



Document Number:	SASoM/EQUIP/101.v1
Title:	Use of Leica SCN 400 Scanner
Version:	v1
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Effective from:	01/03/17
Valid to:	28/02/22

SOP History		
Number	Date	Reason for Change
v1		Original

1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use and maintenance of Leica SCN400 scanner in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies to routine use and maintenance of Leica SCN400 scanner within the SASoM.

3.0 Responsibilities –

It is the responsibility of all users of Leica SCN400 scanner within the SASoM to comply with this SOP.

4.0 Procedure –

4.1 Switching on Scanner and Computer

4.1.1 Order for switching on scanner and computer:

- 1.QSNAP Memory Buffer: Should be on and left on, if not, turn this on first - will take some time to stabilise,
- 2.Scanbox: Press and hold button on front of Scanbox – green light will come on.
- 3.Scanner PC: Turn on the PC and Monitor



Equipment Operation Procedure

4.Scanner: Initialises by itself after Scanbox is turned on (sometimes requires software to be opened before initialisation. Light on scanner turns green. While initialising the second light on scanner will flash orange. When the scanner is ready both lights will shine green.

4.1.2 Username and Password to log onto computer:

Username: dih_slidepath

Password: Svc11023.spDIH

4.1.3 Open Software:

Double click on the SCN400 Client icon (will take a few moments to open)



Log on details for software:

User name: dih_slidepath

Password: Svc11023.spDIH

4.2 Loading and pre-scanning

4.2.1 Loading slides:

Insert the slides into the slide tray and then the slide tray into the scanner.

If the tray is inside the machine and not visible:

Go to "Setup" menu in software and press Eject:

Prior to scanning; naming and exporting images

Click on "Configuration" Drop down menu and select "Options"

4.2.2 Auto Naming:

Click on the "Auto Naming" tab and in "Entity Selection" window select "ImageCollection (User)" from the dropdown menu.

Click "Edit" in the "Entity data" window and enter the name you want to call the slide collection in the "Stem" dialogue box.

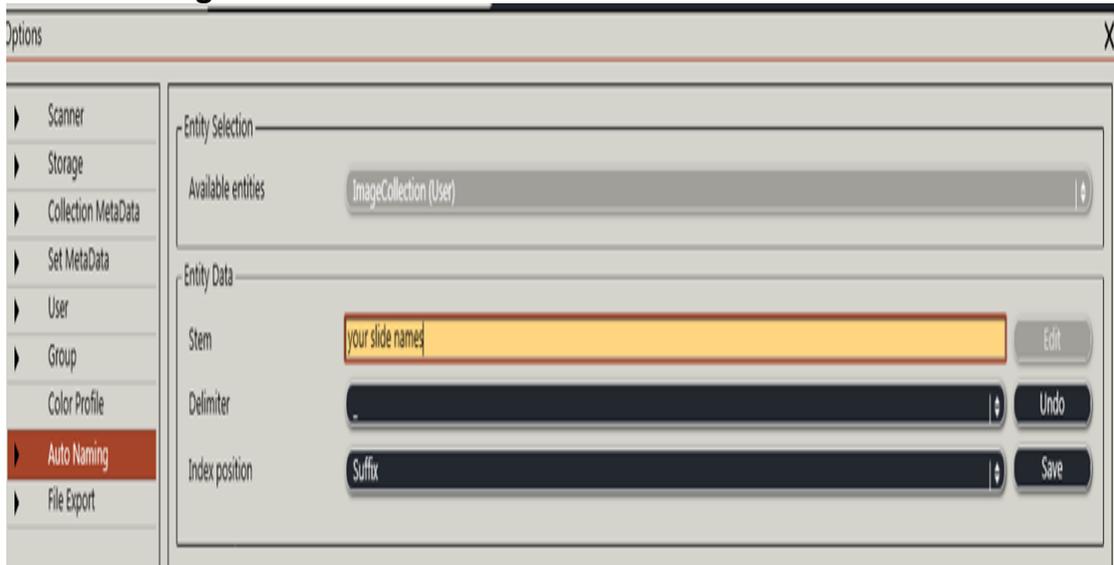
You can only use one stem for each scan run and a suffix of 1,2,3 or 4 will appear after the stem to identify individual slide images.

Click "Save" when complete.



Equipment Operation Procedure

Auto Naming window:



File Export:

Click on the “File Export” tab in Options and press “Edit” in the “File Export Data” window

Check the box “Export after Overview and Scan”

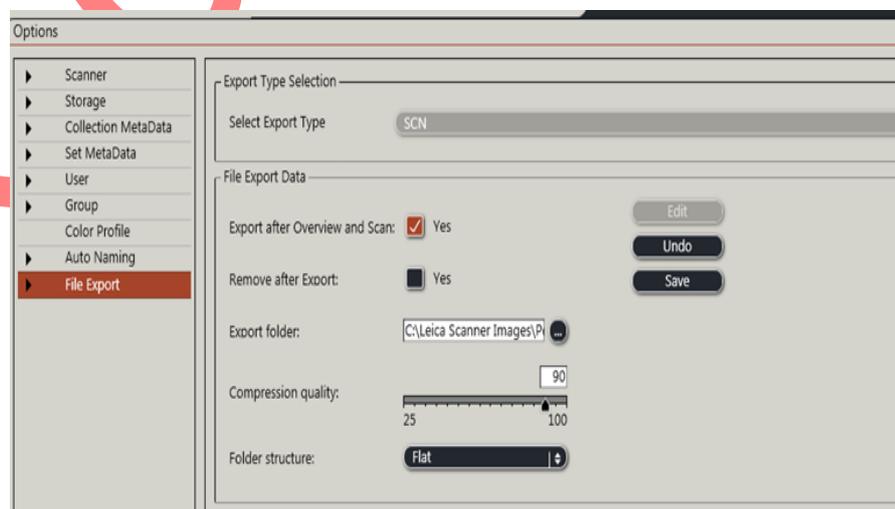
In the Export folder browser box click the three dots “...” and browse to the folder you want the images to be exported to.

Compression Quality should be between 85-100%

Press Save

Press Close (bottom right of screen)

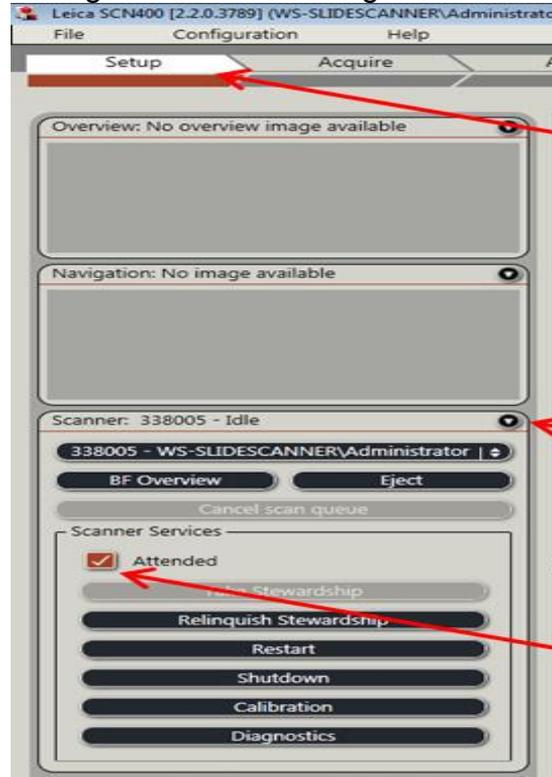
File Export window:





4.3 Manual Scanning BF overview:

Within the “Setup” Menu of the software and under “Scanner” window ensure the full window is displayed by pressing the arrow at the right so it is facing downward.

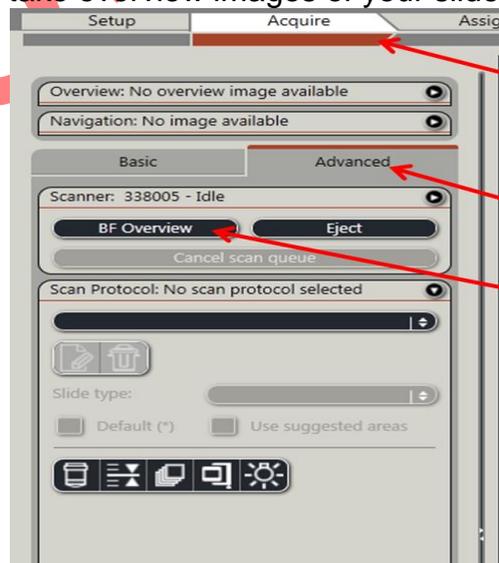


Next ensure the “Attended” box is checked

Now switch to the “Acquire” Menu and the “Advanced” window

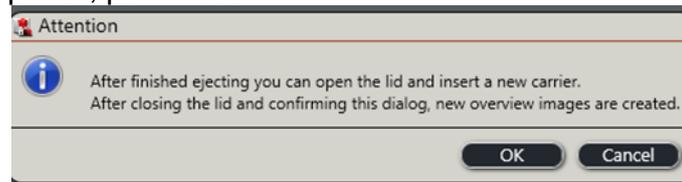
Press “BF Overview”

This will load the slides and take overview images of your slides.



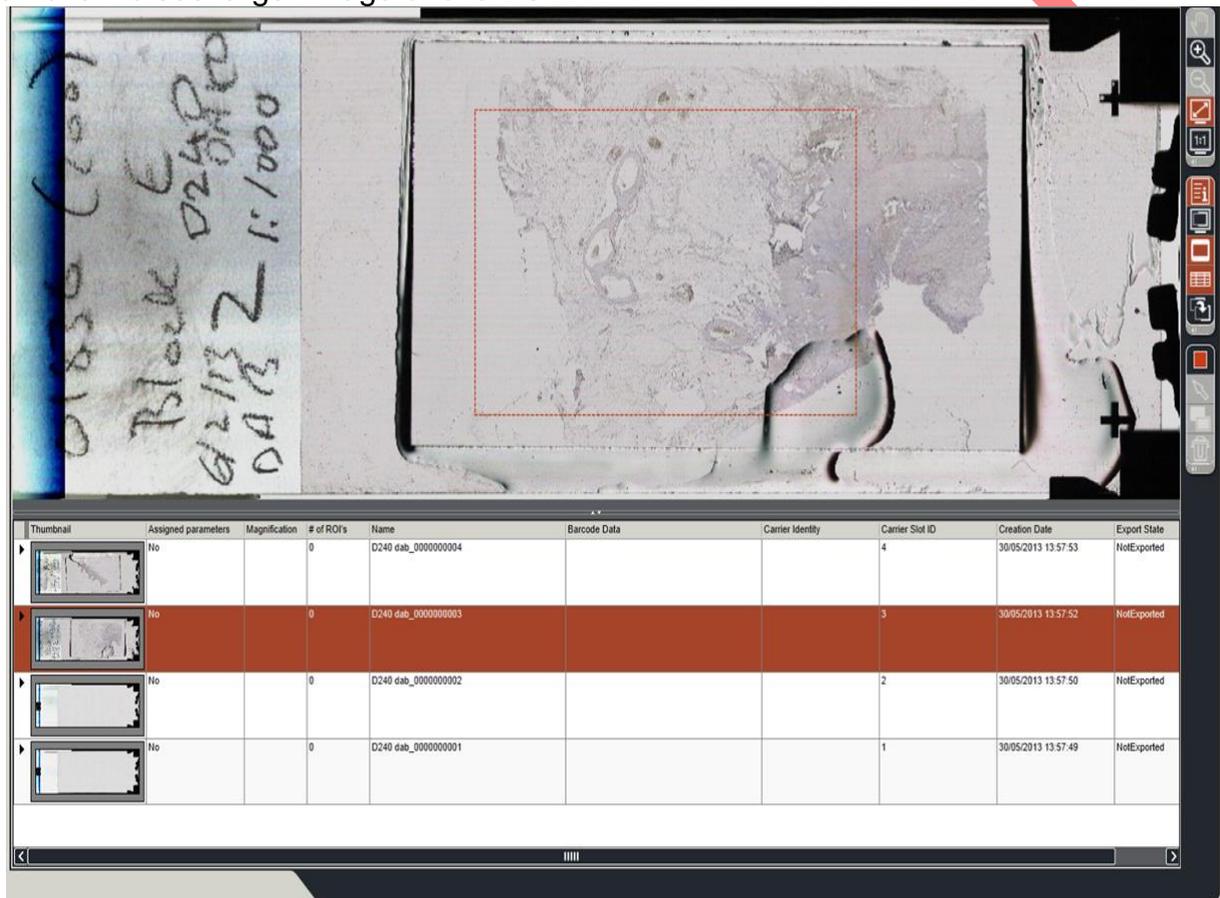
Equipment Operation Procedure

If this Attention box appears, press OK



The orange light on the SCN400 will flash indicating the platform is scanning

The low magnification overview slides will now appear in the thumbnail window, click on thumbnail to see larger image of overview:



4.4 Manual Scanning High magnification

4.4.1 Left Click on your 1st overview thumbnail you wish to image:

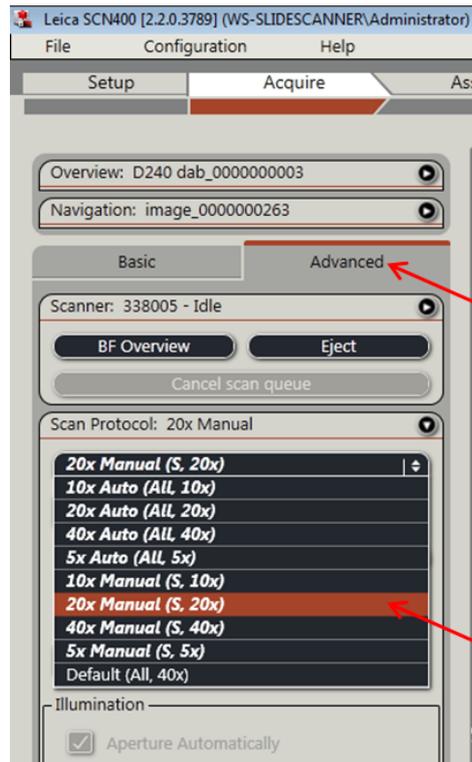
Select the "Advanced" tab

In the "Scan protocol" window, select the magnification you would like to scan at from the dropdown menu:

5x, 10x, 20x, 40x – ensure the it is the Manual version NOT the Advanced

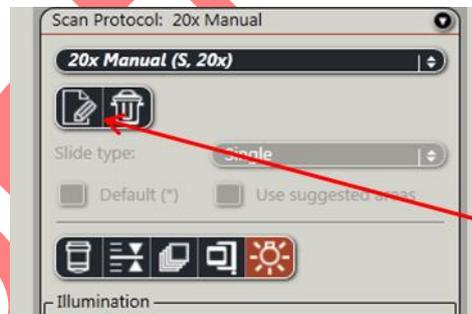


Equipment Operation Procedure



If the red dotted rectangle on your overview slide image is not over the area you wish to scan then:

Click the edit button in Scan Protocol window:

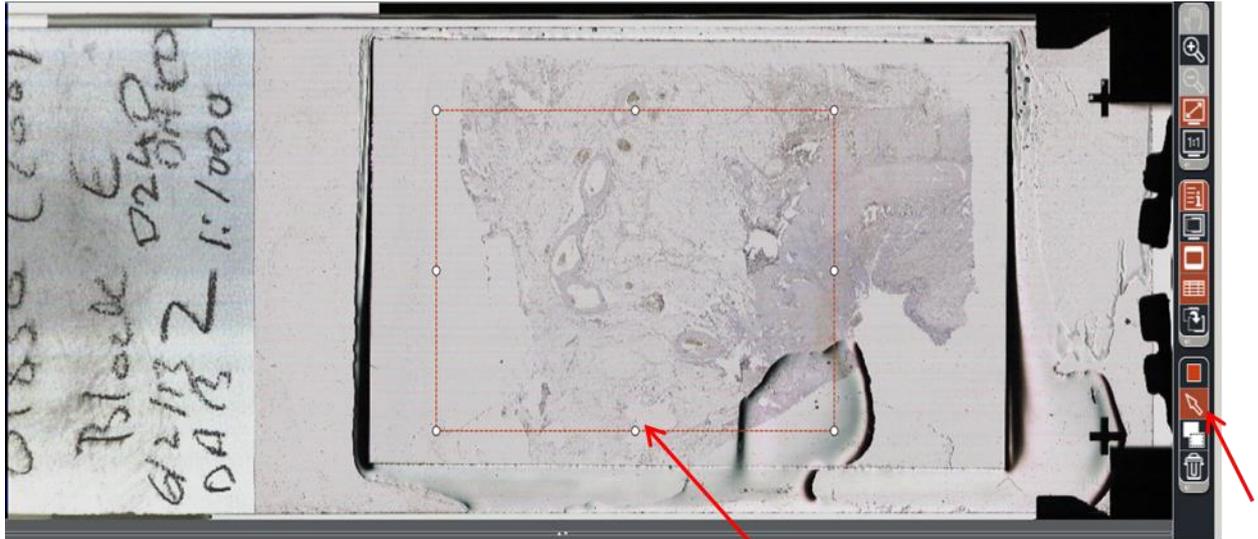


On the far right of the image window press the arrow icon

Now move the arrow with the mouse onto the red dotted rectangle so that the white circles appear on it

Reshape the dotted outline using the mouse so that it encompasses the desired scan area.

Equipment Operation Procedure

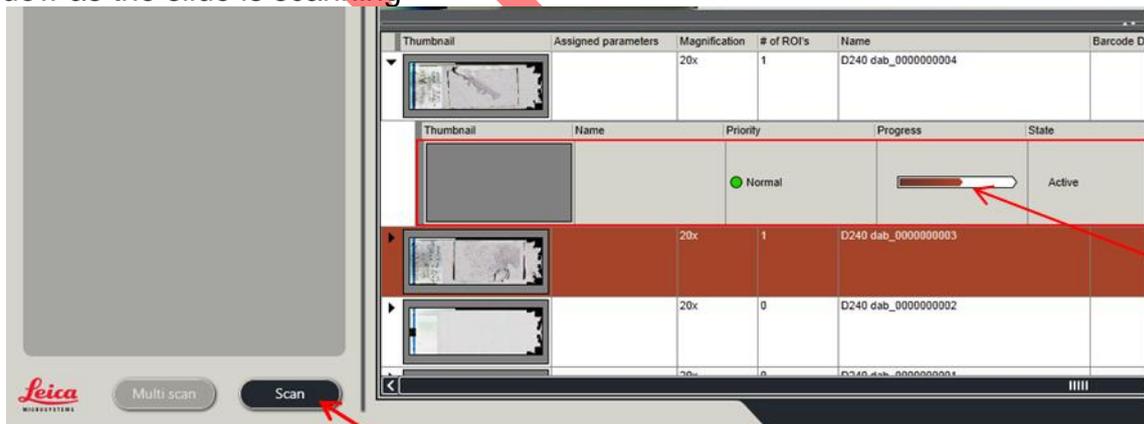


To add a new scan area to the same slide press and draw the new scan area.



Press Save in the Scan Protocol window

Press Scan at the bottom left of the screen; a progress bar will appear in the thumbnail window as the slide is scanning



The Orange scan light will flash at the front of the instrument to show that the scanner is operating

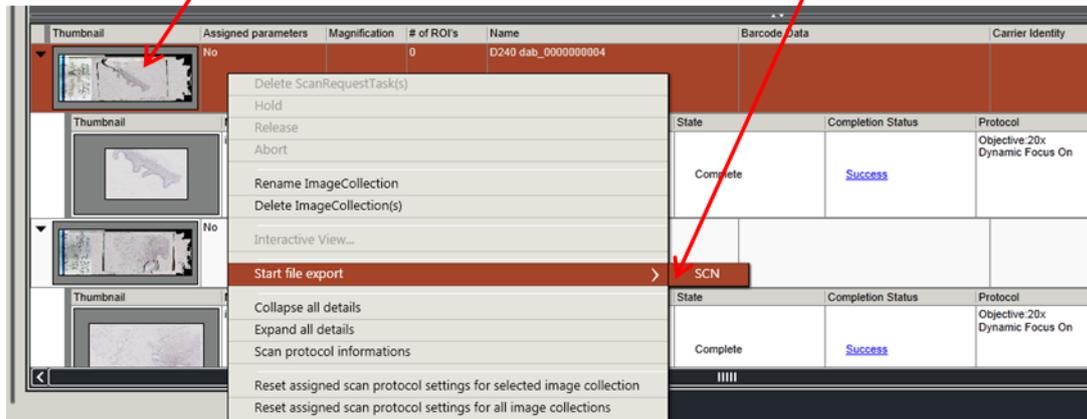
4.4.2 Click on your 2nd overview thumbnail and repeat process D.



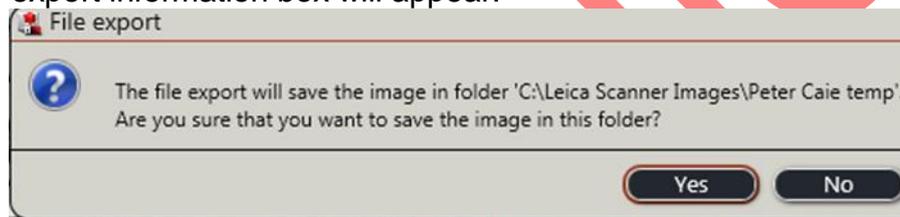
Equipment Operation Procedure

Manual Exporting of images

Right click on the overview thumbnail (not the hi-resolution thumbnail) of the image you wish to export and highlight “Start file export” then highlight “SCN”



A File export information box will appear:



Ensure that the export directory is correct and press OK.

4.5 Switching off Scanner and Computer

After scanning is finished the scanner may be shut down in the software.

The Scanner may also be shutdown by pressing and holding the ON/OFF button (with green light in centre) on the front of the Scan Box – NOT the scanner itself.

Once the scanner is shutdown the PC and monitor can be switched off

Leave the QSNAP Memory Buffer on.

5.0 Personal protection –

- Howie coat must be worn at all times.

6.0 Training –

All users have to be trained before using the Instrument by a designated person.

7.0 Related documents –

7.1 Risk assessments – RA/MH/002, COSHH/008



8.0 Approval and sign off –

Author:

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Signature:

Date:

Management Approval:

Name: Mary Wilson

Position: Laboratory Manger

Signature:

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QA release by:

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Signature:

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Confidential