



NDP.view 2

U12388-01

Instruction manual

 **CAUTION**

- Follow the safety precautions in Chapter 1 in order to avoid personal injury and damage to property when using this system. This manual describes the correct handling method of the system and provides instructions that should be followed to avoid accidents. **Read this manual carefully** before using this software.
- After reading this manual, store it in a location where you can refer to it at any time.

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HAMAMATSU PHOTONICS K.K.

1. SAFETY PRECAUTIONS

1-1 SYMBOLS

The symbols shown below are used for this software.



1-2 CLASSIFICATION OF WARNINGS

We have classified the warning symbols that appear in this instruction manual and on the system as follows for your convenience. Make sure that you fully understand them and follow the instructions they contain.

 WARNING	Improper handling of the system without observing these warnings could lead to serious injury to the user and even death.
 CAUTION	Improper handling of the system without observing these cautions could lead to personal injury to the user or damage to property.
	This symbol indicates a cautionary item that should be followed when handling the system. Read the contents carefully to ensure correct and safe use.
	This symbol indicates an action that is forbidden. Read and follow the instructions carefully.
	This symbol indicates a compulsory action or instruction. Read and follow the instructions carefully.
 Note	This symbol indicates a note to help you get the best performance from the system. Read the contents of the note carefully to ensure correct and safe use. Failure to observe one of these notes might impair the performance of the system.

1-3 HARDWARE SAFETY PRECAUTIONS



- Read the chapter 1 SAFETY PRECAUTIONS carefully and be sure to obey them.

2. INTRODUCTION

Please read this manual carefully before using the NDP.view 2 software.

2-1 SYSTEM REQUIREMENTS

The recommendation system requirements for this software are as follows.

Windows

OS	Windows 8.1, Windows 10 and Windows 11 32 bit and 64 bit
CPU	Core series or faster
Memory	2 GB or more
Available HDD space	100 MB or more
VGA	Direct X 11 compatible (Indispensable)
Screen Resolution	XGA (1024x768) or higher

macOS

OS	macOS v10.15, macOS v11.2 and macOS v12
CPU	Intel Multicore Processors
Memory	2 GB or more
Available HDD space	100 MB or more
VGA	OpenGL 2.0 support
Screen Resolution	XGA (1024x768) or higher

Note

- This software may not work satisfactorily on some computers. This software may fail to operate due to the operating system or system requirements. Please read the clause of "System requirements".

Note

- In the software, a character of "μ" is not indicated. So, in the software window, a character of "u" is used instead of "μ". For example, um is used instead of μm.

2-2 TRADEMARKS

Windows 8.1, Windows 10 and Windows 11 are the registered trademarks of Microsoft Corporation in the United States and other countries. macOS is the registered trademarks of Apple Inc. in the United States and other countries. Other brand names are the trademarks or registered trademarks of each company.

3. CHECK THE CONTENTS OF PACKAGE

When you open the package, check that the following items are included before use. If the contents are incorrect, insufficient, or damaged in any way please contact Hamamatsu subsidiary or your local distributor before using this software.

NDP.view 2 Install Disc (CD-ROM)	1
NDP.view 2 Before Use	1

Contents

1. SAFETY PRECAUTIONS	1
1-1 SYMBOLS.....	1
1-2 CLASSIFICATION OF WARNINGS.....	1
1-3 HARDWARE SAFETY PRECAUTIONS	1
2. INTRODUCTION	2
2-1 SYSTEM REQUIREMENTS	2
2-2 TRADEMARKS.....	2
3. CHECK THE CONTENTS OF PACKAGE	3
4. OVERVIEW	6
4-1 INTENDED USE.....	6
5. INSTALL AND UNINSTALL	7
5-1 INSTALL AND UNINSTALL TO WINDOWS COMPUTER	7
5-1-1 INSTALL.....	7
5-1-2 UNINSTALL.....	10
5-2 INSTALL AND UNINSTALL TO MACOS SYSTEM	11
5-2-1 INSTALL.....	11
5-2-2 UNINSTALL.....	12
6. STARTING UP AND EXIT	13
6-1 STARTING UP NDP.VIEW 2	13
6-2 EXIT NDP.VIEW 2.....	15
7. OPERATION AND FUNCTIONS	16
7-1 IMAGE DISPLAY	16
7-1-1 MAIN DISPLAY	16
7-1-2 BROWSE WINDOW	18
7-1-3 MAIN WINDOW	22
7-1-4 TOOLBAR	23
7-1-5 TOOL WINDOWS	24
7-2 OPEN A DIGITAL SLIDE FILES	26
7-2-1 OPEN THE SLIDE DATA.....	26
7-2-2 PREVIEW DISPLAY ON TAB.....	27
7-2-3 SWITCHING SLIDE FILES	28
7-2-4 CLOSE THE SLIDE DATA.....	28
7-3 THE DIGITAL SLIDE OPERATION	29
7-3-1 MOVEMENT	29
7-3-2 EXPANSION AND REDUCTION.....	30
7-3-3 CHANGE IN FOCUS PLANE	32
7-3-4 INDICATION CHANGE OF THE IMEAGE	33
7-3-5 HISTORY	35
7-3-6 SPLIT SCREEN IMAGES	36
7-3-7 MULTI WINDOW.....	41
7-3-8 ANNOTATIONS.....	43
7-3-9 MAP WINDOW.....	49
7-3-10 SCALE BAR.....	50
7-3-11 GLASS SLIDE IMAGE	51
7-3-12 EXPORT VIEW	52
7-3-13 EXPORT IMAGE.....	53
7-3-14 COPY VIEW.....	54

7-3-15	COPY IMAGE	54
7-3-16	TAKE SCREENSHOT	55
7-3-17	HELP.....	55
7-4	SETTINGS.....	57
7-4-1	GENERAL.....	57
7-4-1-2	START-UP SETTING	58
7-4-1-3	ANNOTATIONS SETTING	58
7-4-1-4	IMAGE CONTROL SETTING.....	59
7-4-2	NAVIGATION.....	59
7-4-3	BROWSER SETTING	61
7-4-4	SCALE BAR SETTING	62
7-4-5	WIDGETS	63
7-4-6	TOOLBAR SETTING.....	64
7-4-7	ADVANCED SETTING	65
7-4-8	SCREENS.....	66
7-4-9	LANGUAGE SETTING.....	66
7-4-10	IMAGE CONTROLS.....	67
7-4-11	IMAGE INFORMATION.....	69
7-5	OPERATION LIST	70
7-5-1	OPERATION LIST FOR WINDOWS	70
7-5-2	OPERATION LIST FOR MACOS	73
8.	BROWSE IMAGES FOR IMAGE SERVER.....	76
8-1	BROWSING	76
8-2	BROWSE WITH NDP.VIEW 2 SOFTWARE	77
8-3	BROWSE WITH WEB VIEWER	78
8-3-1	OPEN A DIGITAL SLIDE FILES	78
8-3-2	MAIN WINDOW	79
8-3-3	DIGITAL SLIDE FILES OPERATION	80
9.	SOFTWARE USER AGREEMENT.....	81
9-1	COPYRIGHTS.....	81
9-2	SCOPE OF USAGE RIGHTS	81
9-3	SCOPE OF WARRANTY LIMITED WARRANTY.....	81
9-4	DISCLAIMER OF LIABILITY FOR DAMAGES	81
9-5	GOVERNING LAW	82
9-6	OTHERS.....	82
10.	CONTACT INFORMATION	83

4. OVERVIEW

NDP.view 2 is a dedicated viewer for displaying digital slide files (NDPi files, NDPi (JPEG XR) files, NDPis files and vmu files) that have been created on the Hamamatsu NanoZoomer system. The NDP.view 2 software lets you open a digital slide file so you can navigate around the specimen as well as view the specimen at different magnifications.

4-1 INTENDED USE

This product is for research use only. Do not use for medical activities such as diagnosis.

5. INSTALL AND UNINSTALL

Please install as follows when you use the software to open a digital slide that is stored on your computer or local storage media.



- This software may not work satisfactorily on some computers. This software may fail to operate due to the operating system or system requirements. Please read the clause of "System requirements" well and use it in the right system requirements.



- If you are using NDP.view2 Plus and the license support period has expired, you will not be able to use the Plus features if you install a new version of the software.

5-1 INSTALL AND UNINSTALL TO WINDOWS COMPUTER

Install and uninstall NDP.view 2 to Windows computer.



- When you are using macOS, please refer 5-2 INSTALL AND UNINSTALL TO macOS system.

5-1-1 INSTALL

- (1) Insert the Install CD to computer.
- (2) The first thing you will need to do is navigate to the NDP.view 2 Setup.exe file and double left click on it.



Figure 5-1

- (3) Once you have clicked on the setup.exe, NDP.view 2 Setup Wizard will start.

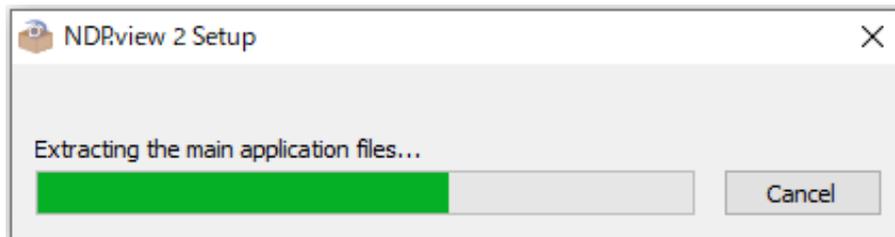


Figure 5-2

(4) When the Setup Wizard (Figure 5-3) is started, click on the Install button.



Figure 5-3

Note

- NDP.view 2 software is installed in "C:/Program Files/Hamamatsu/NDP.view 2".

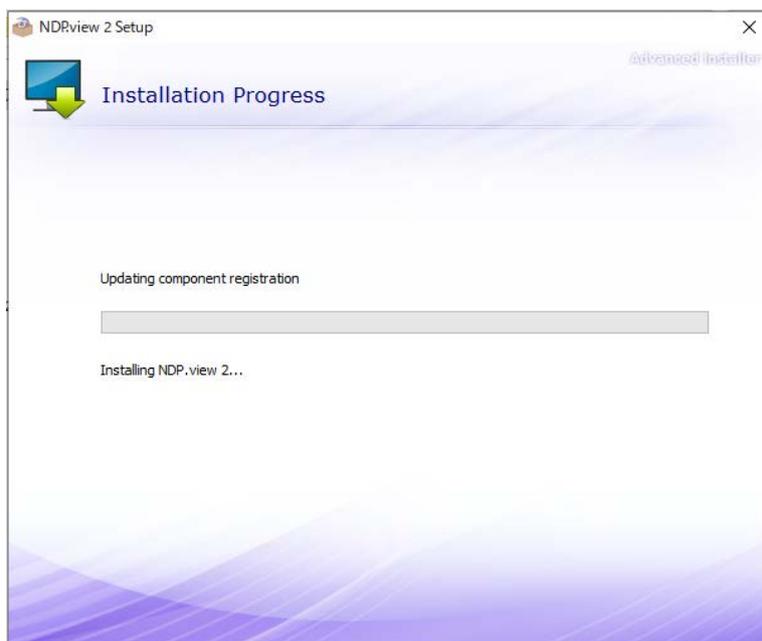


Figure 5-4 (Installing ..)

- (5) When the installation is finished the dialog below will display. (Figure 5-5)
Click on the “Run NDR.view 2” for starting NDR.view 2 or the “Close” to complete the install.

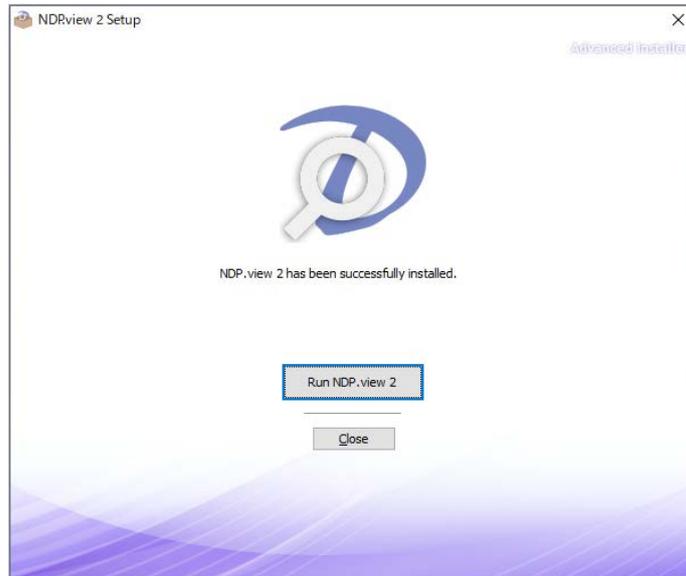


Figure 5-5

5-1-2 UNINSTALL

To remove the software go into your add and remove program section of the Control Panel in your operating system.

Note

- The screen of your control panel may differ depending on what operating system you are using. If more information is needed on uninstalling software please see your relevant operating system manual.

(1) The control panel window in Windows is shown below.

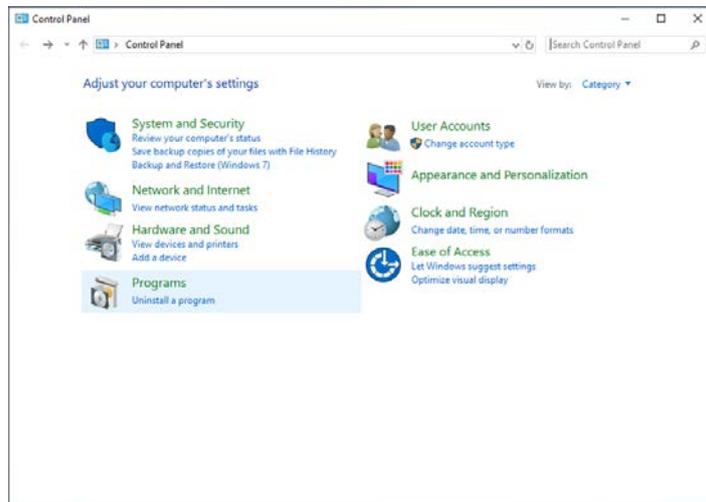


Figure 5-6

(2) Click the “Uninstall a program” icon and the window will appear. (Figure 5-7)

Scroll down until you find the NDP.view 2 software listed and then left mouse click on it so that it becomes highlighted as shown below. Once highlighted click on the remove icon and you will be asked are you sure you want to remove this software, click yes and the uninstall program will start removing the NDP.view 2 software from your computer.

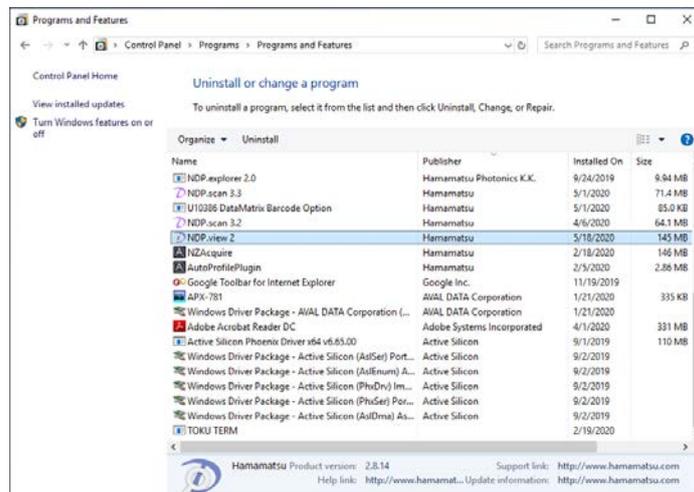


Figure 5-7

5-2 INSTALL AND UNINSTALL TO MACOS SYSTEM

Install and uninstall NDP.view 2 to macOS system.

Note

- When you are using Windows PC, please refer 5-1 INSTALL AND UNINSTALL TO Windows computer.

5-2-1 INSTALL

- (1) Insert the Install CD to the computer.
- (2) The first thing you will need to do is navigate to the NDP.view 2.x.x.dmg file and double left click on it.



NDP.view
2.X.XX.dmg

- (3) Once you have mounted setup image, following window will display. Drag NDP.view 2 icon and drop to "Applications" folder.



Figure 5-8

Note

- NDP.view 2 software is installed in "/Applications".

(4) NDP.view 2 will be added in "Applications"

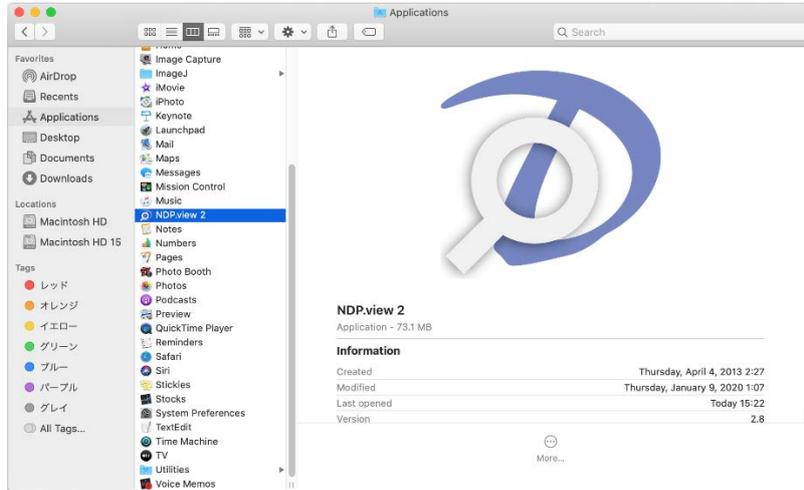


Figure 5-9

5-2-2 UNINSTALL

NDP.view 2 software is uninstalled in the following procedures.

- (1) Open "Applications" in Finder.
- (2) Remove "NDP.view 2" from "Applications".

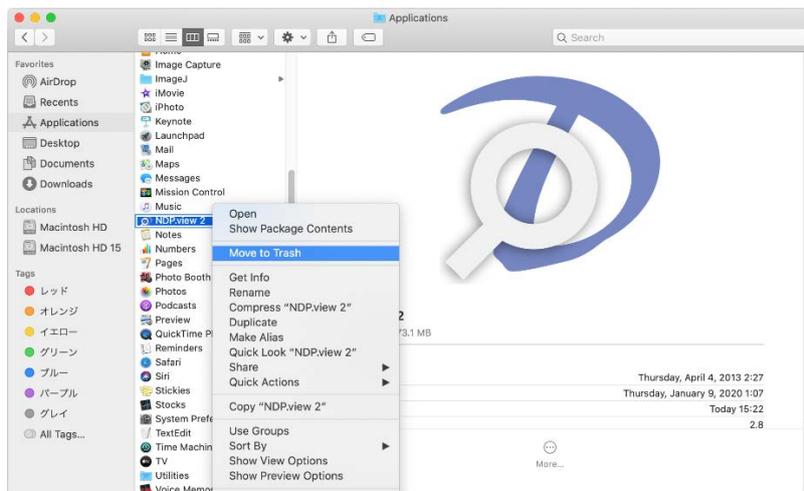


Figure 5-10

6. STARTING UP AND EXIT

6-1 STARTING UP NDP.VIEW 2

Windows

- (1) A double click of an icon created on the desktop will start up NDP.view 2.



Note

- When the icon is not created on the desktop, select "all program" ->"NDP.view 2" -> "NDP.view 2" from the start menu of Windows.

- (2) A following screen will be first displayed, when NDP.view 2 starts.

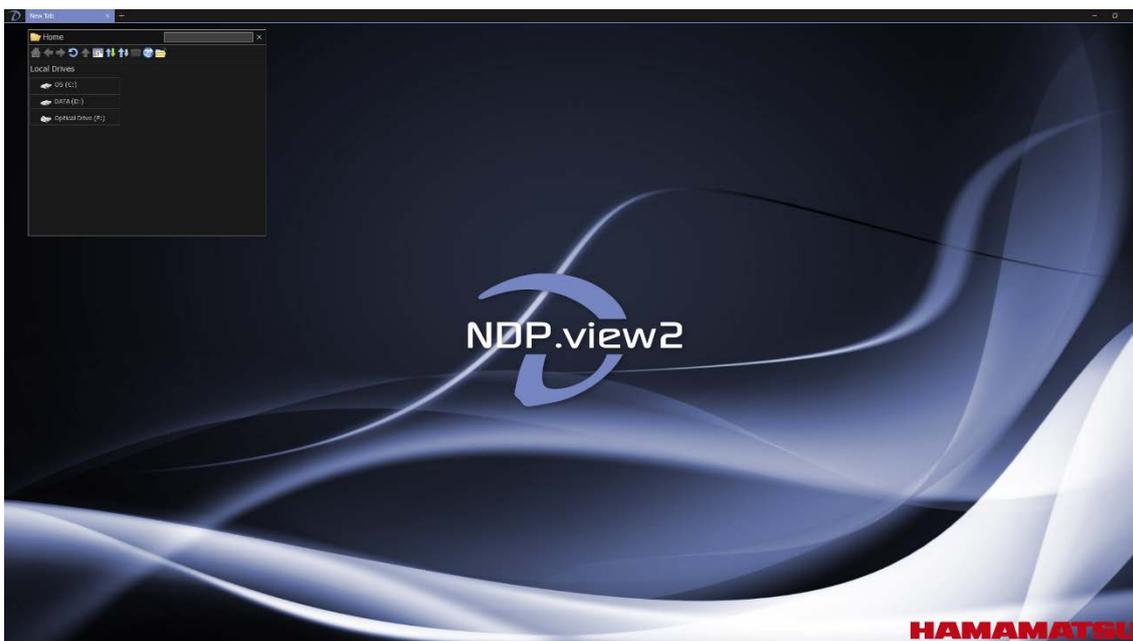


Figure 6-1

Note

- Click □ icon at the upper-right of the screen to display in a full-screen mode or in a windowed mode.

Note

- To minimize the screen, click _ at the upper-right of the screen.

macOS

- (1) A click NDP.view 2 in "Applications" will start up NDP.view 2.
- (2) A following screen will be first displayed, when NDP.view 2 starts.



Figure 6-2

Note

- Click full-screen or windowed button at the upper-left of the screen to switch the display size.

Note

- To minimize the screen, click minimize button at the upper-left of the screen.

6-2 EXIT NDP.VIEW 2

Choose “Exit” from the main menu that placed at upper left or Clicking “x” button at the upper right (at the upper left for macOS) or the “Alt” + “F4” key of a keyboard to exit from NDP.view 2.

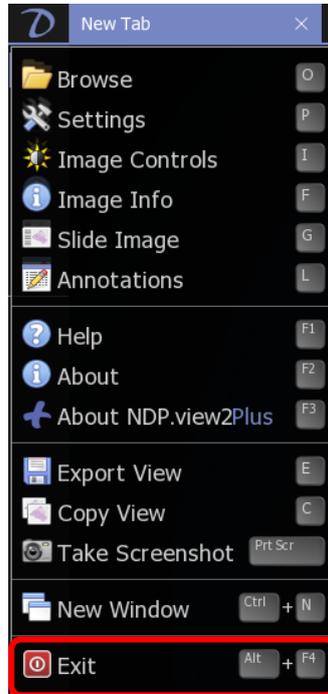


Figure 6-3



Figure 6-4

7. OPERATION AND FUNCTIONS

Note

- The contents in 7. Operation and Functions are written for Window. For macOS, as long as there is no special statement, please transpose a "right click" to a "sub button" and transpose the "Alt" key to the "Option" key.

7-1 IMAGE DISPLAY

7-1-1 MAIN DISPLAY

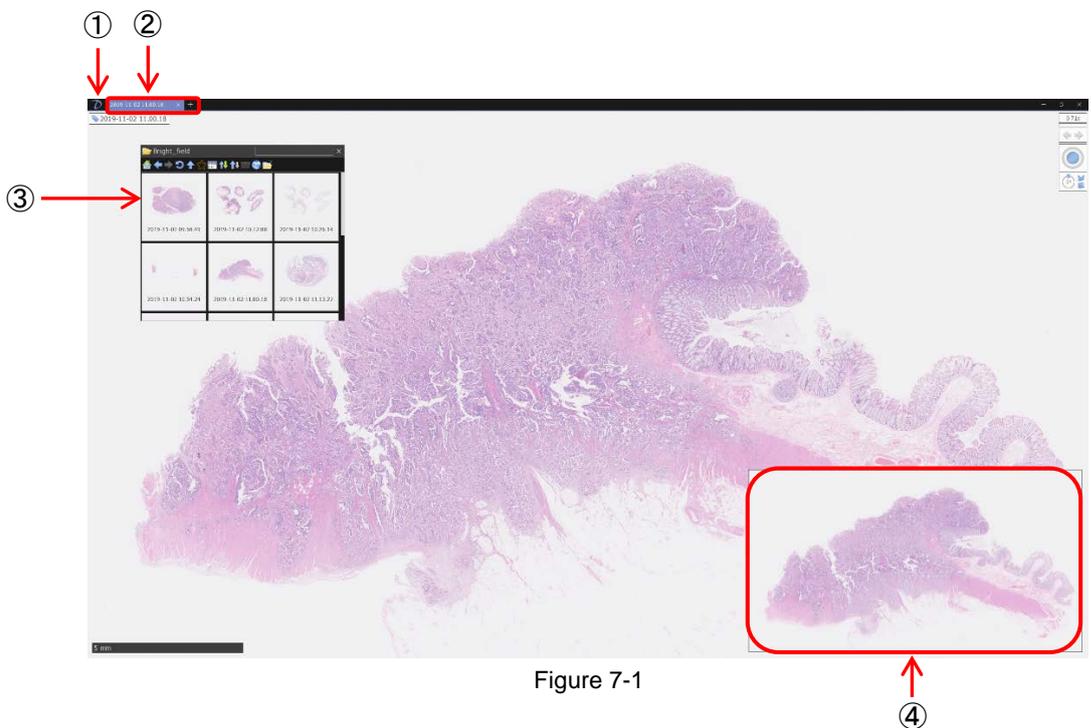


Figure 7-1

① **NDP.view 2 icon**

Clicking this icon will open the main window (Refer to 7-1-3).

② **Tab (Tab area)**

Choosing tabs will change the slide images.

Click  icon next to the tab to open the new tab.

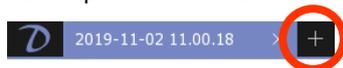


Figure 7-2

Click "x" button at the upper right in the tab or the "Esc" key of a keyboard to close the tab.



Figure 7-3

③ Browse window

Choosing "Browse" from the main menu that placed at upper left or the "O" key of a keyboard will display the browser window. You can choose and open the slide data.

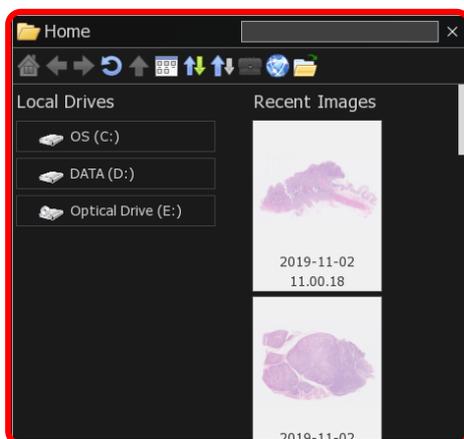


Figure 7-4

Note

- Please refer to section "7-1-2 Browse Window" for these details.

④ Map window

A map window can be displayed in the lower right of the screen.

Show or hide the overview map using the 'M' key.

Left click on the map to jump directly to the selected position at the current magnification, hold the left button down and move to quickly pan around the image.

Drag a box using the right mouse button to view the selected area immediately.

Right click on the overview map to choose the desired display size for the map.

Note

- Please refer to section "7-3-9 Map Window" when change the size of the map.

7-1-2 BROWSE WINDOW

The slide data can be displayed as thumbnail images. The home screen is displayed at the first start. On the home screen, the configuration of the drive and the recently displayed image, favorites are displayed. You can return to the home screen by clicking the "Home" button.

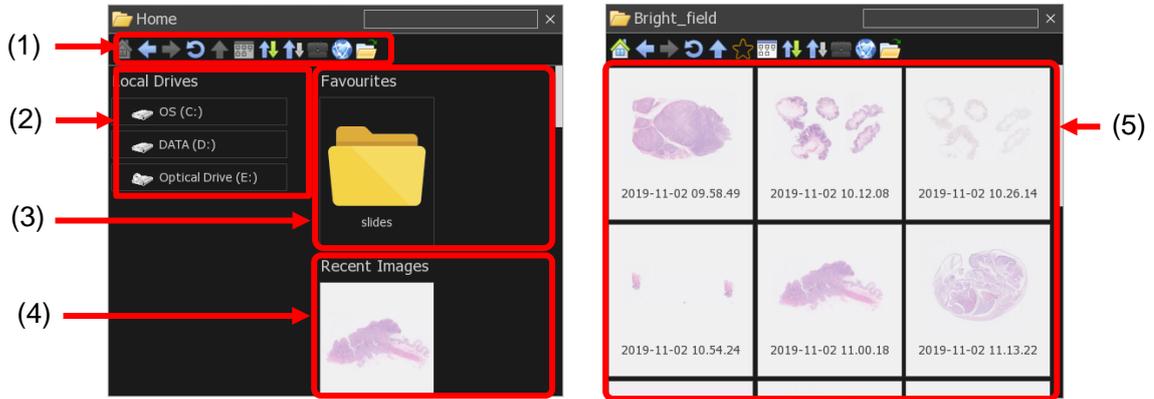


Figure 7-5

(1) Tool buttons

Tool buttons in browse window.

	Go to Home directory.
	Back to previous directory.
	Forward to next directory.
	Reload images in the folder.
	Go to upper directory.
	Add or delete a folder with favorites.
	Change the thumbnail types.
	Sort by the selected column.
	Switch in ascending and descending.
	Open the address window.
	Open the file browser of OS system.

(2) Local Drive

List the local drives.

(3) Favorites

Show folders registered as favorites.

(4) Recent Images

Show recent images.

(5) Slide data

The slide data can be displayed as thumbnail images.

Note

- The slide data in the folder are displayed as thumbnail images. Therefore, images can be checked before open the files.

■ Access to NDP.serve

- (1) Clicking  button will be displayed the input window of file address.

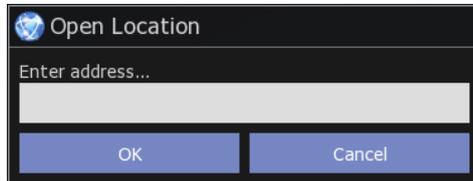


Figure 7-6

- (2) Input the address of NDP.serve and click the “OK” button.
- (3) Input the username and the password.

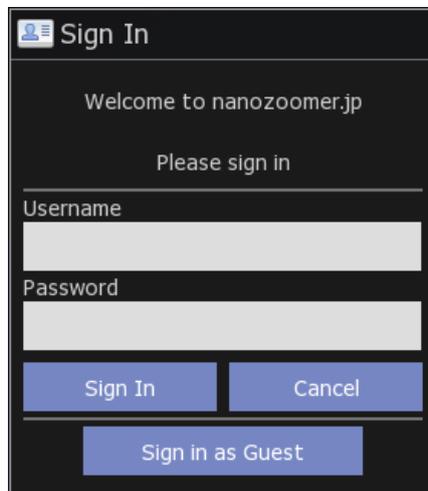


Figure 7-7

- (4) When “sign In” is successful the folder in a server is displayed on file browser.

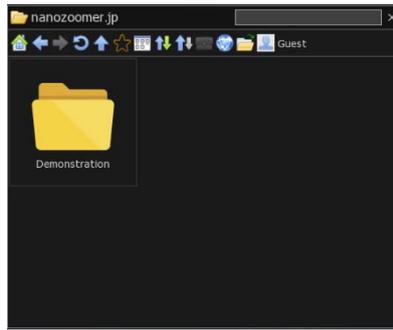


Figure 7-8

■ Add a folder to favorites

You can add to favorites the often accessed folder.
Also you can add the folder on a server.

- (1) Open the folder you want to add and click “” icon.
When you add the folder to favorites, the icon change to “”.
- (2) The folder you added to favorites will appear on “Home”.

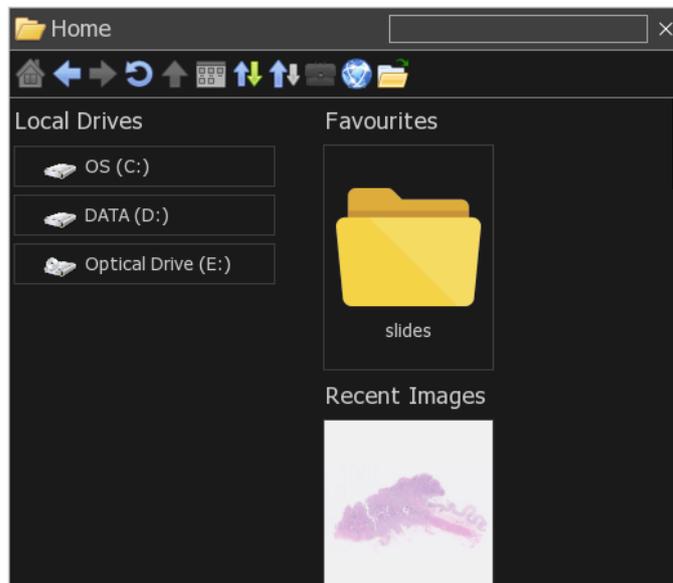


Figure 7-9

■ Show Network on Home Page

You can show the network on home page.

- (1) Open the settings window.
- (2) Select "Show Network on Home Page" in "Browser".

Note

- Please refer to section "7-4 Settings" for these details.

7-1-3 MAIN WINDOW

Main window include following menu.

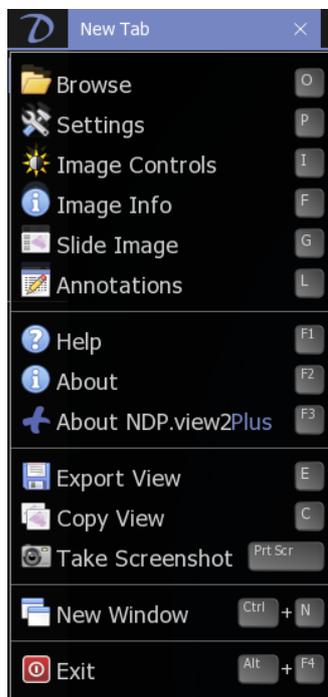


Figure 7-10

Menu	Details	Reference section
Browse	Open the browse window.	7-1-2
Settings	Open the settings window.	7-4
Image Controls	Open the image controls window.	7-4-9
Image Info	Show the current slide information.	7-4-10
Slide Image	Show the glass slide image.	7-3-11
Annotations	Open the annotation list.	7-3-8
Help	Show help.	7-3-17
About	Show the information of Version and License.	
About NDP.view2Plus	Show the information of NDP.view2Plus.	
Export View	Export the current screen to the image file.	7-3-12
Copy to Clipboard	Copy the current screen to clipboard.	7-3-14
Take Screenshot	Take screenshot with tool windows.	7-3-15
New Window	Open new windows.	7-3-7
Exit	Exit NDP.view 2.	6-2

Click anywhere else on the screen or  icon to close the Main window.

7-1-4 TOOLBAR

The following icons are shown on a toolbar.

① Annotation, Custom Annotation



Figure 7-11

Annotations	Shortcut to annotations.	7-3-8
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② Windows



Figure 7-12

Menu	Details	Reference section
	Open the browse window.	7-1-2
	Open the settings window.	7-4
	Open the image controls window.	7-4-9
	Show the current slide information.	7-4-10
	Show the glass slide image.	7-3-11
	Open the annotation list.	7-3-8

③ Show/Hide



Figure 7-13

Menu	Details	Reference section
	Show/Hide Annotation.	7-3-8
	Show/Hide Map Image.	7-3-9
	Show/Hide Scale bar.	7-3-10
	Show/Hide Widget.	-
	Show/Hide Title Tag.	-
	Show/Hide Label Tag.	-

Note

- The icons displayed on the toolbar can be changed in the setting menu.

7-1-5 TOOL WINDOWS

The tool windows can be moved the position, changed the size and closed.
The windows size and position are saved automatically, when software closes

- Move position : Drugging the upper bar of the window can change the window position. (1)
- Change size : Drugging the right-bottom of the window can change the window size. (2)
(Window without the mark will not be able to change the size.)
- Close window : Clicking "x" button at the upper right will close the window. (3)

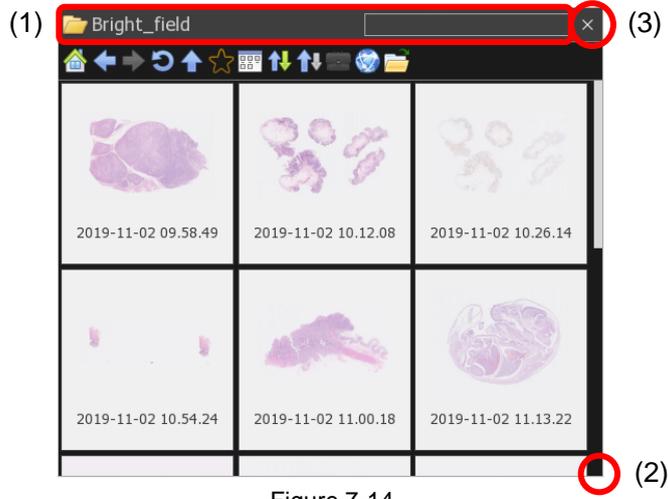


Figure 7-14



Figure 7-15

7-2 OPEN A DIGITAL SLIDE FILES

NDPi, NDPi (JPEG XR), NDPis and VMU file formats are available in NDP.view 2.

7-2-1 OPEN THE SLIDE DATA

A slide is opened by the following methods.

- Click the thumbnail image of the slide data. (Figure 7-16)
- Choose the method to open the slide data from open menu which displayed by right-click on the thumbnail image. (Figure 7-17)

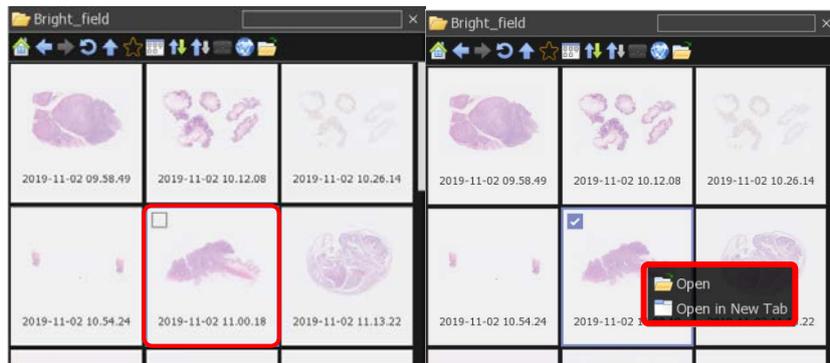


Figure 7-16

Figure 7-17

- Drag and drop the slide data from a browser window. (Figure 7-18)

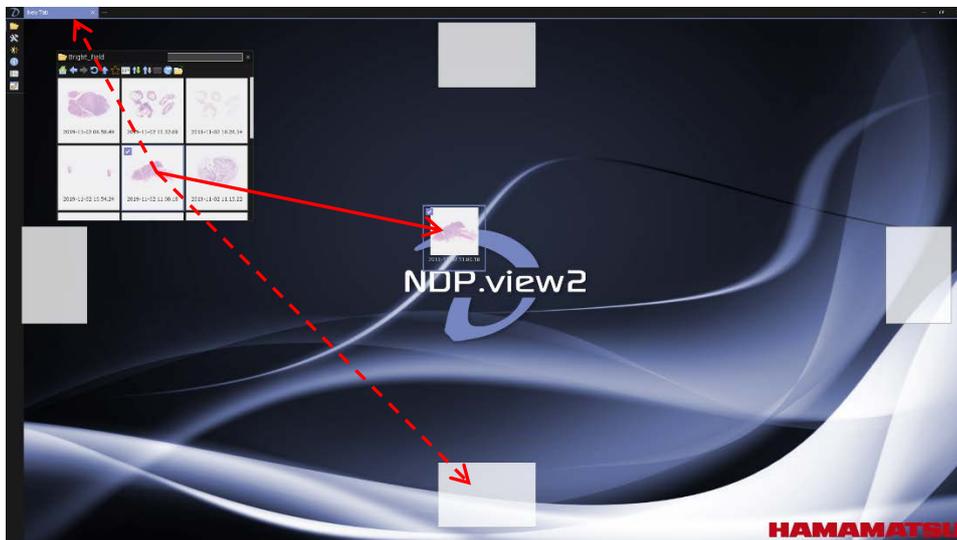


Figure 7-18

- Drop on the upper Tab area, and you can display the slide data on the New Tab.
- Drop on the square shape, and you can display the slide data on multi window.

Note

- Please refer to section " 7-3-6 SPLIT SCREEN IMAGES" for these details.

A Slide image will be displayed, when open the slide data.

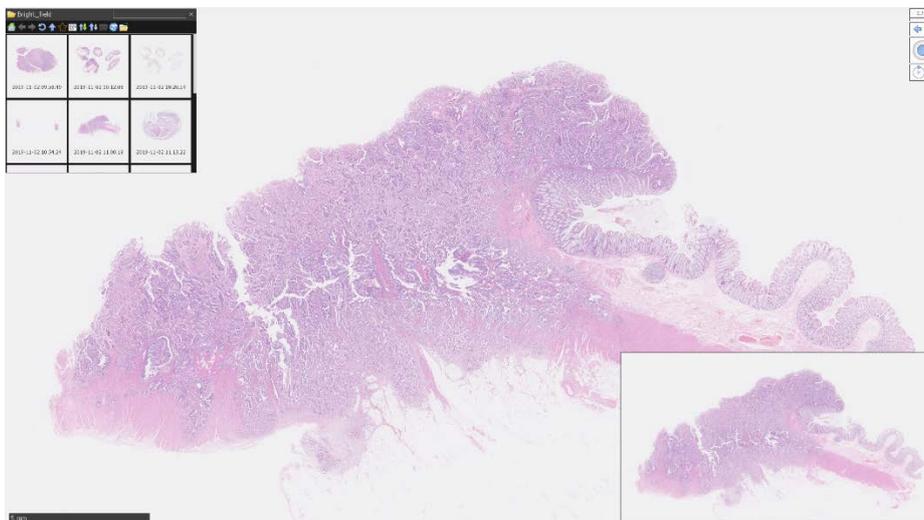


Figure 7-19

Note

- There are cases where the display speed is slow depending on the file format.

7-2-2 PREVIEW DISPLAY ON TAB

When you move the mouse over the tab on which the slide file is opened, a preview image will display.

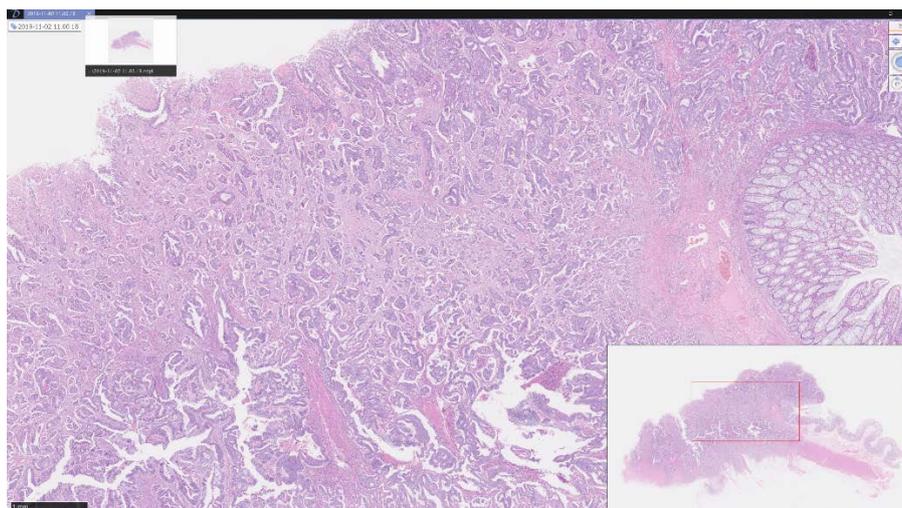


Figure 7-20

7-2-3 SWITCHING SLIDE FILES

Pressing the "Tab" key on the keyboard while the slide file is opened switches to the next image in the folder. Also, "Shift" + "Tab" key will switch to the previous image.

7-2-4 CLOSE THE SLIDE DATA

Clicking "x" button at the upper right or tab will close the slide images.

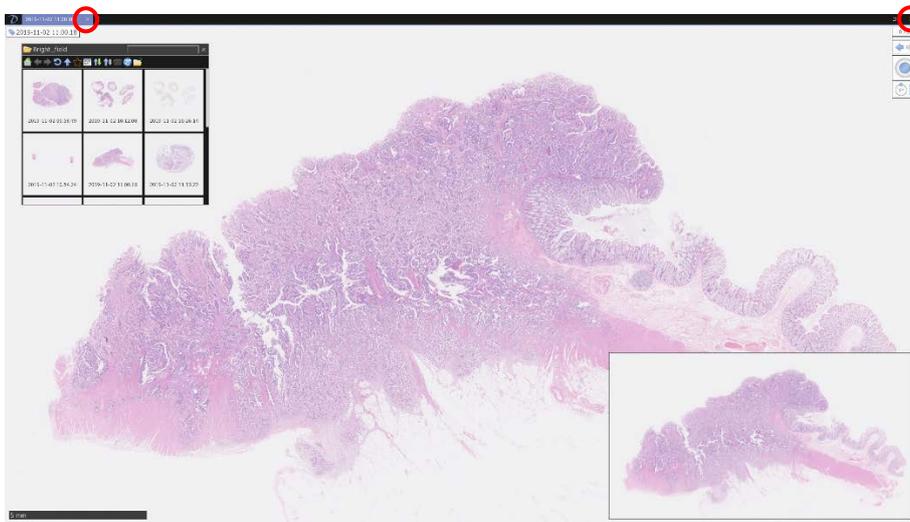


Figure 7-21

7-3 THE DIGITAL SLIDE OPERATION

You can navigate around a digital scan in more than one way by using the keys as well as the mouse.

Note

- Please refer each chapter or "7-5 Operation List" for these details.

7-3-1 MOVEMENT

You can move the slide image to the place where you intend to display on the screen.

7-3-1-1 Moving the slide image

Holding down the left mouse button and dragging as depicted below.

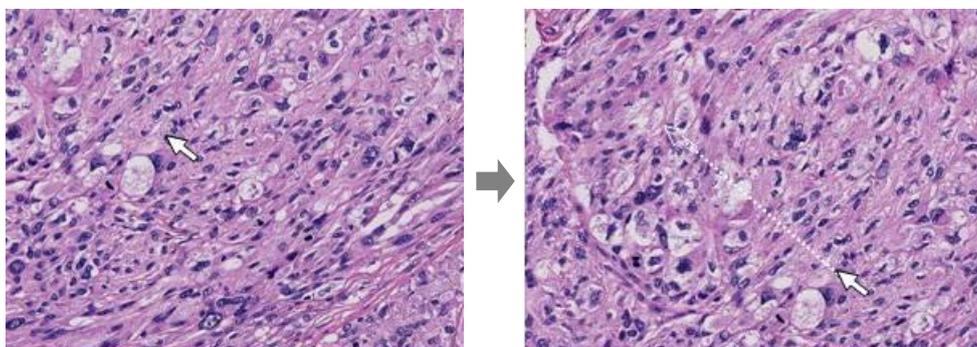


Figure 7-22

"↑, ↓, →, ←" keys will move the specimen a single field in the relevant key direction.

Note

- Moving direction when pressing the arrow keys, it is possible to change by the settings. Also, it is possible to change the moving distance. Please refer to section "7-4-2-2(1) CHANGE SCROLL DIRECTION FOR ARROW KEYS" for this details

7-3-1-2 Jump to a specific area

You can center and expand a specific area of interest by placing the mouse pointer on the relevant area and left double clicking.

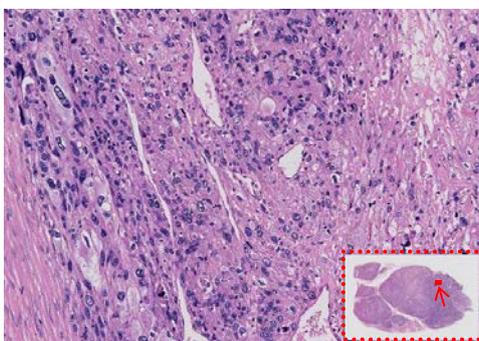


Figure 7-23

7-3-1-3 Moving the slide image by mouse middle button

Click "Middle Button" to display "⊕" on the screen. You can move the slide by moving the mouse.

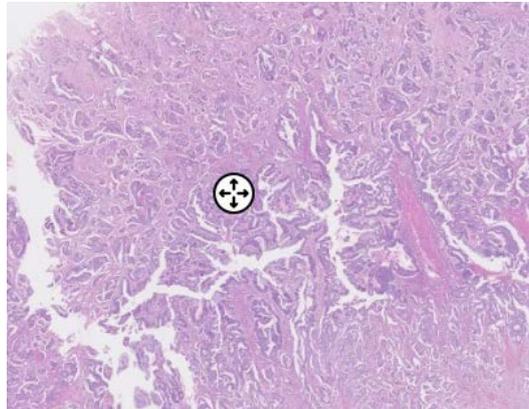


Figure 7-24

Clicking the mouse middle button again releases it.

7-3-1-4 Joystick operation

You can move a slide by operating joystick widget.

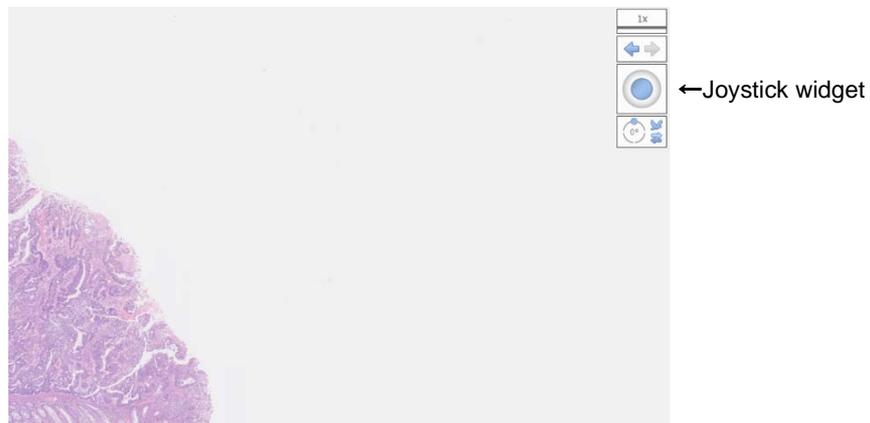


Figure 7-25

7-3-2 EXPANSION AND REDUCTION

Expansion and reduction the slide images.
The images can be magnified up to 8 times of the source magnification.

Note

- The magnification which acquired the images can be checked in the information window (see the 7-4-11 clause). The maximum magnification can be changed by setting. (see the 7-4-2-1 clause).

Pressing the "space" key at any time will take you back to the overview image.

7-3-2-1 Expansion and reduction by mouse's wheel

Zooming in and out of a scan can be done by using the mouse's wheel.

Note

- Expansion direction by the mouse wheel manipulation can be changed by settings. Please refer to section "7-4-2-2(4) CHANGE MOUSE WHEEL DIRECTION" for this details

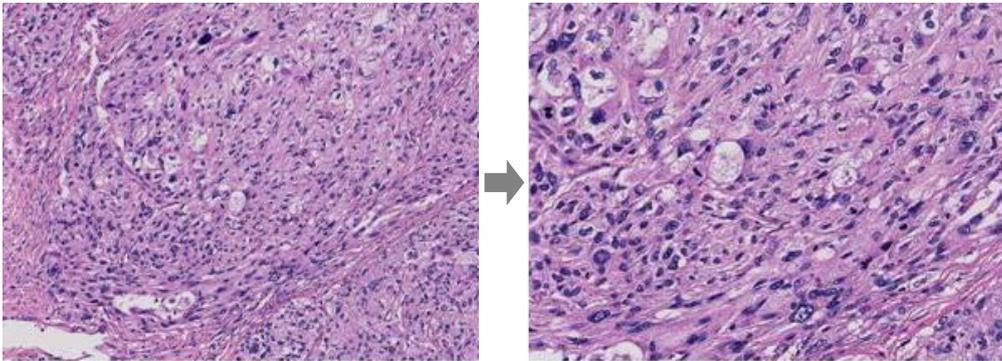


Figure 7-26

7-3-2-2 Expansion and reduction with focus widget

Note

- Lens menu and shortcut key are different depend on the scan mode when you take the image.

The magnification can also be changed with the "Lens Widget". You can specify the magnification by choosing arbitrary magnifications from "Lens Menu". Click "Hide Lens Widget" in the Lens Menu to hide a lens widget.



Figure 7-27

Manipulate with keyboard.

Keys	Magnifications	Keys	Magnifications
+	Expansion	-	Reduction
0	Overview	5	20x
1	1.25x	6	40x
2	2.5x	7	80x
3	5x	8	160x
4	10x		

7-3-2-3 Expansion of a specific area

Holding down the right mouse button and then dragging the mouse will select an area of interest. As you let go of the right mouse button the image you selected will zoom to fill the screen.

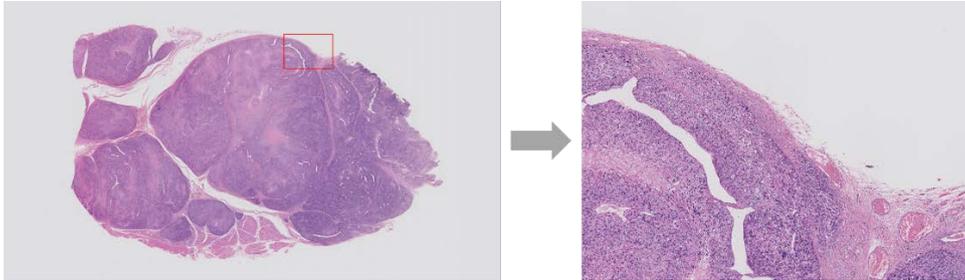


Figure 7-28

7-3-3 CHANGE IN FOCUS PLANE

View the slide images with multi focal plane.

Note

- The operation of focus is limited to the slide data acquired for Z stack when scanning.

7-3-3-1 Moving the focal plane

The focus position can be changed by rolling the mouse wheel while holding down the "Ctrl" key or you can use the "Page up" and "Page down" key.

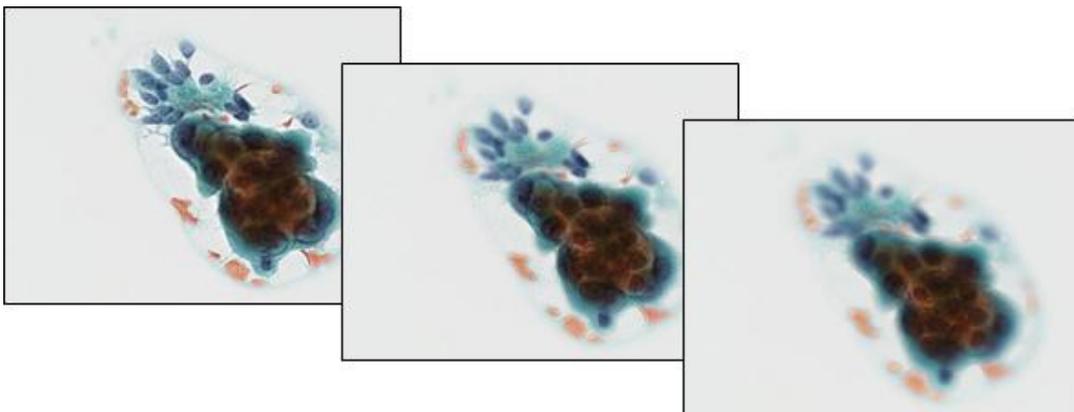


Figure 7-29

7-3-3-2 Moving the focal plane with focus widget

The Current focus position displayed at "Focus Widget".
The focus plane can also be changed with the "Focus Widget".

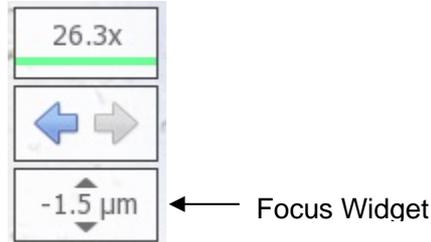


Figure 7-30

7-3-4 INDICATION CHANGE OF THE IMAGE

Switch the image view. You can rotate, flip and bird view images. You can switch each image view with the keyboard operation or with the icon on the widget.

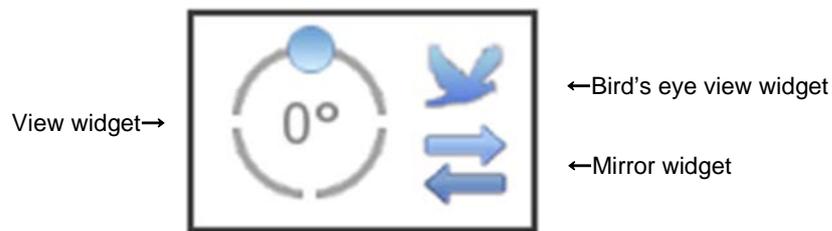


Figure 7-31

7-3-4-1 Rotate operation

Use the R key to rotate the image each 90 degrees. You can manually rotate the image by holding the "Ctrl" key ("Option" key for macOS)down and pressing the "←" or "→" key. Or the view widget at the upper right of a screen can operate the rotation. Rotate to any position by dragging the blue icon. By double-clicking the angle, you can directly enter a value.

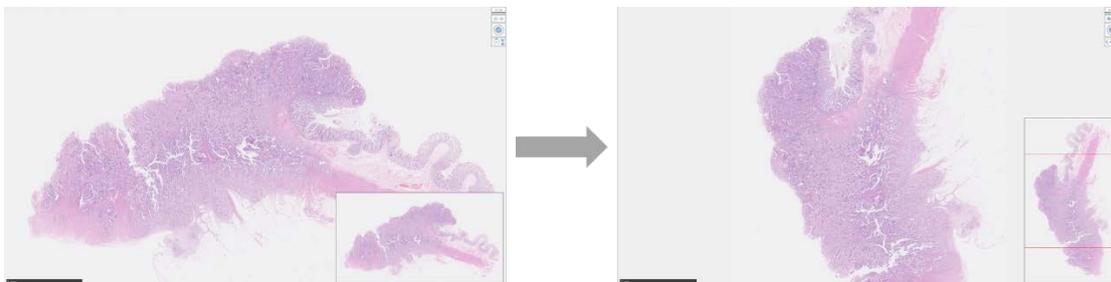


Figure 7-32

Note

- Image rotation direction can be changed by settings. Please refer to section"7-4-2 Navigation" for this details

7-3-4-2 Inversion operation

To switch normal image and mirror image press "Alt"+ "M" key. Or the Mirror widget at the upper right of a screen can switch mirror image.

To switch normal image and flip image press "Alt"+ "F" key.

7-3-4-3 Bird's eye view

Bird's eye view allows you to view images in a way of Bird's Eye view.

Note

- Return to normal view when clicking the map image.

To toggle between normal viewing and the bird's eye view press the "W" key.

To return to normal view mode, press the "W" key again. Or the Bird's eye view widget at the upper right of a screen can switch the bird's eye view.

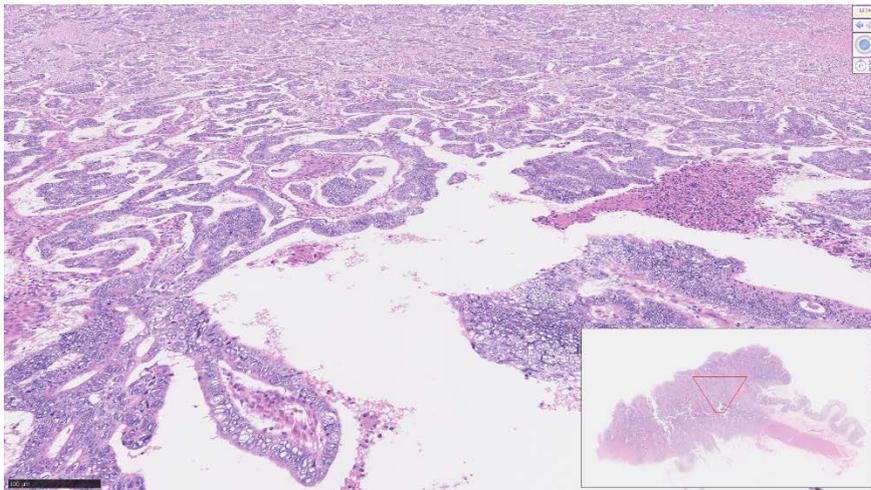


Figure 7-33

7-3-5 HISTORY

Move to back and forward screen.

7-3-5-1 Back

Click a left arrow at history widgets.

When you click a left arrow while pushing "Ctrl" key, it skip move animations.

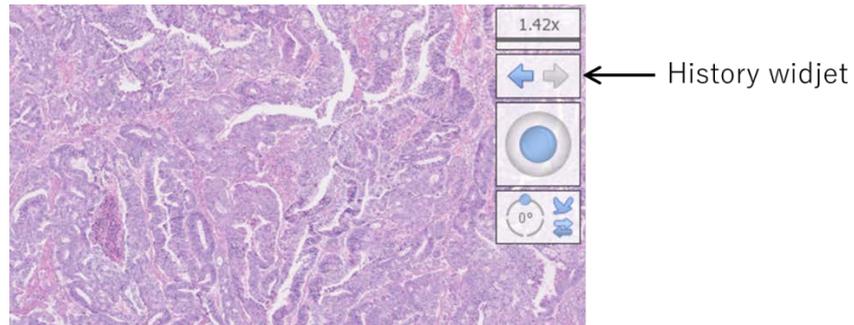


Figure 7-34

Note

- You can operate while the icon is colored.

7-3-5-2 Forward

Click a right arrow at history widgets.

When you click a right arrow while pushing "Ctrl" key, it skip move animations.

Note

- You can operate while the icon is colored.

7-3-6 SPLIT SCREEN IMAGES

Can be displayed the same tab the two or more slide data. You can also synchronize the split screen images.

7-3-6-1 Display multi slide data concurrently

When you intend to display two or more slides concurrently, check the slide images which you want to display from the file browser.

- (1) Select two or more slide images.
Check at the upper left of the each image to select it.
- (2) Display multi slides concurrently.
Select "Open" from the menu shown by right-click.

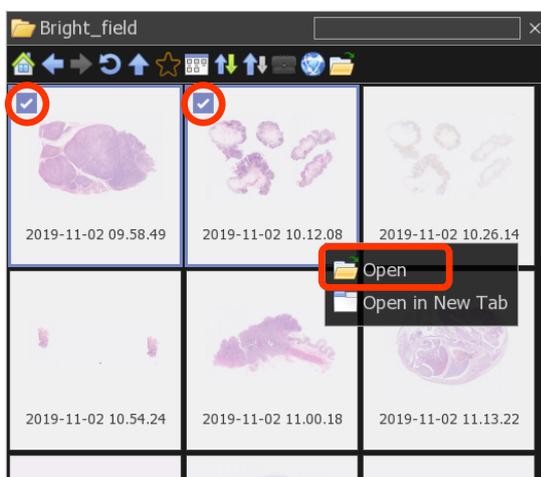


Figure 7-35

Also, dragging and dropping the slide data from the file browser window to the square shape will display multi slide data concurrently.

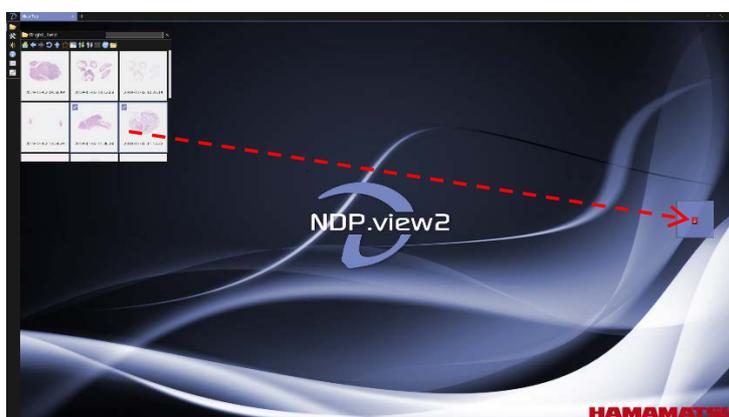


Figure 7-36

The data are placed in any place.

Note

- In NDP.view 2 Plus, the case view and split display options are displayed in the advanced settings. For details, refer to the NDP.view 2 Plus Instruction manual.

Note

- In NDP.view 2 Plus, if you drop multiple images on the square, it will open as case view. For details, refer to the NDP.view 2 Plus Instruction manual.

You can also split the screen and open the image by dragging the file from the file browser and dropping it on the square.

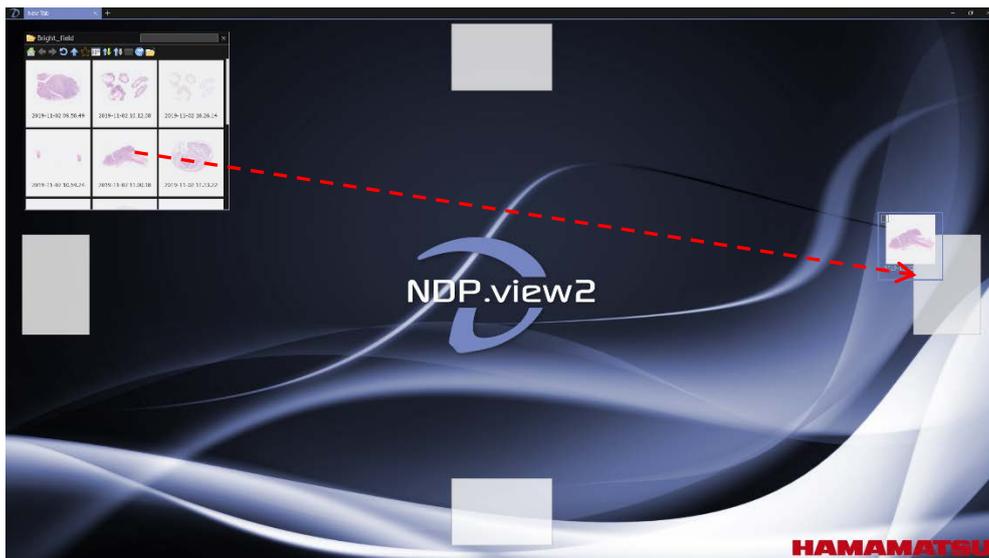


Figure 7-37

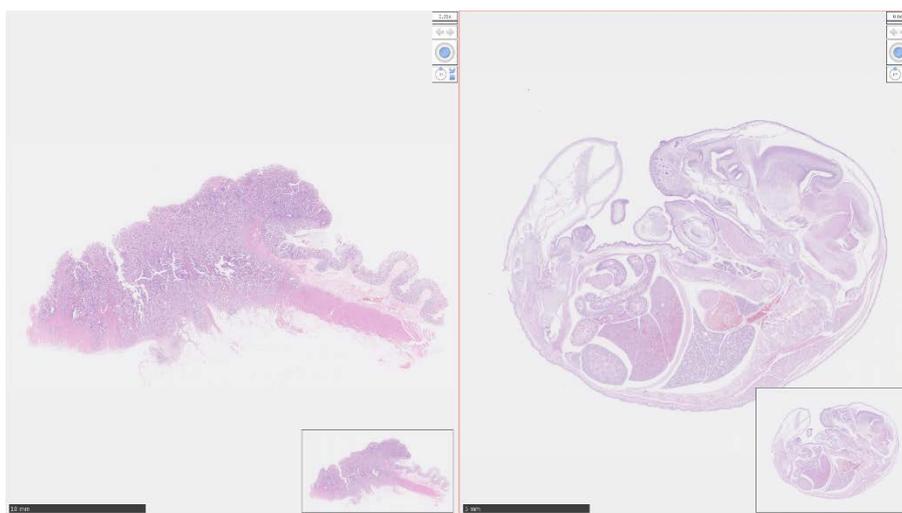


Figure 7-38

The data surrounded in a red frame is activating for operation.

Introducing the another method for multi display below;

(3) Display the split menu.

Right click on the current tab's title will open a split menu.

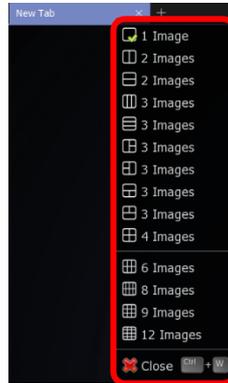


Figure 7-39

The data are placed in any place. A maximum 12 slides (4 x 3) can be displayed on one monitor.

(4) Choose the desired layout from the split menu.

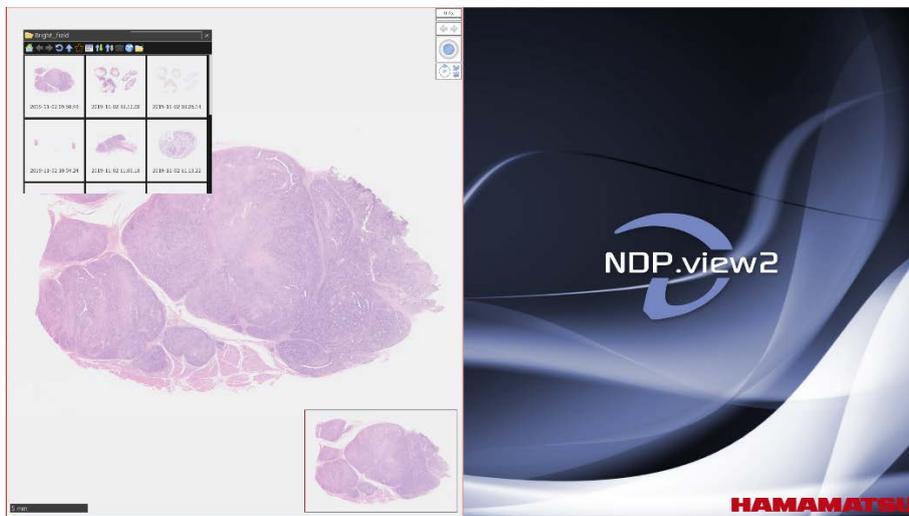


Figure 7-40 (Sample of displays placed in right and left)

Figure 7-40 shows the screen which selected 2 images (vertical) from the split menu. One image is opened. Dragging and dropping the slide data from the browser window to the right area will open second image.

7-3-6-2 Synchronize

You can synchronize the split images and operate them.

- (1) Right click on the active tab title at the top of the screen and choose "synchronize". All the images on the current tab will move together. Pressing "Shift"+ "S" key performs the same function.

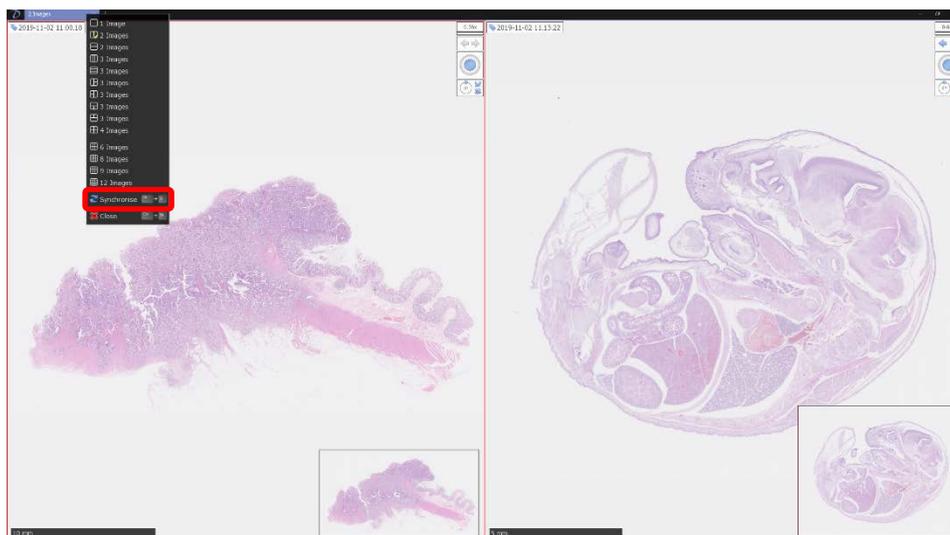


Figure 7-41

- (2) Two Sync Points are displayed on the images. The images are synchronized so that the positions of the two points are the same on each image.

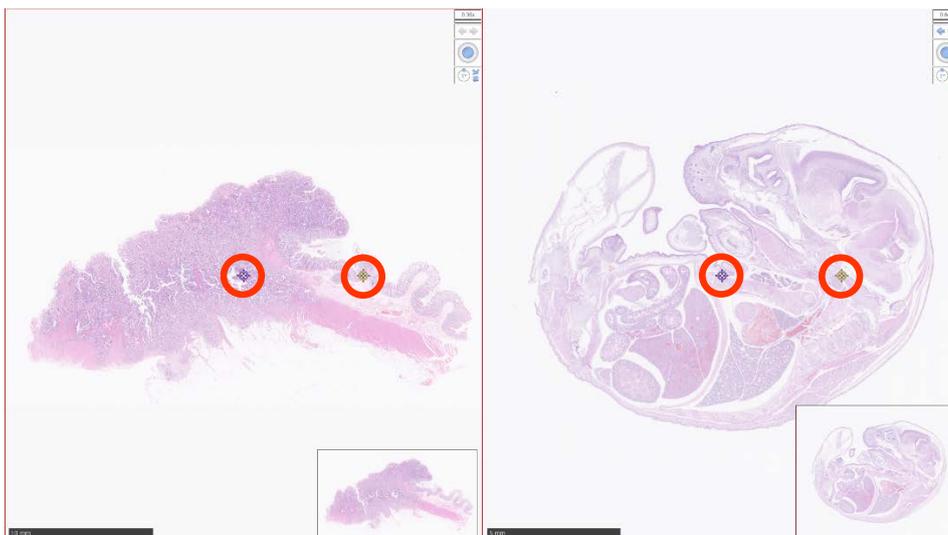


Figure 7-42

7-3-6-3 Desynchronize

To cancel the synchronization right click on the active tab again and choose the “Desynchronize” option. Pressing “Shift”+ "S" key performs the same function.

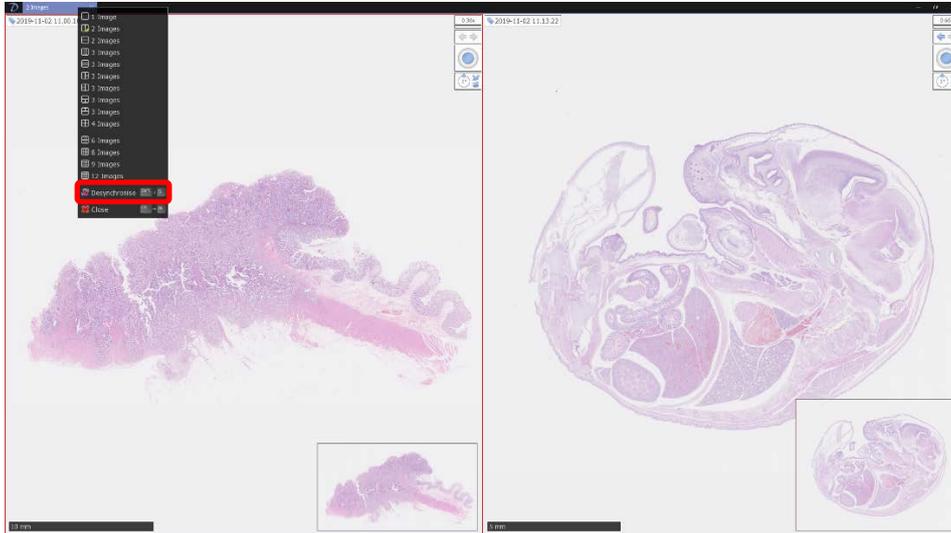


Figure 7-43

7-3-7 MULTI WINDOW

Can be displayed the two or more slide data in each window. You can also synchronize the images.

7-3-7-1 Display two or more slide data in each window

Open a new window to display a slide image.

- (1) Open a new window.

Choose "New Window" from the main menu or press "Ctrl + N" key to open a new window.

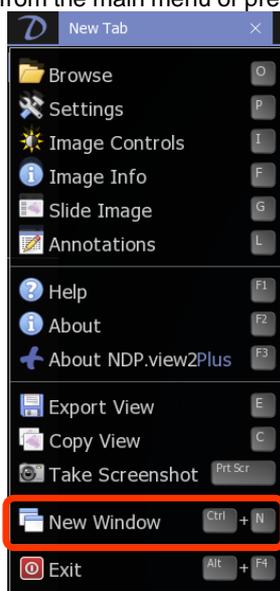


Figure 7-44

- (2) Display two or more slide data in each window.

Display each image in each window as described in "0 NDPi, NDPi (JPEG XR), NDPis and VMU file formats are available in NDP.view 2. Open the Slide data".

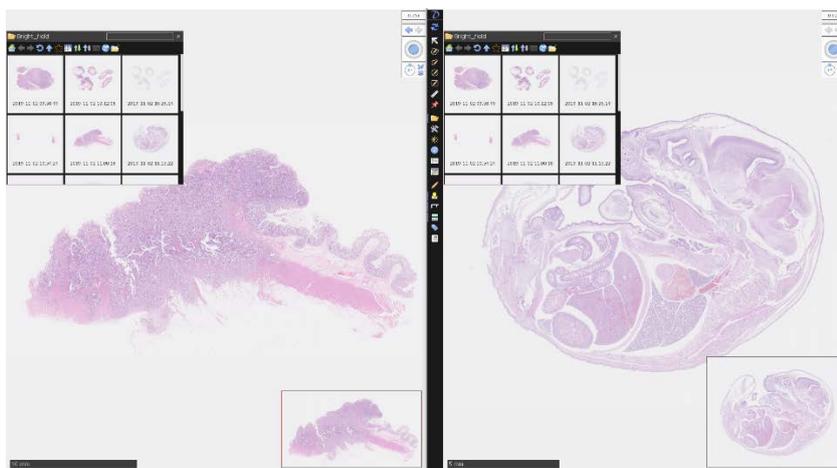


Figure 7-45

7-3-7-2 Synchronize

On multi window mode, the image displayed in each window can be synchronized by selecting “Synchronise All” from the main menu.

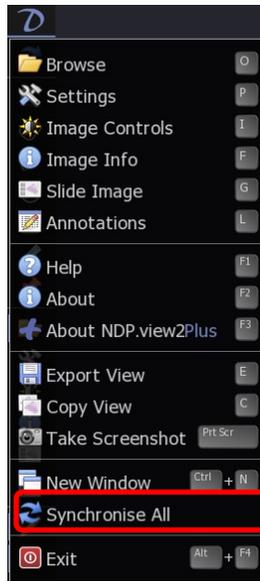


Figure 7-46

7-3-7-3 Desynchronize

To cancel the synchronization, choose “Desynchronise All” from the main menu.

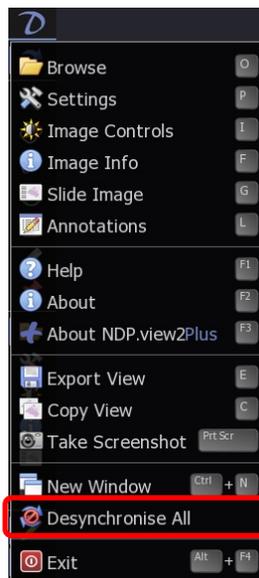


Figure 7-47

7-3-8 ANNOTATIONS

Annotations can be drawn on an image and saved alongside it.
The inserted annotations can be displayed and managed in the list.

7-3-8-1 Annotations Drawing

Right clicking on the slide image will open the annotation menu.

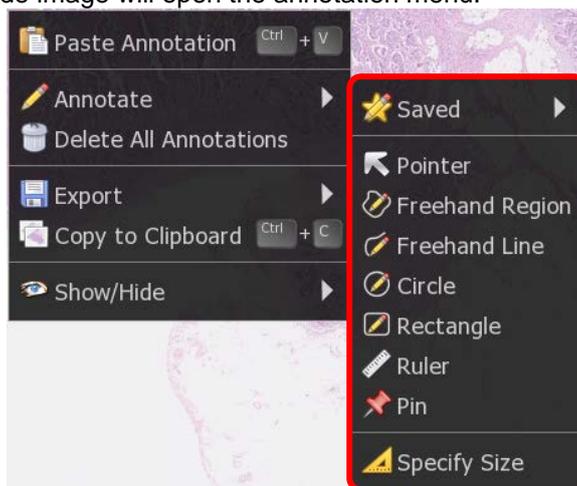


Figure 7-48

- (1) To add a new annotation right click on the image and choose the desired annotation type.
- (2) Next move the mouse to the desired start position and press the left button, hold the button down and move to the end position then release the button.
On Pin annotation, a description ends when you click.
- (3) Draw annotation with specified size.
Click on "Specify Size", Image 7-48 will display. Select the type of annotation from Ruler, Rectangle and circle and enter arbitrary value. Click "OK" to create the annotation of the specified size.

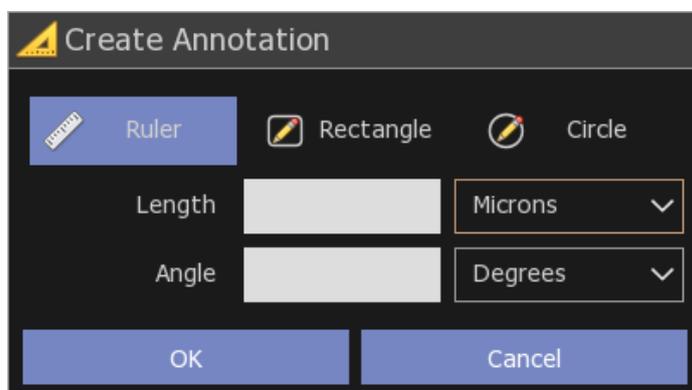


Figure 7-49

- (4) When the button is release a dialog box will appear allowing you to give the annotation a title and description, you can also set the desired color, whether or not the title is displayed on the image and whether or not measurements are displayed (if applicable).

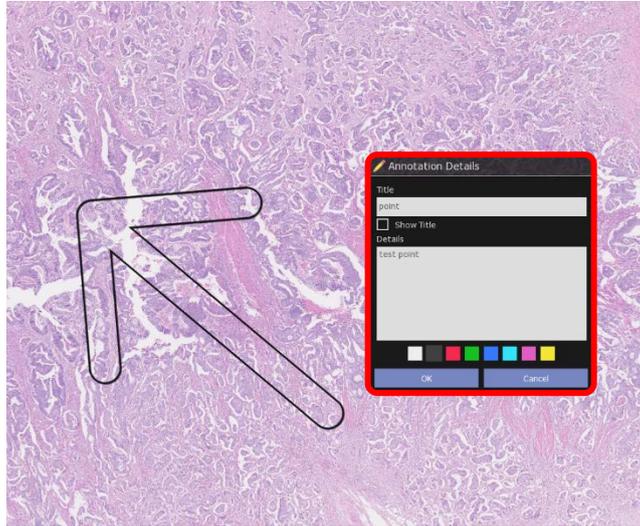


Figure 7-50

Note

- Characters such as “ ”, “[”, “]” etc. may not be displayed.

- (5) The annotations are listed on the screen.

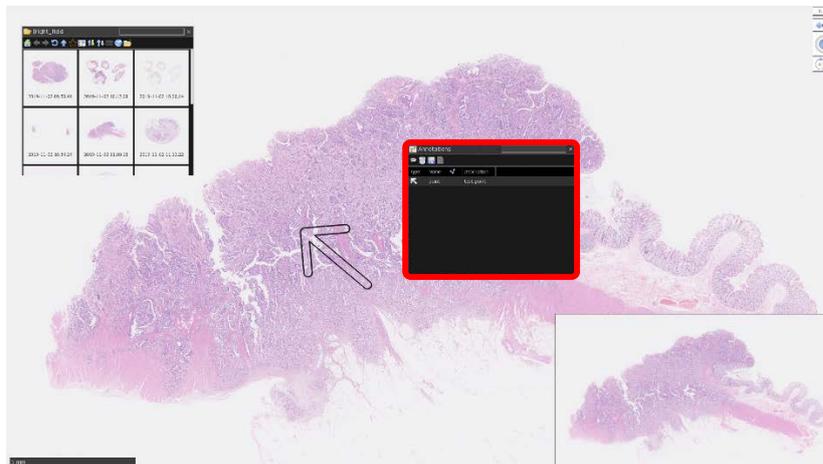


Figure 7-51

The annotation list can be switched between show and hide by pressing “L” key.

- (6) When the mouse is over an annotation the annotation is highlighted, highlight the desired annotation and click the right mouse button to bring up the edit menu.



Figure 7-52

Goto	Go to the position that the annotation was created.
Edit	Change the contents of the annotation.
Move	Move the annotation to desired point
Save	Save the annotation. The saved annotation can be opened from the annotation menu.
Cut	Cut the annotation and copy it to clipboard
Copy	Copy the annotation to clipboard
Delete	Delete the annotation.

- (7) To paste copied annotation anywhere on the slide image choose the “Paste Annotation” option from the annotation menu or “Ctrl + V” key.

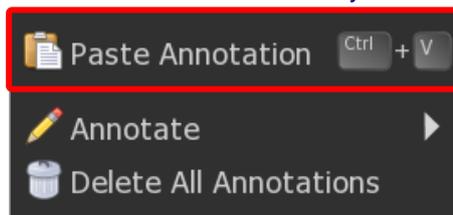


Figure 7-53

- (8) The saved annotation can be opened from “Saved Annotation” in the annotation menu. Choose the annotation and click on the image.

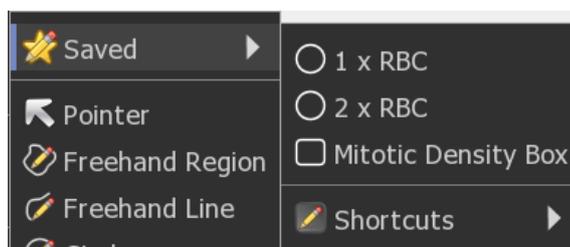


Figure 7-54

To finish addition of the saved annotation, right-click on the image or press the “Esc” key.

- (9) To temporarily show or hide all annotation, choose the appropriate option from the annotation menu or press the “A” key.

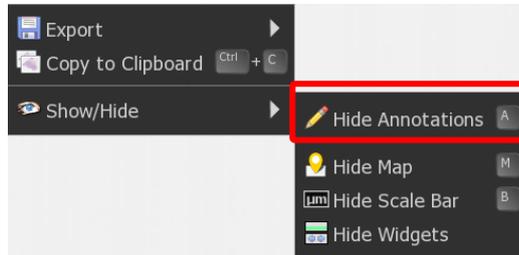


Figure 7-55

- (10) To delete all annotation permanently in one go choose the “Delete All Annotations” option from the image context menu.
- (11) To export all annotation, choose the appropriate option from the annotation menu or press the “Alt + E” key.
Select file format and save all annotation. You can select the field with csv format.

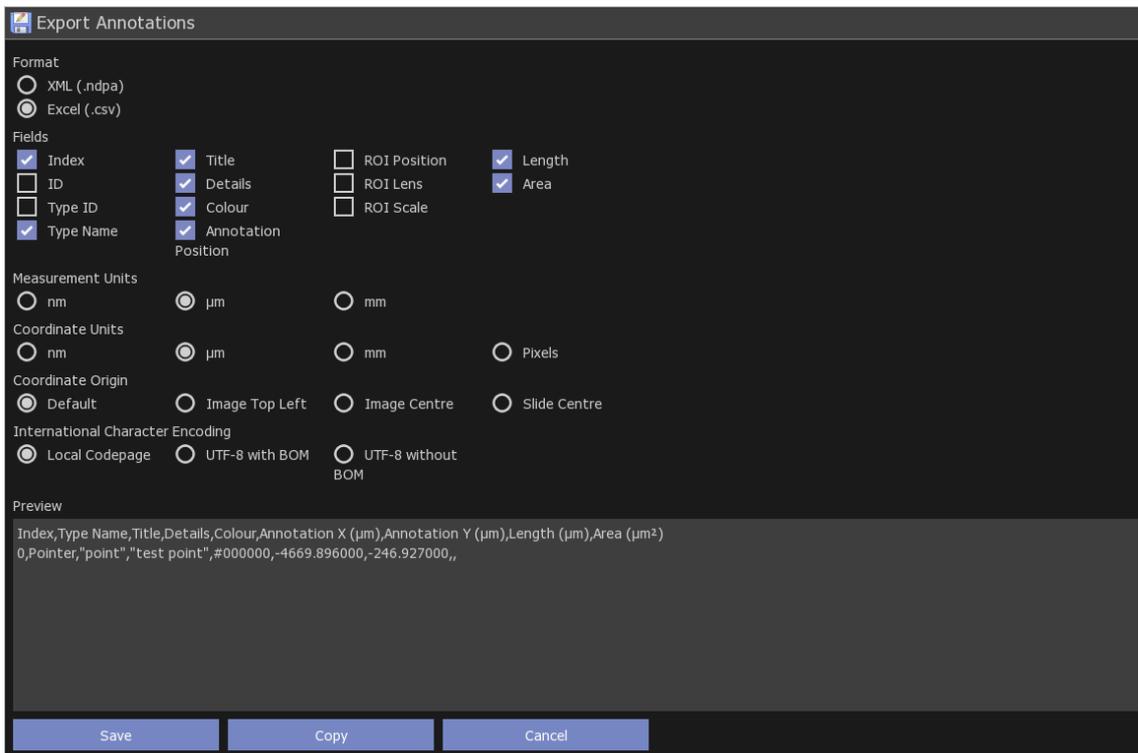


Figure 7-56

7-3-8-2 Annotations List

- (1) Open the annotation list.

Select the “Annotations” from the main menu or the “L” key of a keyboard will display annotations list.

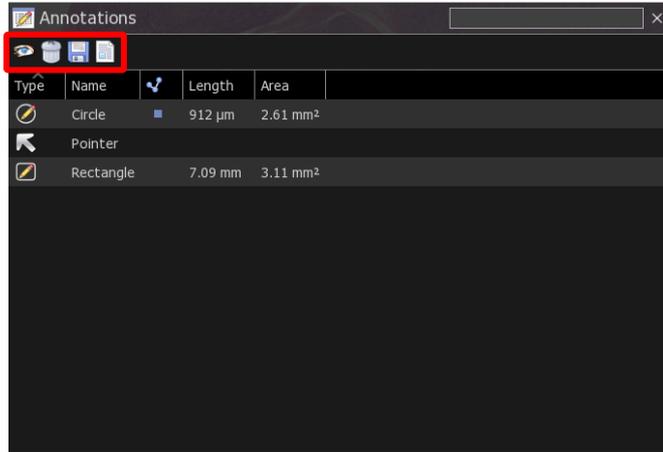


Figure 7-57

- (2) The annotations list has the following icons.

Menu	Details
	Show/Hide Annotation.
	Delete Annotation.
	Export Annotation
	<p>Create Annotation Report.</p> <div style="border: 1px dashed black; padding: 5px;"> <p>Note</p> <ul style="list-style-type: none"> In NDP.view 2 Plus, you can create the Annotation Report. For details, refer to the NDP.view 2 Plus Instruction manual. </div>

- (3) The information of the drawn annotation is displayed for each item.

Annotations can be sorted in ascending/descending order of the clicked each item.

Click the pull-down in the right corner of each item to display the filter list. You can filter from the annotation list by selecting the check box.

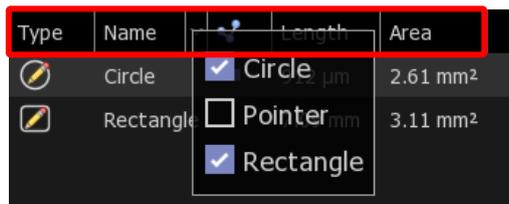


Figure 7-58

(4) The annotation list has the following items.

Item	Details
Type	Show the type of annotation with the icon.
Region	Show the annotation number. To show the "Region" item, you need to turn on "Show an Index Column in Annotation List" check box in the settings.
Name	Show the annotation title.
	Show the  for annotations that are checked for "Show Histogram" and "Show Line Profile". Click the  , show histogram and line profile. <div style="border: 1px dashed black; padding: 5px; margin-top: 10px;"> <p>Note</p> <ul style="list-style-type: none"> In NDP.view 2 Plus, you can show the Histogram and Line Profile. For details, refer to the NDP.view 2 Plus Instruction manual. </div>
Length	Show each length in "Freehand Region", "Freehand Line", "Circle", "Rectangle" and "Ruler".
Area	Show each area in "Freehand Region", "Circle" and "Rectangle".

7-3-9 MAP WINDOW

Left click on the map to jump directly to the selected position at the current magnification, hold the left button down and move to quickly pan around the image.
 Drag a box using the right mouse button to view the selected area immediately.

7-3-9-1 Change the map image size

- (1) Display the map menu.

Right clicking on the on the overview map will open the map menu.

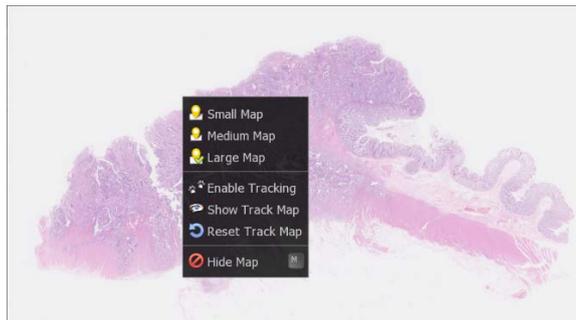


Figure 7-59

- (2) Select the display size of the map image from the menu (Small, Medium, and Large)

7-3-9-2 Show Track Map

- (3) Display the map menu.

- (4) Selecting "Enable Tracking" will display the track map and start the tracking.



Figure 7-60

- (5) Selecting "Show Track Map", "Hide Track Map" will switch the track map display.
 (6) Selecting "Reset Track Map" will reset the track map.

7-3-9-3 Show or hide the overview map

Right click on the overview map to choose the hide map.
 Show or hide the overview map using the 'M' key.

7-3-10 SCALE BAR

A scale bar can be shown to indicate the physical size of the current field of view image

- (1) Show or hide the scale bar using the "B" key.

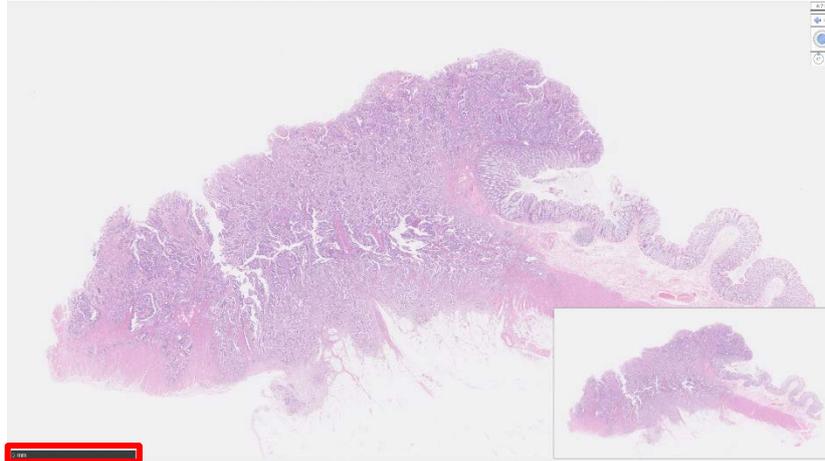


Figure 7-61

When the image magnification is changed, the length and the value of a scale bar will be changed automatically.



Figure 7-62

- (2) To hide the scale, press the "B" key on your keyboard again.
- (3) To change the type of scale, press the "Ctrl" + "B" key on your keyboard.

Note

- The scale bar type can be changed by settings.
Please refer to section "7-4-4 SCALE BAR SETTING" for details

7-3-11 GLASS SLIDE IMAGE

Displays the overview image of the entire slide that was scanned.

(1) Open the slide data.

(2) Open the Slide Image window.

Choosing "Slide Image" from the main menu that placed at upper left or the "G" key of a keyboard will display the slide Image.

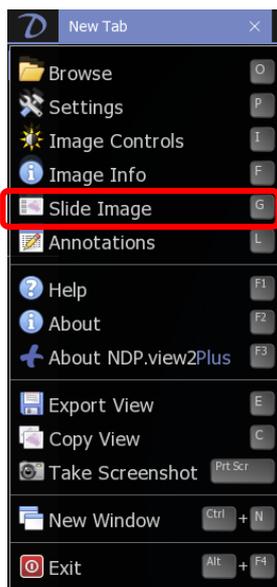


Figure 7-63

(3) The entire image of a glass slide will be displayed.



Figure 7-64

A blue frame indicates the area of the scan image.

Note

- In the image which scan with a skip lane function, the skipped part is included in a blue frame.

7-3-12 EXPORT VIEW

Export the current screen to the image file.

If multiple slides are displayed on a split window, save them in a split view.

- (1) Open the Export View Window.

Choosing "Export View" from the main menu that placed at upper left or the "E" key of a keyboard will display the Export Image Window.

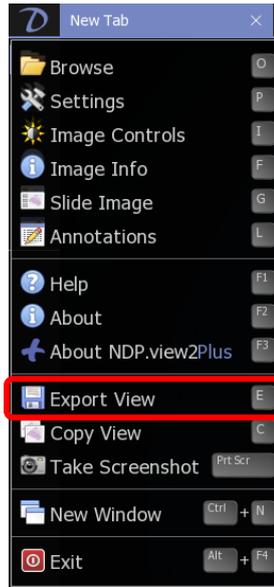


Figure 7-65

- (2) Set file name.

Set the file format and file name and save the image file to selected folder.

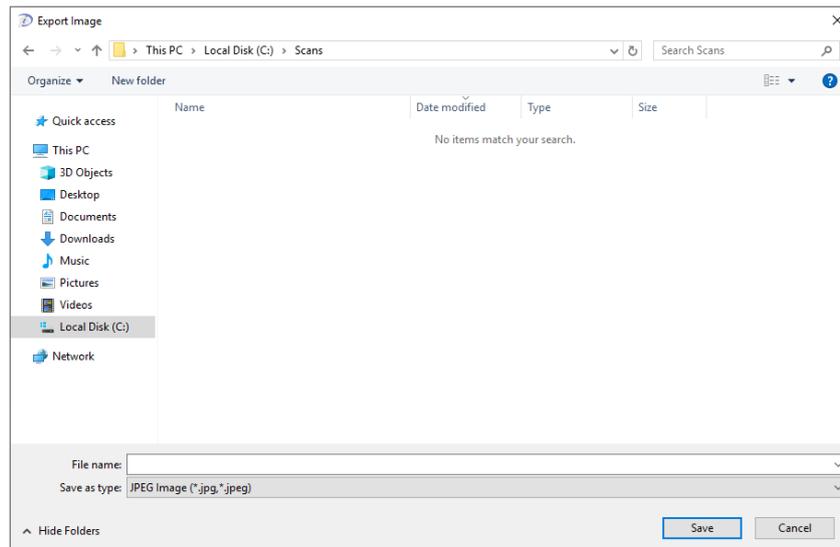


Figure 7-66

7-3-13 EXPORT IMAGE

Export the current screen to the image file.

If you are viewing multiple slides on a split window, save the selected image.

- (1) Open the Export Image Window.

Choosing "Export Image" from the annotation menu that opened by right-click or the "Ctrl" + "E" key of a keyboard will display the Export Image Window.

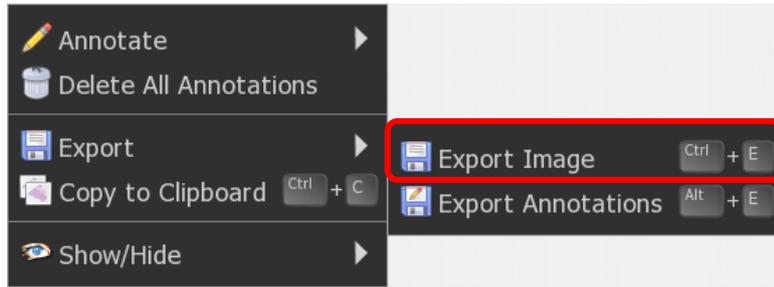


Figure 7-67

- (2) Sets the pixel size of the output image.

Set the image magnification, screen ratio or print size, and determine the pixel size of the output image.

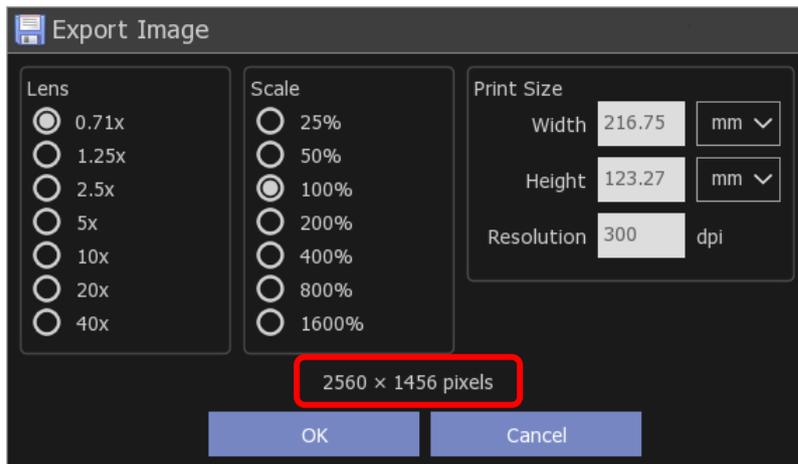


Figure 7-68

The current view is output with the pixel size displayed in the dialog.

- (3) Set file name.

Set the file format and file name and save the image file to selected folder.

7-3-14 COPY VIEW

Copy the current screen to clipboard.

If multiple slides are displayed on a split window, copy them to the clipboard in the split view.

Choosing "Copy View" from the main menu that placed at upper left or a notation menu that opened by right-click or the "C" key of a keyboard will copy the current screen to clipboard.

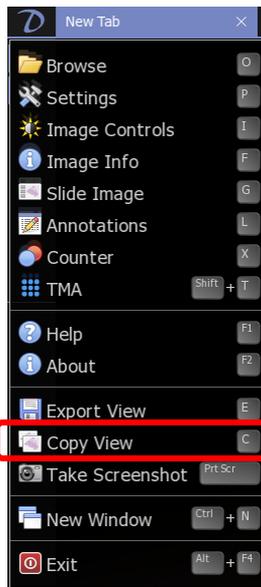


Figure 7-69

7-3-15 COPY IMAGE

Copy the current screen to clipboard.

If you are viewing multiple slides on a split window, copy the selected image.

Choosing "Copy to Clipboard" from the main menu that placed at upper left or a notation menu that opened by right-click or the "Ctrl + C" key of a keyboard will copy the current screen to clipboard.

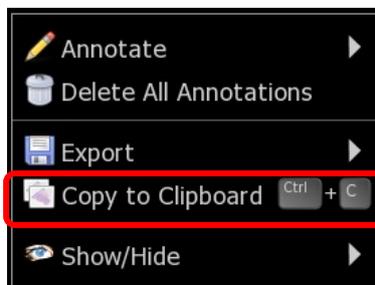


Figure 7-70

7-3-16 TAKE SCREENSHOT

Take screenshot with tool windows.

Choosing "Take Screenshot" from the main menu that placed at upper left or the "Print Screen" key ("Command"+"Shift"+"3" with macOS) of a keyboard will take the screenshot to clipboard.

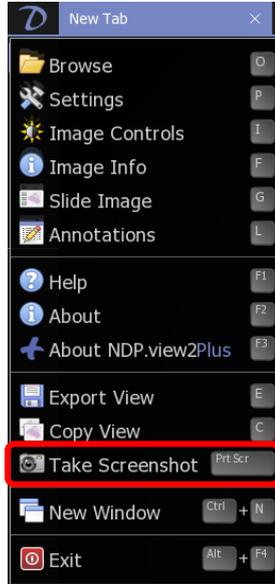


Figure 7-71

7-3-17 HELP

Help menu shows the directions for NDP.view 2.

Choosing "Help" from the main menu that placed at upper left or the "F1" key of a keyboard will open the help window.

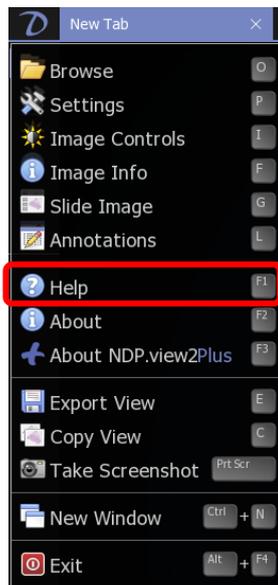


Figure 7-72

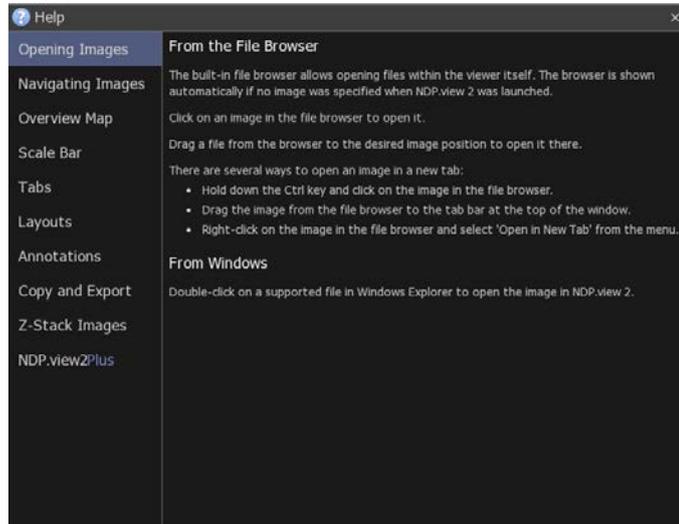


Figure 7-73

7-4 SETTINGS

7-4-1 GENERAL

In General, you can set for window layout.

- (1) Open the setting window.
- (2) Click “General” and change setting any actions.

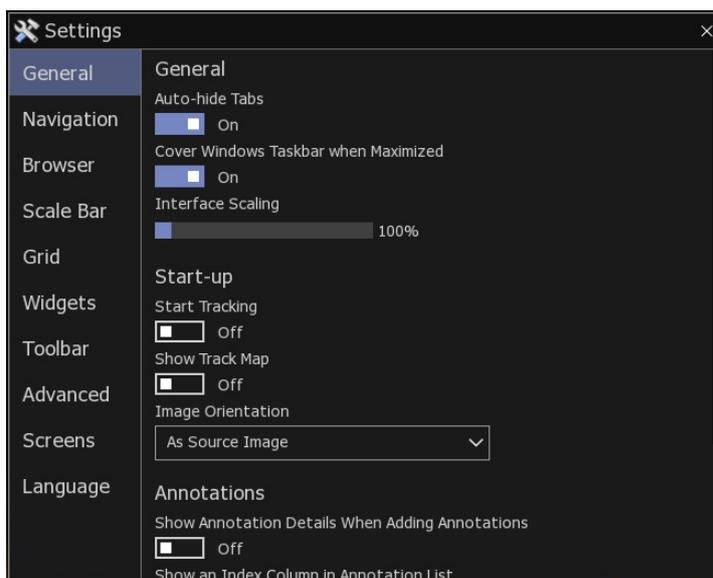


Figure 7-74

7-4-1-1 GENERAL SETTING

- (1) Auto-Hide Tabs

In the full screen mode, you can hide tabs automatically.
Check “Auto-Hide Tabs (Full Screen)” to switch the settings.

- (2) Cover Windows Taskbar in Full Screen

In the full screen mode, you can hide windows taskbar automatically.
Check “Cover Windows Taskbar in Full Screen” to switch the settings.

- (3) Interface Scaling

The size of the interface of an icon and the menu can be changed.
When you can use the high-resolution monitor, you can change the interface size.

7-4-1-2 START-UP SETTING

The start-up settings are available by selecting the settings.

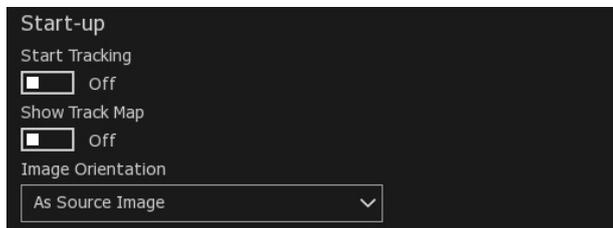


Figure 7-75

- (1) Checking “Start Tracking” can be starting the tracking at start-up NDP.view 2.
- (2) Checking “Show Track Map” can be showing the track map at start-up NDP.view 2.
- (3) Set the orientation of the image to be displayed at start-up NDP.view 2.

As Source Image	Show Sample images
Label on Left	Display the image with the label on left.
Label on Right	Display the image with the label on right.
Label at Top	Display the image with the label at top.
Label at Bottom	Display the image with the label at bottom.

7-4-1-3 ANNOTATIONS SETTING

You can set for annotations.

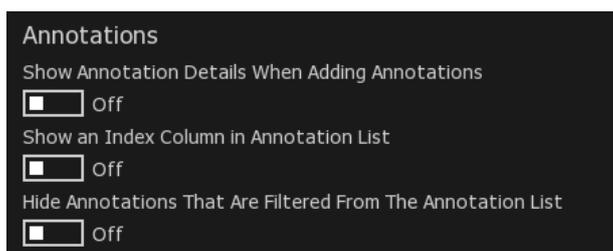


Figure 7-76

- (1) Checking “Show Annotations Details When Adding Annotations” can be showing the edit window of annotations which can fill in the title and details when you added annotations.
- (2) Checking “Show an Index Column in Annotation List” can be adding the “Region” item in annotation list.
- (3) Checking “Hide Annotations That Are Filtered From the Annotation List” can be hiding the annotations in the image which you hide filtered in the annotation list.

7-4-1-4 IMAGE CONTROL SETTING

You can set for image controls.

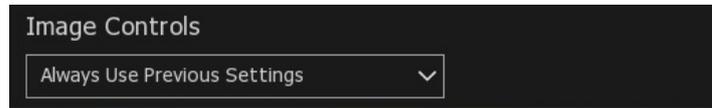


Figure 7-77

- (1) Set the reset timing of image controls.

Always Use Previous Settings	Settings are not reset automatically.
Use Settings Until NDP.View is Closed	Reset settings when software starts.
Always Use Defaults	Reset settings when opening slide images.

7-4-2 NAVIGATION

Navigation can change the settings related to slide actions.

- (1) Open the setting window.
- (2) Click “Navigation” and change setting any actions.

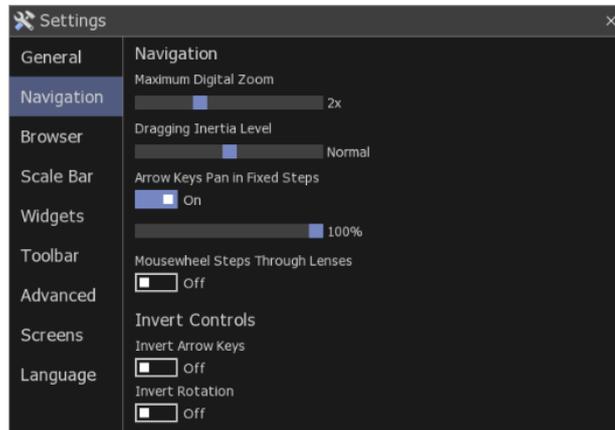


Figure 7-78

7-4-2-1 NAVIGATION SETTING

- (1) MAXIMUM MAGNIFICATION SETTING

You can change the maximum magnification by sliding the scale bar of “Max Digital Zoom” from None to 8x gradually.

None: The original resolution of the image.

2x, 4x, 8x: These are to be the maximum magnification of the image.

(2) INERTIA SETTING

Change the inertia level of the slide viewing by sliding the scale bar.

Sliding the scale bar of "Inertia" can change the level of inertia to Disabled, Heavy, Normal, Light, Weightless.

(3) MOVE FIXED DISTANCE WITH ARROWS KEY

Checking on "Arrow Keys Pan in Fixed Steps" can be moving slide image by fixed distance.

(4) Check on "Arrow Keys Pan in Fixed Steps" from "Navigation" menu.

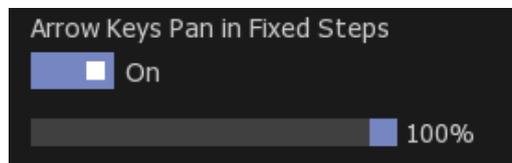


Figure 7-79

(5) Slide scale bar with mouse to set fixed distance which moves by enter any "arrows" key. (window size=100%)

(6) Mousewheel Steps Through Lenses

You can zoom the image step by step when with the mouse wheel.

Checking on "Mousewheel Steps Through Lenses" can be zoom slide image step by step.

7-4-2-2 CHANGE DIRECTION

(1) CHANGE SCROLL DIRECTION FOR ARROW KEYS

Checking "Invert Arrow keys" can be changing scroll direction which moves by any "arrows" key.

(2) CHANGE ROTATION DIRECTION

Checking "Invert Rotation" can be changing rotation direction which rotates by the "R" key or "Ctrl" key ("Option" key with macOS) and any "arrows" key.

(3) CHANGE SCROLL DIRECTION FOR ARROW KEYS

Checking "Invert Arrow keys" can be changing scroll direction which moves by any "arrows" key.

(4) CHANGE MOUSE WHEEL DIRECTION

Checking “Invert Mousewheel” can be changing the expand directions which expand by the mouse wheel.

7-4-3 BROWSER SETTING

The browser can be set by selecting the settings.

- (1) Open the setting window.
- (2) Click “Browser” and change setting any actions.

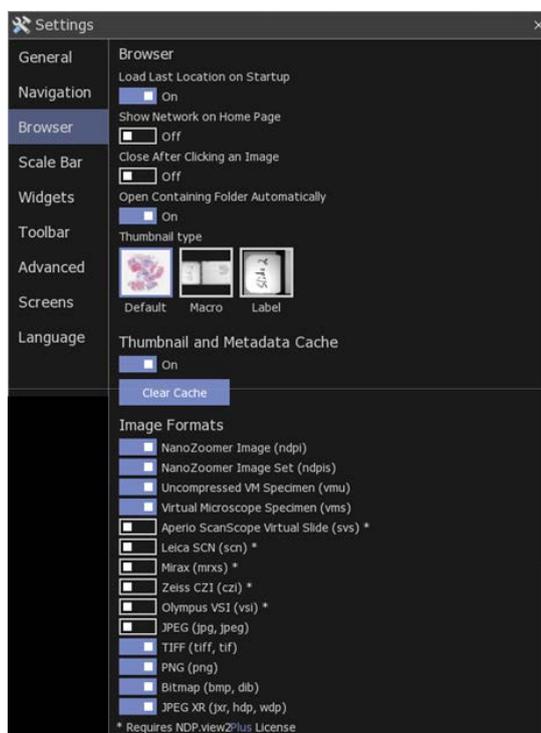


Figure 7-80

7-4-3-1 FILE BROWSER

- (1) Checking “Load Last Location on Startup” can be load the folder for the last slide on startup.
- (2) Checking “Show Network on Home Page” can be showing the network PC on Home.

Note

- Show Network may take a while depending on the PC condition.

- (3) Checking “Close After Clicking an Image” can be closed the browser after clicking slide image.
- (4) Checking “Open Containing Folder Automatically” can be automatically update the file browser when launching the software from the slide file or drag and drop the slide onto the screen.
- (5) Select a thumbnail type from Default, Macro or Label.

Default	Show Sample images
Macro	Show Glass slide images
Label	Show Label images

7-4-3-2 THUMBNAIL AND METADATA CACHE

Checking can be use the cache and Increase display speed of file browser.
To clear the cache, click "Clear Cache"

7-4-3-3 IMAGE FORMATS

Sets the image format to display in the file browser.

Note

- In NDP.view 2 Plus, you can open the slide image with the third party slide format (svs, scn, mrxs, czi, vsi). For details, refer to the NDP.view 2 Plus Instruction manual.

7-4-4 SCALE BAR SETTING

The scale bar can be displayed and changed by selecting the settings.

- (1) Open the setting window.
- (2) Click “Scalebar” and change setting any actions.



Figure 7-81

- (3) Checking "Show Scalebar" can be displayed the scale bar.
- (4) Choose scale bar type from "Scalebar style".
- (5) Choose minimum scale bar Length.

7-4-5 WIDGETS

Widgets can be set by selecting the settings.

- (1) Open the setting window.
- (2) Click "Widgets" and change setting any actions.

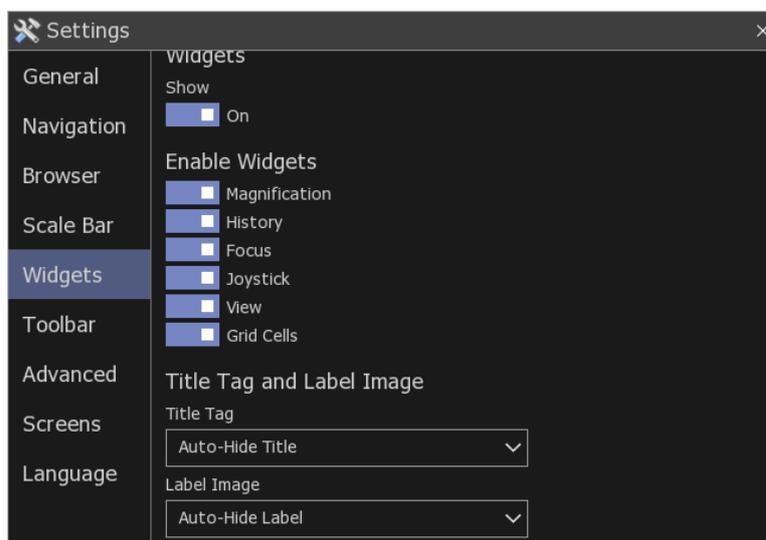


Figure 7-82

7-4-5-1 WIDGET SETTING

- (1) Checking "Show" can be showing all widgets.
 - ① Checking "Magnification" can be showing "Lens widget".
 - ② Checking "History" can be showing "History widget".
 - ③ Checking "Focus" can be showing "Focus widget".
 - ④ Checking "Joystick" can be showing "Joystick widget".
 - ⑤ Checking "View" can be showing "View widget".

- ⑥ Checking “Grid Cells” can be showing “Grid Cells widget”.

7-4-5-2 TITLE TAG & LABEL IMAGE

- (1) You can switch the display style for the Title tag.
- (2) You can switch the display style for the Label tag.

Note

- Each widget located top-right and Title and Label widget located at top-left on the screen.

7-4-6 TOOLBAR SETTING

Tools on the toolbar can be set by selecting the settings.

- (1) Open the setting window.
- (2) Click “Toolbar” and change setting any actions.

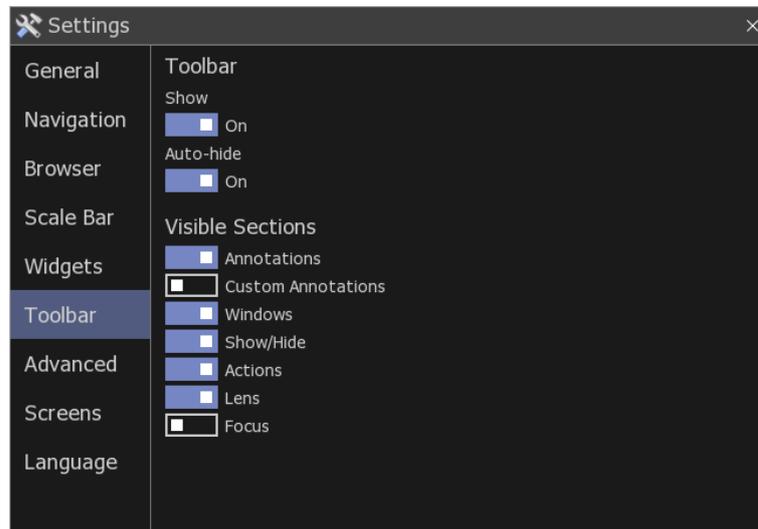


Figure 7-83

- ① Checking “Show” can be showing toolbar.
- ② Checking “Auto-hide” can be set the display style to auto-hide.
- ③ Checking “Annotations” can be showing “Annotations”.

- ④ Checking “Custom Annotations” can be showing “Custom Annotations”.
- ⑤ Checking “Windows” can be showing “Windows”.
- ⑥ Checking “Show/Hide” can be showing “Show/Hide”.
- ⑦ Checking “Actions” can be showing “Actions”.
- ⑧ Checking “Lens” can be showing “Lens”.
- ⑨ Checking “Focus” can be showing “Focus”.

7-4-7 ADVANCED SETTING

The advanced setting can be set by selecting the settings.

- (1) Open the setting window.
- (2) Click “Advanced” and change setting any actions.

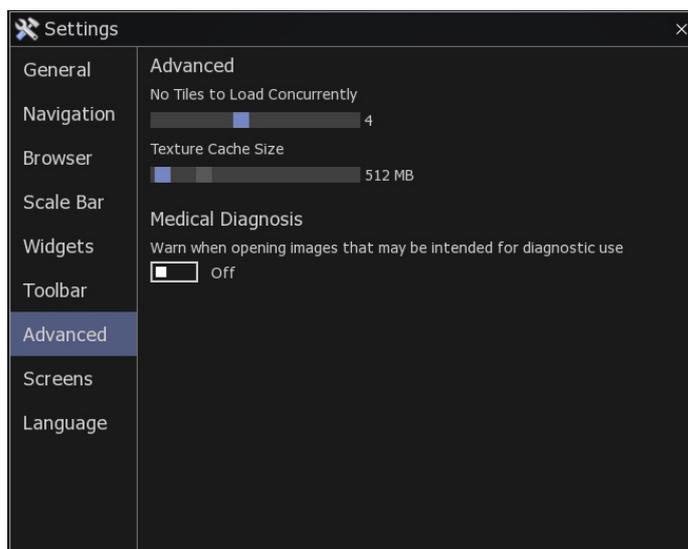


Figure 7-84

7-4-7-1 ADVANCED

- (1) No Tiles to Load Concurrently

Set for the concurrent tile of the lading images.
The response speed of display will be improved by lower threads. Otherwise, it is usually set on “4”.

- (2) Texture Cache Size

Set for the texture cache size.

7-4-7-2 MEDICAL DIAGNOSIS

- (1) Warn when opening images that may be intended for diagnostic use

Checking on “Warn when opening images that may be intended for diagnostic use” can display a warning when opening an image for diagnostic use.

7-4-8 SCREENS

You can save the current window layout.

Clicking "Save Layout" saves the current window position at the end of software.

The window will be displayed at the same position at next startup.

7-4-9 LANGUAGE SETTING

The language can be changed by selecting the settings.

- (1) Open the setting window.
- (2) Clicking “Language” and choosing the language displayed.



Figure 7-85

- (3) Restart NDP.view 2

Note

- In order to change language, it is necessary to restart NDP.view 2.

7-4-10 IMAGE CONTROLS

The slide image can customize the appearance of the image by changing the image controls.

(1) Open the Image Controls window

Choosing "Image Controls" from the main menu that placed at upper left or the "I" key of a keyboard will display the Image Control window.

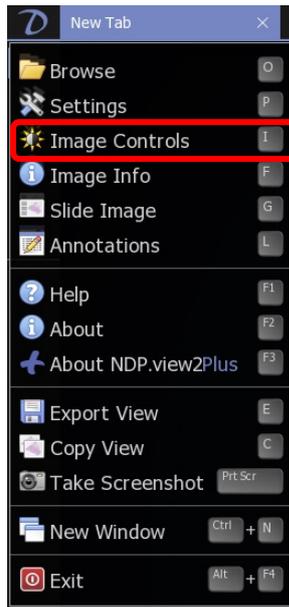


Figure 7-86

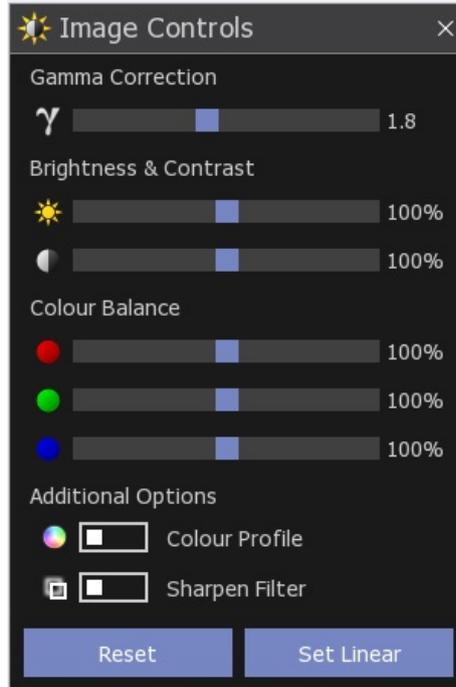


Figure 7-87

(2) Settings

Gamma Correction		Change the gamma correction.
Brightness & Contrast		Change the brightness.
		Change the contrast.
Color Balance		Change the color Balance.
Color Profile		Apply color profile.
Sharpen Filter		Apply sharpen filter
Reset All	Reset the image settings to default.	
Set Linear	Set the image setting to linear mode.	

In case of ndpis format image, you can select the viewing image.

Check boxes of staining method with which you want to display the image.
When you check two or more, the images will be displayed as merged image.

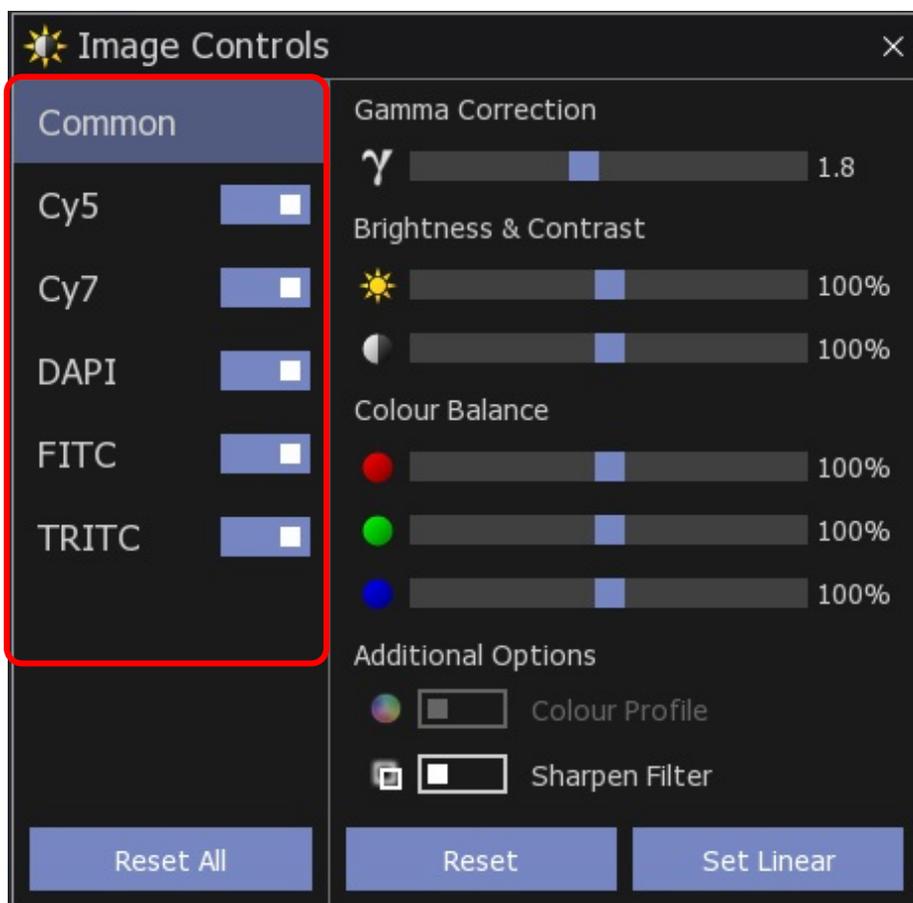


Figure 7-88

Note

- When using NDP.view 2 Plus, you can select the viewing image from the images which have been set in the Extension of the File Format menu. Please refer to Instruction Manual of NDP.view 2 Plus for the details.

- Clicking "x" button at the upper right will close the window.
- Drugging the upper bar of the window can change the window position.
- The windows position are saved automatically, when software closes.

7-4-11 IMAGE INFORMATION

Image information shows the details information of the current slide.

- (1) Open the slide data.
- (2) Open the Image Information window.

Choosing "Image Info" from the main menu that placed at upper left or the "F" key of a keyboard will display the Image information.

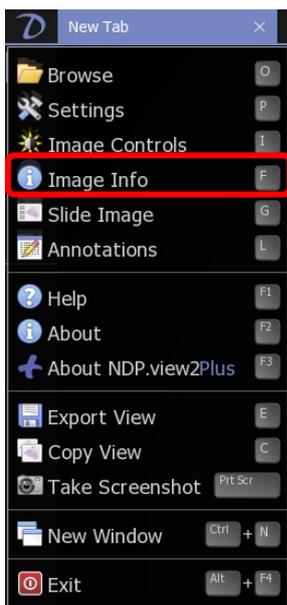


Figure 7-89

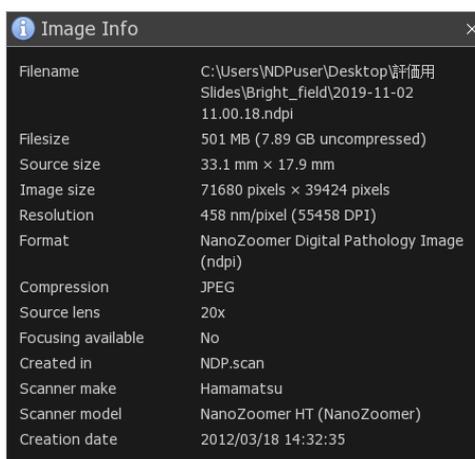


Figure 7-90

- Clicking "x" button at the upper right will close the window
- Drugging the right-bottom of the window can change the window size.
- Drugging the upper bar of the window can change the window position.
- The windows size and position are saved automatically, when software closes

7-5 OPERATION LIST

7-5-1 OPERATION LIST FOR WINDOWS

	Mouse	Keyboard
Help	Main menu > Help	[F1]
Open Slide	Main menu > Browse	[O]
Exit Slide	Tab area > X	[Ctrl]+ [W] [ESC]
	Right-Click in the tab area > Close	
Exit Software	Upper-right of the screen > X	[Alt] + [F4]
	Main menu > Exit	
Tool widget *1	—	[T]
Move Slide	Left-Drug	[←], [→], [↑], [↓]
	Left-Click (in Map image)	
	Joy stick widget	
Magnification	Mouse wheel	[+],[−], [1]~[8] *2 [1] =1.25x [5] =20x [2] =2.5x [6] =40x [3] =5x [7] =80x [4] =10x [8] =160x
	Right-Drug (allow in Map image)	
	Double-Click	
	Lens widget	
Focus Plane	[Ctrl] + Mouse wheel	[Page Up],[Page Down]
Rotation	View widget	[R] each 90 degree [Ctrl]+ [←], [→]
Mirror Image	Mirror widget	[Alt] + [M]
Flip Image	—	[Alt] + [F]
Reset Image	—	[Space] , [0]
Split Screen	Right-Click in the tab area	—
Synchronize	Split menu > Synchronize	[Sift]+ [S]

	Mouse	Keyboard
Desynchronize	Split menu > Desynchronize	[Sift]+ [S]
Close window	—	[Esc]
Multi Window	Main menu > New Window	[Ctrl]+ [N]
Synchronize all	Main menu > Synchronize All	—
Desynchronize all	Main menu > Desynchronize All	—
Show/Hide Annotation	—	[A]
Show/Hide Annotation list	—	[L]
Add Annotation	Right-Click Menu > Select Annotation type	—
Go to Annotation	Right-Click on the Annotation > Annotation menu > Go To	—
Edit Annotation	Right-Click on the Annotation > Annotation menu > Edit	—
Move Annotation	Right-Click on the Annotation > Annotation menu > Move	—
Copy Annotation	Right-Click on the Annotation > Annotation menu > Copy	—
Cut Annotation	Right-Click on the Annotation > Annotation menu > Cut	—
Delete Annotation	Right-Click on the Annotation > Annotation menu > Delete	—
Paste Annotation	Annotation menu > Paste	[V]
Export Annotations	Annotation menu > Export	[Alt] + [E]
Enable Tracking	Map menu > Enable Tracking	—
Show Track Map	Map menu > Show Track Map	—
Reset Track Map	Map menu > Reset Track Map	—
Bird's Eye View	—	[W]
Map Image	Right-Click Menu > Export Image > Show/Hide Map	[M]
Scale Bar	Right-Click Menu > Export Image > Show/Hide Scale bar	[B]
Change Scale Bar types	—	[Ctrl] + [B]

	Mouse	Keyboard
Glass Slide image	Main menu > Slide Image	[G]
Export view	Main menu > Export Image	[E]
Export Image	Right-Click Menu > Export Image	[Ctrl] + [E]
Copy View	Main menu > Copy View	[C]
Copy Image	Right-Click Menu > Copy to Clipboard	[Ctrl] + [C]
Screenshot	Main menu > Take Screenshot	[Print Screen]
Settings	Main menu > Settings	[P]
Image Control	Main menu > Image Controls	[I]
Image Information	Main menu > Image Info	[F]
Move to the next tab Back to the previous tab	—	[Ctrl]+[Tab] [Ctrl]+ [Shift]+[Tab]
Open the next slide Open the previous slide	—	[Tab] [Shift]+[Tab]

*1: Lens widget and Focus widget.

*2: Lens menu and shortcut key are different depend on the scan mode when you take the image.

Note

- Please refer each chapter for details.

7-5-2 OPERATION LIST FOR MACOS

	Mouse	Keyboard
Help	Main menu > Help	[F1]
Open Slide	Main menu > Browse	[O]
Exit Slide	Tab area > X	[Ctrl]+ [W] [ESC]
	Right-Click in the tab area > Close	
Exit Software	Upper-right of the screen > X	[Command] + [Q]
	Main menu > Exit	
Tool widget *1	—	[T]
Move Slide	Left-Drug	[←], [→], [↑], [↓]
	Left-Click (in Map image)	
	Joystick widget	
Magnification	Mouse wheel	[+],[−], [1]~[8] *2 [1]=1.25x [5]=20x [2]=2.5x [6]=40x [3]=5x [7]=80x [4]=10x [8]=160x
	Right-Drug (allow in Map image)	
	Double-Click	
	Lens widget	
Focus Plane	[Ctrl] + Mouse wheel	[Page Up],[Page Down]
Rotation	View widget	[R] each 90 degree [Option] + [←], [→]
Mirror Image	Mirror widget	[Option] + [M]
Flip Image		[Option] + [F]
Reset Image	—	[Space], [0]
Split Screen	Right-Click in the tab area	—
Synchronize	Split menu > Synchronize	[Sift]+ [S]
Desynchronize	Split menu > Desynchronize	[Sift]+ [S]

	Mouse	Keyboard
Close window	—	[Esc]
Multi Window	Main menu > New Window	[Command] + [N]
Synchronize all	Main menu > Synchronize All	—
Desynchronize all	Main menu > Desynchronize All	—
Show/Hide Annotation	—	[A]
Show/Hide Annotation list	—	[L]
Add Annotation	Right-Click Menu > Select Annotation type	—
Go to Annotation	Right-Click on the Annotation > Annotation menu > Go To	—
Edit Annotation	Right-Click on the Annotation > Annotation menu > Edit	—
Move Annotation	Right-Click on the Annotation > Annotation menu > Move	—
Copy Annotation	Right-Click on the Annotation > Annotation menu > Copy	—
Cut Annotation	Right-Click on the Annotation > Annotation menu > Cut	—
Delete Annotation	Right-Click on the Annotation > Annotation menu > Delete	—
Paste Annotation	Annotation menu > Paste	[Ctrl] + [V] [Command]+ [V]
Export Annotations	Annotation menu > Export	[Option] + [E]
Enable Tracking	Map menu > Enable Tracking	—
Show Track Map	Map menu > Show Track Map	—
Reset Track Map	Map menu > Reset Track Map	—
Bird's Eye View	—	[W]
Map Image	Right-Click Menu > Export Image >Show/Hide Map	[M]
Scale Bar	Right-Click Menu > Export Image >Show/Hide Scale bar	[B]
Change Scale Bar types	—	[Ctrl] + [B] [Command]+ [B]

	Mouse	Keyboard
Glass Slide image	Main menu > Slide Image	[G]
Export View	Main menu > Export Image	[E]
Export Image	Right-Click Menu > Export Image	[Ctrl] + [E] [Command]+ [E]
Copy View	Main menu > Copy View	[C]
Copy Image	Right-Click Menu > Copy to Clipboard	[Ctrl] + [C] [Command]+ [C]
Screenshot	Main menu > Take Screenshot	[Command]+[Shift]+[3]
Settings	Main menu > Settings	[P]
Image Control	Main menu > Image Controls	[I]
Image Information	Main menu > Image Info	[F]
Move to the next tab Back to the previous tab	—	[Ctrl]+[Tab] [Ctrl]+ [Shift]+[Tab]
Open the next slide Open the previous slide	—	[Tab] [Shift]+[Tab]

*1: Lens widget and Focus widget.

*2: Lens menu and shortcut key are different depend on the scan mode when you take the image.

Note

- Please refer each chapter for details.

8. BROWSE IMAGES for IMAGE SERVER

8-1 BROWSING

You can browse the digital slide files that you have been given permission to view on the image server (NZConnect or NDP.serve3) by the following methods;

(1) Browse with NDP.view 2

The image can be seen in full-screen mode with NDP.view 2 software. It is necessary to install NDP.view 2 software in the PC.

Note

- Please refer to section "8-2 BROWSE WITH NDP.view 2 SOFTWARE" for this details

(2) Browse with Web Viewer

The image can be seen with Web Viewer in the browser. It is not necessary to install NDP.view 2 software in the PC.

Note

- Please refer to section "8-3 BROWSE WITH WEB VIEWER" for this details

When you access the images of the image server for the first time, the following dialog box will appear on your screen. Choice either of the viewers and display the image.



Figure 8-1

Note

- The viewer is changeable. Please refer to the image server (NZConnect or NDP.serve3) manual for details.

Note

- When you browse the images on the image server, you may be restricted some part of operations because of no access permission. With respect to access permission, please contact your local the image server administrator.

8-2 BROWSE WITH NDP.VIEW 2 SOFTWARE

The image can be seen in full-screen as well as NDP.view 2 software. It is necessary to install NDP.view 2 software in the PC.

Note

- If NDP.view 2 has already installed, no necessary to install again.

(1) Download NDP.view 2 software.

When you access to the image server, the following screen appears.

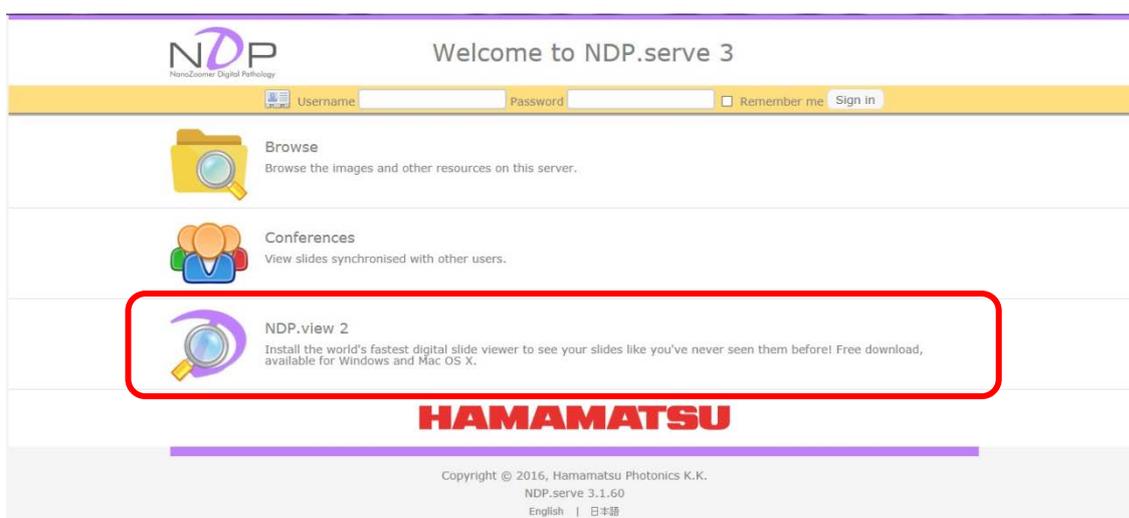


Figure 8-2

Selecting “NDP.view 2” will start the downloading of NDP.view 2 software.

The download site in HAMAMATSU home page will display depend on the settings of NDP.serve3. Download the software for your OS.

Note

- Please install according to the instructions of “5 INSTALL AND UNINSTALL”.

The browse operation is same as NDP.view 2 software.

8-3-2 MAIN WINDOW

On the Web Viewer, the tool bar for menu window is displayed at the left of a screen.



Figure 8-5

Menu window are appeared by putting a mouse pointer on the tool bar.

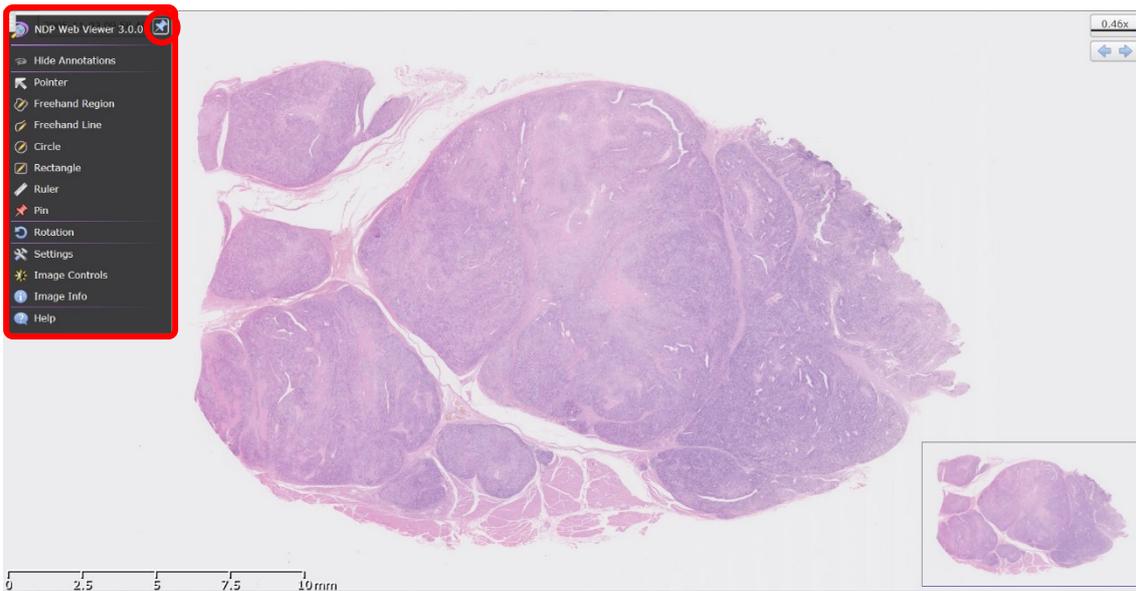


Figure 8-6

To minimize the tool bar, click the pin mark at the upper right of the menu window.



Figure 8-7

8-3-3 DIGITAL SLIDE FILES OPERATION

The operation method of Web Viewer is same as NDP.view 2 except for some functions.

8-3-3-1 Rotate Operation

As with NDP.view 2, "R" key make the image rotate each 90 degrees. (The rotation direction is different from NDP.view 2.)

Enter a viewing angle in Rotation window displayed by selecting the "Rotation" from main menu or pressing "Alt"+"R" or "Ctrl"+"R" keys.

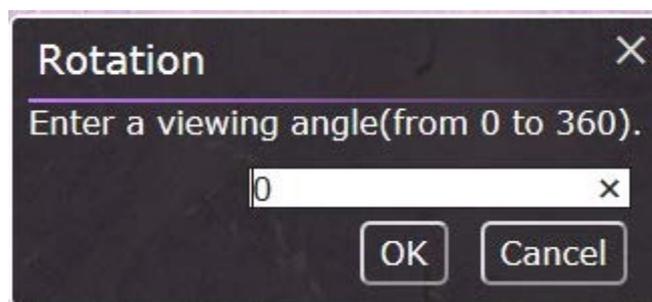


Figure 8-8

8-3-3-2 Export and copy

You can export the image only at current magnification by JPEG format.

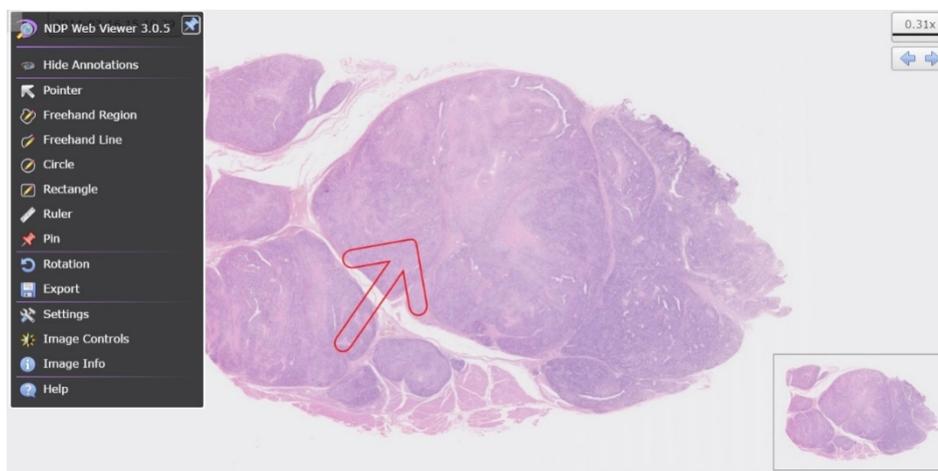


Figure 8-9

9. SOFTWARE USER AGREEMENT

In order to use this software the user must agree to the following terms and conditions. Always be sure to read these terms before use.

9-1 COPYRIGHTS

All ownership rights, intellectual property rights and all other rights relating to this software and instruction manual are the property of Hamamatsu Photonics K.K. (hereafter called "Hamamatsu"). Except for those items expressly permitted in this user agreement, Hamamatsu does not assign or grant any rights to the user, and Hamamatsu retains all rights relating to this software and instruction manual.

9-2 SCOPE OF USAGE RIGHTS

Hamamatsu grants the user non-exclusive rights to use of this software subject to the following conditions.

- (1) User may install and use this software on the several computers with the intended use for observing the digital slides acquired by the NanoZoomer.
- (2) User may copy this software with the intended use for making a backup or observing the digital slides acquired by the NanoZoomer.
- (3) User may not analyze, change or modify this software.

9-3 SCOPE OF WARRANTY LIMITED WARRANTY

- (1) If the storage media containing this software is found to be defective during the warranty period and this software does not properly function, then this software will be replaced free of charge or a substitute product given to the user.
- (2) Hamamatsu accepts absolutely no liability in any case whatsoever, for damages or losses arising directly or indirectly relating to or incidental to use of this software.
- (3) If an error (bug) is discovered in this software and is corrected, then the corrected software or software for making the correction (hereafter written as "correction software") or information relating to making the correction will be provided. However, the necessity, the time, and the period for providing the correction software or information relating to the correction will be decided at the discretion of Hamamatsu.

9-4 DISCLAIMER OF LIABILITY FOR DAMAGES

The legal liability of Hamamatsu including warranty against defects relating to this software and its usage is limited to the contents of this software user agreement. Hamamatsu shall not be liable to provide compensation for any damage or loss resulting from using this software, including direct, indirect or incidental damages or losses to the user. This holds true even if Hamamatsu or its suppliers have been advised of the possibility of such damages or losses.

9-5 GOVERNING LAW

This software user agreement shall be governed by the laws of Japan.

9-6 OTHERS

If a conflict or doubt should arise regarding this user license agreement or items not established within this user license agreement, then that matter shall be resolved by mutual consultation carried out in good faith by both parties. In the event a lawsuit should arise, it shall be resolved by a court of law having jurisdiction in the area where the head office of Hamamatsu Photonics is then located.

10. CONTACT INFORMATION

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