运行环境。

### ■服务器电脑

- 操作系统
  - Windows Server 2022
  - Windows 11
  - Windows 10 64bit (21H2 或更高版本)
- 硬件
  - CPU: Intel Core 7 代 (Kaby Lake) 或更高版本
  - 内存: 8GB 以上
  - 显示器: 1920x1080 以上
  - 存储: 预留 2GB 以上的存储空间
- 软件
  - 网络浏览器: Microsoft Edge, Google Chrome

※服务器电脑的硬件环境指的是使用免费基础软件的功能时所需的硬件环境。

关于使用收费插件的功能时所需的硬件环境, 请参阅各收费插件说明书所述的运行环境要求。

※服务器电脑的 Windows 操作系统应在安装到 C 盘的状态下使用。

### ■客户端 (浏览终端)

- 操作系统
  - Windows 11
  - Windows 10 64bit (21H2 或更高版本)
  - macOS 13 (Ventura) 或更高版本
  - iPadOS 16 或更高版本
- 硬件
  - 显示器: 1920x1080 以上 (iPad 除外)
- 软件
  - 网络浏览器: Microsoft Edge, Google Chrome

### <备注>

- 如果您使用 Google Chrome, 请从 Google LLC 网站下载并安装。

---

## 支持设备

本软件支持的设备包括以下产品（截至 2025 年 6 月）

### ■Panasonic 生产的网络相机

#### PTZ 相机

- AW-UE160/AW-UE163
- AW-UE150A/AW-UE158/ AW-UE 148
- AW-UE150/AW-UE155/AW-UN145
- AW-UE100
- AW-UE80/AW-UE83
- AW-UE70/AW-UN70/AW-UE65/AW-UE63
- AW-UE50/AW-UE53
- AW-UE40/AW-UE43
- AW-UE30
- AW-UE30
- AW-UE70/AW-UN70/AW-UE65/AW-UE63
- AW-UE20
- AW-UE4
- AW-HE145
- AW-HE70/AW-HN70
- AW-HE65/AW-HN65/AW-HE58/AW-HE48
- AW-HE42/AW-HE68/AW-HE75
- AW-HE40/AW-HN40/AW-HE38/AW-HN38/AW-HE35
- AW-HE20
- AW-UR100
- AW-HR140

#### 盒式相机

- AW-UB10
- AW-UB50

### <备注>

- 关于最新的支持机型，请前往下列网站的本软件产品页面进行确认。  
日文: [https://connect.panasonic.com/jp-ja/products-services\\_proav](https://connect.panasonic.com/jp-ja/products-services_proav)  
英文: <https://pro-av.panasonic.net/en/>
- 请将设备固件更新到最新版后再使用。固件可以通过上述网站下载。
- 上面列出的某些型号可能在某些地区不销售。

---

## 关于网络/安全的请求

本软件需在电脑联网的状态下使用，因此可能遭遇以下损害：

- 信息经电脑泄露或外流
- 怀有恶意的第三方非法操作电脑/本软件
- 怀有恶意的第三方干扰或中止电脑/本软件的工作

为防止此类损害，客户应负责采取完善的网络安全措施，包括下列措施。本公司对此类损害概不负责，敬请理解。

- 使用防火墙，在确保安全性的网络上使用电脑。
- 确认定期查杀电脑病毒或非法程序。
- 为保护电脑免受非法攻击，电脑应设置密码，并对用户的登录权限进行限制。
- 电脑不可安装在第三方容易访问的场所，并且应采取防盗措施。

---

## 关于连接设备的限制事项

- 连接服务器电脑、远程相机等设备的网络，建议使用相同网段。如果连接不同网段的设备，可能会依赖于网络设备的特定设置，因此操作开始前请进行充分确认。
- 连接服务器电脑、远程相机等设备的网络，建议使用有线连接。使用无线连接时，本软件的界面显示或操作反应可能会变得缓慢。
- 请使用 HTTP 连接设置连接远程相机。不支持 HTTPS 连接。
- 请使用固定 IP 设置来操作服务器 PC。不支持 DHCP 设置操作。

# 软件的安装

---

## 电脑已安装自动追踪软件时的注意事项

在已安装自动追踪软件 AW-SF200 / AW-SF100 Web appli ver. 的电脑上，本软件无法执行。如需在已安装自动追踪软件 AW-SF200 / AW-SF100 Web appli ver. 的电脑上安装本软件，请按照以下步骤卸载自动追踪软件。

1. 打开 Windows 的[应用和功能]界面。
2. 从[应用和功能]界面的应用程序中选择[Node.js]并执行卸载。
3. 从[应用和功能]界面的应用程序中选择[PostgreSQL 11]并执行卸载。
4. 从[应用和功能]界面的应用程序中选择[Panasonic Auto Tracking Server]（Panasonic 自动跟踪设置）并执行卸载。
5. 重启电脑。

<备注>

- 已安装 AW-SF100 Standalone ver. 的电脑无需卸载自动追踪软件。

---

## 安装时的注意事项

- 请使用拥有管理员权限的 Windows 帐户进行安装。
- 如果在安装过程中显示 Windows 的用户帐户控制的确认信息，请单击“是”以继续该项处理。
- 如果在安装过程中显示 Windows 防火墙权限确认屏幕，请允许访问并继续该过程。

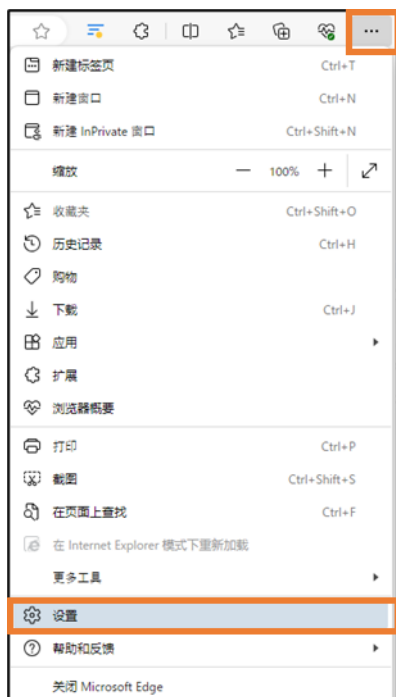
## 更新到新版本时

当本软件更新到新版本时，无需事先卸载旧版本。当您安装新版本时，软件将自动更新。

更新后，请先清除网络浏览器的缓存，然后再使用新版本的软件。如果在未清除缓存的情况下运行新版本，可能会出现故障。

### ■Microsoft Edge 清除缓存流程

1. 单击 Microsoft Edge 屏幕右上角的菜单按钮…，然后单击“设置”。



2. 在 Microsoft Edge 设置屏幕上，选择“隐私、搜索和服务”，然后选择“选择要清除的内容”。



3. 在“清除浏览数据”屏幕上，配置以下设置并单击“立即清除”按钮以清除缓存。

时间范围：所有时间

缓存的图像和文件：勾选




<备注>

• 上述清除缓存的过程适用于 Microsoft Edge 版本 120.0.2210.121。

根据 Microsoft Edge 版本的不同，显示可能会有所不同。

## ■ Google Chrome 清除缓存流程

1. 单击 Google Chrome 屏幕右上角的菜单按钮 ，然后单击“设置”。



2. 在 Google Chrome 设置屏幕上，选择“隐私和安全”，然后选择“清除浏览数据”。



3. 在“清除浏览数据”屏幕上，配置以下设置并单击“清除数据”按钮以清除缓存。

时间范围：时间不限

缓存的图片和文件：勾选

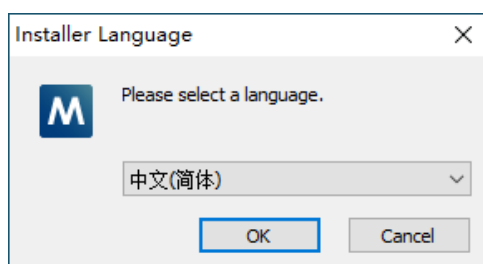


<备注>

- 上述清除缓存的过程适用于 Google Chrome 版本 119.0.6045.123。  
根据 Google Chrome 版本的不同，显示可能会有所不同。

## 软件安装步骤

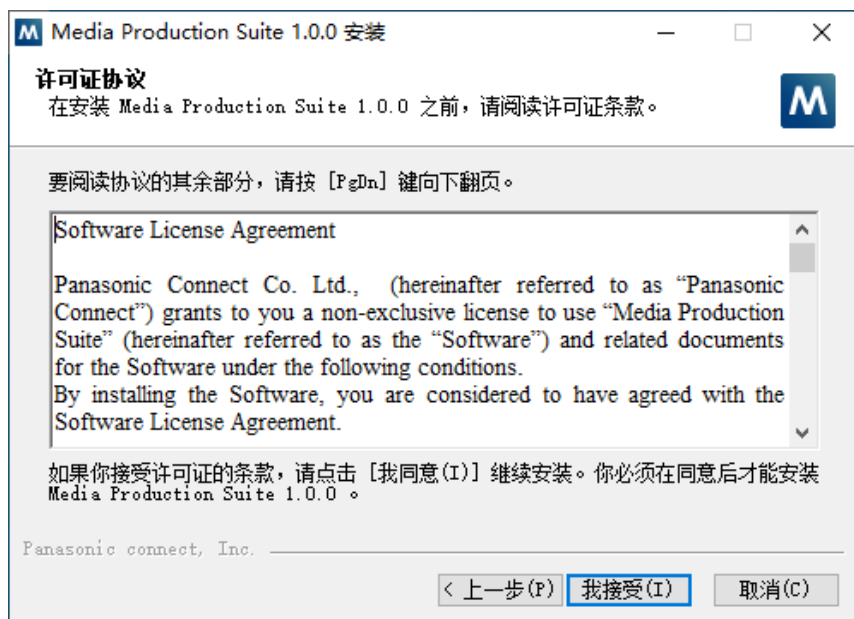
1. 双击 Setup.exe 运行安装程序，选择语言，然后单击确定。



2. 单击「下一步」按钮继续。



3. 显示许可证协议，请检查内容，如果没有问题，请单击「我接受」。



4. 运行软件所需的运行时将被安装。

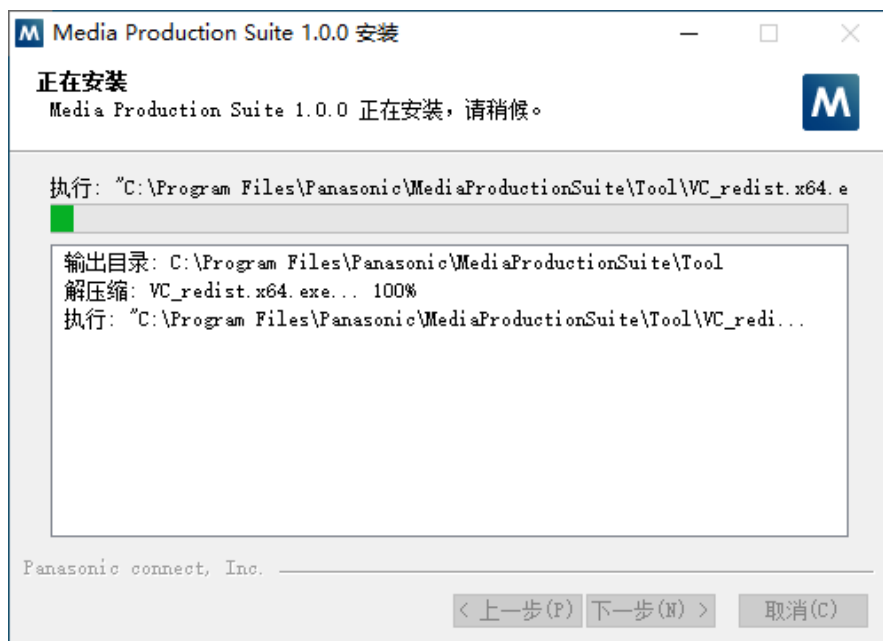
根据您电脑的状态，运行时安装后，您的电脑可能会重新启动。

如果您的电脑重新启动，请在重新启动后再次运行安装程序。



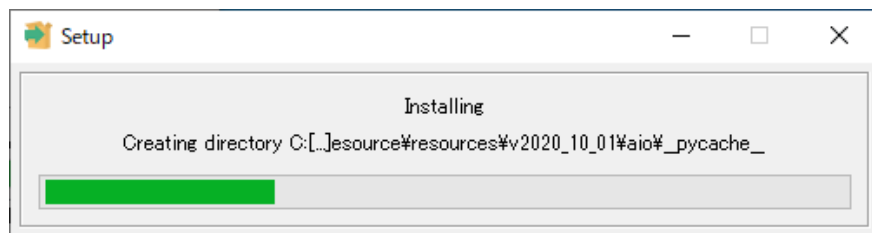
5. 文件复制开始。

如果您是第一次安装本软件，那么在安装过程中，还会自动安装执行本软件所需的软件。（Erlang OTP, RabbitMQ, PostgreSQL），因此需要一些时间才能完成。

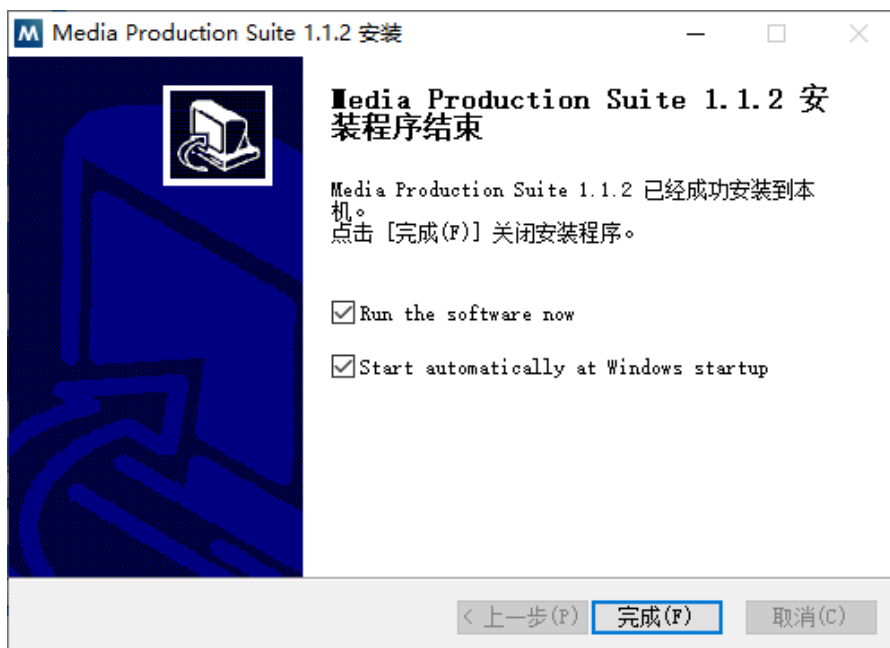


6. 如果未安装 PostgreSQL，则会自动开始安装 PostgreSQL。

如果已安装 PostgreSQL，则不会开始安装 PostgreSQL，因此请继续执行步骤 8。



7. 安装后，将显示以下屏幕。



勾选 “Run the software now”，选择安装完成后是否启动该软件。

勾选 “开”：该软件将在安装后启动。

勾选 “关”：该软件安装后不会启动。

勾选 “Start automatically at Windows startup” 以选择该软件是否在 Windows 启动时自动启动。

勾选 “开”：将此软件设置为在 Windows 启动时自动启动。

勾选 “关”：将此软件设置为在 Windows 启动时不自动启动。

如果选择 OFF（不自动启动），则 Windows 启动后，您需要按照本文档“启动软件”中描述的步骤手动启动软件。

单击“完成”按钮完成安装。

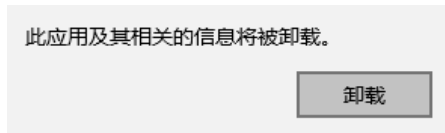
如果勾选“Run the software now”，安装完成后 Media Production Suite 软件将会启动，任务栏中会出现一个图标，桌面上会出现一个管理窗口。

有关后续操作，请参阅[软件的启动和关闭](#)部分。

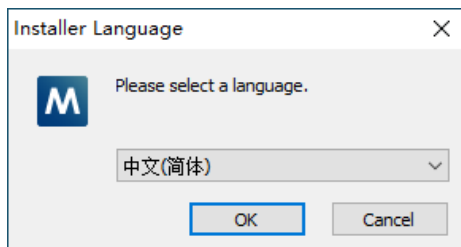
## 软件卸载步骤

### ■对于 Windows10、Windows Server 2022

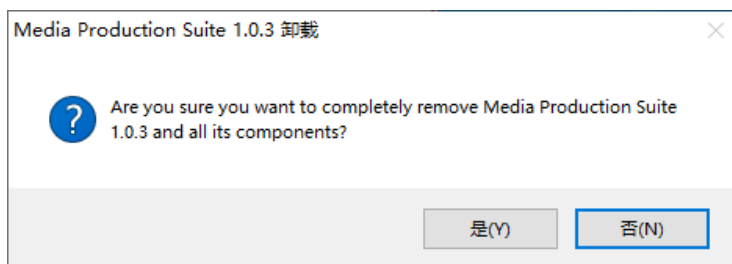
1. 右键单击 Windows 任务栏上的 Windows 图标，然后在出现的菜单中选择「应用程序和功能」。
2. 从「应用程序和功能」屏幕上显示的应用程序中选择「Media Production Suite \*.\*」（\*.\*是安装的应用的版本信息）」然后单击「卸载」。
3. 将显示「此应用及其相关的信息将被卸载」的确认信息，请单击「卸载」。



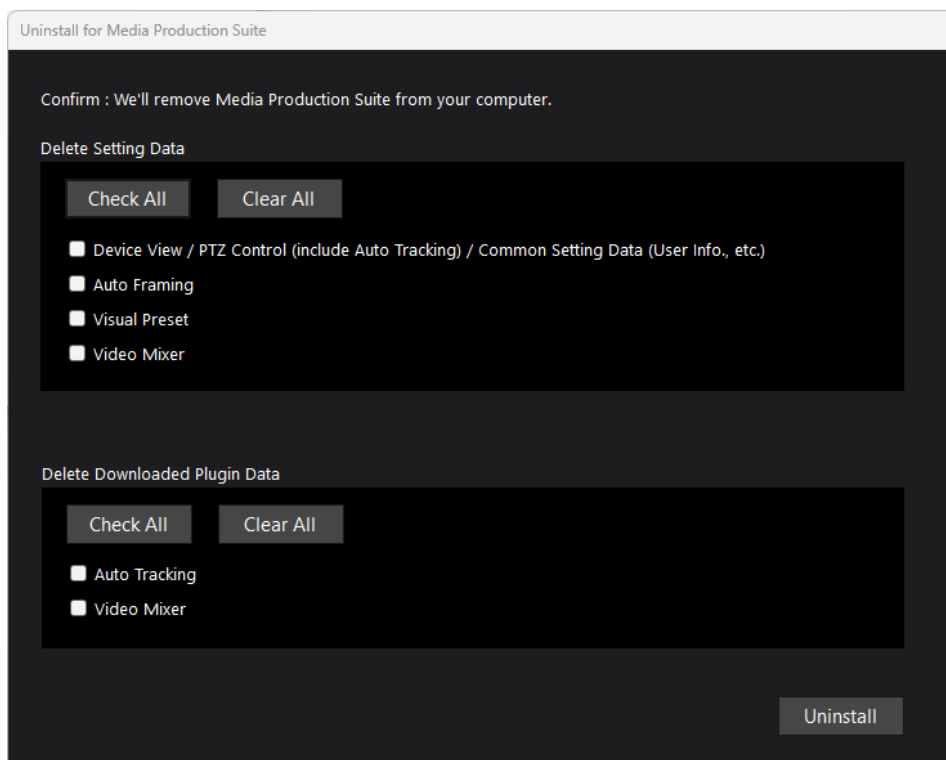
4. 如果显示 uninst.exe 的执行确认框，请选择「是」。
5. 出现语言确认框时，选择任一语言单击「OK」。



6. 显示卸载确认框时，请单击「是」。



7. 将出现确认屏幕。



#### [Delete Setting Data]

- Device View/PTZ Control(include Auto Tracking)/Common Setting Data(User Info. Etc.)

勾选后，以下设置数据将被删除。

- 使用设备查看功能注册的设备信息
- PTZ 控制功能操作设置（如自动跟踪操作设置）
- 本软件的帐户信息
- 已注册的面部数据

- Auto Framing

当勾选此项时，Auto Framing 设置数据将被删除。

- Visual Preset

当勾选此项时，Visual Preset 设置数据将被删除。

- Video Mixer

当勾选此项时，Video Mixer 设置数据将被删除。

#### [Delete Downloaded Plugin Data]

- Auto Tracking

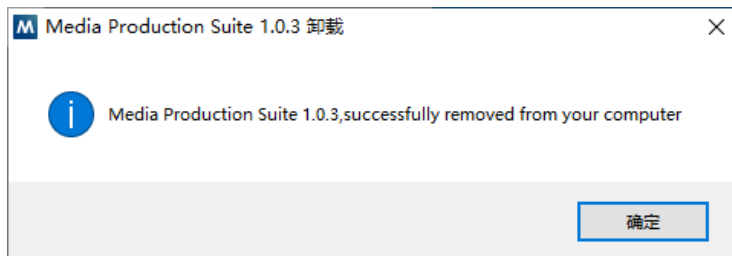
当勾选此项时，Auto Tracking 插件的下载执行数据将被删除。

- Video Mixer

当勾选此项时，Video Mixer 插件的下载执行数据将被删除。

※已激活的付费插件的许可证数据不会被删除。

8. 执行卸载。如果显示以下确认框则卸载完成。



#### ■对于 Windows11

1. 右键单击 Windows 任务栏上的 Windows 图标，然后在出现的菜单中选择「已安装的应用程序」。
2. 从「已安装的应用程序」屏幕上显示的应用程序中选择「Media Production Suite \*.\*.\*（\*.\*.\*是安装的应用的版本信息）」然后单击「卸载」。
3. 以下过程与上述「对于 Windows10, Windows Server 2022」中的步骤 3~7 相同。

#### <备注>

- 如果您想将许可证数据转移到另一台电脑，您需要在软件已安装的情况下先执行解除激活操作。停用步骤请参阅信息功能操作手册中的「停用许可证」。

# 软件的启动和关闭

## 启动软件

如果您在“软件安装步骤”的步骤 6 中选中“Start automatically at Windows startup”，则该软件将在 Windows 启动时自动启动。

如果取消选中“Start automatically at Windows startup”，该软件将不会自动启动，因此请通过以下方式之一启动软件。

- 在 Windows 开始菜单中打开“Media Production Suite”，选择“Media Production Suite”快捷方式
- 双击桌面上的“Media Production Suite”快捷方式

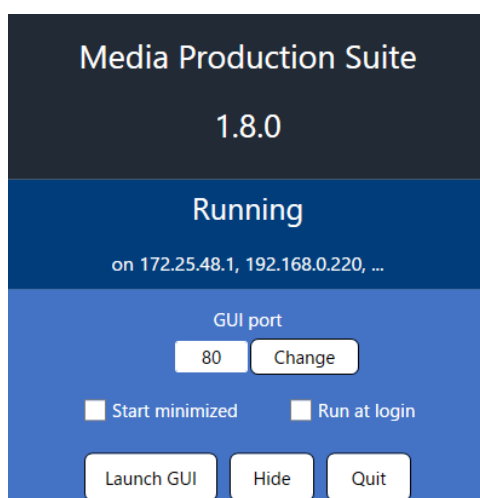
启动时将显示 Windows 管理员权限的确认弹窗，请单击“确定”以允许启动。

软件启动时，Windows 任务托盘中会出现软件图标 ，桌面上会出现管理窗口（如果打开了管理窗口显示）。

- 任务栏中的软件图标



- 管理窗口

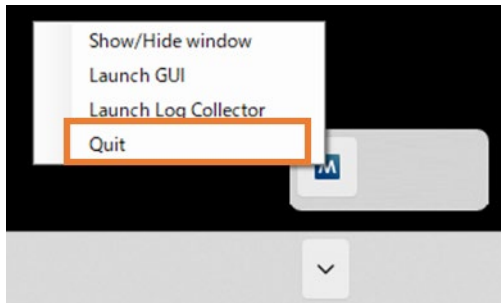


有关如何操作管理窗口以及如何显示和操作操作 GUI 的信息，请参阅“[软件使用流程](#)”部分。

## 退出软件

要退出此软件，请执行以下操作之一。

- 右键单击 Windows 任务托盘中的本软件图标以显示菜单，然后选择[Quit]。



- 点击软件管理窗口中的“Quit”按钮



# 软件使用流程

## 关于管理窗口

默认情况下，启动软件时，桌面上会显示一个管理窗口。

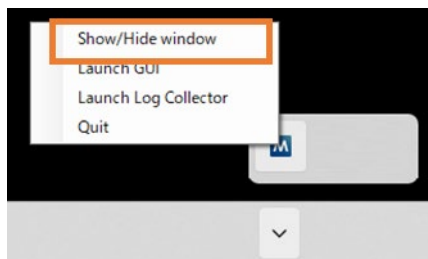
管理窗口允许您执行以下操作：

- 查看软件版本和运行状态
- 设置要使用的端口号和启动操作设置
- 显示操作 GUI
- 退出软件

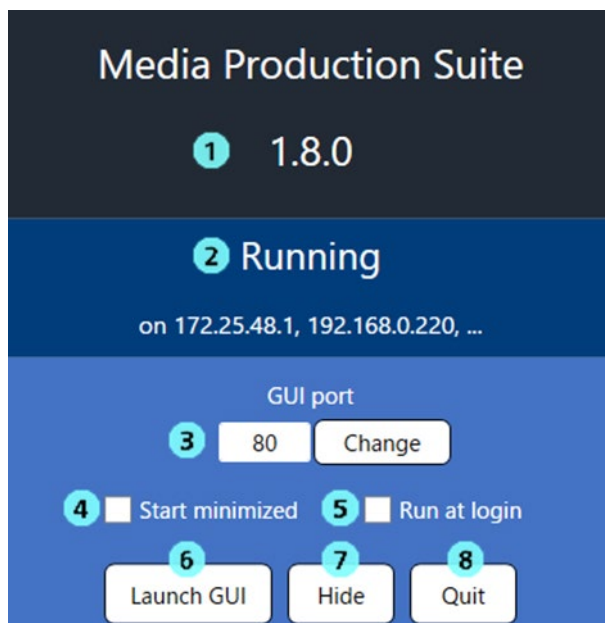
### ■ 如何显示管理窗口

如果未显示管理窗口，请按照以下步骤显示它。

- 右键单击 Windows 任务托盘中的软件图标以显示菜单，然后选择[Show/Hide window]。



### ■ 管理窗口说明



1. 版本信息显示栏
- 显示此软件的版本。

2. 状态显示字段
- 显示本软件的运行状态。

• 正常运行时显示

状态显示	说明
Starting Database Check	软件启动过程中 (正在连接数据库服务)
Starting Receive Message	软件启动过程中 (正在连接消息服务)
Starting Activate Plugins	软件启动过程中 (内部模块启动操作)
Running on *.*.*, *.*.*	软件运行正常  *.*.* 将显示 PC 网卡的 IP 地址。

• 运行异常时显示

状态显示	说明
Error GUI port is not available	由于操作 GUI 的端口号不可用, Apache 服务无法启动。 请在“3. 操作 GUI 端口号设置字段”中更改端口号。
Starting Database service	运行此软件所需的数据库服务 (PostgreSQL) 尚未启动, 因此目前正在启动中。 如果启动成功, 将进入正常运行状态。如果由于某种原因无法成功启动, 则会显示以下“Fail”消息。
Starting Message service	运行此软件所需的消息服务 (RabbitMQ) 尚未启动, 因此目前正在启动中。 如果启动成功, 将进入正常运行状态。如果由于某种原因无法成功启动, 则会显示以下“Fail”消息。
Starting Receive Message *	运行此软件所需的消息服务 (RabbitMQ) 启动失败, 正在重试。末尾的 * 表示重试次数。 如果软件启动成功, 将进入正常运行状态。如果软件因某种原因无法成功启动, 则会显示以下“Fail”消息。
Starting GUI service	运行此软件所需的 Apache 服务尚未启动, 因此目前正在启动中。 如果启动成功, 将进入正常运行状态。如果由于某种原因无法成功启动, 则会显示以下“Fail”消息。
Fail *****	由于某种原因, 本软件的运行出现异常。 请参阅本手册中的“ <a href="#">收集本软件的操作日志</a> ”获取操作日志, 然后联系我们的服务部门。

3. 操作 GUI 端口号设置字段
- 设置在 Web 浏览器中显示操作 GUI 时使用的端口号。

在数字输入字段中输入端口号，然后单击“更改”按钮即可设置端口号。

<备注>

不能使用以下端口号。

1337, 1338, 1437, 2000 ~ 2010, 5672, 8756, 10160, 15672, 20060

除上述情况外，由于 Web 浏览器的限制，某些端口号可能无法使用。

如果端口号不可用，点击“Change”按钮时状态显示栏将显示“Error”，因此请更改为其他端口号。

#### 4. 管理窗口显示设置字段

设置此软件启动时是否显示管理窗口。

勾选：此软件启动时不显示管理窗口。

勾选：此软件启动时显示管理窗口。

#### 5. 登录 Windows 时软件自动启动设置字段

选择此软件是否在您登录 Windows 时自动启动。

选中：此软件将在您登录 Windows 时自动启动。

选中：此软件将在您登录 Windows 时自动启动。

#### 6. 操作 GUI 显示按钮

点击此按钮可在操作系统的默认 Web 浏览器中显示操作 GUI。

#### 7. 管理窗口隐藏按钮

点击此按钮可隐藏管理窗口。

#### 8. 软件退出按钮

点击此按钮可退出本软件。

---

## 显示操作 GUI

该软件通过在 Web 浏览器上显示操作 GUI 来操作。

只要与安装的 PC 位于同一网络，您就可以从另一台 PC 使用 Web 浏览器访问操作 GUI 并进行远程操作。

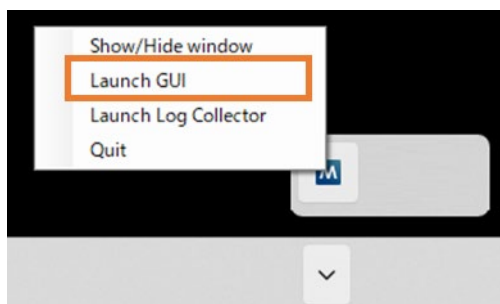
操作 GUI 按照以下步骤显示。

### ■ 对于服务器电脑

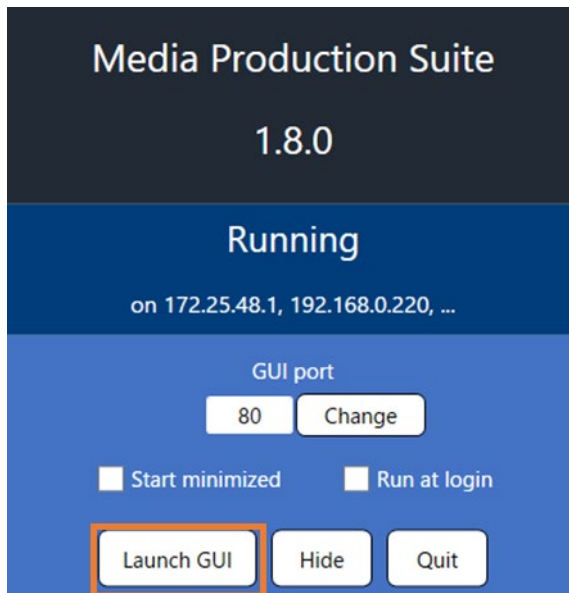
- 当操作系统默认网络浏览器是 Microsoft Edge 或 Google Chrome 时

您可以通过以下操作之一显示操作 GUI：

- 右键单击 Windows 任务栏中该软件的图标以显示菜单，然后选择“Launch GUI”。



- 单击软件管理窗口中的“Launch GUI”按钮。



• 当操作系统默认网络浏览器不是 Microsoft Edge 或 Google Chrome 时

1. 启动网络浏览器（Microsoft Edge 或 Google Chrome）。
2. 在网络浏览器的地址栏内输入以下网址。

<http://localhost/MediaProductionSuite/Base>

如果 GUI 端口号设置为 80 以外的其他值，则必须指定端口号。

（例如：8080）<http://localhost:8080/MediaProductionSuite/Base>

※我们建议您在 GUI 显示后为登录屏幕添加书签。

#### ■对于客户端电脑

1. 启动网络浏览器（Microsoft Edge 或 Google Chrome）。
2. 在网络浏览器的地址栏内输入以下网址。

[http://\[服务器电脑的 IP 地址\]/MediaProductionSuite/Base/](http://[服务器电脑的 IP 地址]/MediaProductionSuite/Base/)

（例：<http://192.168.0.200/MediaProductionSuite/Base>）

如果 GUI 端口号设置为 80 以外的其他值，则必须指定端口号。

（例如：8080）<http://192.168.0.200:8080/MediaProductionSuite/Base>

※我们建议您在 GUI 显示后为登录屏幕添加书签。

※如果网页浏览器显示不正常，请按下“F5”键来刷新页面。

本软件安装后，在初始状态下显示图形用户界面时，将会显示本软件的管理员帐户注册界面；在已注册管理员帐户的状态下显示图形用户界面时，将会显示本软件的登录界面。

显示管理员帐户注册界面时：

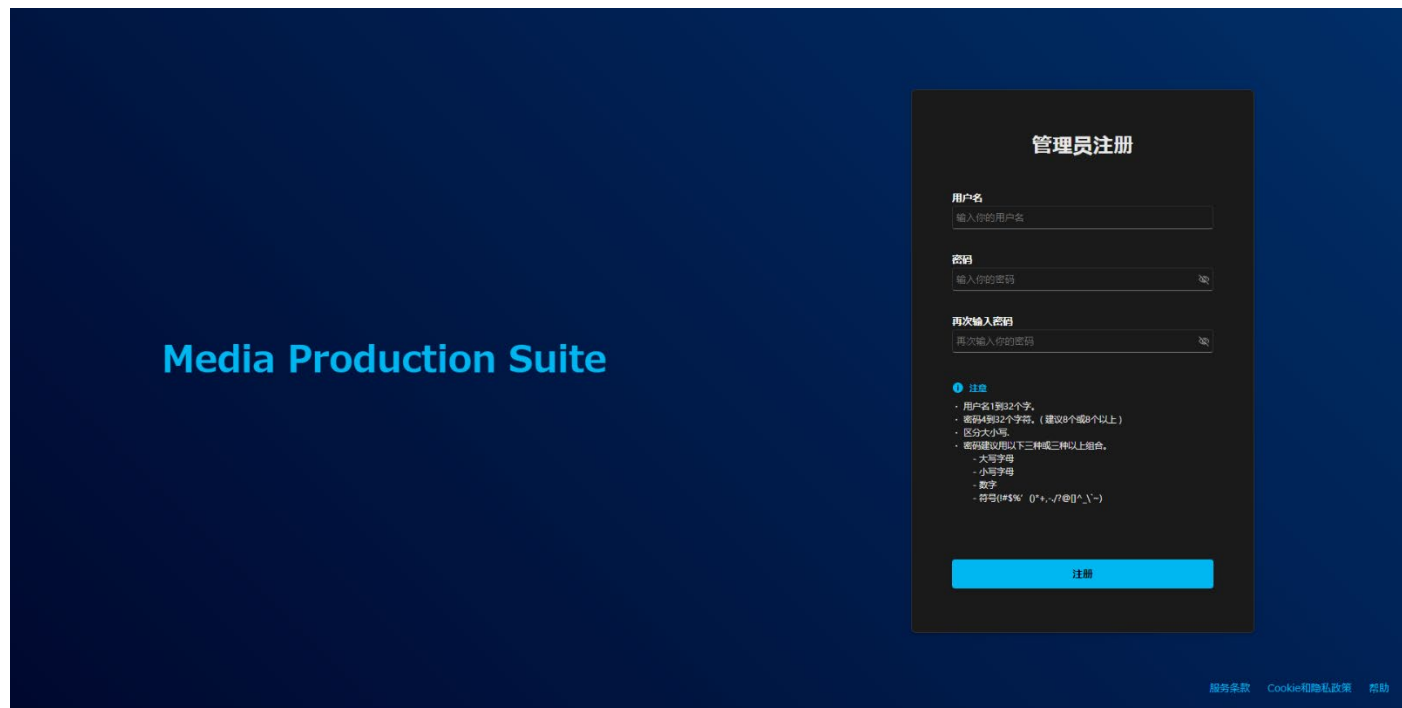
请按照以下“管理员帐户注册”的内容注册管理员帐户。

显示登录界面时：

请按照以下“登录操作”的内容进行登录。

# 注册管理员帐户

本软件安装后，在初始状态下显示图形用户界面时，将会显示本软件的管理员帐户注册界面。  
请按照以下步骤注册管理员帐户。



1. 在[用户名]栏内输入帐户名称。

可用字符

- 大写字母
- 小写字母
- 数字
- 特殊字符(~!@#\$\$%^&\*()\_+¥|}{[<>.,/?`-'~)

字符数

- 1 至 32 个字符

2. 在[密码]和[再次输入密码]栏内输入密码。

可用字符

- 大写字母
- 小写字母
- 数字
- 特殊字符(~!@#\$\$%^&\*()\_+¥|}{[<>.,/?`-'~)

字符数

- 4 至 32 个字符

出于安全考虑，建议按照以下规则设置密码。

建议规则

- 包含上述 4 种可用字符类型中的至少 3 种，且长度至少为 8 个字符

3. 单击注册按钮，即可注册管理员帐户。

如果密码不符合上述建议规则，将会显示警告信息。如需更改密码，请单击[取消]按钮以更改密码。在了解安全风险的基础上，如需继续设置，请单击[确认]按钮以完成设置。

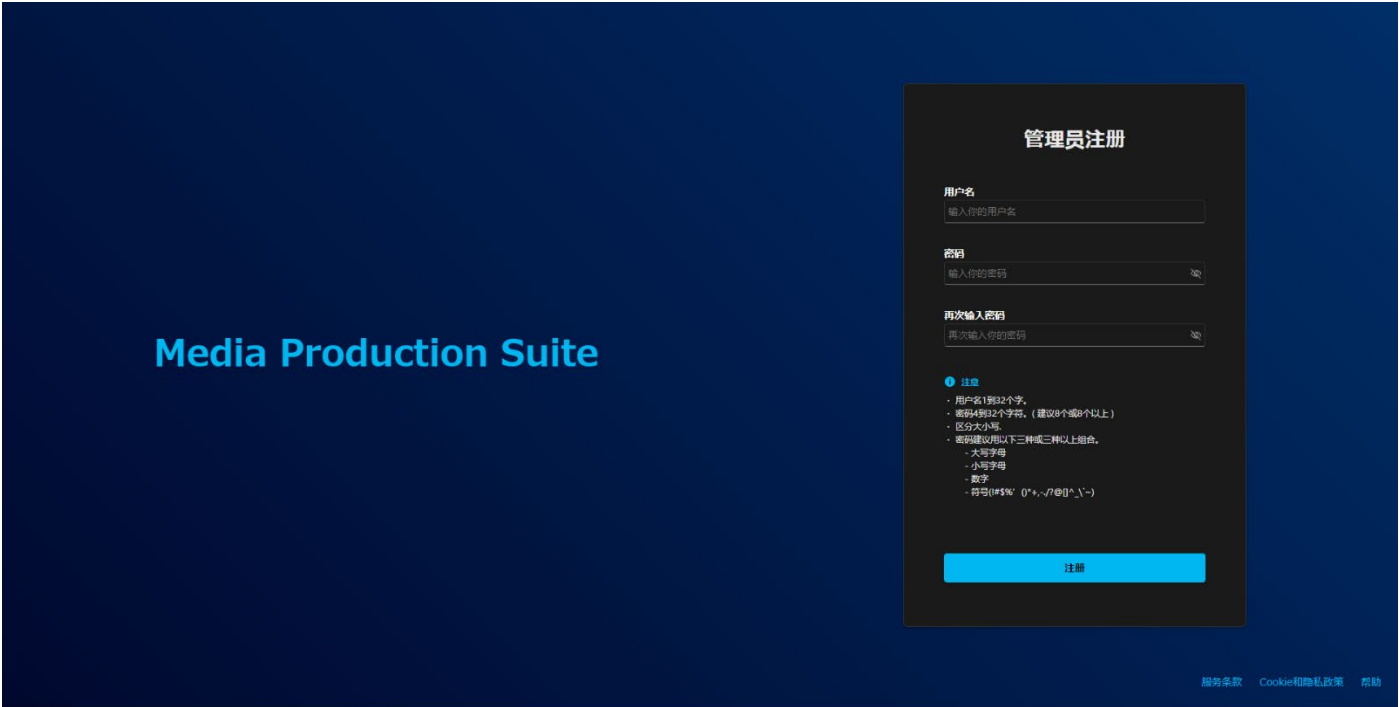
<备注>

- 管理员帐户将注册为具有管理员权限的帐户。

可以使用设定功能更改帐户信息。详细信息请参阅设定功能的操作说明。单击[帮助]按钮，从菜单中选择[设定]，即会显示设定功能的操作说明。

## 登录操作

在已注册管理员帐户的状态下显示图形用户界面时，将会显示本软件的登录界面。  
在用户名栏内输入帐户名称，在密码栏内输入密码，单击[登录]按钮即可执行登录，显示操作界面。  
关于操作界面，请参阅本书的“界面说明”。



## 设备注册

为了使用本软件操作设备，需在本软件上注册设备。  
在设备视图功能内进行设备注册。详细信息请参阅设备视图功能的操作说明。  
单击本软件的[帮助]按钮，从菜单中选择[设备视图]，即会显示设备视图功能的操作说明。

## 设备操作

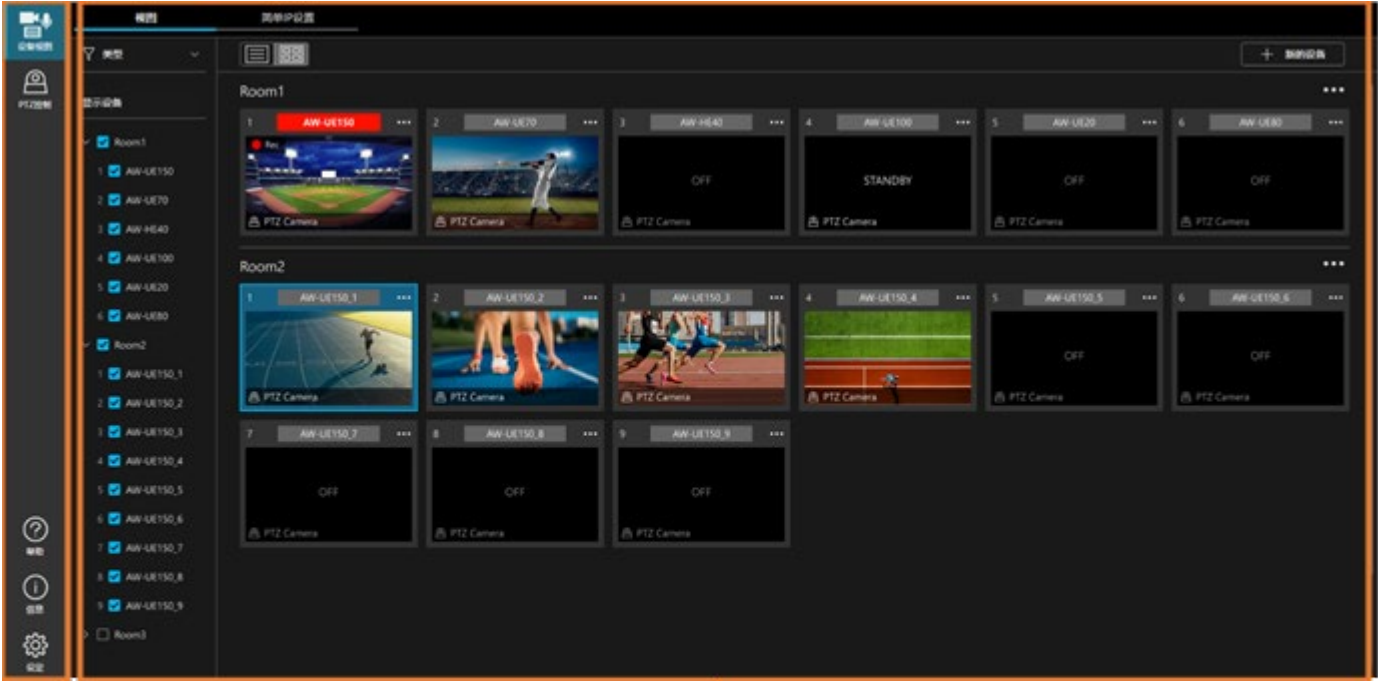
通过本软件可以操作已注册的设备。  
免费的基础软件提供 PTZ 控制功能，用以操作远程相机。

该功能的详细信息请参阅 PTZ 控制功能的操作说明。单击本软件的[帮助]按钮，从菜单中选择[PTZ 控制]，即会显示 PTZ 控制功能的操作说明。

# 界面说明

## 基本的界面构成

本节仅说明基本的界面构成。  
关于各功能的界面，请参阅各功能的按钮说明中所述的操作说明。



功能选择区

操作界面区

- 操作界面区  
显示在功能选择区内选中功能的操作界面。

## • 功能选择区



### 1. 主功能选择区

本软件的可用功能以[按钮+功能名称]的形式显示在功能选择区内。单击按钮，操作界面即切换至该功能的界面。

如已安装好免费的基础软件，将会显示[设备视图]和[PTZ 控制]按钮，且其功能可用。

如果有兼容的远程摄像机，则还会显示[自动取景]按钮并且该功能可用。

激活收费插件的许可证使新功能可用后，该功能的按钮将会添加显示到功能选择区。

#### • 设备视图按钮

单击按钮，操作界面即切换至设备视图功能的界面。

设备视图功能提供设备一览表和管理设备的功能。通过操作界面，可以执行设备的注册/编辑/删除、电源管理等操作。此外，在本功能中也可以使用 EasyIP Setup Tool Plus 功能。

关于功能的详细信息，请参阅从[帮助]按钮的菜单中选择[设备视图]时所显示的设备视图功能的操作说明。

#### • PTZ 控制按钮

单击按钮，操作界面即切换至 PTZ 控制功能的界面。

PTZ 控制功能提供操作远程相机所需的专用功能。可以通过操作界面执行远程相机平移/俯仰/变焦控

制、预设控制、图像质量调整等操作。

关于功能的详细信息，请参阅从[帮助]按钮的菜单中选择[PTZ 控制]时所显示的 PTZ 控制功能的操作说明。

- 自动取景按钮

单击按钮，操作界面即切换至自动取景功能的界面。

关于功能的详细信息，请参阅从[帮助]按钮的菜单中选择[自动取景]时所显示的自动取景功能的操作说明。

## 2. 帮助按钮

帮助按钮用于在网络上显示本软件的操作说明。

操作说明按功能划分。单击帮助按钮，即会显示所选功能的菜单。从菜单中选择了功能，即会显示该功能的操作说明。

安装免费的基础软件后显示以下菜单。

常用：显示本软件的基本要素的操作说明（本书）。

设备视图：显示设备视图功能的操作说明。

PTZ 控制：显示 PTZ 控制功能的操作说明。

自动取景：显示自动取景功能的操作说明。

信息：显示信息功能的操作说明。

设定：显示运行设定功能的操作说明。

激活收费插件的许可证使新功能可用后，将会添加菜单以显示该功能的操作说明。

## 3. 信息按钮

单击按钮，操作界面即切换至信息界面。

在信息界面中可执行显示本软件的版本信息、激活收费插件等操作。

关于功能的详细信息，请参阅从[帮助]按钮的菜单中选择[信息]时所显示的信息功能的操作说明。

## 4. 设定菜单

单击按钮，操作界面即切换至设定界面。

在设定界面中可进行本软件的运行设置。

关于功能的详细信息，请参阅从[帮助]按钮的菜单中选择[设定]时所显示的设定功能的操作说明。

# 管理工具

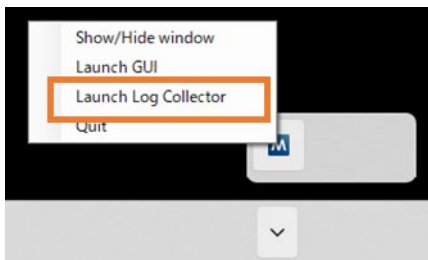
## 收集本软件的操作日志

您可以使用本软件附带的日志收集工具来收集本软件的运行日志。  
当查询软件无法正常启动时请使用此工具。

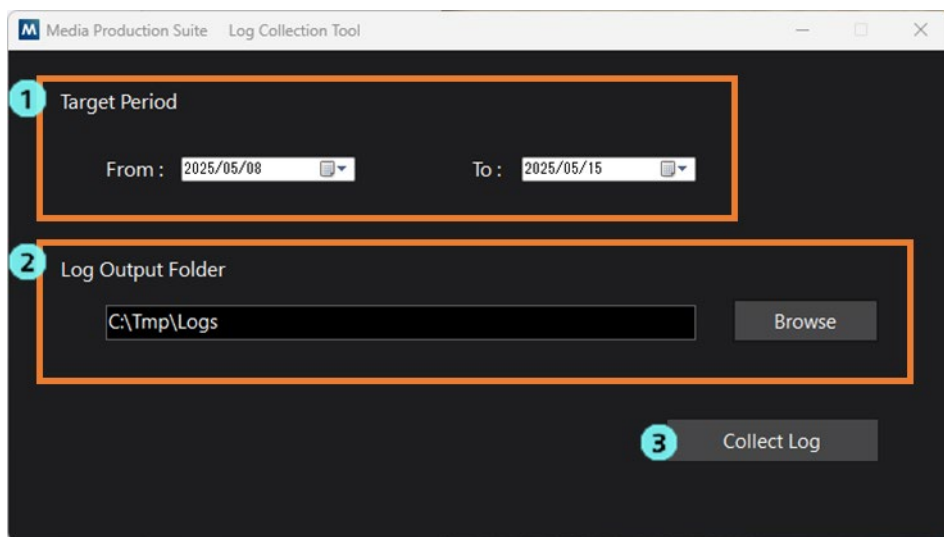
### ■启动日志收集工具的步骤

您可以按照以下步骤启动日志收集工具。

- 右键单击 Windows 任务托盘中的软件图标以显示菜单，然后选择[Launch Log Collector]。



### ■如何使用日志收集工具



1. 使用 Target Period 字段中的 From 和 To 日历来设置输出日志的期间。
2. 点击 Log Output Folder 栏中的 Browse 按钮，设置日志输出文件夹。
3. 点击 Collect Log 按钮将输出日志文件的 zip 文件。

日志文件将被命名为“MPS\_Log\_[YYYYMMDD]\_[HHMMSS].zip”。

\*[YYYYMMDD] 部分是执行日志收集的日期，[HHMMSS] 部分是执行日志收集的时间。

# 有关本产品的软件信息

1. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).
2. Software licensed in accordance with the Apache License 2.0 is included in this software.
3. Software licensed in accordance with the MIT License is included in this software.
4. Software licensed in accordance with the GNU Library General Public License version 2 is included in this software.
5. Software licensed in accordance with the GNU Library General Public License version 3 is included in this software.
6. Software licensed in accordance with the Boost Software License 1.0 is included in this software.
7. Software licensed in accordance with the GNU Lesser General Public License v2.1 is included in this software.
8. Software licensed in accordance with the Mozilla Public License 2.0 is included in this software.
9. Software licensed in accordance with the zlib/Libpng License is included in this software.
10. Software licensed in accordance with the PostgreSQL License is included in this software.
11. Software licensed in accordance with the NVIDIA Software License is included in this software.
12. Software licensed in accordance with the BSD License is included in this software.
13. Software licensed in accordance with the PyTorch License is included in this software.

---

## LICENSE ISSUES

=====

The OpenSSL toolkit stays under a double license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts.

### OpenSSL License

-----

```
/* =====  
 * Copyright (c) 1998-2019 The OpenSSL Project. All rights reserved.  
 *  
 * Redistribution and use in source and binary forms, with or without  
 * modification, are permitted provided that the following conditions  
 * are met:  
 *
```

\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.  
\*

\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in  
\* the documentation and/or other materials provided with the  
\* distribution.  
\*

\* 3. All advertising materials mentioning features or use of this  
\* software must display the following acknowledgment:  
\* "This product includes software developed by the OpenSSL Project  
\* for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"  
\*

\* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to  
\* endorse or promote products derived from this software without  
\* prior written permission. For written permission, please contact  
\* [openssl-core@openssl.org](mailto:openssl-core@openssl.org).  
\*

\* 5. Products derived from this software may not be called "OpenSSL"  
\* nor may "OpenSSL" appear in their names without prior written  
\* permission of the OpenSSL Project.  
\*

\* 6. Redistributions of any form whatsoever must retain the following  
\* acknowledgment:  
\* "This product includes software developed by the OpenSSL Project  
\* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"  
\*

\* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY  
\* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR  
\* PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR  
\* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
\* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT  
\* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;  
\* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)  
\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,  
\* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED  
\* OF THE POSSIBILITY OF SUCH DAMAGE.  
\* =====  
\*

\* This product includes cryptographic software written by Eric Young

\* (eay@cryptsoft.com). This product includes software written by Tim  
\* Hudson (tjh@cryptsoft.com).  
\*  
\*/

## Original SSLeay License

-----

/\* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)  
\* All rights reserved.  
\*  
\* This package is an SSL implementation written  
\* by Eric Young (eay@cryptsoft.com).  
\* The implementation was written so as to conform with Netscapes SSL.  
\*  
\* This library is free for commercial and non-commercial use as long as  
\* the following conditions are aheared to. The following conditions  
\* apply to all code found in this distribution, be it the RC4, RSA,  
\* lhash, DES, etc., code; not just the SSL code. The SSL documentation  
\* included with this distribution is covered by the same copyright terms  
\* except that the holder is Tim Hudson (tjh@cryptsoft.com).  
\*  
\* Copyright remains Eric Young's, and as such any Copyright notices in  
\* the code are not to be removed.  
\* If this package is used in a product, Eric Young should be given attribution  
\* as the author of the parts of the library used.  
\* This can be in the form of a textual message at program startup or  
\* in documentation (online or textual) provided with the package.  
\*  
\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:  
\* 1. Redistributions of source code must retain the copyright  
\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. All advertising materials mentioning features or use of this software  
\* must display the following acknowledgement:  
\* "This product includes cryptographic software written by  
\* Eric Young (eay@cryptsoft.com)"  
\* The word 'cryptographic' can be left out if the rouines from the library

- \* being used are not cryptographic related :-).
- \* 4. If you include any Windows specific code (or a derivative thereof) from
- \* the apps directory (application code) you must include an acknowledgement:
- \* "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
- \*
- \* THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND
- \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
- \* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
- \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
- \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- \* SUCH DAMAGE.
- \*
- \* The licence and distribution terms for any publically available version or
- \* derivative of this code cannot be changed. i.e. this code cannot simply be
- \* copied and put under another distribution licence
- \* [including the GNU Public Licence.]
- \*/

---

Apache License 2.0

SPDX identifier

Apache-2.0

License text

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct

or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such

license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract,

or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,

WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and

limitations under the License.

Standard License Header

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

#### Notes

This license was released January 2004

#### SPDX web page

<https://spdx.org/licenses/Apache-2.0.html>

#### Notice

This license content is provided by the SPDX project. For more information about [licenses.nuget.org](https://licenses.nuget.org), see our documentation.

Data pulled from [spdx/license-list-data](#) on February 9, 2023.

---

#### The MIT License (MIT)

Copyright © 2023 <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

---

#### The 2-Clause BSD License

Copyright <YEAR> <COPYRIGHT HOLDER>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----  
The 3-Clause BSD License

Copyright <YEAR> <COPYRIGHT HOLDER>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----

## Boost Software License 1.0

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the “Software”) to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

-----

## GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we

suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than

the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its

scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.  
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy. For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the

separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

## NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER

PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the library's name and an idea of what it does.

Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in  
the library 'Frob' (a library for tweaking knobs) written  
by James Random Hacker.

signature of Ty Coon, 1 April 1990

Ty Coon, President of Vice

-----  
Mozilla Public License Version 2.0

=====

## 1. Definitions

-----

### 1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

### 1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

### 1.3. "Contribution"

means Covered Software of a particular Contributor.

### 1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

### 1.5. "Incompatible With Secondary Licenses"

means

(a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

(b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

### 1.6. "Executable Form"

means any form of the work other than Source Code Form.

### 1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

### 1.8. "License"

means this document.

### 1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

#### 1.10. "Modifications"

means any of the following:

- (a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or
- (b) any new file in Source Code Form that contains any Covered Software.

#### 1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

#### 1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

#### 1.13. "Source Code Form"

means the form of the work preferred for making modifications.

#### 1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 2. License Grants and Conditions

-----

## 2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and
- (b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

## 2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

## 2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

- (a) for any code that a Contributor has removed from Covered Software; or
- (b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or
- (c) under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

## 2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

## 2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

## 2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

## 2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

## 3. Responsibilities

-----

### 3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

### 3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

- (a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
- (b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

### 3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

### 3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

### 3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by

You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

#### 4. Inability to Comply Due to Statute or Regulation

-----

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

#### 5. Termination

-----

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

\*\*\*\*\*

\* \*  
\* 6. Disclaimer of Warranty \*

\* ----- \*

\* \*

\* Covered Software is provided under this License on an "as is" \*  
\* basis, without warranty of any kind, either expressed, implied, or \*  
\* statutory, including, without limitation, warranties that the \*  
\* Covered Software is free of defects, merchantable, fit for a \*  
\* particular purpose or non-infringing. The entire risk as to the \*  
\* quality and performance of the Covered Software is with You. \*

\* Should any Covered Software prove defective in any respect, You \*  
\* (not any Contributor) assume the cost of any necessary servicing, \*  
\* repair, or correction. This disclaimer of warranty constitutes an \*  
\* essential part of this License. No use of any Covered Software is \*  
\* authorized under this License except under this disclaimer. \*

\* \*

\*\*\*\*\*

\*\*\*\*\*

\* \*

\* 7. Limitation of Liability \*

\* ----- \*

\* \*

\* Under no circumstances and under no legal theory, whether tort \*  
\* (including negligence), contract, or otherwise, shall any \*  
\* Contributor, or anyone who distributes Covered Software as \*  
\* permitted above, be liable to You for any direct, indirect, \*  
\* special, incidental, or consequential damages of any character \*  
\* including, without limitation, damages for lost profits, loss of \*  
\* goodwill, work stoppage, computer failure or malfunction, or any \*  
\* and all other commercial damages or losses, even if such party \*  
\* shall have been informed of the possibility of such damages. This \*  
\* limitation of liability shall not apply to liability for death or \*  
\* personal injury resulting from such party's negligence to the \*  
\* extent applicable law prohibits such limitation. Some \*

\* jurisdictions do not allow the exclusion or limitation of \*  
\* incidental or consequential damages, so this exclusion and \*  
\* limitation may not apply to You. \*  
\* \*

\*\*\*\*\*

## 8. Litigation

-----

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

## 9. Miscellaneous

-----

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

## 10. Versions of the License

-----

### 10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

### 10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

### 10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

### 10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

#### Exhibit A - Source Code Form License Notice

-----

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <http://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

#### Exhibit B - "Incompatible With Secondary Licenses" Notice

-----

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

-----

The zlib/libpng License

Copyright (c) <year> <copyright holders>

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages

arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

---

## PostgreSQL License

PostgreSQL is released under the PostgreSQL License, a liberal Open Source license, similar to the BSD or MIT licenses.

PostgreSQL Database Management System  
(formerly known as Postgres, then as Postgres95)

Portions Copyright © 1996-2023, The PostgreSQL Global Development Group

Portions Copyright © 1994, The Regents of the University of California

Permission to use, copy, modify, and distribute this software and its documentation for any purpose, without fee, and without a written agreement is hereby granted, provided that the above copyright notice and this paragraph and the following two paragraphs appear in all copies.

IN NO EVENT SHALL THE UNIVERSITY OF CALIFORNIA BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE UNIVERSITY OF CALIFORNIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE UNIVERSITY OF CALIFORNIA SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE UNIVERSITY OF CALIFORNIA HAS NO OBLIGATIONS TO PROVIDE MAINTENANCE, SUPPORT,

## UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

---

### License For Customer Use of NVIDIA Software

**IMPORTANT NOTICE -- READ CAREFULLY:** This License For Customer Use of NVIDIA Software ("LICENSE") is the agreement which governs use of the software of NVIDIA Corporation and its subsidiaries ("NVIDIA") downloadable herefrom, including computer software and associated printed materials ("SOFTWARE"). By downloading, installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this LICENSE. If you do not agree to the terms of this LICENSE, do not download the SOFTWARE.

### RECITALS

Use of NVIDIA's products requires three elements: the SOFTWARE, the hardware on a graphics controller board, and a personal computer. The SOFTWARE is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE is not sold, and instead is only licensed for use, strictly in accordance with this document. The hardware is protected by various patents, and is sold, but this LICENSE does not cover that sale, since it may not necessarily be sold as a package with the SOFTWARE. This LICENSE sets forth the terms and conditions of the SOFTWARE LICENSE only.

### 1. DEFINITIONS

1.1 Customer. Customer means the entity or individual that downloads the SOFTWARE.

### 2. GRANT OF LICENSE

2.1 Rights and Limitations of Grant. NVIDIA hereby grants Customer the following non-exclusive, non-transferable right to use the SOFTWARE, with the following limitations:

2.1.1 Rights. Customer may install and use multiple copies of the SOFTWARE on a shared computer or concurrently on different computers, and make multiple back-up copies of the SOFTWARE, solely for Customer's use within Customer's Enterprise. "Enterprise" shall mean individual use by Customer or any legal entity (such as a corporation or university) and the subsidiaries it owns by more than fifty percent (50%).

2.1.2 Linux/FreeBSD Exception. Notwithstanding the foregoing terms of Section 2.1.1, SOFTWARE designed exclusively for use on the Linux or FreeBSD operating systems, or other operating systems derived from the source code to these operating systems, may be copied and redistributed, provided that the binary files thereof are not modified in any way (except for unzipping of compressed files).

2.1.3 Limitations.

No Reverse Engineering. Customer may not reverse engineer, decompile, or disassemble the SOFTWARE, nor

attempt in any other manner to obtain the source code.

No Separation of Components. The SOFTWARE is licensed as a single product. Its component parts may not be separated for use on more than one computer, nor otherwise used separately from the other parts.

No Rental. Customer may not rent or lease the SOFTWARE to someone else.

### 3. TERMINATION

This LICENSE will automatically terminate if Customer fails to comply with any of the terms and conditions hereof. In such event, Customer must destroy all copies of the SOFTWARE and all of its component parts.

Defensive Suspension. If Customer commences or participates in any legal proceeding against NVIDIA, then NVIDIA may, in its sole discretion, suspend or terminate all license grants and any other rights provided under this LICENSE during the pendency of such legal proceedings.

### 4. COPYRIGHT

All title and copyrights in and to the SOFTWARE (including but not limited to all images, photographs, animations, video, audio, music, text, and other information incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by NVIDIA, or its suppliers. The SOFTWARE is protected by copyright laws and international treaty provisions. Accordingly, Customer is required to treat the SOFTWARE like any other copyrighted material, except as otherwise allowed pursuant to this LICENSE and that it may make one copy of the SOFTWARE solely for backup or archive purposes.

### 5. APPLICABLE LAW

This LICENSE shall be deemed to have been made in, and shall be construed pursuant to, the laws of the State of Delaware. The United Nations Convention on Contracts for the International Sale of Goods is specifically disclaimed.

### 6. DISCLAIMER OF WARRANTIES AND LIMITATION ON LIABILITY

6.1 No Warranties. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SOFTWARE IS PROVIDED "AS IS" AND NVIDIA AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES OF ANY KIND OR NATURE, WHETHER EXPRESS, IMPLIED, OR STATUTORY, RELATING TO OR ARISING FROM THE SOFTWARE, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT. Without limiting the foregoing, you are solely responsible for determining and verifying that the SOFTWARE that you obtain and install is the appropriate version for your model of graphics controller board, operating system, and computer hardware.

6.2 No Liability for Consequential Damages. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL NVIDIA OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, LOSS OF DATA, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF NVIDIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## 7. SYSTEM UPDATES

Customer hereby agrees and acknowledges that the SOFTWARE may access, collect non-personally identifiable information about, update, and configure Customer's system in order to properly optimize such system for use with the SOFTWARE. To the extent that Customer uses the SOFTWARE, Customer hereby consents to all of the foregoing, and represent and warrant that Customer has the right to grant such consent. In addition, Customer agrees that Customer is solely responsible for maintaining appropriate data backups and system restore points for Customer's system, and that NVIDIA will have no responsibility for any damage or loss to such system (including loss of data or access) arising from or relating to (a) any changes to the configuration, application settings, environment variables, registry, drivers, BIOS, or other attributes of the system (or any part of such system) initiated through the SOFTWARE; or (b) installation of any SOFTWARE or third party software patches through the NVIDIA Update Service. The SOFTWARE may contain links to websites and services. We encourage you to review the privacy statements on those sites and services that you choose to visit so that you can understand how they may collect, use and share your personal information. NVIDIA is not responsible for the privacy statements or practices of sites and services controlled by other companies or organizations.

Registration and Customer Information. Customer represents and warrants that the non-personally identifiable information that Customer has furnished in connection with its registration for the SOFTWARE is complete and accurate. Customer also acknowledges that from time to time, NVIDIA may collect, use, and disclose such information about Customer and/or Customer's system in connection with the SOFTWARE in accordance with NVIDIA's privacy policy, available at URL [https://www.nvidia.com/object/privacy\\_policy.html](https://www.nvidia.com/object/privacy_policy.html) If Customer does not wish the SOFTWARE to provide system updates as described in this Section 7, uncheck "Automatically check for updates" in the "Preferences" tab of the applicable NVIDIA Update control panel for the SOFTWARE.

## 8. MISCELLANEOUS

If any provision of this LICENSE is inconsistent with, or cannot be fully enforced under, the law, such provision will be construed as limited to the extent necessary to be consistent with and fully enforceable under the law. This LICENSE is the final, complete and exclusive agreement between the parties relating to the subject matter hereof, and supersedes all prior or contemporaneous understandings and agreements relating to such subject matter, whether oral or written. This LICENSE may only be modified in writing signed by an authorized officer of NVIDIA. Customer agrees that it will not ship, transfer or export the SOFTWARE into any country, or use the SOFTWARE in any manner, prohibited by the United States Bureau of Industry and Security or any export laws, restrictions or regulations.

---

## BSD 3-Clause License

Copyright (c) 2017, Pytorch contributors  
All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this  
list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice,  
this list of conditions and the following disclaimer in the documentation  
and/or other materials provided with the distribution.
- \* Neither the name of the copyright holder nor the names of its  
contributors may be used to endorse or promote products derived from  
this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE  
DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE  
FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL  
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR  
SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER  
CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,  
OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE  
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---

From PyTorch:

Copyright (c) 2016- Facebook, Inc (Adam Paszke)  
Copyright (c) 2014- Facebook, Inc (Soumith Chintala)  
Copyright (c) 2011-2014 Idiap Research Institute (Ronan Collobert)  
Copyright (c) 2012-2014 Deepmind Technologies (Koray Kavukcuoglu)  
Copyright (c) 2011-2012 NEC Laboratories America (Koray Kavukcuoglu)  
Copyright (c) 2011-2013 NYU (Clement Farabet)  
Copyright (c) 2006-2010 NEC Laboratories America (Ronan Collobert, Leon Bottou, Iain Melvin, Jason Weston)  
Copyright (c) 2006 Idiap Research Institute (Samy Bengio)

Copyright (c) 2001-2004 Idiap Research Institute (Ronan Collobert, Samy Bengio, Johnny Mariethoz)

From Caffe2:

Copyright (c) 2016-present, Facebook Inc. All rights reserved.

All contributions by Facebook:

Copyright (c) 2016 Facebook Inc.

All contributions by Google:

Copyright (c) 2015 Google Inc.

All rights reserved.

All contributions by Yangqing Jia:

Copyright (c) 2015 Yangqing Jia

All rights reserved.

All contributions by Kakao Brain:

Copyright 2019-2020 Kakao Brain

All contributions by Cruise LLC:

Copyright (c) 2022 Cruise LLC.

All rights reserved.

All contributions by Arm:

Copyright (c) 2021, 2023-2024 Arm Limited and/or its affiliates

All contributions from Caffe:

Copyright(c) 2013, 2014, 2015, the respective contributors

All rights reserved.

All other contributions:

Copyright(c) 2015, 2016 the respective contributors

All rights reserved.

Caffe2 uses a copyright model similar to Caffe: each contributor holds copyright over their contributions to Caffe2. The project versioning records all such contribution and copyright details. If a contributor wants to further mark their specific copyright on a particular contribution, they should indicate their copyright solely in the commit message of the change when it is committed.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the names of Facebook, Deepmind Technologies, NYU, NEC Laboratories America and IDIAP Research Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.