OLYMPUS

Installation Manual

cellSens [Ver.3.2]

IMAGING SOFTWARE

This installation manual is for the Olympus imaging software cellSens and microscope digital camera. To ensure safety, obtain optimum performance and familiarize yourself fully with the installation of this software, we recommend that you study this manual thoroughly before operating the software.
Retain this manual in an easily accessible place near a system for future reference.

For research and education

This system has been designed for research and educational purposes.

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About the software licenses

This product is licensed under the MPEG-4 visual patent portfolio license for the personal and non-commercial use of a consumer for (I) encoding video in compliance with the MPEG-4 visual standard ("MPEG-4 video") and/or (II) decoding MPEG-4 video that was encoded by a consumer engaged in a personal and noncommercial activity and/or was obtained from a video provider licensed by MPEG LA to provide MPEG-4 video. No license is granted or shall be implied for any other use. Additional information including that relating to promotional, internal and commercial uses and licensing may be obtained from MPEG LA, LLC. See http://www.mpegla.com

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This product may include (i) open source software; and (ii) other software whose source code is intentionally published (collectively, hereinafter referred to as "OSS").

The OSS included in this product shall be licensed and distributed to you subject to the terms and conditions applied to the OSS. Please see such terms and conditions

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software which Olympus has an obligation to provide in accordance with the terms and

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following URL. This offer is valid for a period of three (3) years from the date of original

purchase. Olympus has no responsibility to provide any source code except the source code for certain software.

http://www.olympus-lifescience.com/support/oss-license/cellSens

You shall not inquire information relating to the source codes obtained in the above URL from Olympus.

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1. IMPORTANT

This Installation Manual describes the installation procedures of cellSens. For installation procedures of the digital camera to be used in combination with this software, refer to Instruction Manual of the relevant digital camera and Hardware Manual within DVD-ROM of cellSens.

There are 3 types in cellSens.

- Dimension
- Standard
- Entry

○ Solutions (paid) can be added to this software separately.

This installation manual is for installing cellSens [Dimension & Database Solution & NetCam Solution]. When installing the other grades and options, a part of the dialog boxes described in this installation manual is not displayed while installing the software, but all other procedures are the same.

The procedures described in this installation manual are for installing cellSens when using Windows$^®$ 10. The same procedures are also applied for Windows$^®$ 8.1.

NOTE:

When installing this product, the license key is required. Be sure to keep the license certificate (refer to P.7) describing the license key.

NOTE:

To operate a camera using cellSens, a device driver for each camera must be installed onto your PC.

NOTE:

Close all running applications before installing cellSens.

NOTE:

The software cannot be installed unless the user account is registered as "Computer Administrator."

If the user account is registered as a "Restricted Account," change it to the "Computer Administrator" account.

(For user account registration, refer to the instruction manuals for your computer.)

Note on Disposal

Be sure to observe your local regulations and rules when disposing this product.

If you have any questions, please call the Olympus sales office where you have purchased this product.

Recommended configurations

Even though the recommended operating environment below is met, this product may not be installed or this product may not be operated properly due to malfuction, etc. caused by aged deterioration. (Example: Installation media is not recognized due to performance degradation of the DVD drive.)

Please refer to the Instruction Manual of each camera for the operation environment unique to the camera to be used.

No.	Topic	Remark
1	CPU	Intel® Core™ i5, Intel® Core™ i7, Intel® Xeon®, (or compatible)
2	RAM	8 GB recommended (4GB minimum)
3	HDD	1 GB hard disk space for installation Recommended for high speed image acquisition: SSD hard disk
4	Graphic card	1280x1024 (min. 1024 x768) monitor resolution with 32-bit-video card with separate graphics memory (no integrated graphics processor with shared memory)
5	Drive	DVD drive (available for double layer DVD)
6	PC input device	Minimum 2 button mouse (recommended: 3 button mouse with wheel), Keyboard
7	OS	Microsoft® Windows® 10 Pro (64bit) (Version 1909) Microsoft® Windows® 8.1 Pro (64bit)
8	OS language	English, German, Japanese, Chinese, Russian, and all others using the Roman alphabet.
9	.NET Framework	.NET Framework 4.6.2 or later (Windows® 10) .NET Framework 4.6.2 (Windows® 8.1)
10	Web browser	Microsoft® Internet Explorer 11 (for accessing the Olympus license activation server)

In order to realize the faster image acquisition, it is recommended to meet the following specifications in addition to the recommended operating environment described above.

- CPU : QuadCore is installed.
- Graphic Board :The commercially available graphic board with specifications equivalent to the above is attached to PC. (On-board is not used.)

When using the Olympus' DP camera specific controller, please follow the system requirements described in the instruction manual of the controller.

Getting Ready

1. An error may occur if PC turns in the hibernation mode during cellSens startup. Please be sure to set PC not to be in hibernation mode.
2. The image data may be damaged unexpectedly. Please backup the data on regular base.
3. This software must not be used for medical purpose.

4. Please note that if the camera cable comes off while the live image is displayed, the live image will not be displayed though the camera cable is connected again. In this case, restart the application with the camera cable being connected.

5. The application cannot be started doubly.

6. cellSens (Dimension/Standard/Entry) cannot be installed on the same PC.

7. If this product is connected to the network, the product may not work properly due to the following problems.

    - Virus infection through the network
    - Malfunction caused by applying OS service pack, security patch, or updating third party software including runtime libraries
    - The acquired images are missed or the acquisition process is delayed or stopped due to the overloaded system which is caused by running the antivirus software, etc.

8. Please refer to the instruction manual of each device for the setup procedures, the operation procedures or cautions of other devices (microscopes, etc.).

9. Never attempt to delete or rename the folders and files installed by the provided installer software. Otherwise, the software may get unable to be started up.

10. When the HDD free space reduces, the data processing speed may slow extremely or errors may occur frequently. To prevent this, delete unnecessary data files frequently.

11. Please understand that Olympus shall not be responsible for any loss (destruction) of the data recorded.

12. Be sure to create the backup of PC system before installing this software.

13. In order to use the report function of cellSens Dimension, either Microsoft $^\circledR$ Office Word 2010 SP1, 2013, 2016 or 2019 must be installed.

14. If the user account control level is high, the message may appear to confirm whether you agree to change "CodeMeter Runtime Server". If this message appears, select [Yes]. You can set this message not appeared by setting the user account control level to the lowest.

15. When installing this software, the software called CodeMeter is installed. Since the software license of this CodeMeter is controlled, do not uninstall this software, delete folders or files, or change their names carelessly. The software may not start. Also, do not specify the desktop as an installation destination folder.

16. Do not use the system protection (creation of restored points) which can be set to Windows $^\circledR$ as standard because it may affect the software license controlled by CodeMeter.

2. Installing cellSens

This section describes the installation procedures of cellSens.

Cautions for Installation:

When installing cellSens, if IX3-CBH or BX3-CBH, etc. is specified as the device to be used, the IEEE1394 device driver is changed to the OLYMPUS specific IEEE1394 device driver. Consequently, general IEEE1394 devices cannot be used.

Devices requiring OLYMPUS specific IEEE1394 device driver (I)	OLYMPUS	• IX3 CBH • BX3 CBH	
Devices requiring general IEEE1394 device driver (II)	Olympus Soft Imaging Solutions (OSIS)	• CC12 • F-View II • ColorView I • ColorView II • ColorView III • ColorView IIIu • XM10	• XC10 • XC30 • XC50 • UC30 • UC50 • UC90 • SC50
	QImaging	• MicroPublisher 3.3 RTV • MicroPublisher 3.3 RTV cooled • MicroPublisher 5 RTV • MicroPublisher 5 RTV cooled • Retiga SRV • Monochrome Retiga Exi	• Monochrome QI Click • Exi Blue • Rolera Thunder • Monochrome Exi Aqua • Monochrome Retiga 4000 R • Monochrome Retiga 4000 RV • Monochrome Retiga 2000 R • Monochrome Retiga 2000 RV
	Hamamatsu	• Orca-AG • Orca-05 • Orca-ER	• Orca-R2 • Orca-03 • ImagEM X2
	Photometrics	• CoolSnap HQ2 • Evolve 512 Delta	
	Jenoptik	• ProgRes C3 • ProgRes C5	

When you use the device requiring OLYMPUS specific IEEE1394 device driver (I) and the device requiring general IEEE1394 device driver (II) by connecting both to the same PC, set up two PCI boards of IEEE1394 connector to the PC, and connect the device (I) and the device (II) to each PCI board, then install cellSens.
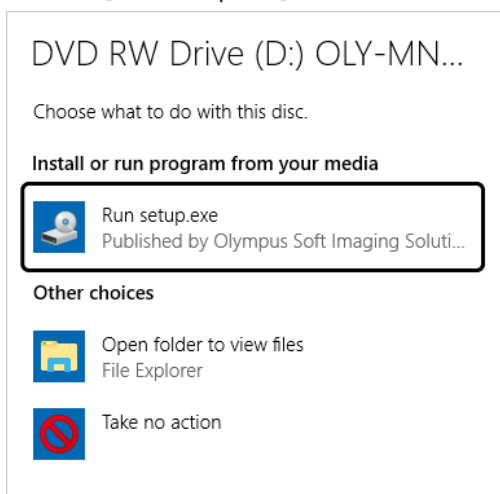
○ If you want to manually change the IEEE1394 device driver, please refer to P.54.

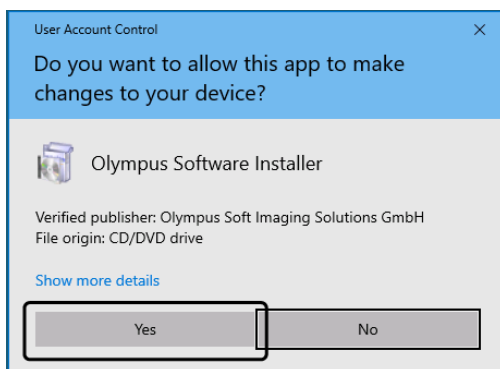## 2.1 Start of the Installer

Prepare following items for installation.

- DVD-ROM
- License certificate of cellSens Dimension / Standard (refer to P.7)
- License certificate of the solution license (only when using the solution)
- Storage media, e.g. USB memory, etc.
  (only if PC to install cellSens cannot be connected to Internet.)

1. Start Windows®. (Log on with the Computer Administrator account.)
2. Insert the DVD-ROM into the DVD drive.
3. Click on [Run setup.exe].

DVD RW Drive (D:) OLY-MN...

Choose what to do with this disc.

Install or run program from your media

Run setup.exe
Published by Olympus Soft Imaging Soluti...

Other choices

Open folder to view files
File Explorer

Take no action

4. When the [User Account Control] window appears, click [Yes] button.

User Account Control   ×

Do you want to allow this app to make
changes to your device?

Olympus Software Installer

Verified publisher: Olympus Soft Imaging Solutions GmbH
File origin: CD/DVD drive

Show more details

| Yes | No |

- After installation of Microsoft® .Net Framework, you may be required to restart Windows®. In this case, please restart and double-click cellSensDVD-ROM icon in [Computer] in Start menu.

  Go to Software activation

2.2 Software activation

2.2.1 What is the purpose of software activation?

Software activation is the process to unlock the software you are about to install or have already installed for perpetual use.

Normally, the licenses are activated at the beginning of the software installation, but you can also activate your software after completing the installation. When the software activation has been completed successfully, you can acquire an activated software license that is registered on Olympus' license activation server.

If 30 days have passed after installing the software without activating the license, you cannot use the software. Please be sure to activate the license within 30 days after installing the software at latest.

If you activate the license passing 30 days after installing the software, start cellSens and select [Help] > [Activate Product] command to activate the license.

2.2.2 Activation procedure

How the activation is carried out depends on whether an Internet connection can be made or not, and from which PC. Regardless of the activation scenario used, basically always the same data is exchanged between the client PC and the activation server. These data do not contain any personal information.

There are three scenarios:

1. Internet-based activation (P.8)

   If the PC on which the software will run has an Internet connection, the activation automatically takes place via Internet.

2. File-based activation (P.9)

   If the PC on which the software will run has no Internet connection, the activation takes place via another PC that has an Internet connection.

3. Code-based activation (P.14)

   Alternatively the activation can be done via transferring and entering character codes.
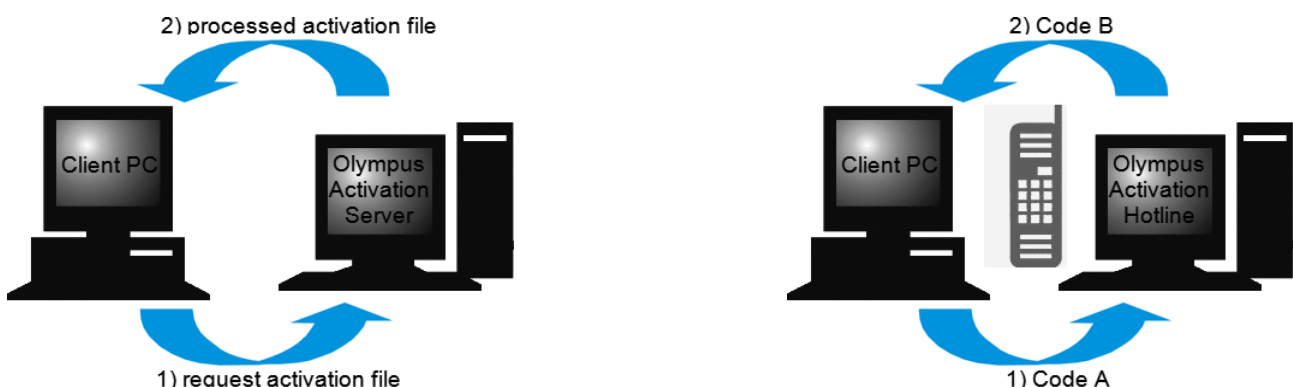
Basic data exchange during software activation

With the internet-based activation scenario, a RAF file (request activation file) is automatically sent to the Olympus' license activation server via Internet. This server, provided that the license is assured to be the authorized license, automatically sends back a PAF file (processed activation file).

With the file-based activation scenario, the RAF files are transferred too. However, sending the files is done manually in this scenario via upload and download from the activation server.

With the code-based activation scenario, the character codes are exchanged.

The importance of the license key

Any cellSens software installation always requires entering license keys.

The license key can be found on the license certificate that was delivered with your software.
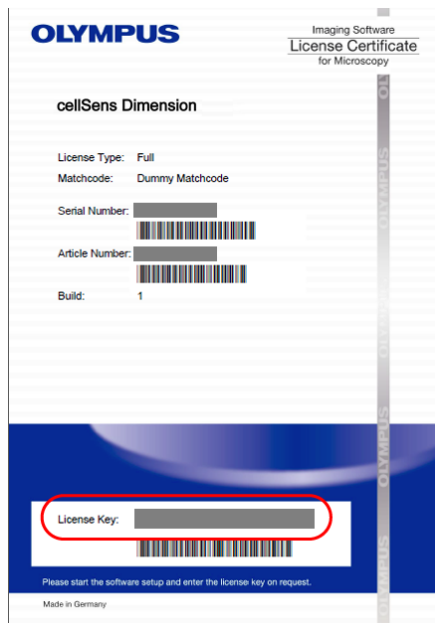
As described above, the license key that is needed for software installation is surrounded in an oval.

During activation the activation server checks whether the license is valid. If the license is valid, the activation server sends back a PAF file. With PCs that have an Internet connection, this process runs automatically and is normally finished within seconds.

You are given exactly one license key for your software. If you also purchased solutions, you have been given a separate license certificate with another license key for each solution. You must enter these license keys as well during installation.

2.2.3 When does software activation take place?

Having installed the software does not mean that it is automatically activated. If, during software installation, you chose to activate the software later, you must do this within 30 days of installation because you won't be able to use the software afterwards without activation. Until you complete the activation, you are prompted to do so every day during this term.

Select the [Help] > [Activate Product] command to activate your software licenses retroactively. This command is only available if your licenses have not been activated yet.

2.2.4 Internet-based software activation

1. The [Select Action] dialog box may appear. In such a case, select [Install or maintain Imaging software] and click the [Next] button.
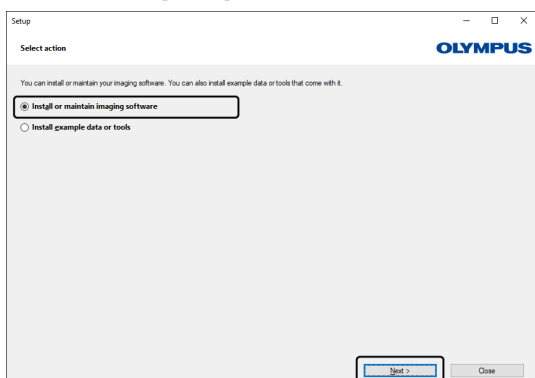
2. In the [Provide license keys] dialog box that is displayed now, enter the license key that is given on the license certificate.
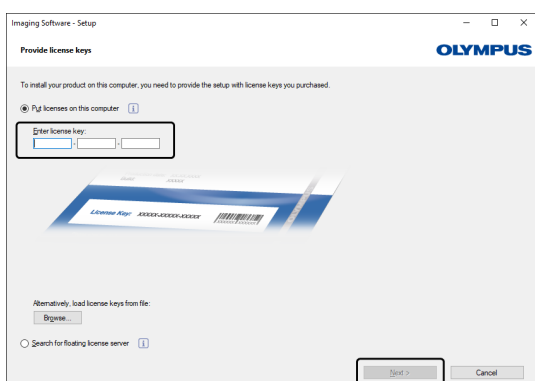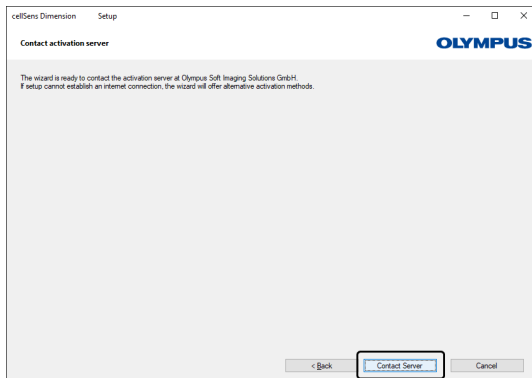

   ○ If you have more license keys (for example, for solutions), enter all of them.

3. Click the [Next] button.

4. In the [Activate licenses] dialog box that is displayed now, do not change the preset [Activate now (recommended)] option and click the [Next] button.
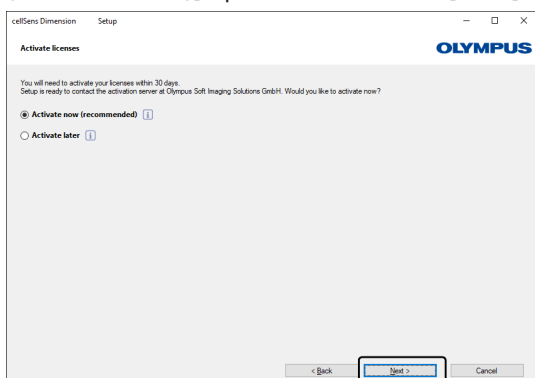
5. In the [Contact activation server] dialog box, click the [Contact Server] button.

- The PC will now contact the activation server and data will be exchanged. This occurs in the background. This can take several seconds. Do not attempt to interrupt this process.
- If this process is stopped for some reasons, please call the Olympus sales office where you have purchased this product.

6. When the dialog box below is displayed, your software has been activated successfully. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Next] button to continue the software installation.
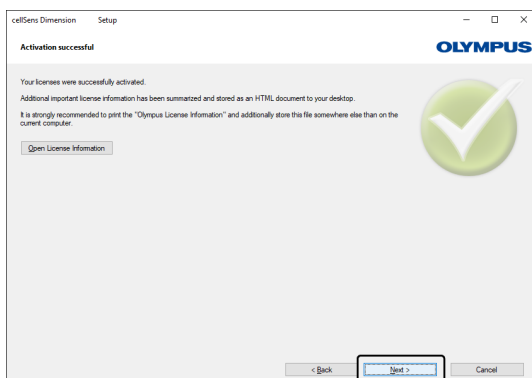
- For following operations, refer to Installation.

2.2.5 File-based software activation

If the PC where cellSens is to be used has no Internet connection, the activation can be done via another PC that has an Internet connection.

To do so, you start the software installation on the first PC and then use a second PC (with an Internet connection) for data exchange with the Olympus' license activation server. The file exchange function must be enabled between two PCs.

Have your license certificate at hand.

1. The [Select Action] dialog box shown may appear. In such a case, select [Install or maintain Imaging software] and click the [Next] button.
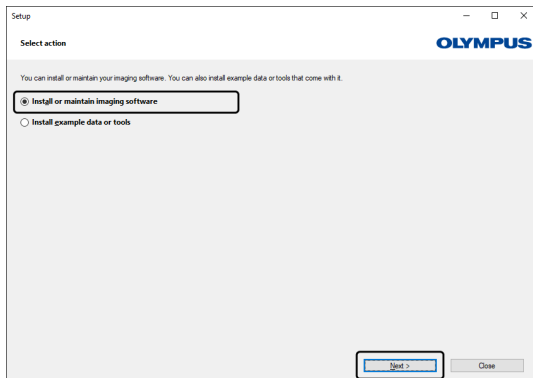
2. In the [Provide license keys] dialog box that is displayed now, enter the license key that is given on the license certificate.
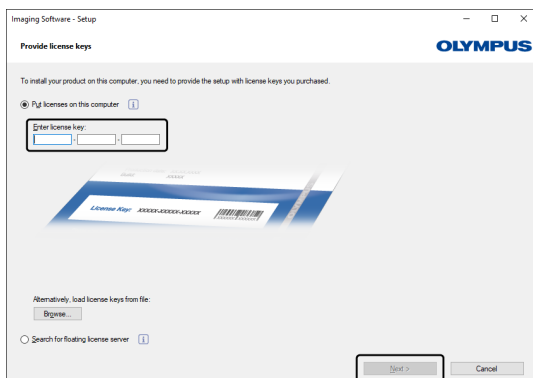
   ○ If you have more license keys (for example, for solutions), enter all of them.

3. Click the [Next] button.

4. In the [Activate licenses] dialog box that is displayed now, do not change the preset [Activate now (recommended)] option and click the [Next] button.

5. In the [Exchange files for activation] dialog box, click the [Save Request File] button. Save the request file in a way that allows you to access it from the second PC with the Internet connection (for example, on a network drive or USB memory stick).
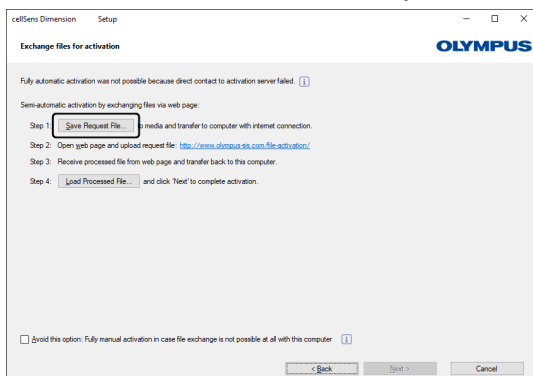
   ○ Do not close the [Exchange files for activation] dialog box. It will be used in subsequent operations.

6. Enter the request file name in [File name]. Use arbitrary one-byte alphanumeric characters for the file name.
Example: "cellSens"
   ○ The request file has the RAF file name extension, for "request activation file".

7. Make sure that the file type is a (*raf) file, and click the [Save] button.
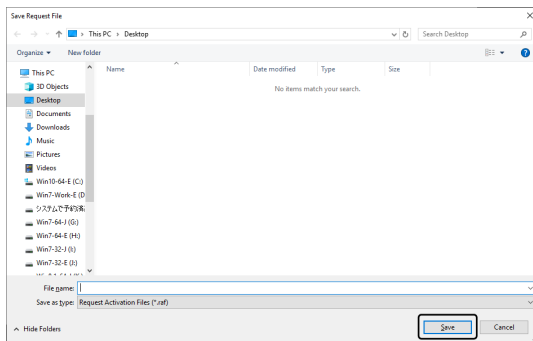
8. Change over to the PC with Internet connection, open an Internet browser and enter the following internet address.
http://www.olympus-sis.com/file-activation/
   ○ You will see the website shown below.
   ○ If necessary, you can change the website language.

9. Click the [Browse...] button.
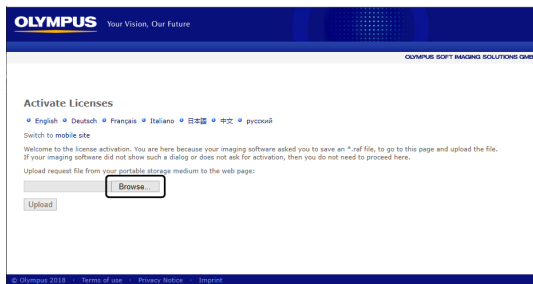
   ○ Do not close the internet browser until procedures from 9. to 17. are completed.
   ○ Do not operate [Next], [Back] or [Update] on the internet browser until procedures from 9. to 17. are completed.

10. On [Open] dialog box, select the request file (RAF) saved in Step 7. Click the [Open] button.
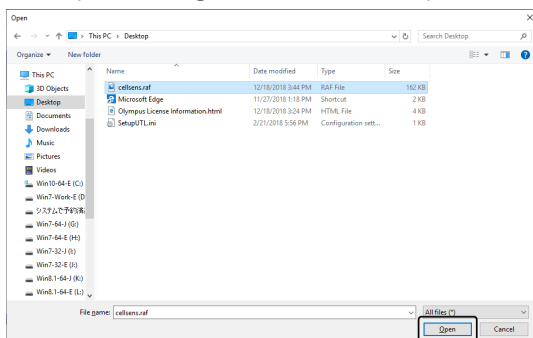
11. Click the [Upload] button.
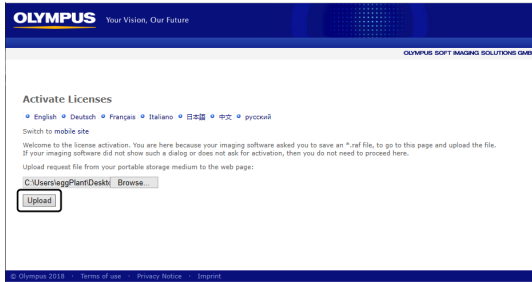
   ○ The website will now be updated. This may take several seconds.

12. Click the [Download Processed File] button.
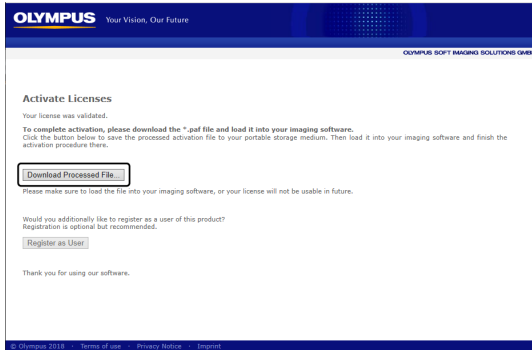
13. Click the [Save as] button.
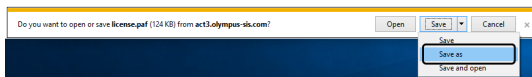
14. Save the processed file in a way that allows you to access it from the PC where cellSens is being installed (for example on a network drive or USB stick). The processed file downloaded from the activation server is attached with a file name "license.paf" by default. You can change the file name arbitrarily. Enter the file name downloaded to [File name] on the window below, and click the [Save] button. Use arbitrary one-byte alphanumeric characters for the file name.
Example: "cellSens"
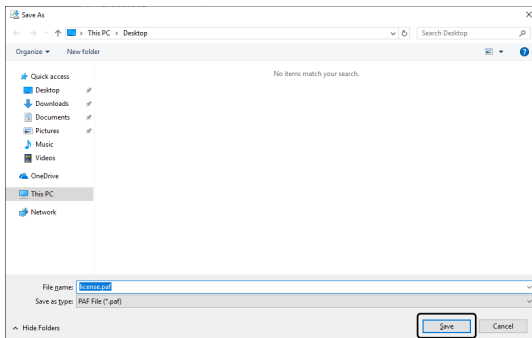
   ○ The processed file has the PAF file name extension, for "processed activation file".

15. Make sure of the message "The download is completed.", and close the message.

16. After completing in downloading the processed file, you can perform User Registration. After User Registration is completed, you can receive the product information via your E-mail. Click [Register as User] button to move to the user registration page. Enter the required items in the form.
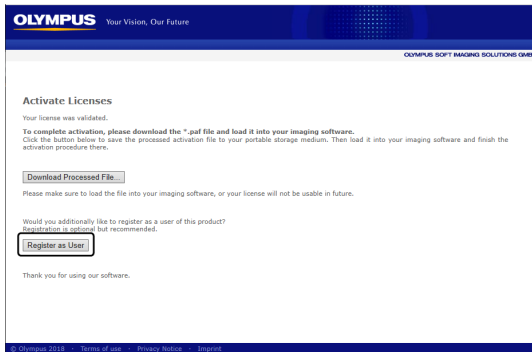
17. Make sure that the processed file has been saved and close the Internet browser.

18. Change back to the PC where cellSens is being installed.

19. In the [Exchange files for activation] dialog box that should still be on display, click the [Load Processed File] button.
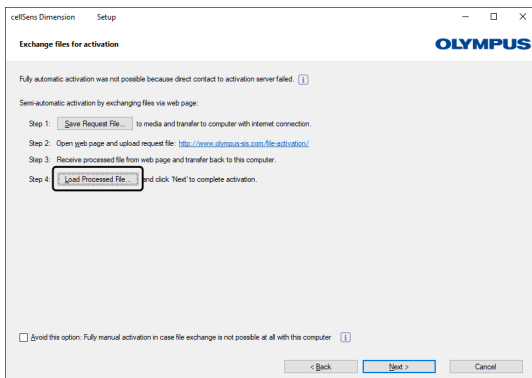
20. Select the folder where the file downloaded from the activation server in Step 14. and 15. is saved, and click the [Open] button.
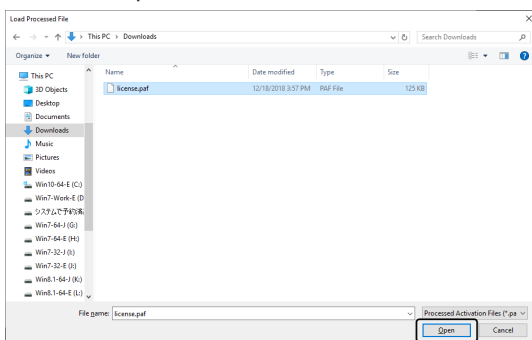
21. When the loading of the downloaded file is completed, you are allowed to click the [Next] button on the [Exchange files for activation] dialog box.
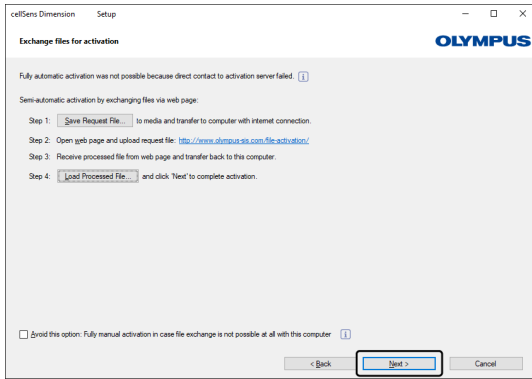
22. When the dialog box below appears, your software has been activated successfully. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Next] button to continue the software installation.
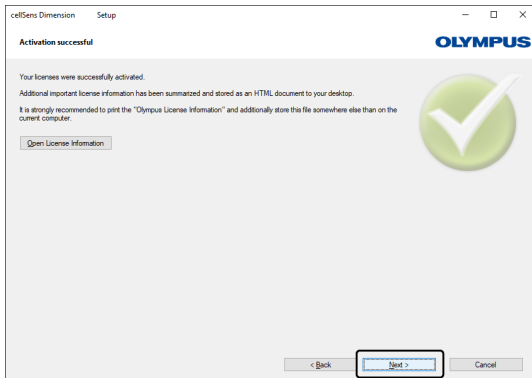
   ○ For following operations, refer to Installation.

2.2.6 Code-based software activation

If the PC where your software is installed has no Internet connection and if the file cannot be exchanged between the PC and another PC that has an Internet connection by using storage media, etc., the activation can be done via transferring and entering character codes.

- With the code-based activation, the activation process cannot be stopped.
- When activating other licenses after performing the code-based activation, the internet-based activation or the file-based activation cannot be executed.
- If the activation is performed by code-based, the deactivation can be performed only by code-based.

1. If the [Select Action] dialog box below appears, select [Install or maintain Imaging software] and click the [Next] button.
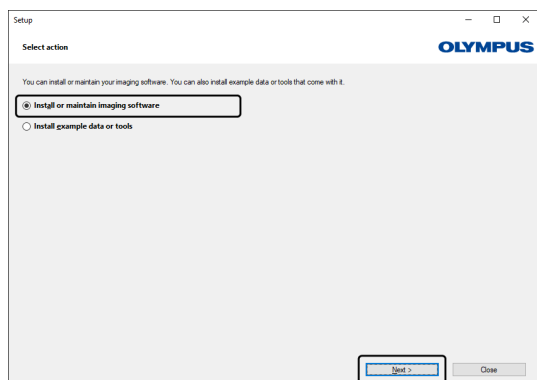
2. In the [Provide license keys] dialog box that is displayed now, enter the license key that is given on the license certificate.
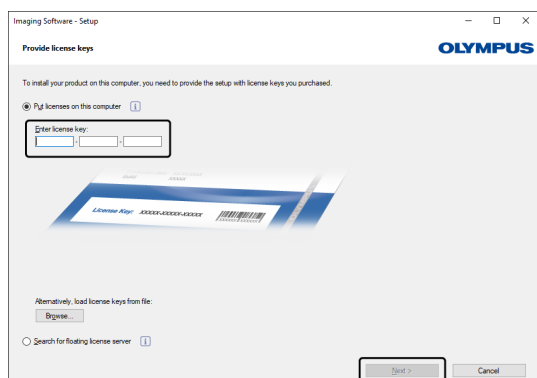

   ○ If you have more license keys (for example, for solutions), enter all of them.

3. In the [Activate licenses] dialog box that is displayed now, do not change the preset [Activate now (recommended)] option and click the [Next] button.

4. Select the [Avoid this option: Fully manual activation in case file exchange is not possible at all with this computer] check box.
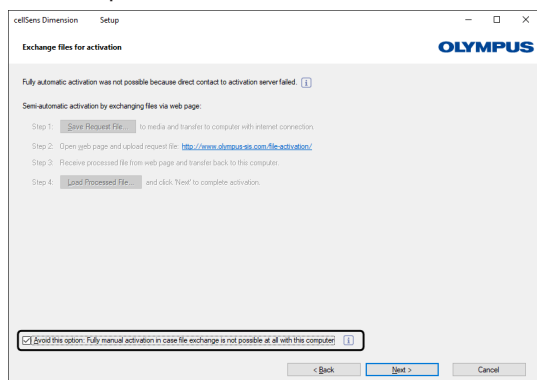
5. Click the [Next] button.
   - The dialog box below appears.

     Click [Yes] to close the dialog box.
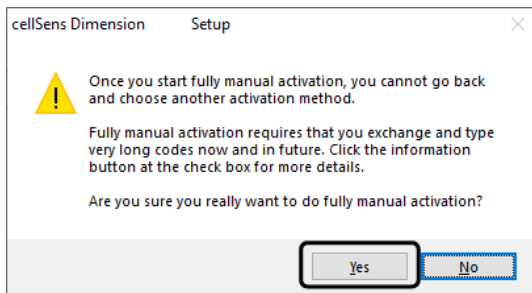
6. Make sure of Code A on the [Activate licenses manually] window.
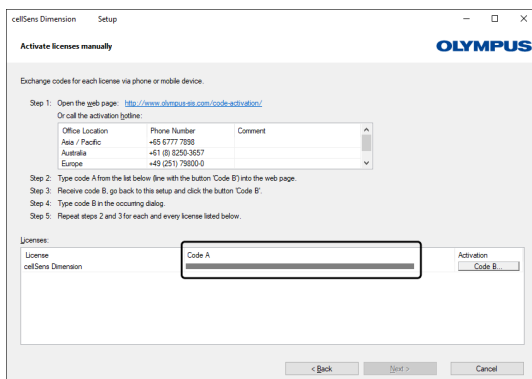
7. Change over to the PC which is used for transferring character codes, open an Internet browser and enter the following internet address.

   http://www.olympus-sis.com/code-activation/

8. Enter Code A yourself in the website you have accessed, and then select [Submit].

   - Be careful not to enter codes erroneously.

     <Particular examples>
     - I (upper case of i), l (lower case of L) or

       1 (numeral)
     - 0 (numeral) or O (upper case of o)
     - Do not forget entering "-" (hyphen).

9. Make sure of Code B shown on the window.

10. Change back to the PC where cellSens is being installed, click the [Code B] button in the [Activate licenses manually] dialog box.
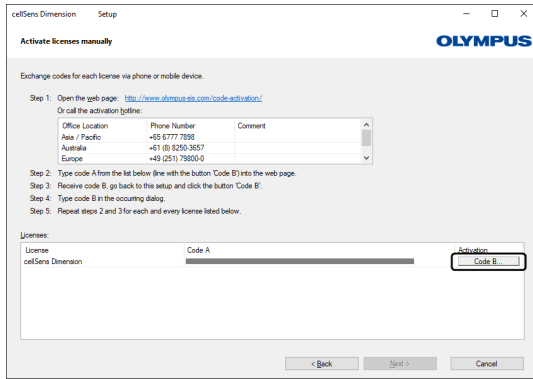
   ○ The [Type Code B] dialog box opens.

11. Enter Code B and click the [OK] button.
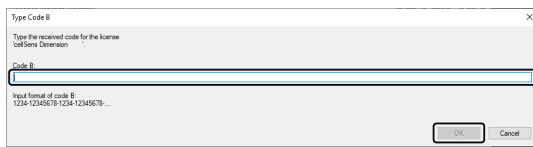
12. If you have more than one license, repeat the procedures from 7. to 11. until you finish entering Code B for all your licenses.

13. In the [Activate licenses manually] dialog box, click the [Next] button.

14. When the dialog box below appears, your software has been activated successfully. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Next] button to continue the software installation.
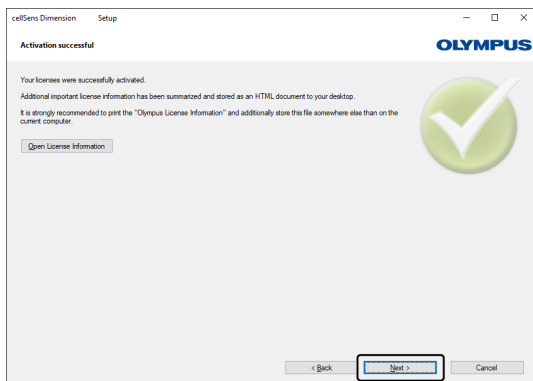
   ○ For following operations, refer to Installation.

1. Read the displayed License Agreement, select [Yes, I accept all the terms of the License Agreement.] and then click the [Next] button.
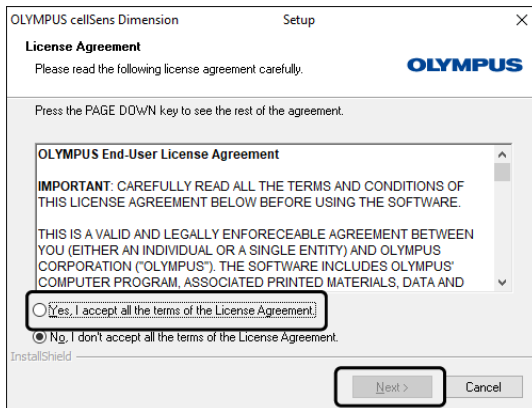
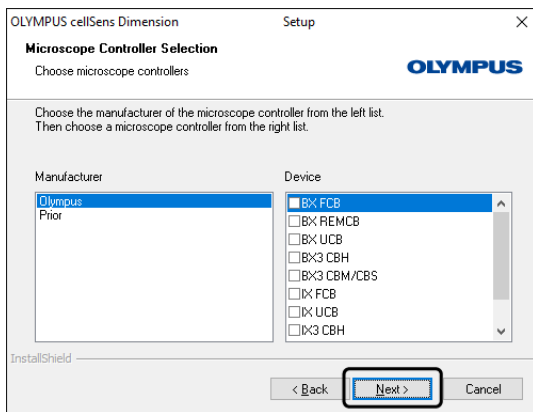2. Select the language and click the [Next] button.
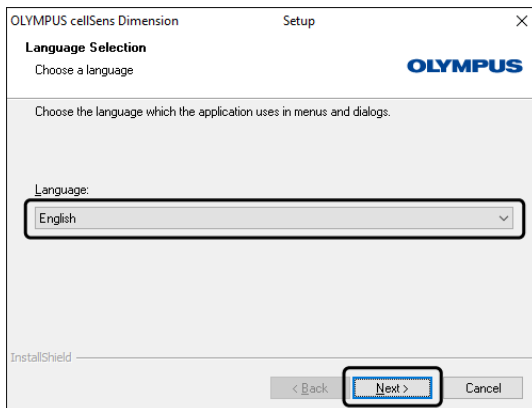
3. The [Choose Destination Location] window appears. If you want to change the destination location, click the [Browse] button to find a new location. Click the [Next] button.
   - If a dot " . " is included in the name of the folder selected as the destination to install, the failure may occur in some functions. Be sure to select the folder whose name does not include a dot " . ".
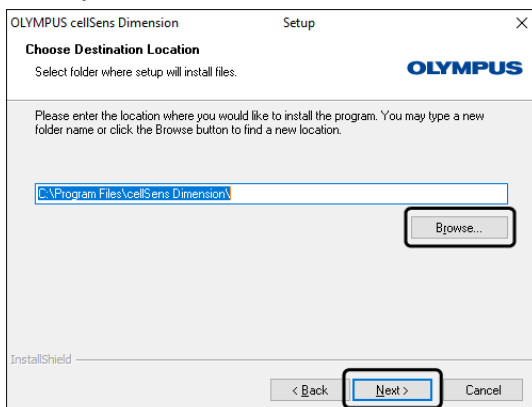
4. The [Image Source Selection] window appears. Select your camera and click the [Next] button. When you select manufacturers, the cameras of each maker are displayed in the device list. If your camera is not in the list, click the [Next] button.
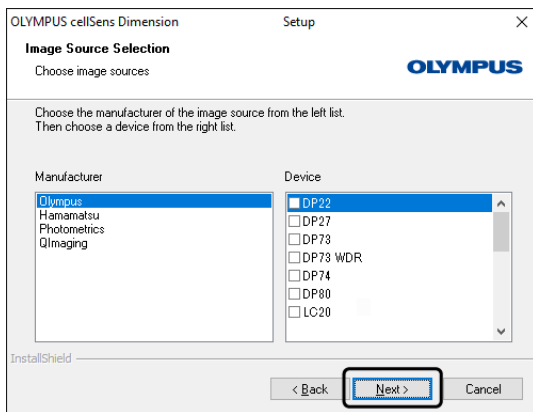
5. The [Microscope Controller Selection] window appears. Select your microscope, and click the [Next] button. If your microscope is not in the list, click the [Next] button.

    ○ When installing [Entry], this window won't be displayed.

6. The [Microscope Accessories Selection] window appears. Select your device, and click the [Next] button. If your device is not in the list, click the [Next] button.
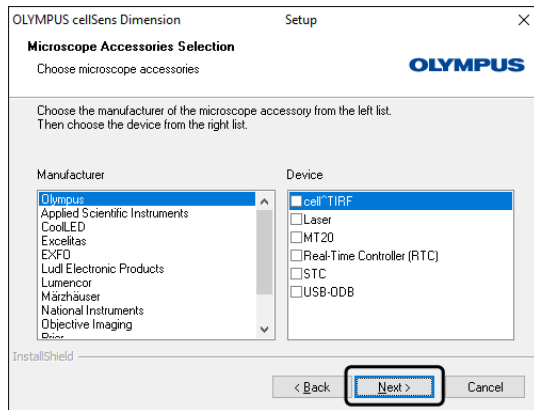
When you use BX3-SSU

If you connect the control box of BX3-SSU to BX3-CBH, select [BX3 SSUCB]. If you connect the control box of BX3-SSU to the PC, select [BX3 SSUCB (serial)].

When you use IX3-SSU

If you connect the control box of IX3-SSU to IX3-CBH, select [IX3 SSUCB]. If you connect the control box of IX3-SSU to the PC, select [IX3 SSUCB (serial)].

7. The [Database] window appears. Select [Install local database server] and then click the [Next] button.
   ○ If the Database Solution is not purchased, it won't be displayed.
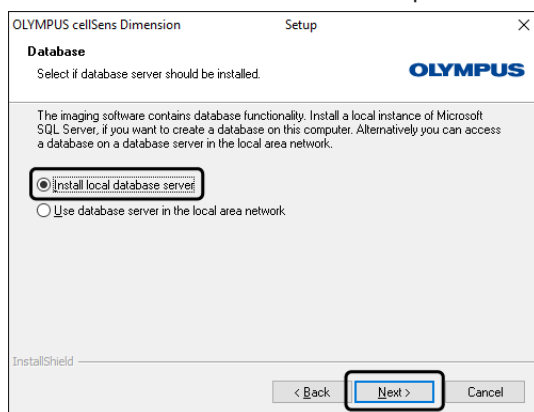
8. The [Configure Microsoft SQL Server] window appears. Enter the system administrator password, and then click the [Next] button.
   ○ The password is consisted of 8 to 128 characters long and contains characters from 3 of 4 categories.
      • Latin uppercase letters (A-Z)
      • Latin lowercase letters (a-z)
      • Base 10 digits (0 through 9)
      • Non-alphanumeric characters: "!", "$", "#", or "%".
   ○ If the Database Solution is not purchased, it won't be displayed.
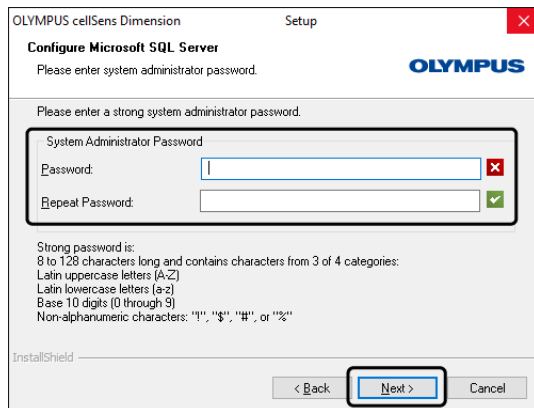
9. The [NetCam server] window appears. Check [Yes] and then click the [Next] button.
   ○ If the NetCam Solution is not purchased, it won't be displayed.
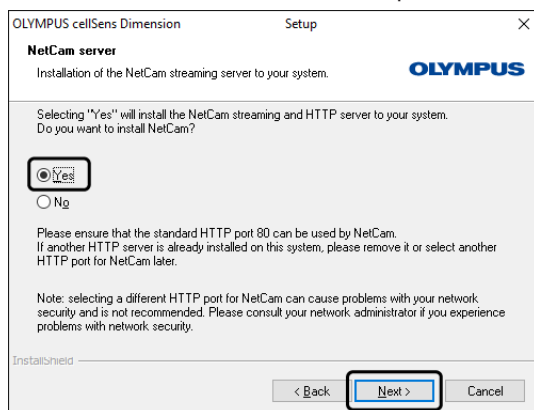
10. The [Select Additional Tasks] window appears. Make sure that the task to be used is selected, and click the [Next] button.
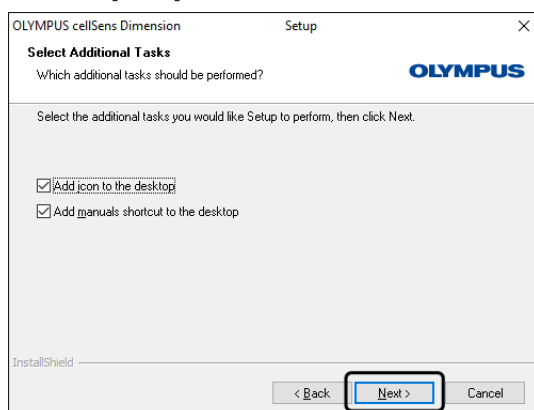
11. The [Start Copying Files] window appears. Click the [Next] button to start installation.
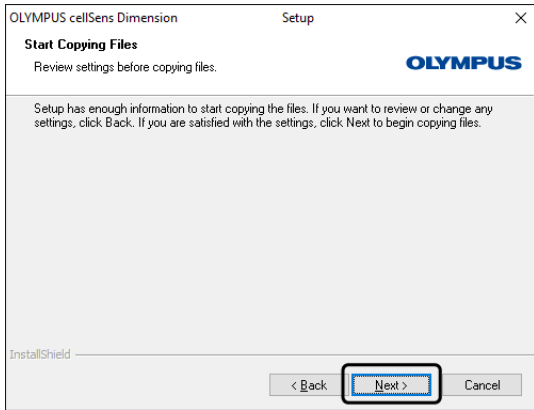
12. If the Microsoft® Word has not been installed in the PC, the below window appears. Click the [OK] button to resume installation. In this case, you cannot use the report function of cellSens. If you want to use this function, you need to install Microsoft® Word (2010 SP1 / 2013 / 2016 / 2019). Be sure to install Microsoft® Word after completing in installing cellSens, and run the WordReportDiagnostics.exe in the folder shown in the below window.
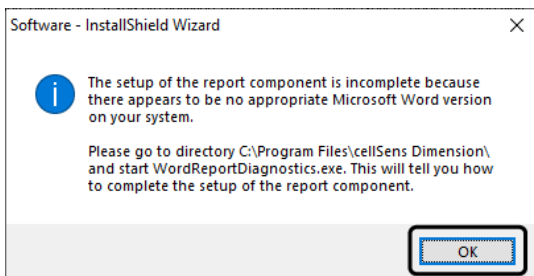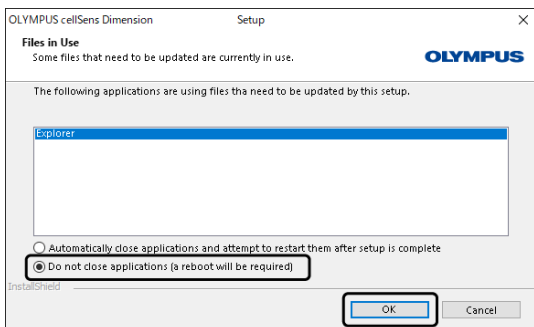

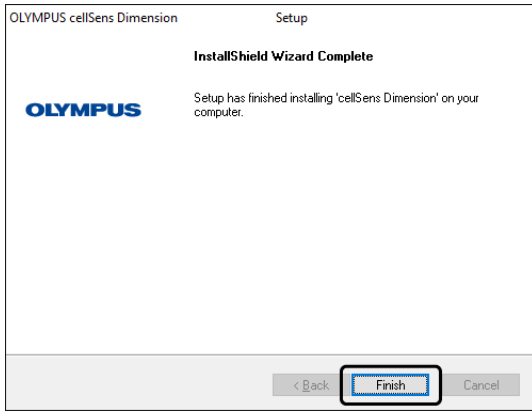13. Click the [Install] button if the window below appears during the installation.
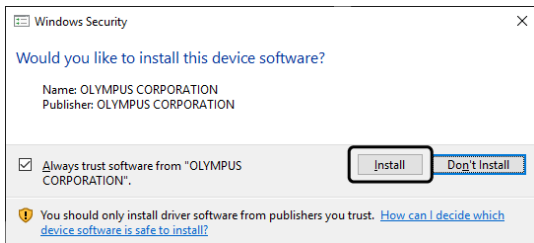
   ○ The window to carry out the configuration of IEEE1394 device driver (FireWire driver) may appear depending on the camera and/or the microscope connected to the PC. In that case, go to step 16. on next page.

14. If the [Files in Use] window appears during the installation, select [Do not close applications (a reboot will be required)] and then click the [OK] button.
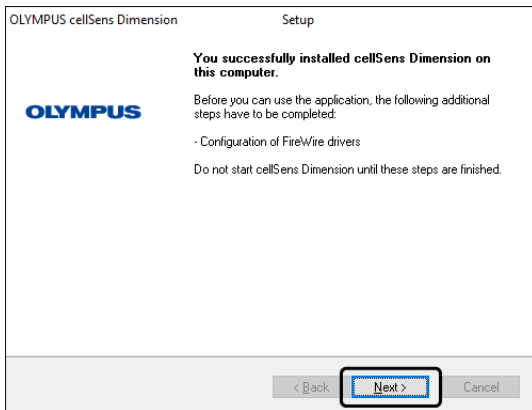
15. When the window below appears, click the [Finish] button. The installation of cellSens is completed.
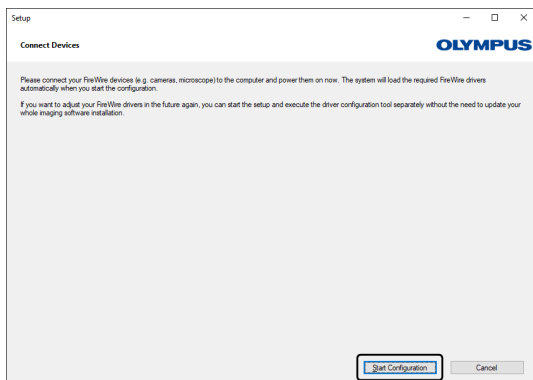

○ After cellSens is installed, the message for installing the sample data or tools appears. Follow the message if necessary.
○ If any device was selected in step 4., 5. or 6., the shortcut file for installing the driver is saved on the desktop. Double-click the file and install the driver.
○ If the message requesting to restart PC appears, please restart PC.

If installation is completed normally, it will go to

Starting the cellSens software (P.43).

16. When the window below appears, click the [Next] button to carry out the configuration of IEEE1394 device driver (FireWire driver).

17. The [Connect Devices] window appears. Connect the camera and/or the microscope to the PC and turn on the main switch, and then click the [Start Configuration] button. The configuration of device driver is carried out automatically.

- ○ If the window below appears, the configuration of device driver has not been completed. Confirm that the camera and/or the microscope are/is connected to the PC and the main switch is turned on, and then click the [Retry] button.
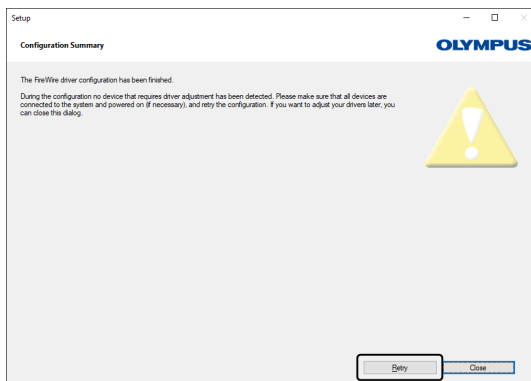
18. If the window below appears, the configuration of device driver has been completed. Click the [Close] button. The installation of cellSens is completed.
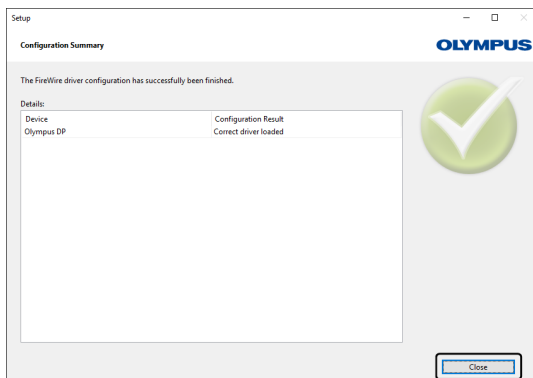
- ○ After cellSens is installed, the message for installing the sample data or tools appears. Follow the message if necessary.
- ○ If any device was selected in step 4., 5. or 6., the shortcut file for installing the driver is saved on the desktop. Double-click the file and install the driver.
- ○ If the message requesting to restart PC appears, please restart PC.

If installation is completed normally, it will go to

Starting the cellSens software (P.43).

2.4 Updating/Upgrading the software

You can update/upgrade the cellSens to the latest version or the upper grade while keeping it installed on your PC.

○ Depending on the software version you have been using or the date of software activation, paid update license is required so as to update your software to the latest version.

<How to confirm if the update license is required>

Open an internet browser and enter the following internet address.

https://licenseinformation.olympus-sis.com/LicenseInformation

[Information on Software Updates] window opens. Enter the serial number of your software license and click the [Show Data] button.


If [Highest available Product Version] and [Highest available Product Version (free of Charge)] of the information displayed match, you can update your software for free. If the two do not match, the paid update license is required and you have to purchase it in advance so as to update your software.
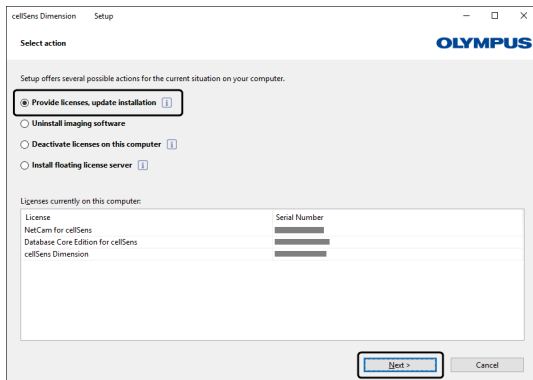
1. Start the installer.
   If you use the DVD-ROM, follow the procedures in Start of the Installer (P.5).
   If you use the installer downloaded from website, extract it and run the "Setup exe".

2. The [Select action] window appears. Select [Install or maintain Imaging software] and click the [Next] button.
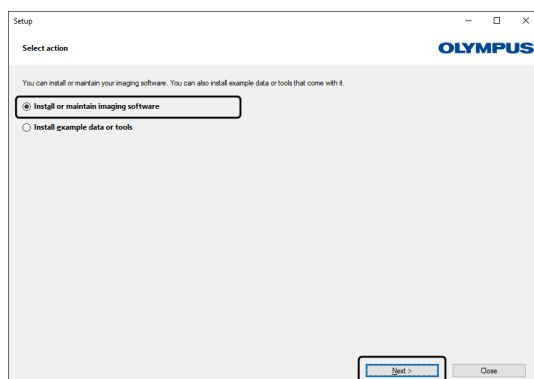
3. Select [Provide licenses, update installation] and click the [Next] button.


4. The [Provide license keys] window appears. Enter all of additional license keys for paid update, upgrading to upper grade or adding solutions. And click the [Next] button. If you do not have any additional license key, click the [Next] button.
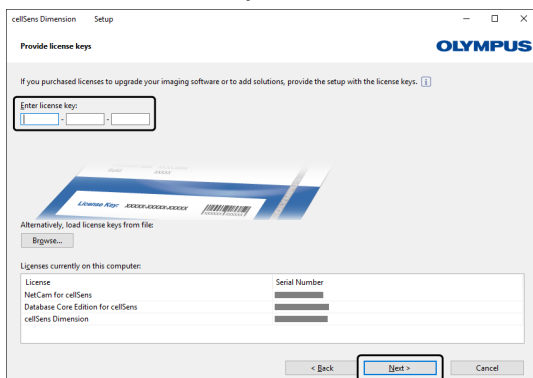

5. When the current software version is "1.18" or earlier, a window appears that indicates that the license is old. If you have confirmed in advance on the [Information on Software Updates] window that you can update your software for free[1], click the [Yes] button.

    [1] Even your license is old, you can update your software for free if the first time activation of the license was done within one year back from the release date of the latest major version.
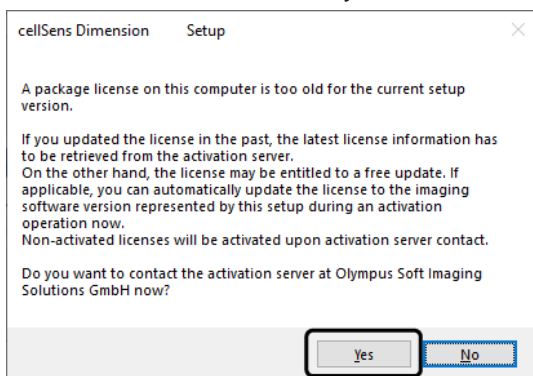

6. Carry out the activation as described in Software activation (P.6).

7. Read the displayed License Agreement, select [Yes, I accept all the terms of the License Agreement.] and then click the [Next] button.
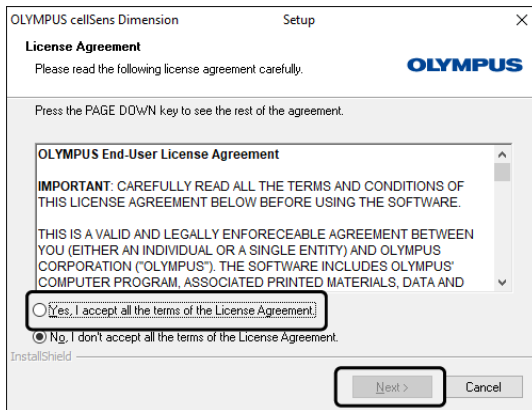
8. After this, follow the procedures from 4. to 18. in Installation (P.19) to update/upgrade cellSens.

9. When the update/upgrade is completed, the [Select action] window appears. Click the [Close] button to close the window.
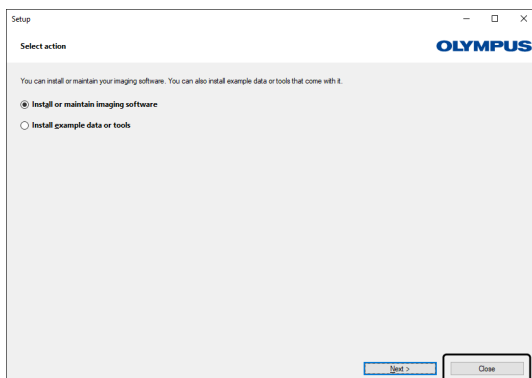
The update/upgrade of cellSens is completed.

2.5 Software deactivation

You must deactivate the software if you want to use the same cellSens software on a different PC (for example because the old PC will be disposed of) and you would like to continue using the software license. Deactivation of your software licenses is always done via the Olympus' license activation server, too. It is important that the software license receives the "deactivated" status on this server. Only then can this license be activated again on another PC.

Deactivate the software before you dispose of the PC, reformat the hard drive or remove it from service by any other means! Don't worry if the new PC is not yet available, because you can do the reactivation of the software at any later point in time.

Just like activation, also the way the deactivation is carried out depends on whether an Internet connection can be made or not, and from which PC. Regardless of the deactivation scenario used, basically always the same data is exchanged between the client PC and the activation server. These data do not contain any personal information.

The same scenarios as with the activation apply:

1. **Internet-based deactivation (P.29)**

   If the PC on which the software will run has an Internet connection, the deactivation automatically takes place via Internet.

2. **File-based deactivation (P.30)**

   If the PC on which the software will run has no Internet connection, the deactivation takes place via another PC that has an Internet connection.

   This deactivation scenario requires an additional step: One additional file must be uploaded onto the Olympus' license activation server: the confirmation file that contains the information that the deactivation was successful. This software license will only get the "deactivated" status on the activation server after you uploaded this additional file.

3. **Code-based deactivation (P.36)**

   If you activated the software via transferring and entering character codes by using your mobile device (for example, Smartphone), the deactivation must also be done by the code-based deactivation.

28
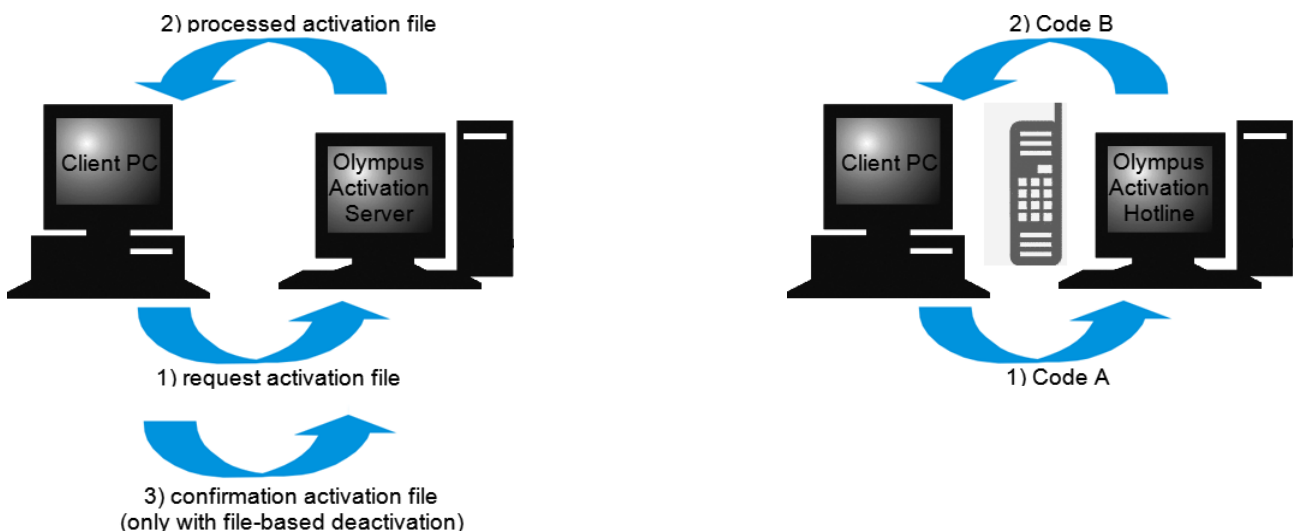
**Basic data exchange during software deactivation**

With the **first** deactivation scenario, the RAF file (request activation file) and the PAF file (processed activation file) are automatically exchanged between PC and the Olympus' license activation server via Internet.

With the **second** deactivation scenario, the same files are transferred. However, sending the files is done manually in this scenario via upload and download from the activation server. When the file-based deactivation is used, the client must save and upload another file at the end of the deactivation procedure, the CAF file (confirmation activation file).

With the **third** deactivation scenario, the character codes are exchanged.

2.5.1 Internet-based software deactivation

- ○ If licenses are activated by the internet-based activation or the file-based activation, the deactivation can be performed only by internet-based or file-based.

1. Insert the DVD-ROM with the software that you want to uninstall into the DVD drive.
2. In the [Select action] dialog box, select the [Deactivate licenses on this computer] option.
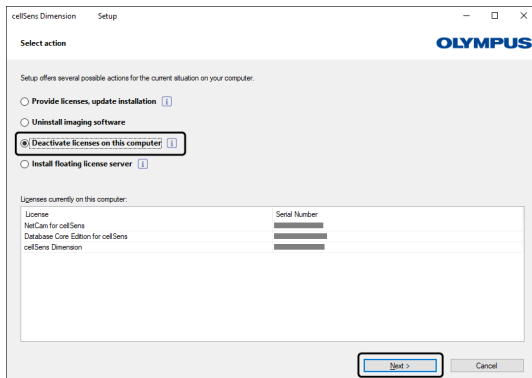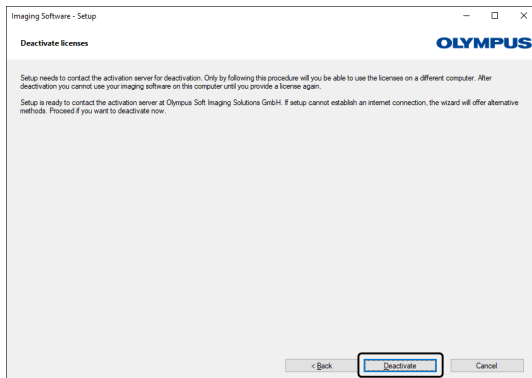

3. Click the [Next] button.
4. The [Select licenses] dialog box is shown. Select the licenses that you want to deactivate.
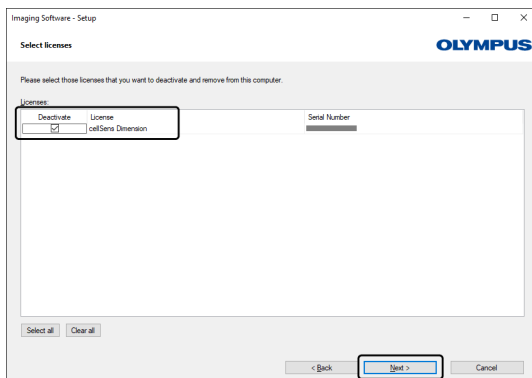
5. Click the [Next] button.

6. In the [Deactivate licenses] dialog box, click the [Deactivate] button.

    ○   The PC now contacts the activation server and tries to find the software license that you want to deactivate. This can take several seconds. Do not attempt to interrupt this process.

7. When deactivation was successful, the [Deactivation successful] dialog box appears. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Close] button.
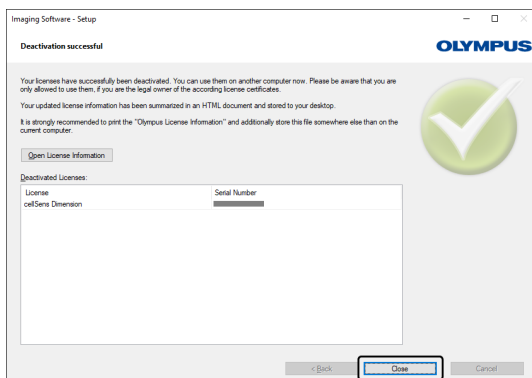
    ○   After completing deactivation, the License keys.lkf file will be created in the following folder.
        C:\ProgramData\Olympus\OSIS
        This file can be used when installing the software next time. You can load the license key by loading the License keys.lkf from [Browse (O)] in the [Provide license keys] dialog box.

2.5.2 File-based software deactivation

If the PC where cellSens is to be used has <u>no</u> Internet connection, the deactivation can be done via another PC that has an Internet connection.

To do so, use the second PC (with internet connection) to exchange the data with the Olympus activation server. The file exchange function must be enabled between two PCs.

○   If licenses are activated by the internet-based activation or the file-based activation, the deactivation can be performed only by internet-based or file-based.

○   Start the file-based software deactivation in the same procedures as those in Internet-based software deactivation (P.29).

1. Click the [Save Request file] button on the [Exchange files for deactivation] window.
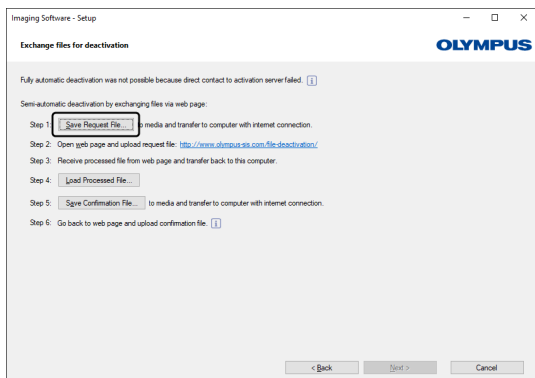

   ○ Do not close the [Exchange files for deactivation] window. It will be used in subsequent operations.

2. Select the USB memory stick or double-click to open the relevant folder in the specified save location, if any. Save the request file so that you can access it from the second PC with an Internet connection. (on the network driver or USB memory stick, etc.)

3. Enter the request file name in [File name]. Use arbitrary one-byte alphanumeric characters for the file name.
   Example: "cellSens"
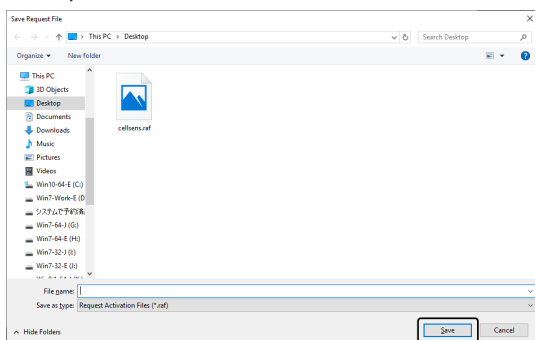
4. Make sure that the file type is a (*raf) file, and click the [Save] button.

5. Change over to the PC with Internet connection, open an Internet browser and enter the following internet address.

   http://www.olympus-sis.com/file-deactivation/

   ○ The site shown below appears.

6. When the [Deactivate Licenses] window appears, click the [Browse..] button.
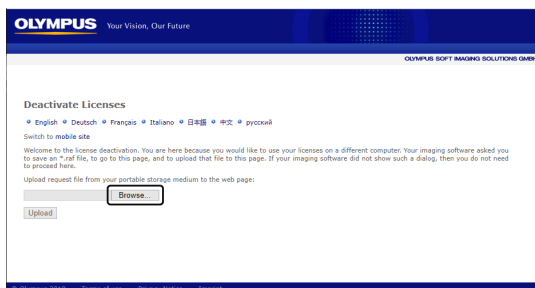
   ○ Do not operate [Next], [Back] or [Update] on the internet browser until procedures from 6. to 8. are completed.

7. Select the request file on the [Open] window, and click the [Open] button.
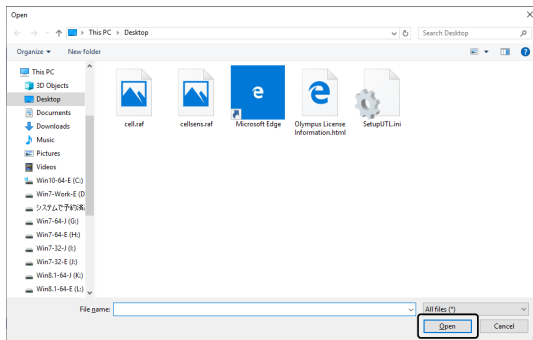
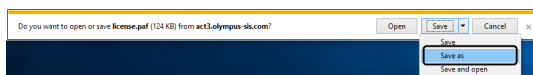8. Click the [Upload] button on the [Deactivate Licenses] window.

- The site is updated. It takes several seconds.
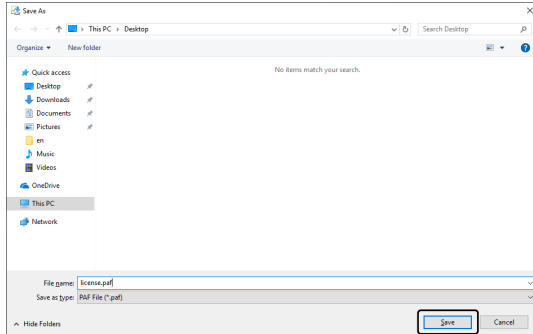
9. Click the [Download processed File] button.
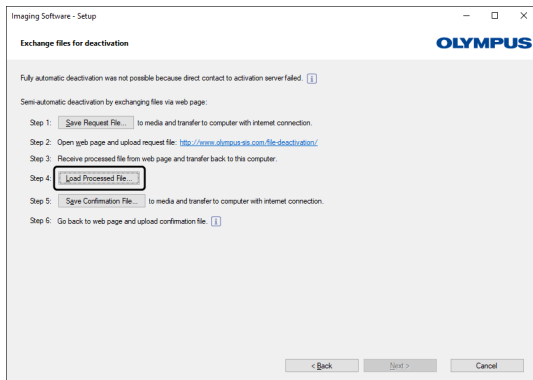

10. Click the [Save as] button.

11. Save the processed file in a way that allows you to access it from the PC where cellSens is being installed (for example on a network drive or USB stick). The processed file downloaded from the activation server is attached with a file name "license.paf" by default. You can change the file name arbitrarily. Enter the file name downloaded to [File name] on the window below, and click the [Save] button. Use arbitrary one-byte alphanumeric characters for the file name.
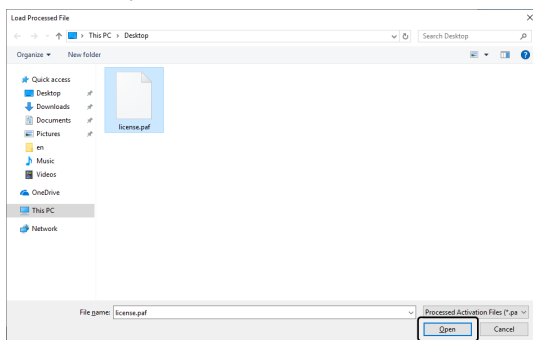Example: "cellSens"

12. Change over to PC where cellSens is installed.

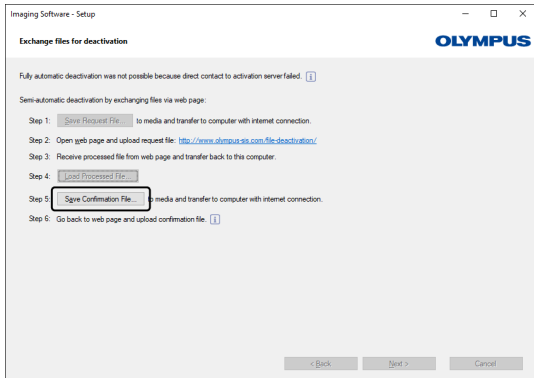13. Click the [Load Processed Files] button on the [Exchange files for deactivation] window.

14. Select the processed file (PAF) on the [Load Processed Files] window, and click the [Open] button.
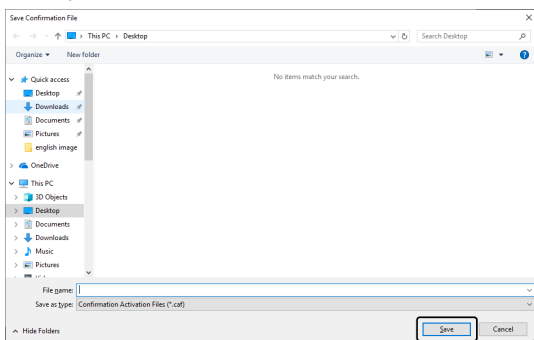

- At this time, make sure that the extension of the selected file is (*paf).

15. Click the [Save Confirmation Files] button on the [Exchange files for deactivation] window.
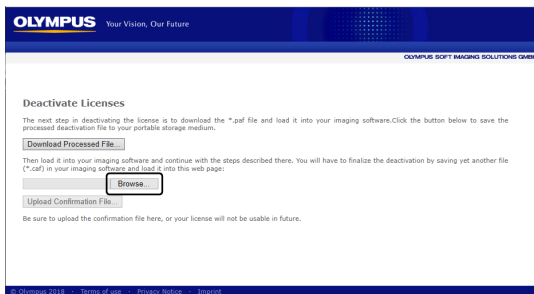

16. Select the confirmation file (CAF) on the [Save Confirmation Files] window, enter the name of the downloaded file in [File Name], and click the [Save] button. Use arbitrary one-byte alphanumeric characters for the file name.
Example: "cellSens"

17. Change over to the PC with Internet connection, click the [Browse...] button on the [Deactivate Licenses] window.
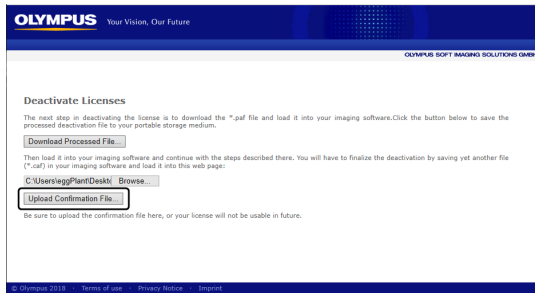

○ Do not operate [Next], [Back] or [Update] on the internet browser until procedures from 17. to 19. are completed.
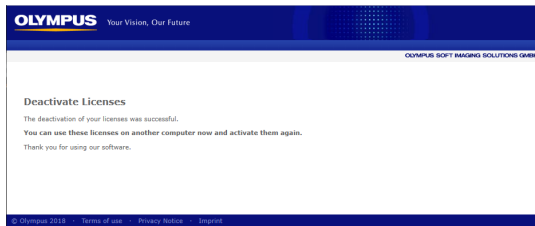
18. Select the conformation file (CAF) on the [Open] window, and click the [Open] button.
    - At this time, make sure that the extension of the selected file is (*caf).
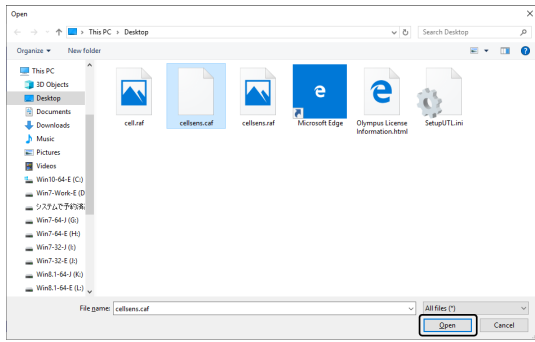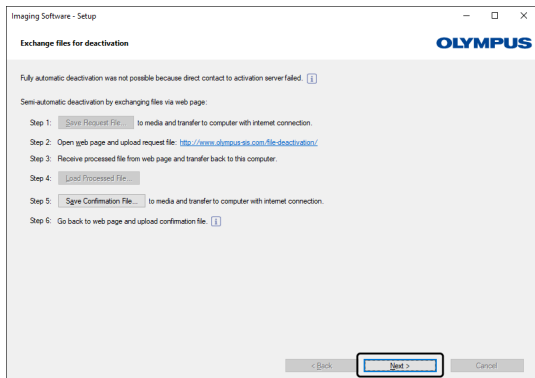

19. Click the [Upload Confirmation File] button on the [Deactivate Licenses] window.

    - The site is updated. It takes several seconds.

20. After a while, the window below appears.

21. Change over to PC where cellSens is installed. Click the [Next] button on the [Exchange files for deactivation] window.

    - Completing in loading the downloaded file allows you to select the [Next] button.

22. When the software deactivation completes, the dialog box below appears. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Close] button.
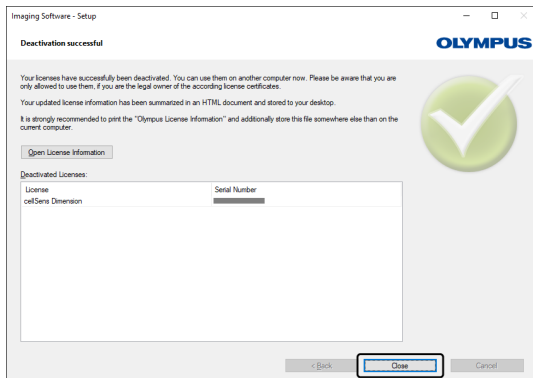

2.5.3 Code-based software deactivation

If the PC where your software is installed has no Internet connection and if the file cannot be exchanged between the PC and another PC that has an Internet connection by using storage media, etc., the deactivation can be done via transferring and entering character codes.

- If the activation is performed by code-based, the deactivation can be performed only by code-based.
- Start the code-based software deactivation in the same procedures as those in Internet-based software deactivation (P.29).

1. Make sure of Code A on the [Deactivate licenses manually] window.
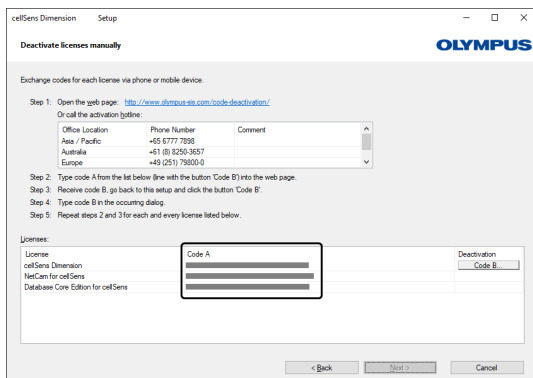
2. Change over to the PC which is used for transferring character codes, open an Internet browser and enter the following internet address.
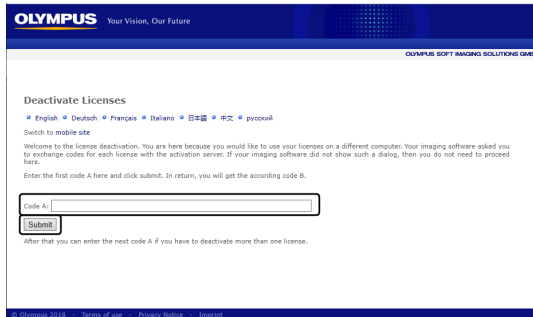
http://www.olympus-sis.com/code-deactivation/

- The site below appears.

3. Enter Code A on the connected site, and select [Submit].
   - Be careful not to enter codes erroneously.
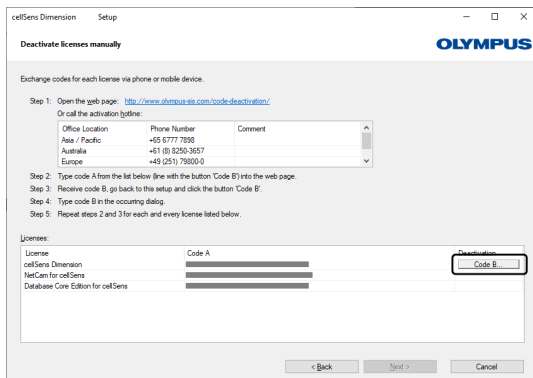   <Particular examples>
     - I (upper case of i), l (lower case of L) or 1 (numeral)
     - 0 (numeral) or O (upper case of o)
     - Do not forget entering "-" (hyphen).

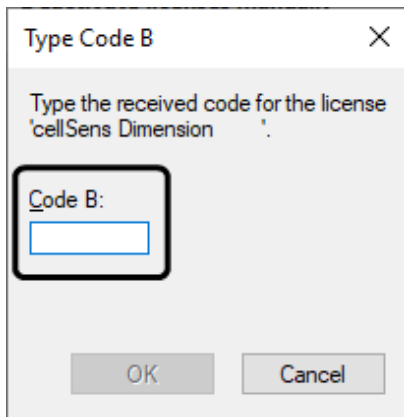
4. Make sure of Code B on the window below appears.

5. Change back to the PC where cellSens is being installed, click the [Code B] button on the [Deactivate licenses manually] window.

6. Enter Code B on the [Type Code B] window, and click the [OK] button.
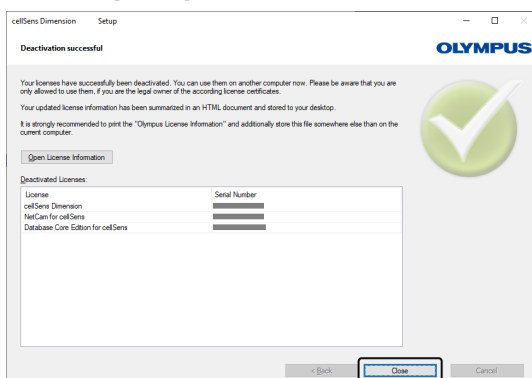   - Be careful not to enter codes erroneously.
     <Particular examples>
     - I (upper case of i), l (lower case of L) or 1 (numeral)
     - 0 (numeral) or O (upper case of o)

7. If there are multiple licenses, repeat Steps 1 ~ 6 until you finish entering Code B to all licenses.
8. Make sure that the deactivation is completed on the [Deactivate licenses manually] window, and click the [Next] button.
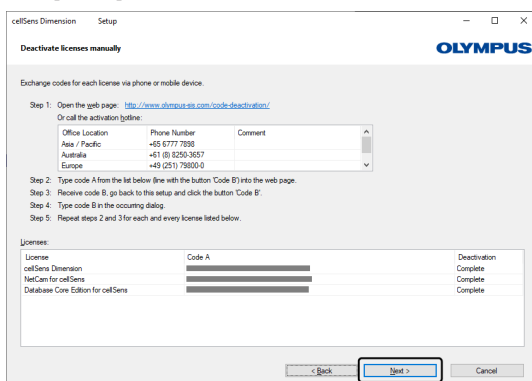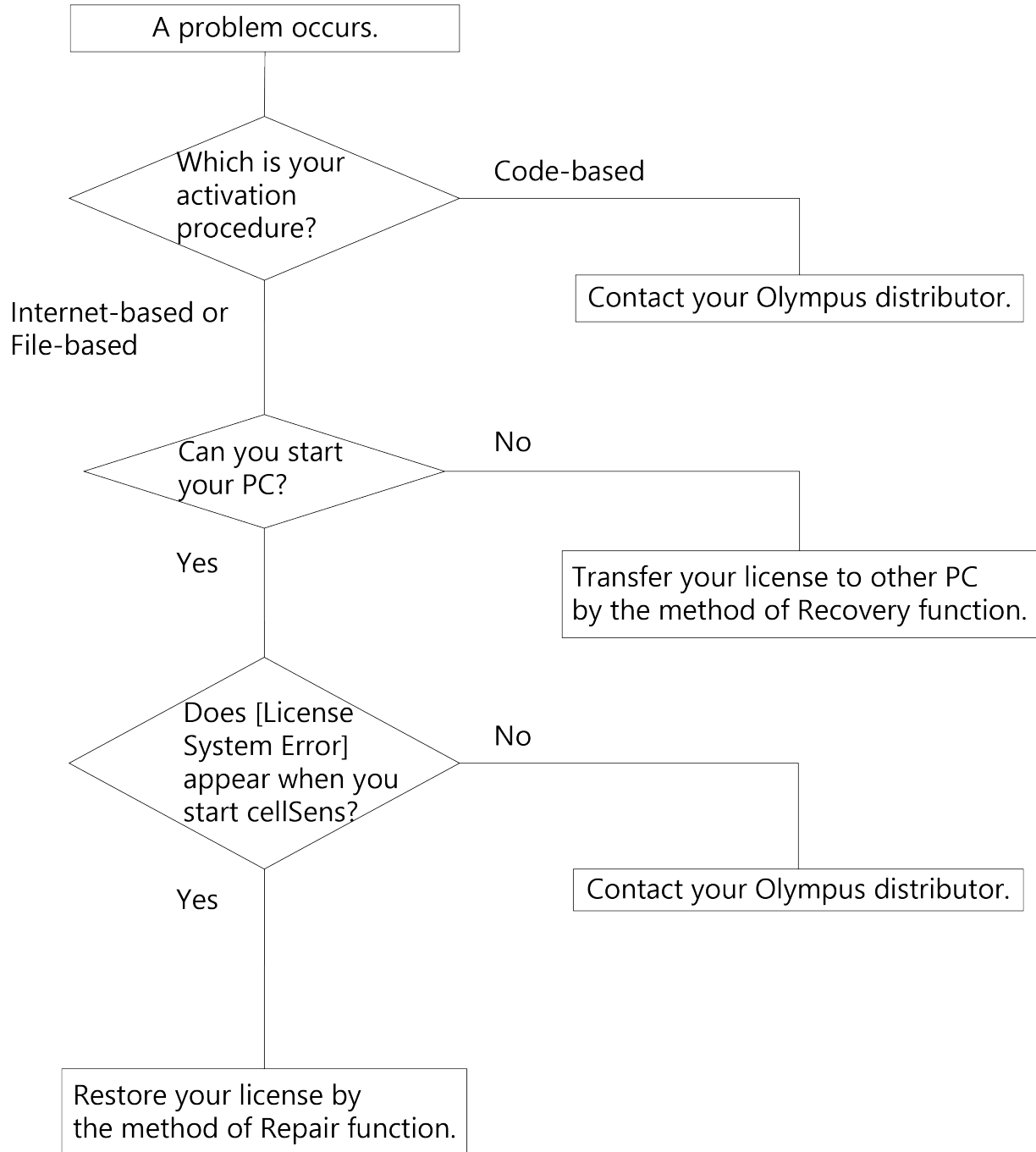

9. When the software deactivation completes, the dialog box below appears. An HTML file has been saved to you desktop that contains important information regarding your licenses. Print out this HTML file and additionally save it on another PC to ensure that you can always access this information. Click the [Close] button.

When a problem associated with software activation occurs and you cannot start cellSens, check the following flowchart and perform the solution to the problem.

```
                    ┌─────────────────────────┐
                    │    A problem occurs.     │
                    └─────────────────────────┘
                                 │
                          ╱──────────────╲
                         ╱ Which is your   ╲   Code-based
                        ╱  activation       ╲──────────────┐
                        ╲  procedure?       ╱               │
                         ╲─────────────────╱                │
                                 │                          │
   Internet-based or                            ┌───────────────────────────────────┐
   File-based                                   │  Contact your Olympus distributor. │
                                                └───────────────────────────────────┘
                                 │
                          ╱──────────────╲
                         ╱ Can you start  ╲   No
                         ╲  your PC?      ╱────────────────┐
                          ╲──────────────╱                 │
                                 │                          │
                               Yes             ┌───────────────────────────────────┐
                                               │ Transfer your license to other PC │
                                               │ by the method of Recovery function.│
                                               └───────────────────────────────────┘
                                 │
                          ╱──────────────╲
                         ╱ Does [License   ╲   No
                        ╱  System Error]    ╲──────────────┐
                        ╲  appear when you  ╱               │
                        ╲  start cellSens? ╱                │
                         ╲─────────────────╱                │
                                 │              ┌───────────────────────────────────┐
                               Yes              │  Contact your Olympus distributor. │
                                                └───────────────────────────────────┘
                    ┌─────────────────────────┐
                    │ Restore your license by │
                    │ the method of Repair function.│
                    └─────────────────────────┘
```

In case the [License System Error] appears when you start cellSens, you can restore your license by performing the operation according to the navigation displayed on the screen.
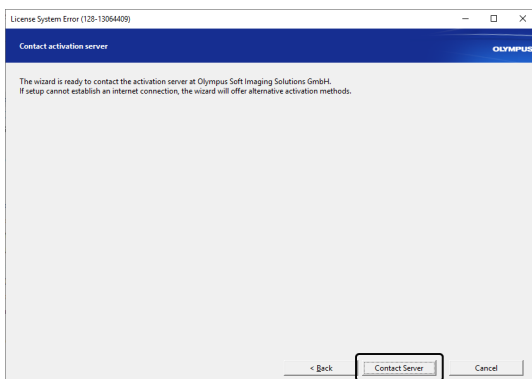
- ○ This method is available when the activation has been performed by the Internet-based software activation (P.8) or the File-based software activation (P.9).

  However, it is not available when the activation has been performed by the Code-based software activation (P.14). In this case, contact your Olympus distributor.

1. Click the [Repair] button on the [Repair local license system] window of the [License System Error].
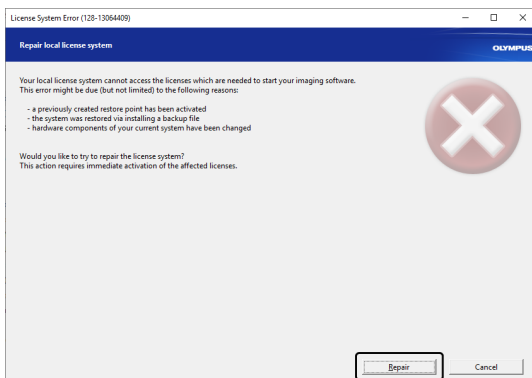
2. Click the [Contact Server] button on the [Contact activation server] window.

3. The [Exchange files for activation] window appears when the activation has been performed by the File-based software activation (P.9).

   Perform activation according to the procedures after step 5 of the File-based software activation (P.9).
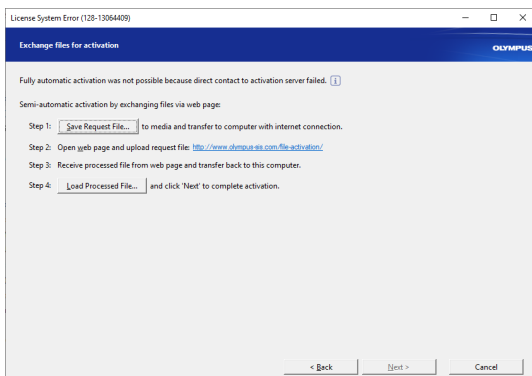
4. When the [Activation successful] window appears, click the [Next] button.
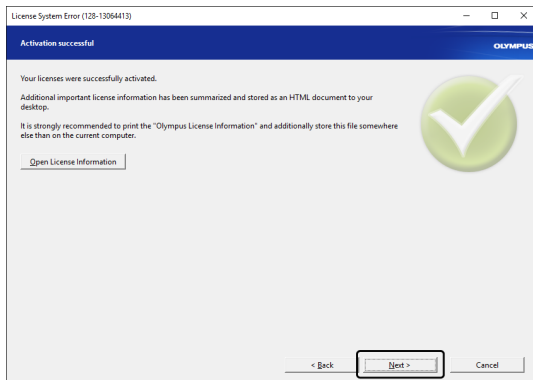
Now the license is restored.

2.6.2 Recovery function

In case you cannot start the PC in which cellSens has been activated due to HDD crash and so on, you can transfer your license to other PC by using a service code issued at the time of activation.

- ○ When using this method, you need a service code which is placed on the "OlympusLicenseInformation.html" file created on the desktop of your PC after cellSens is activated. Make sure to save the "OlympusLicenseInformation.html" file to a different location or to print it out and store the printed document to prepare for any case that you cannot start your PC.
- ○ This method is available when the activation has been performed by the Internet-based software activation (P.8) or the File-based software activation(P.9).
  However, it is not available when the activation has been performed by the Code-based software activation (P.14). In this case, contact your Olympus distributor.

1. Open the "OlympusLicenseInformation.html" file and confirm your service code.
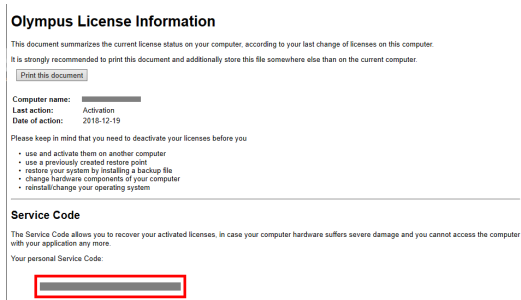
2. Start internet browser and enter the following URL to open the Olympus service website.
   http://www.olympus-sis.com/license-service/
   Enter the service code confirmed in step 1 and click the [Continue] button.

3. Enter your personal data and e-mail address and click the [Submit Request] button.
   The license recovery key will be delivered to the e-mail address you entered.


4. Install cellSens on the new PC. When performing activation, use the license recovery key which you got in step 3. For other operations, follow the procedures in Software activation (P.6).

3. Starting the cellSens software

When cellSens starts up after installation and activation have been completed, you will only need to initialize the first time only. Please initialize according to the following procedures. The initialization will not be displayed after the initial startup. The contents defined during initialization can be changed later.

1. Connect the camera to be used with your PC.
2. Start cellSens.
3. If you agree with the [OLYMPUS End-User License Agreement], select [I accept the terms in the license agreement.] and click the [Continue] button. (First time only)
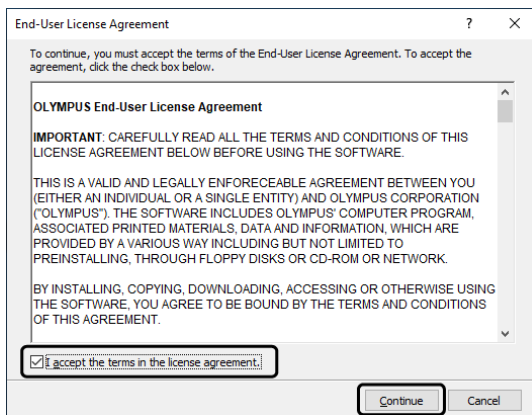

4. The [Register Your Product] dialog box appears. If you want to register the product, click the [Proceed] button, and if you do not want to register the product, click the [Cancel] button.
   If you register the product, you can receive the product information by E-mail in the future.
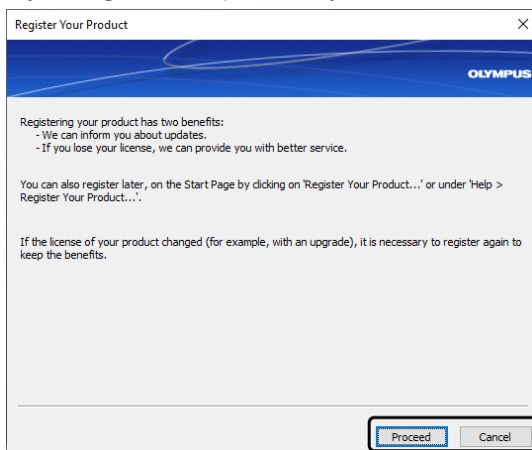
5. If you selected [Proceed] in Step 4, the Olympus website "Register Your Product" opens. Register necessary information in accordance with the website.
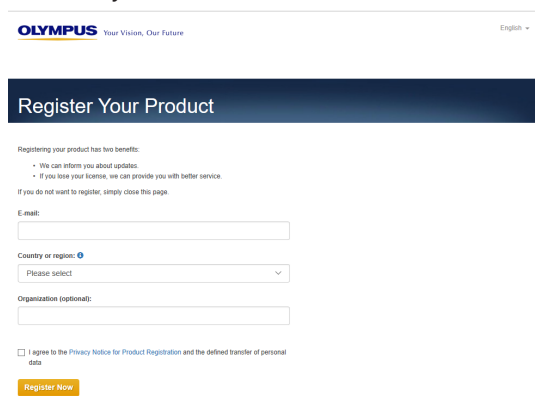
6. The [Simple Layout] dialog box appears. Click any button at the bottom of the dialog box to select your desired action. (First time only)
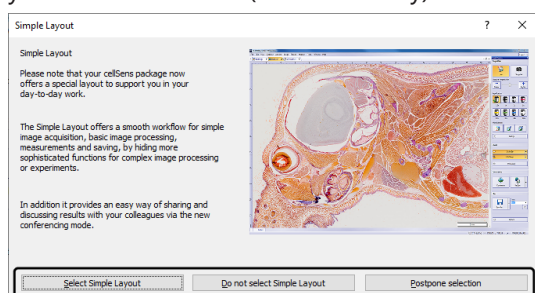

7. The [Quick Device Setup] dialog box will appear, select a camera to use from the [Camera(C)] list. In a same manner, select the microscope or the control box in use from the [Microscope (M)] list. (First time only)
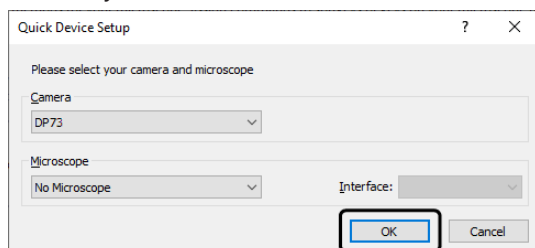
When you use BX43, BX53, BX61, BX61WI. IX81 or IX73

Select the serial port in use from [Interface] and click the [OK] button.

When the [Device List] dialog box appears, select your device and click the [OK] button.
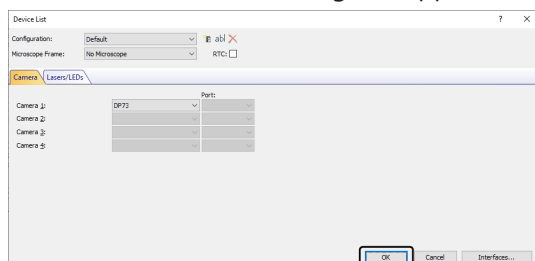
When you use DP73

There are 2 types, DP73 and DP73WDR (Correction for wide dynamic range). Select the image device from the above alternatives. If the proper device is not selected, the correction process for the wide dynamic range of DP73WDR does not function.

○ If devices are not correctly connected, the [Device Settings] dialog box will appear. If ⚠ is attached to the device icon, the device cannot be controlled. Click the [OK] button and close this dialog box. Check if the cables are correctly connected and verify if the driver is correctly working and then, restart cellSens.
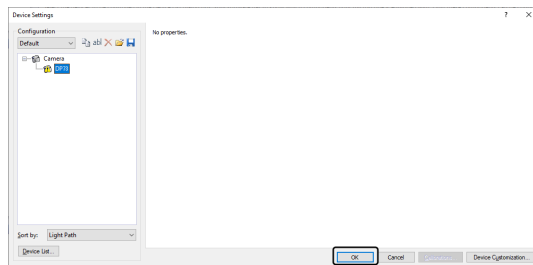
○ The devices can also be set after restarting cellSens. Refer to HELP of cellSens for detail operating procedures.

3.1 Creating a system restore point

When you create a system restore point (SRP file) in advance, you can return this software installed on your PC back to the state it was in when the system restore point was created. This enables you to undo unwanted changes made to the configuration and the calibration.

Attention :

- The grade and the version of the software must be same before and after the restoration. If you upgrade the software, recreate the system restore point.
- User specific parameters (parameters for which the [Private] setting was selected in the [Access] field when the system restore point was saved) are not restored.
- Connect the same hardware (for example, microscope, camera, objectives and filter wheels) before and after the restoration. If different hardware is connected, you may receive a warning message regarding the missing hardware component when you start the software or open the [Device List] dialog box. In this case, update the settings in the [Device List] dialog box and the [Device Settings] dialog box.
- When you want to restore the system restore point on a different PC, you need to add the Administrator authority to the default user in advance and create the system restore point. After the restoration, if necessary, delete the Administrator authority from the default user and add the user with the Administrator authority.

3.1.1 What information is saved in a system restore point?

- Hardware configurations (observation methods, device lists, device settings)
- Calibration data
- Layouts
- User-independent parameters. That's all parameters that had the [Public] setting selected in the [Access] field when the system restore point was saved. This can be different parameters, for example layouts, macros, LUTs, database templates or camera settings.

Note :

User specific parameters (parameters for which the [Private] setting was selected in the [Access] field when the system restore point was saved) are not saved in the system restore point.
If necessary, every user has to save these user specific parameters separately. They can be found in their user directory by default. It could be called something like: C:\Users\<user name>\AppData\Local\Olympus\OSIS\cellSens.

Note :

A system restore point only resets data that relates to the image analysis system back to it's saved state. If, for example, you've performed several updates to the operating system in the intervening time, these are not reset or changed in any way by the [Acquire] > [Devices] > [Restore System Restore Point...] command.

3.1.2 Creating a system restore point

1. Select the [Acquire] > [Devices] > [Create System Restore Point...] command.
   A message box opens and tells you that this operation will restart the software.
2. Click on the [OK] button to continue the process.

[Create System Restore Point] dialog box opens.

3. Specify where you want to save the system restore point (SRP file), then click the [Save] button.
    - Don't save the SRP file on the same PC that has the configured system. Otherwise the system restore point would also be lost if the PC was unexpectedly no longer available.

The software is automatically closed and started again.

3.1.3 Restoring a system restore point

1. Select the [Acquire] > [Devices] > [Restore System Restore Point...] command.

    A message box opens and tells you that this operation will restart the software.

2. Click on the [OK] button to continue the process.

    [Restore System Restore Point] dialog box opens.

3. Browse to the directory where the file with the system restore point (SRP file) was saved and select the file.

4. Click on the [Open] button.

    The software is automatically closed.

    Then the software is re-started with the configurations that are saved in the file with the system restore point.

4. Starting the microscope BX63 or IX83

Starting BX63

When operating the intelligent microscope (BX63) with cellSens, start BX63 according to the following procedures, and set the full operation mode to start cellSens. Please refer to Instruction Manuals of BX63 and BX3-CBH for connecting BX63 to PC. If you start cellSens while the [MENU] screen is displayed on the touch panel, you can login the touch panel controller from the GUEST account of the full operation button and the microscope can be operated from cellSens.

1. Check whether each device such as BX63, PC or digital camera for microscope is properly connected.
2. Start Windows$^®$ (Log on with the Computer Administrator account.)
3. If you are using the scanning stage with ultrasonic, set the main switch of its control box to " | " (ON).
4. Set the main switch of the BX3-CBH control box to " | " (ON).
5. Set the main switch on the rear panel of the touch panel controller to ON. After 30 seconds, the [MENU] screen appears on the touch panel. (Fig.1)
6. Specify User Number in (a) and tap the Full Operation button(b). Then, start cellSens to login as User.
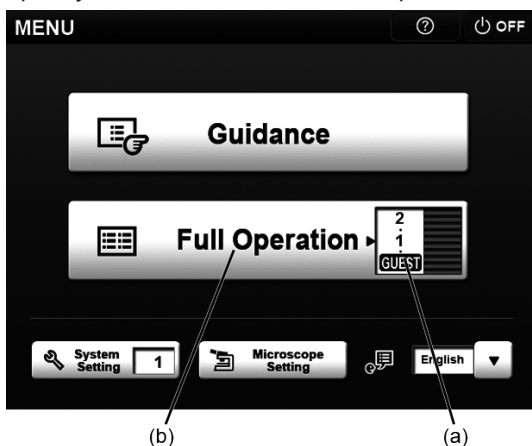

Fig.1

- When starting BX63 for the first time or when changing units connected to the microscope, the system setting must be performed. For the system setting procedures, please refer to BX 63 Instruction Manual and Help in Touch Panel window.
- If you have been using the BX63 microscope as a standalone microscope and you want to use it in combination with a PC, turn OFF all devices of the BX63 system and follow the procedure described above to restart the system.
- If you operate BX63 from cellSens, disable the Eco mode of the touch panel controller. If the Eco mode is enabled, the transmitted illumination and the touch panel controller will be turned OFF after a certain period of time.

When operating the research inverted microscope (IX83) with cellSens, start IX83 according to the following procedures, and then start cellSens. Please refer to Instruction Manuals of IX83 and IX3-CBH for connecting IX83 to PC.

1. Check whether each device such as IX83, PC or digital camera for microscope is properly connected.

2. 2) Start Windows®. (Log on with the Computer Administrator account.)

3. If you are using the scanning stage with ultrasonic (IX3-SSU or BX3-SSU), set the main switch of its control box for scanning stage with ultrasonic to "|" (ON).

4. If you are using the control box for fast filter wheel and shutter, set the main switch of its control box for fast filter wheel and shutter to "|" (ON).

5. Set the main switch of the IX3-CBH control box to "|" (ON).

6. Set the main switch on the rear panel of the touch panel controller to ON. After 30 seconds, the [MENU] screen appears on the touch panel. (Fig.2)

Fig.2

7. Start cellSens.
   ○ Be sure to start cellSens while the menu window (Fig.2) is displayed on Touch Panel Controller or while the operation window (Fig.3) is displayed by tapping the [Start Operation] button (a) on the menu window.
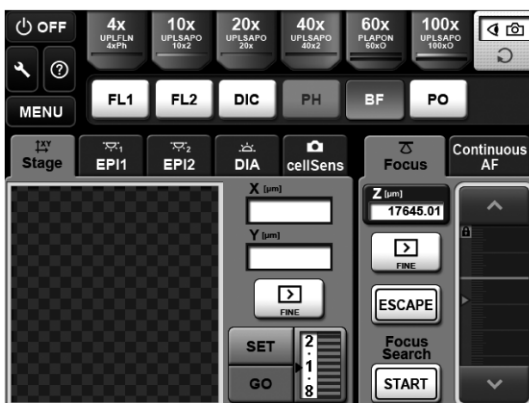
Fig.3

○ If you start IX83 for the first time or if you change the unit connected to the microscope, you need to perform the system setting. The system setting can be performed either by Touch Panel Controller or cellSens. For setting procedures, refer to IX83 Instruction Manual, Help of Touch Panel Controller or Help of cellSens.

○ If you have been using the IX83 microscope as a standalone microscope and you want to use it in combination with a PC, turn OFF all devices of the IX83 system and follow the procedure described above to restart the system.

○ If the continuous focus mode is in process on the operation window of touch panel controller, be sure to close the continuous focus mode before starting cellSens.

5. Uninstalling cellSens

5.1 Uninstalling software

This section describes the uninstallation procedures.

1. Start Windows®. (Log on with the Computer Administrator account.)

2. Insert the DVD-ROM into the DVD drive.

3. Click on [Run setup.exe].
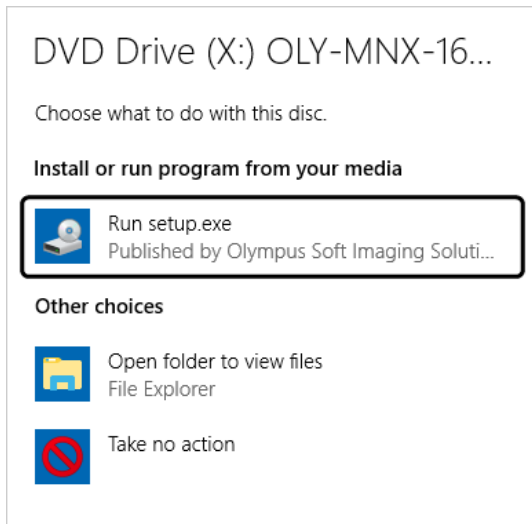
4. When the [User Account Control] window appears, click [Yes] button.
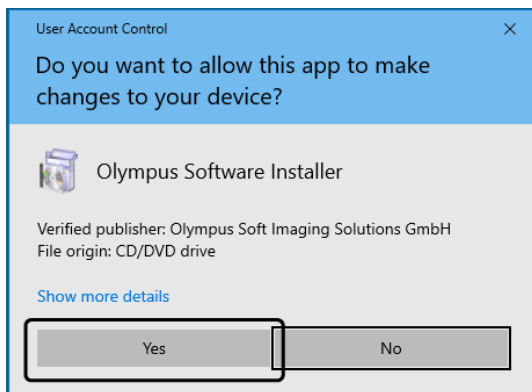
5. When the [Select action] window appears, check [Install or maintain imaging software] and click [Next] button.
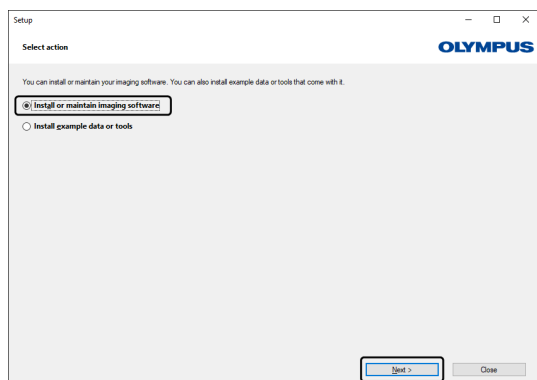
6. When the [Select action] window appears, check [Uninstall imaging software] and click [Next] button.
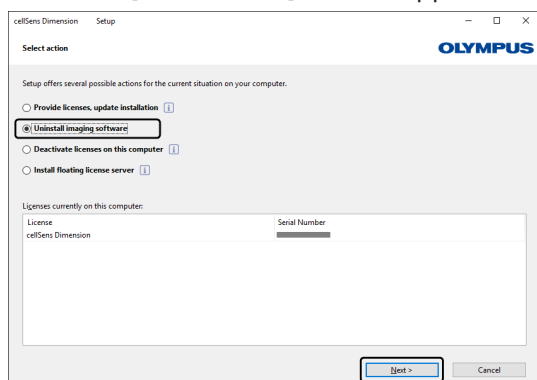
   ○ When the deactivation has been completed, the uninstallation starts.

7. When the [Optionally deactivate licenses] window appears, check [Deactivate licenses (recommended)] and click the [Next] button.
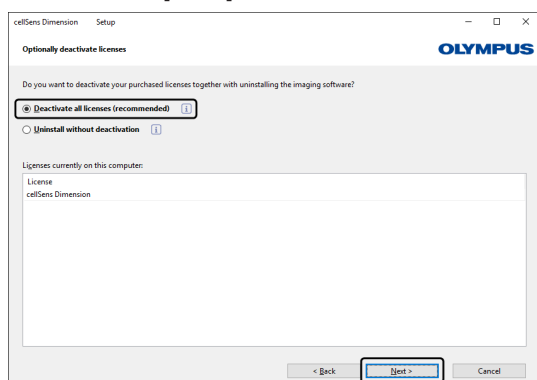
   ○ The uninstallation can be performed without deactivating the license, but please note that the activation cannot be performed if cellSens is installed on other PCs.
   ○ If you deactivate once again, install cellSens and perform deactivation when uninstalling cellSens.

8. Perform the deactivation. Refer to Software deactivation (P.28) for detail procedures.

9. The uninstallation starts after completing the deactivation.

10. The dialog box below appears. Click the [Yes] button to retain the settings. If you do not want to retain the settings, click the [No] button.
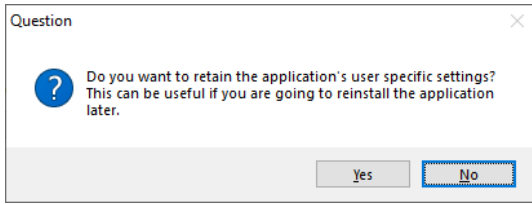
11. When the activation is completed, the window below appears. Click the [Finish] button. The uninstallation is completed.
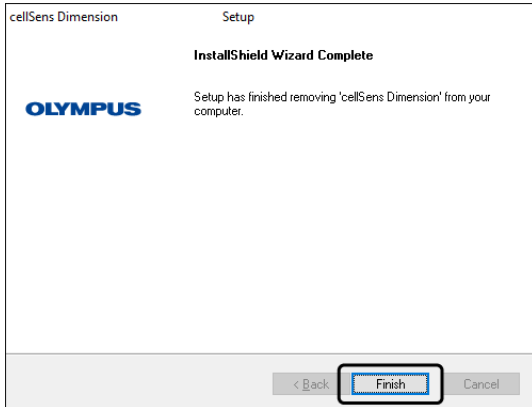
When installing cellSens, if IX3-CBH or BX3-CBH, etc. is specified as the device to use, the 1394 driver will be changed to the exclusive driver for OLYMPUS. However, <u>though cellSens is uninstalled, the 1394 driver will not be uninstalled.</u> Therefore, general IEEE1394 device cannot be used. If you want to use general IEEE1394 device, update the driver software according to the following procedures.

The driver software can be updated even if cellSens has not been uninstalled. As general IEEE1394 device is used, it is also possible to change only 1394 driver temporarily and update to the exclusive driver for OLYMPUS again without uninstalling cellSens. This procedure has indicated the case where Windows $^{\circledR}$ 10 is used. In use of different OS please follow the procedure of each OS.

Installation of general 1394 driver

1. Right-click [■] in the bottom left corner of the screen and click "Device Manager".
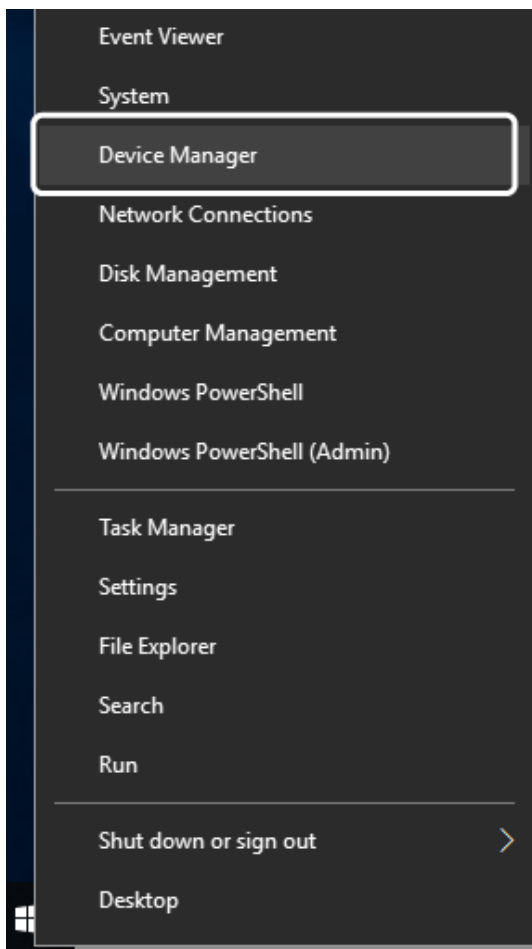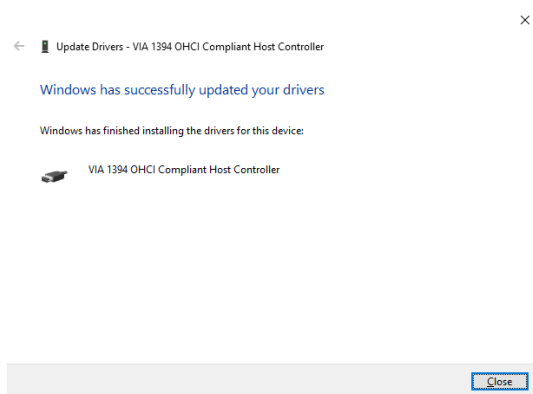
2. Right-click [OLYMPUS(R) MICROSCOPE 1394 DIGITAL CAMERA SYSTEM] under [1394 Bus Host Controllers], and click [Update driver] from the displayed menu.
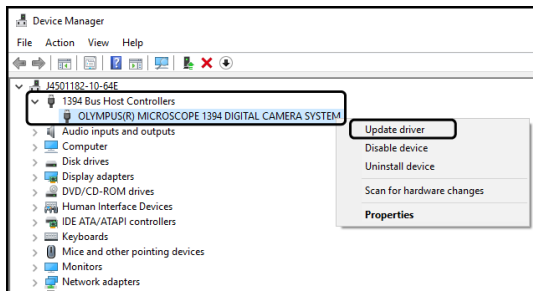
3. Click [Search automatically for updated driver software] in the displayed menu.
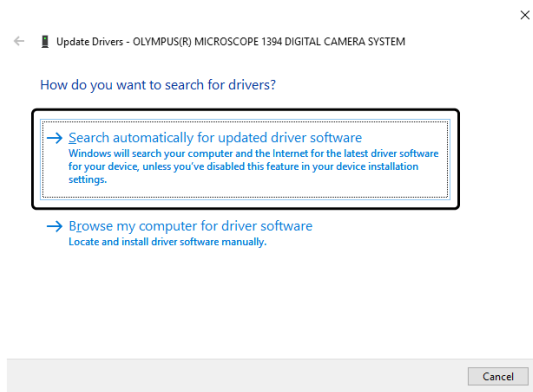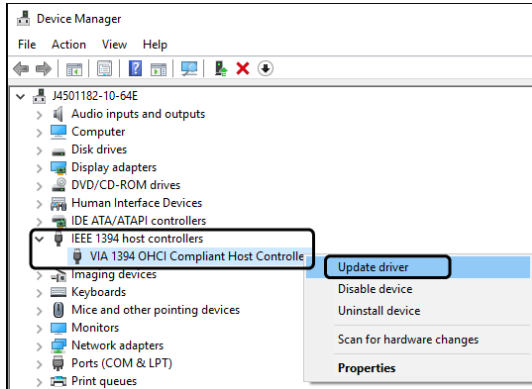

4. General 1394 driver is installed.

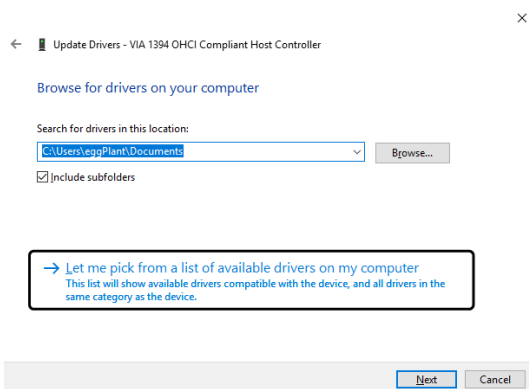Installation of 1394 device driver for OLYMPUS

1. Open the device manger according to the same procedures described in 1. above.

2. Right-click the device positioned under [IEEE 1394 host controllers], and click [Update driver]. The device name depends on the PC in use.
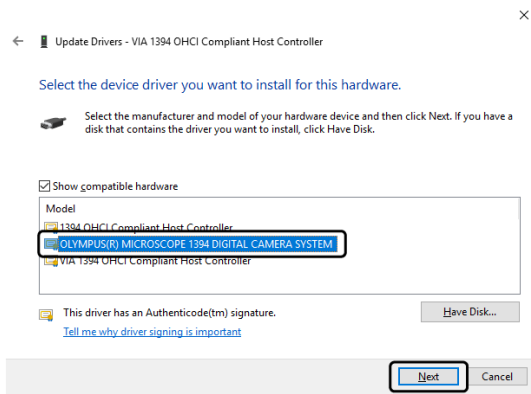

3. Click [Browse my computer for driver software] in the displayed menu.
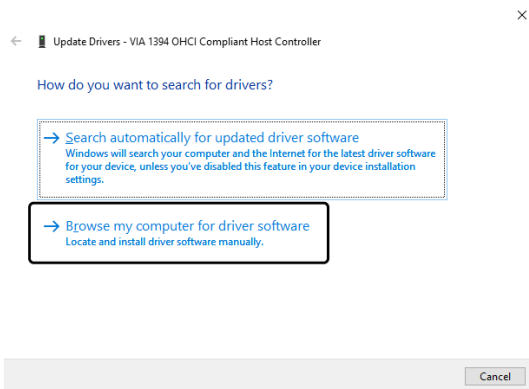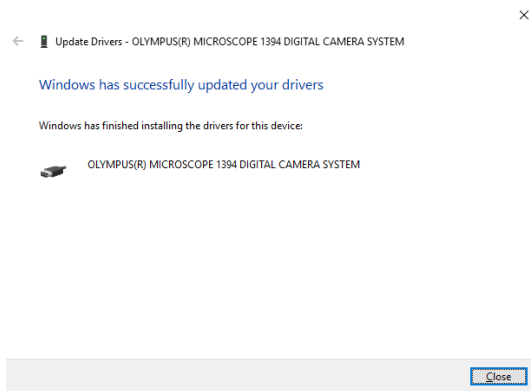

4. Click [Let me pick from a list of available drivers on my computer] in the displayed menu.

5. Select [OLYMPUS(R) MICROSCOPE 1394 DIGITAL CAMERA SYSTEM], and click the [Next] button.

6. 1394 device driver for OLYMPUS is installed.

6. Others

Update of software (Only using DP2-BSW)

In order to install cellSens to a PC where DP2-BSW has been installed, an update installation process will be performed. The shortcut name will not be updated by performing the update, but it is possible to startup the software as the destination to be linked has been modified.

Documents

The maximum number of documents (acquired images, etc.) which can be opened by cellSens at a time is up to 150.

OLYMPUS

www.olympus-global.com