



SURGIVERSE

Web Planning

User Guide

Surgiverse[®] Web Planning / CYSWARE 4H[®]

English version for USA only

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The user should consult the instructions for use before using the Abys® Medical Surgiverse® Web-Planning (referred to below as Surgiverse® Web-Planning).

In the following document, Abys® Medical Cysware® 4H is also called Surgiverse® Web-Planning. Both denominations refer to the same product.







I. Description

Abys® Medical Surgiverse® Web Planning allows the user to log in to a secure space to centralize the documents that are useful for planning an operation. On this space he/she can register each patient who needs a surgical act. A patient file is automatically created with patient's data. One patient may have one or more planning assistance files (PAF). Each planning assistance file is specific to a patient surgery and allows the information necessary to perform the surgical procedure to be centralized, while at the same time meeting the patient's anatomical specificities.

A planning assistance file can be remotely shared and completed with other surgeons, at a distance, simultaneously or not.

Abys® Medical Surgiverse® Web Planning is compatible with Abys® Medical Surgiverse® Digital Cockpit (see specific instructions for use of Abys® Medical Surgiverse® Digital Cockpit).

II. Condition before use

-  Precaution of use: Abys® Medical Cysware® 4H should only be used in the following up-to-date browsers: Chrome, Firefox, Safari or Edge.
-  Precaution of use: The user's workstation must meet the following minimum requirements: Windows 10 (32/64 bits) and 4 GB of RAM.
-  Precaution of use: Abys® Medical Cysware® 4H must not be used from a mobile device to create or modify a PAF.
-  Precaution of use: Abys® Medical Cysware® 4H must be used on devices authorized for the user by his/her institution's security policy. The security policy of his/her institution must guarantee that his/her computer network and workstation are secure. Workstations should have timely security patches and updates, necessary anti-virus software, firewalls and other protection.
-  Precaution of use: The user must ensure that he/she has a good quality internet connection with a speed of at least 50 Mbit/s before connecting to Abys® Medical Cysware® 4H webpage and throughout his/her use of the platform.
-  Precaution of use: The user must carefully read all the warnings and errors that appear on the software. Caution: Most alerts are blocking.

- ⚠️ Precaution of use: The use of weblinks is only intended as support prior to surgery. Therefore, the weblinks are only available in Cysware® 4H and not in Cysart® 4H.
- ⚠️ Precaution of use: When working collaboratively on the same series, the following parameters can affect other users: MPR axes, window width, window level and segmentation manipulation
- ⚠️ Precaution of use: A DICOM can only be uploaded if it meets the following criteria:
 - Be a file in ZIP format ending in ".zip", or a directory containing DICOM images
 - Images must be CT modality only
 - Contain the information of only one patient
 - Have a maximum size of 2GB
 - Be complete with no missing slice
- ⚠️ Cautions: It is necessary for the recipient to have a Cysware 4H account to perform the sharing
- ⚠️ Cautions: Only patients who meet the criteria detailed in section "Indications" may be selected
- ⚠️ Cautions: Patients meeting the criteria detailed in section "Contraindications" should not be selected.
- ⚠️ Cautions: Abys® Medical Cysware® 4H does not replace the user's medical decision
- ⚠️ Cautions: The user must ensure that the elements imported on Cysware® 4H are secure (pdf, images).
- ⚠️ Cautions: The user must ensure that the added weblinks are secure.
- ⚠️ Cautions: Measurements taken from the Abys® Medical Cysware® 4H web platform are indicative with an accuracy of 1.25mm for distance measurements and 3° for angle measurements
- ⚠️ Cautions: Extraction tools are for informational purposes only and not intended for diagnostic use.

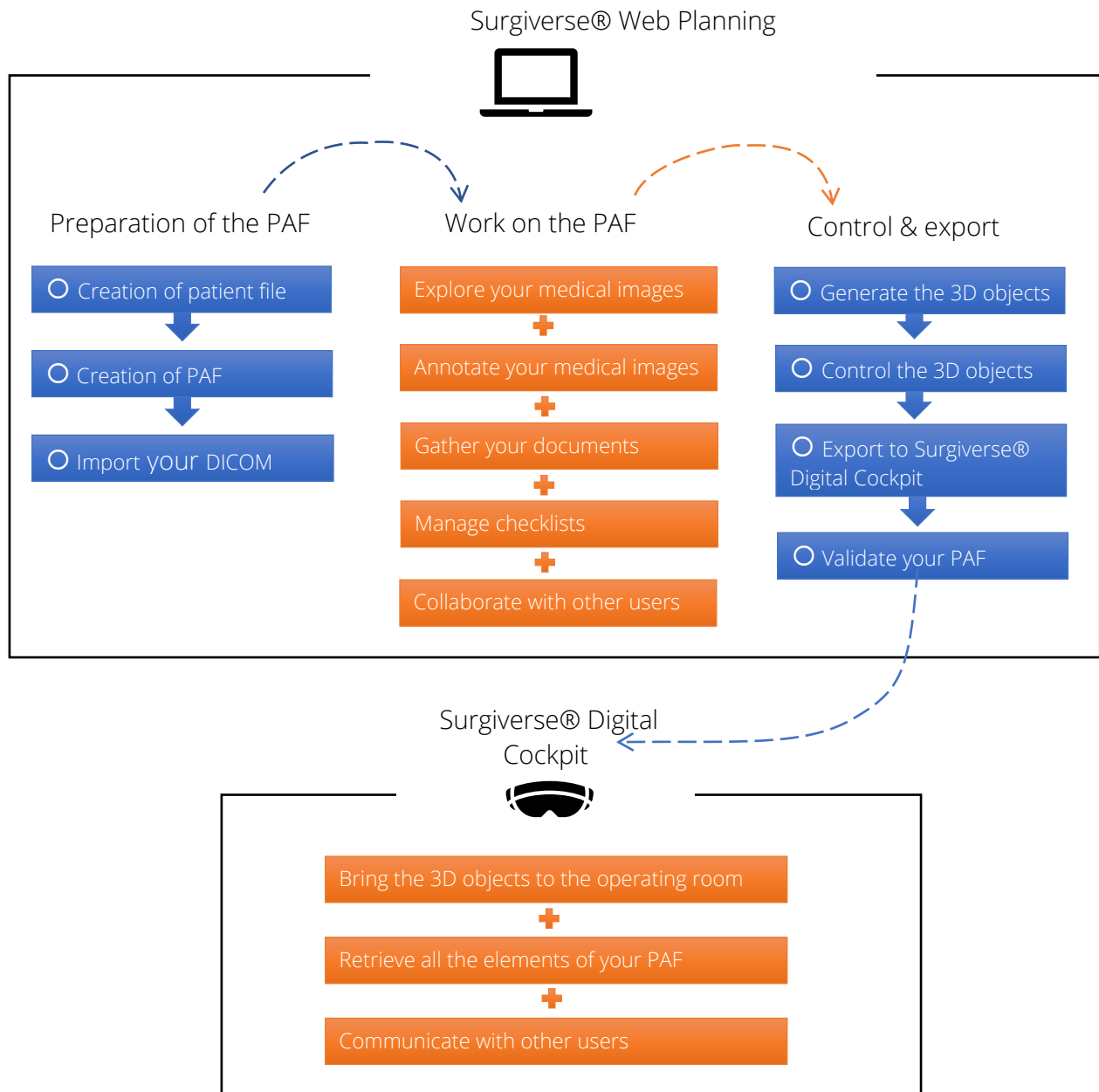
III. General Description

A. Introduction

1. What is Surgiverse Web Planning / Cysware 4H?

Surgiverse® Web Planning is a collaborative platform gathering all the elements used to prepare an operation in a **Planning Assistance File (PAF)** and making them available in mixed reality glasses through Surgiverse® Digital Cockpit.

A PAF is related to a patient. It contains the analysis details performed on **3D models generated from DICOM files (CT Scan)** and other documents.

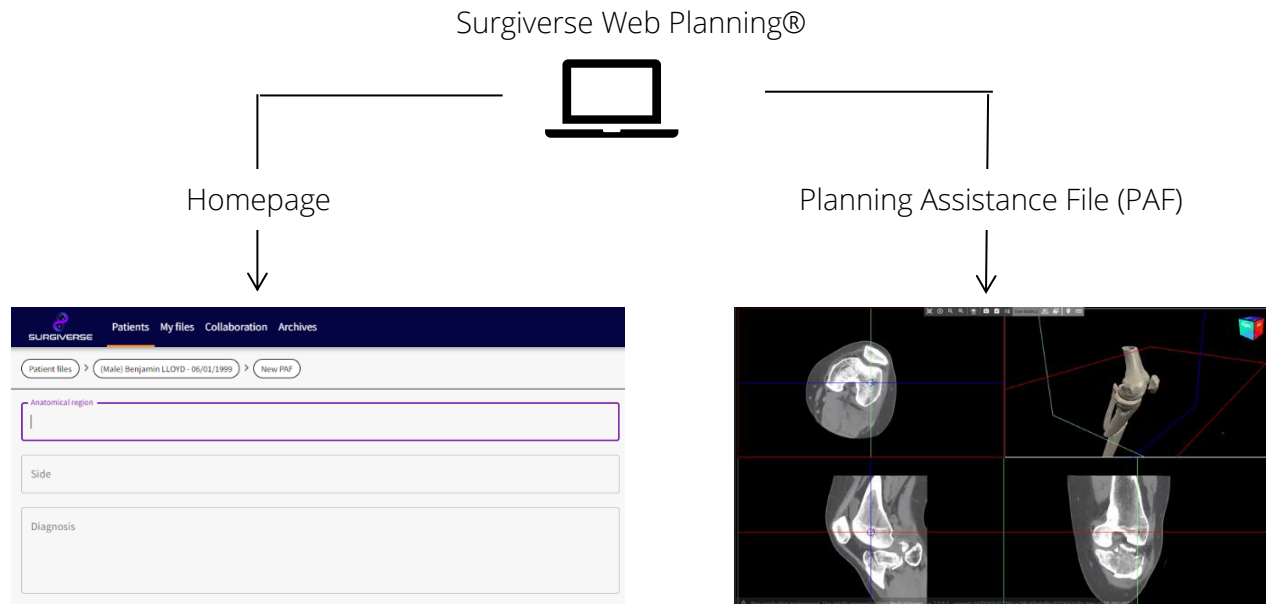


2. How to find my way in the interface?

The interface of the software is structured in two parts.

A part called "**Homepage**", to manage the patients and the PAF. The home page also presents advanced configuration and administration functionalities depending on the user's rights.

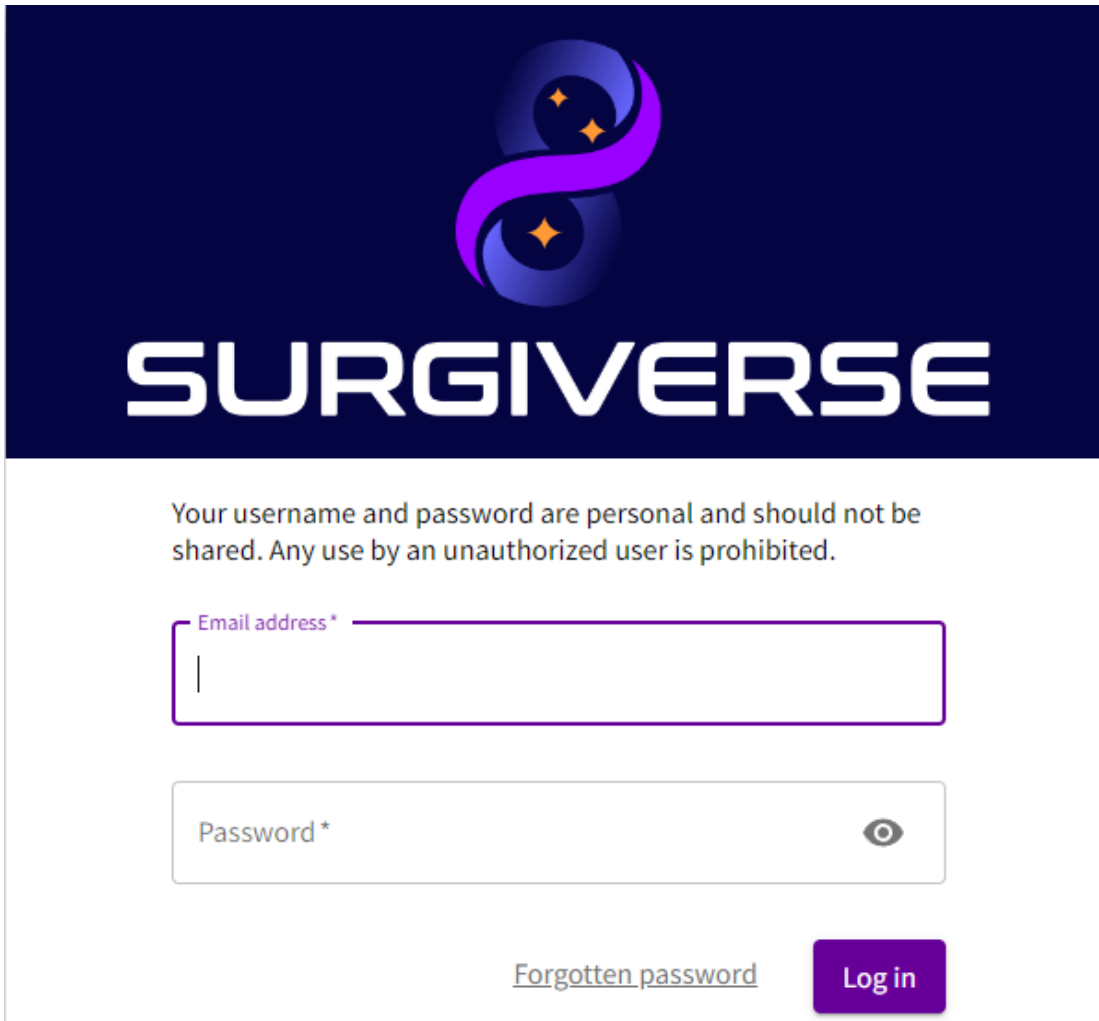
A section called "**Planning Assistance File (PAF)**", to access the tools to work with medical image, annotate it, import documents, collaborate with other users, and send validated elements to Surgiverse® Digital Cockpit.



B. Access and first connection to Surgiverse® Web Planning

(1) Log in Surgiverse® Web Planning

① Open a web browser (Chrome, Safari, Firefox or Edge) and go to the Surgiverse® Web Planning website : <https://planning.surgiverse.ai/> .



Your username and password are personal and should not be shared. Any use by an unauthorized user is prohibited.

Email address*

Password*

[Forgotten password](#)

② Enter your email address and your password.

③ Click on "Log in".

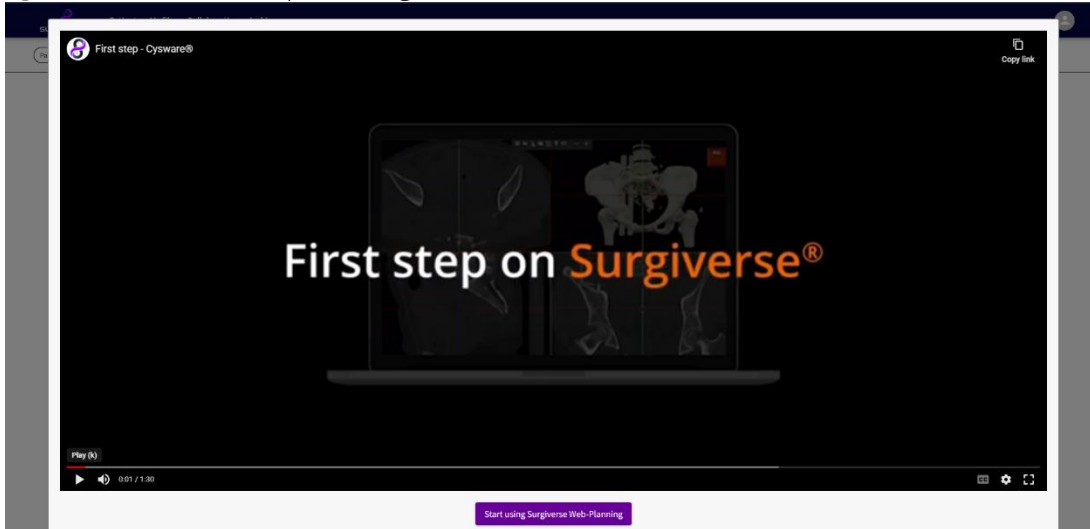
(2) First connection

① Once you received the email confirming the creation of your account, click on the link to activate your account.

② You shall receive a second email, with a link to set your password. For security purposes, the chosen password must meet certain conditions:

- At least 12 characters
- At least one capital letter

- At least one lower case letter
 - At least one number
 - At least one special character (@\$!%*?&#)
- ③ A Welcome email follows the validation of the password.
- ④ Then, when you connect to your Surgiverse® Web Planning account, you must read and accept the terms of Use of Surgiverse® Web Planning.
- ⑤ A video of first step on Surgiverse starts.

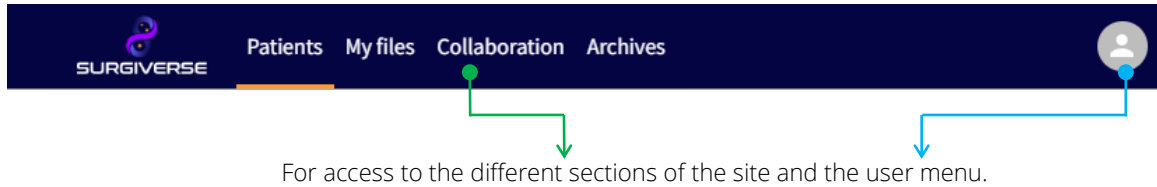


- ⑥ To leave the video presentation, the user can click on "start using Surgiverse® Web Planning".
Note: This video is also available from the user menu.

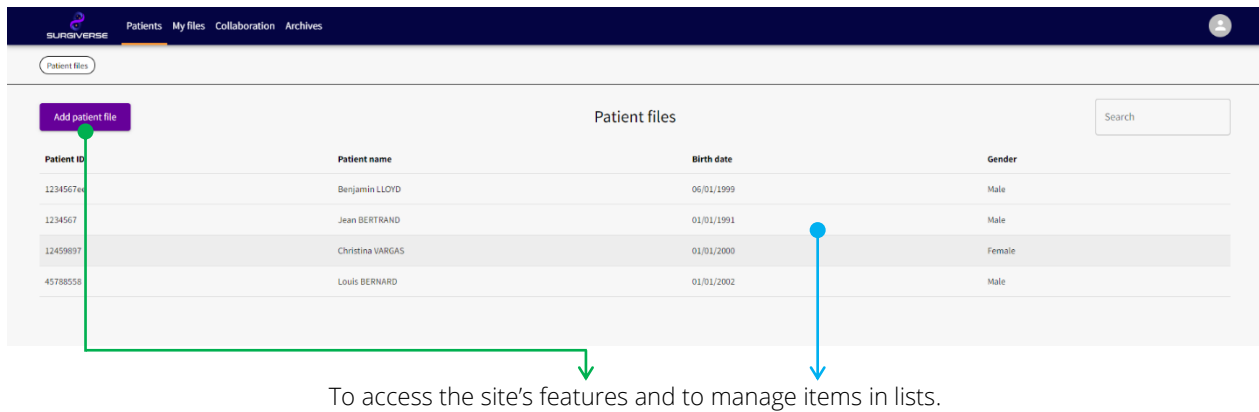
C.Homepage Description

1.The homepage interface is divided in two parts

- A tabbed navigation bar:



- A panel to display the content (mostly in lists):



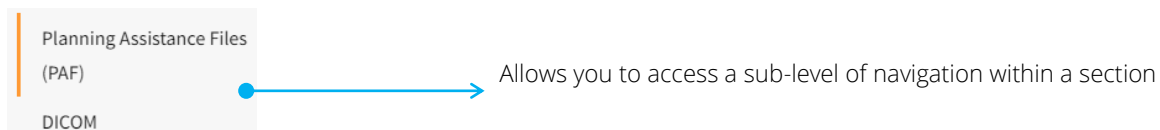
The navigation tabs and options presented in the homepage depend on the profile of the connected user. For example, a Healthcare user will not be able to access the administration tools.

Navigation in the content pages:

- With a breadcrumb trail



- With sub-tabs



2. Access to features from the homepage

The home page has several tabs in the upper part of the interface, they provide access to many following features described in the following table. You can directly open the detailed description of the features by clicking on the links in the "Access to features" column.

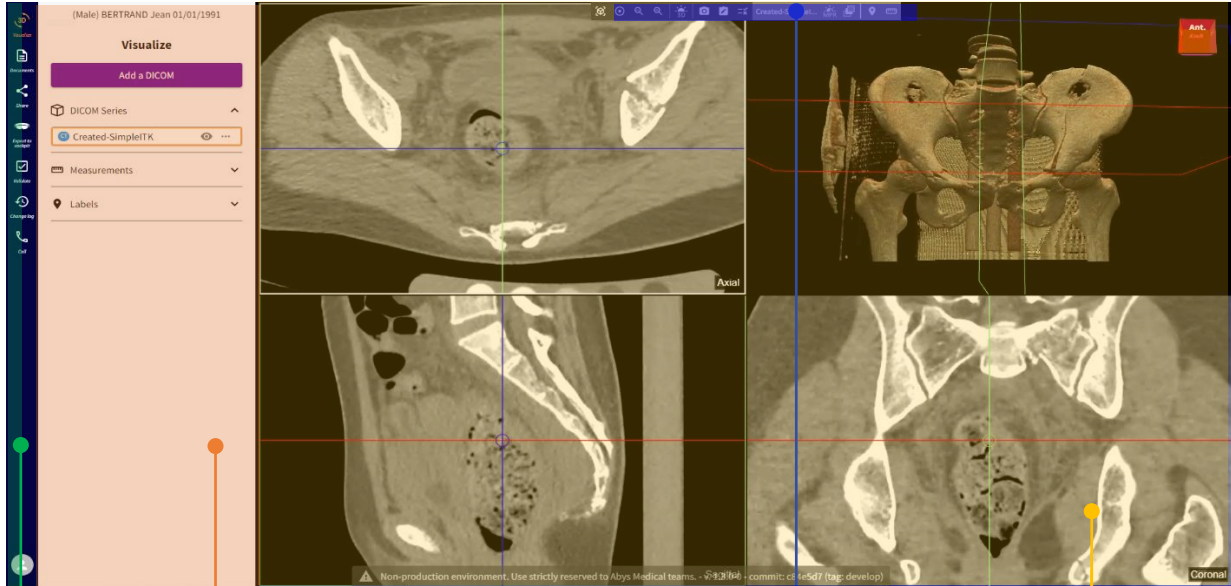
TAB	What can you do?	Access to features
Patient tab	○ Manage your patient files.	Add/Create a patient file Edit a patient file Archive a patient file
	○ Add a DICOM from the patient file.	Add a DICOM from the patient file
	○ Opening a Planning Assistance File (PAF) from a PAF details.	Opening a Planning Assistance File (PAF) from a PAF details Planning Assistance File (PAF) creation from the patient file
My files tab	○ Smart access to Planning Assistance Files using shortcuts.	Opening a Planning Assistance File (PAF) from the "My Files" tab
Collaboration tab	○ Share your PAF.	Share a Planning Assistant File (PAF) from the "Collaboration" tab
	○ Control the access of the shared PAFs.	Update an automatic Share
	○ Access to your teams.	Create a team Edit a team
Archive tab	○ Find previously archived patient file.	Archive a patient file
	○ Unarchive your patient file.	Unarchiving a patient file
User profile	○ Set your status.	Set your status
	○ Manage your preferences about	Change your password

TAB	What can you do?	Access to features
	password, language, and avatar picture.	Change the language Change your avatar picture
	○ Get your access to Surgiverse® Digital Cockpit.	Get access to
	○ Get the user guide.	Documentation access
	○ Get the terms of use.	
	○ Get the Instruction for Use.	
	○ Get the Legal notice.	
	○ Get the information about Abys Medical.	
	○ See the First steps video.	
	○ Log out from Surgiverse® Web Planning.	Log out from Surgiverse® Web Planning.
Administration tab	○ Manage your users.	Administration rights management
	○ Manage your entity.	management
	○ Send alert messages.	Administration rights management

Table 1 - Features from the homepage

D. Planning Assistant File (PAF) Description

1. The Planning Assistant File (PAF) interface is made of four components:









<p>The Navigation bar Access to the different sections of a PAF</p>	<p>The Side bar Management of the 3D objects</p>	<p>The Tool bar Access to the tools</p>	<p>The Viewer Display of the 3D and MPR views</p>
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2. Navigation bar details:

The main functionalities of the PAF are consolidated and organized by category called **PAF sections**. When working on a PAF, the navigation bar allows you to quickly access to the PAF sections and the associated functionalities as described in the table below:

Tab	Description	Shortcut to feature explanations					
	The main section of a PAF. 3D Visualization: view of the medical imaging and managing the items.	<u>Add a DICOM from a Planning Assistant File (PAF)</u>					
		<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Global</td> <td style="text-align: right;">Contextual</td> </tr> <tr> <td colspan="2" style="text-align: right;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%; text-align: center;"><i>Series name</i></td> </tr> </table> </td> </tr> </table>	Global	Contextual	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%; text-align: center;"><i>Series name</i></td> </tr> </table>		
Global	Contextual						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%; text-align: center;"><i>Series name</i></td> </tr> </table>				<i>Series name</i>			
		<i>Series name</i>					

Tab Description Shortcut to feature explanations

	<p>Documents: Upload and visualization of documents.</p>	<p>Add documents to your Planning Assistant File (PAF)</p>
	<p>Share: Manage your shared PAF.</p>	<p>Create a new share from your Planning Assistant File (PAF) Update existing shares from the Planning Assistant File (PAF)</p>
	<p>Export to Surgiverse® Digital Cockpit: Model and select the view that you will be able to display in Surgiverse® Digital Cockpit.</p>	<p>Export to Surgiverse® Digital Cockpit from the Planning Assistant File (PAF)</p>
	<p>Validation: Control of the PAF information.</p>	<p>Validate a Planning Assistant File (PAF)</p>
	<p>Change log; Automatic record of the PAF modifications.</p>	<p>Consult the history of actions of a Planning Assistant File (PAF)</p>
	<p>Communication: List of contacts you can reach.</p>	<p>Start a communication</p>

Tab Description Shortcut to feature explanations

✂	Segmentation of a specific series to extract a sub-part	Segmentation with an exclusive polygon
		Segmentation with an inclusive polygon
		Segmentation with a polyline
		Segmentation with a proximity tool

Table 2 - Features from the Planning Assistant File page

3.Viewer details:

The 3D objects are displayed in a viewer divided in 4 areas (2x2 display). 3 are dedicated to the display of MPR Views and one to display the 3D view. The MPR views are associated with anatomical planes that are defined in the viewer.

They appear in the following order:

- Top left: transverse view/ axial section.
- Top right: 3D view.
- Bottom left: sagittal view/cut.
- Bottom right: frontal view / coronal section.

	Anatomical plane	Position in Viewer				
	Coronal plane	<table border="1" style="text-align: center;"> <tr><td></td><td>3D</td></tr> <tr><td></td><td style="background-color: blue;"></td></tr> </table>		3D		
		3D				
Axial plane	<table border="1" style="text-align: center;"> <tr><td style="background-color: red;"></td><td>3D</td></tr> <tr><td></td><td></td></tr> </table>		3D			
	3D					
Sagittal plane	<table border="1" style="text-align: center;"> <tr><td></td><td>3D</td></tr> <tr><td style="background-color: green;"></td><td></td></tr> </table>		3D			
	3D					

It is possible to display in full screen one of the views by double clicking inside. Double-clicking again to retrieve the initial 2x2 display.

The manipulation of the objects in the viewer is done with the mouse:

Click and drag to explore the objects or use the wheel to zoom or navigate between slices.

Type of displacement	Before	After
Translation in the MPR view using the mouse cursor.		
Navigation between slices in the MPR views using the mouse wheel.		
Rotation in the 3D view using the mouse cursor.		
Zoom in the 3D view using the mouse wheel.		



The MPR anatomical orientation is lost if the user moves the MPR axes in the software. He can restore them by reinitializing the viewpoints.

4. Toolbar details:

The toolbar is present in the different PAF sections. It gives access to the tools depending on the context.

In the 3D section, some tools affect all the 3D objects and other just the selected object. The selected object is called **“Active”**.

The toolbar has different colors to identify the tools that affect the active object:

- Light grey area: the tools are effective on all objects.
- Light orange area: the tools are effective only on the active object.

Global

Contextual

Validation

		<i>Series name</i>				
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The tools are represented by icons with a descriptive tooltip.



Each tool and its associated functions are described in the table below:
















Tools icon	Access to the features
	Change the Viewpoint from the 3D visualization
	Change the focus of the visualization
	Zooming in or out of the 3D visualization
	Change the lights intensity of your 3D visualization
	Take a screenshot from the Planning Assistant File (PAF)
	Write or edit a note
	Create a checklist
AiCE MOU	Name of the active series
	Change the Window Level and Window Width of your Planning Assistant File (PAF)
	Change the segmentation threshold
	Create a label
	Take a measurement : angle or distance
	Segmentation with an inclusive polygon
	Segmentation with an exclusive polygon
	Segmentation with a polyline
	Proximity (segmentation)

Table 3 - Tools from the Planning Assistant File page

5.Side bar details:

The side bar is used to manage the objects displayed in the viewer (series, measurements, and labels)

From the sidebar, the user chooses what to display, to modify, to edit, and to delete.

The actions of adding DICOM, adding measurements and adding labels result in the creation of a new object in the side bar.

An orange frame is used to identify the **active** series on which the contextual tools will be applied (its name is shown in the light grey part of the toolbar).

DICOM Series Series parent
 Pelvic_femur Actions menu: (rename, segment, delete...)
 Pelvic_femur segmentat... Active object concerned by the contextual tools (orange frame)
 Pelvic_femur segmentat... Sub series / segmentation result of the parent series
 Pelvic_femur segmentat... Sub series / segmentation result of the parent series
 Measurements Measurements
 Distance 1 - 149.3mm Eye icon to identify the objects displayed in the viewer (show / hide)
 Angle 2 - 52.1° Eye icon to identify the objects displayed in the viewer (show / hide)
 Labels Labels
 Label 4 Labels
 Label 5 Labels
 Label 6 Labels



The objects displayed in the viewer may be modified by other users if the PAF has been shared. To see the possible collaborative interactions, please refer to the table: [Details of collaborative interactions](#)

Multiple object display is enabled for Labels, Measurements and Sub series with a common parent:

<p>Multiple sub series display</p> <p>it allows to display simultaneously the result of several segmentation:</p>	
--	--

<p>Multiple measurements and labels display</p> <p>It allows to reduce information overload and improves readability</p>	
---	--

E. Communication interface within a PAF:

Surgiverse® Web Planning allows to communicate with other Surgiverse® Web Planning users and to receive calls from Surgiverse® Digital Cockpit users.

<p>Surgiverse® Web Planning <-> Surgiverse® Web Planning</p>	<p>Between several users connected on Surgiverse® Web Planning</p>	<p>The PAF will be shared with the participants.</p>
<p>Surgiverse® Digital Cockpit <-> Surgiverse® Web Planning</p>	<p>A user of Surgiverse® Digital Cockpit can call a connected user on Surgiverse® Web Planning</p>	<p>The PAF will be shared with the participants. Surgiverse® Digital Cockpit user can share the video feed captured by the HoloLens 2.</p>

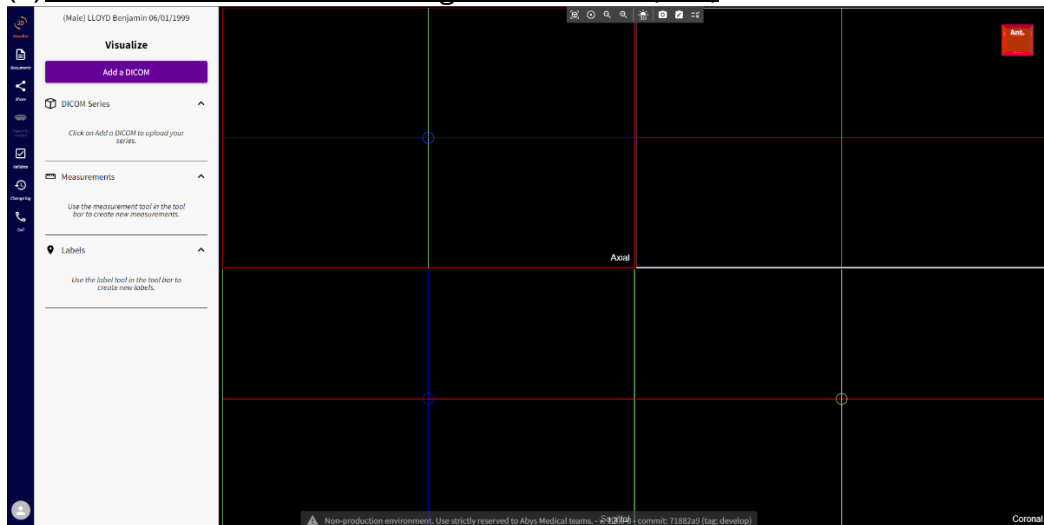
When you are in communication with someone, you can access to:

Tools icon	Access to the features
	Show/hide the participants of a communication
	Show/hide the screen of a participant during a communication
	Hang off a communication
	Mute/unmute your microphone
	Take a screenshot during a communication
	Share your screen during a communication
	Change the parameters of your microphone and speakers

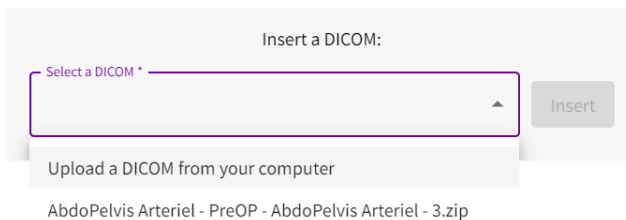
Table 4 - Tools from the Communication page

IV. Index of functionalities

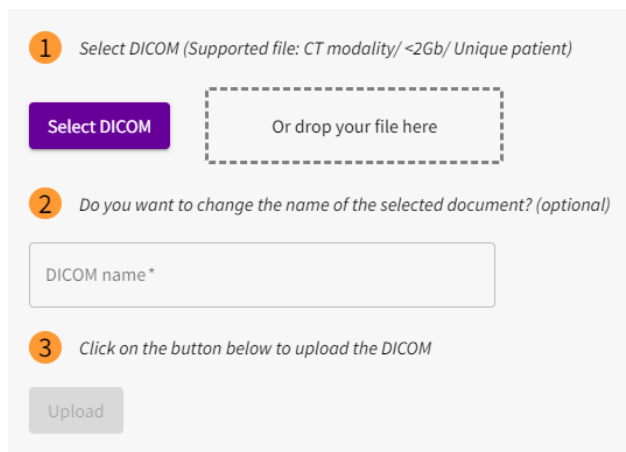
(1) Add a DICOM from a **Planning Assistant File (PAF)**



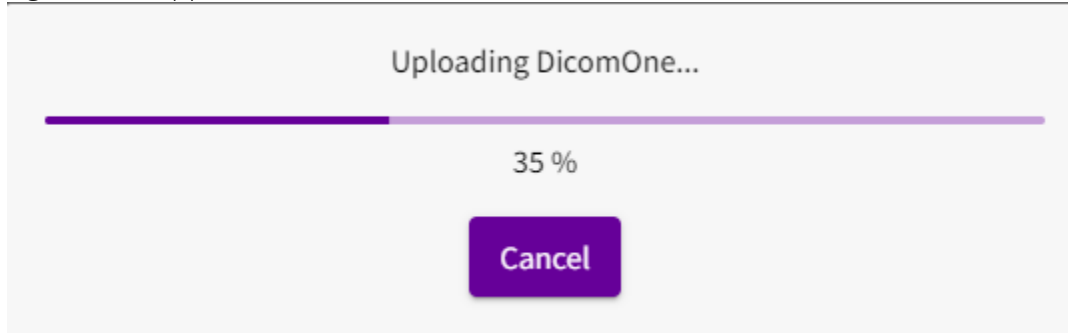
- ① Click on the "Add a DICOM" button in the "Visualize" sub-tab of the PAF.
- ② A new pop-up window opens. You can choose to select an existing DICOM previously uploaded to the patient's file or select a new DICOM on your computer to upload it.



- ③ If you choose to upload a DICOM from your computer, the following pop-up window is displayed.



- ④ Select a DICOM files (CT modality) from your computer to upload it (Add button). Two file structures are supported:
- Directory (with all the files),
 - Zip archive containing all the files.
- ⑤ A progress bar appears.



- ⑥ At the end of the treatment, the series from the DICOM are added to the Planning Assistance File and displayed in the 3D section.

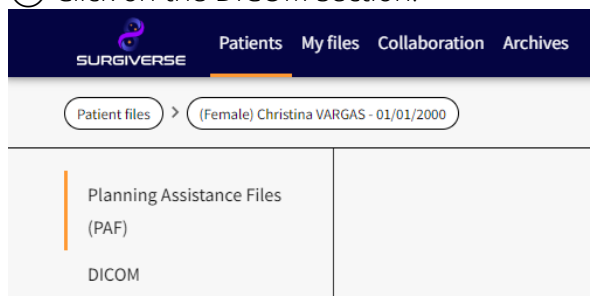


Precaution of use: A DICOM can only be uploaded if it meets the following criteria:

- Be a file in ZIP format ending in ".zip", or a directory containing DICOM images,
- Images must be CT modality only,
- Contain the information of only one patient,
- Have a maximum size of 2GB,
- Be complete with no missing slice.

(2) Add a DICOM from the patient file

- ① Open your patient file.
- ② Click on the DICOM section.



- ③ Click on the "Upload a DICOM" button.
- ④ A upload form is opened.

1 Select DICOM (Supported file: CT modality/ <2Gb/ Unique patient)

Select DICOM Or drop your file here

2 Do you want to change the name of the selected document? (optional)

DICOM name*

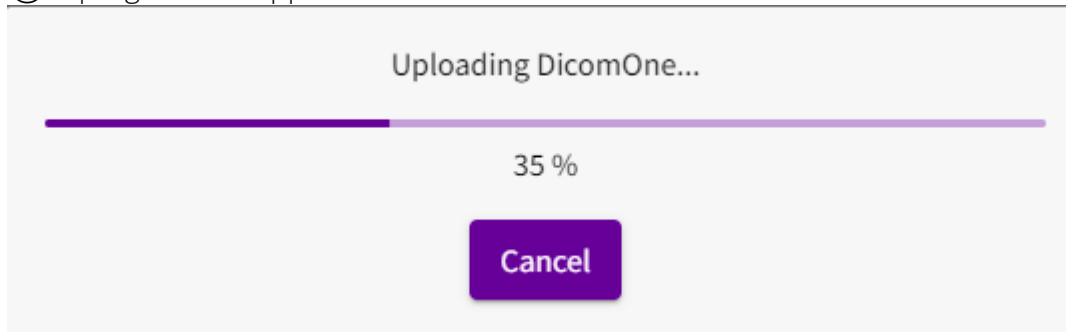
3 Click on the button below to upload the DICOM

Upload

⑤ Select a DICOM files (CT modality) from your computer to upload it (Add button). Two file structures are supported:




- Directory (with all the files),
- Zip archive containing all the files .

⑥ A progress bar appears.



⑦ At the end of the treatment, the DICOM appears in the DICOM table.

⑧ Check the status of your file: if the status is

-  your DICOM is pending,
-  your DICOM is ready,
-  your DICOM didn't load, there has been an error.

⑨ Once your DICOM is "Ready" it is possible to use it in a PAF.



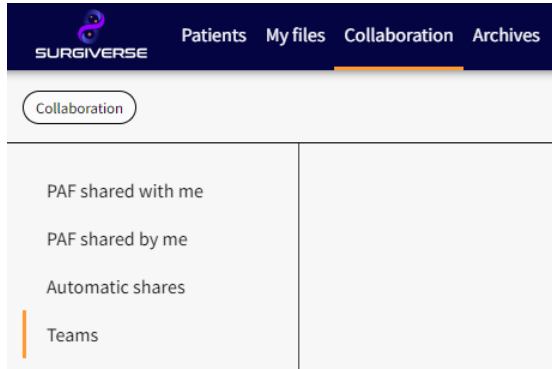
Precaution of use: A DICOM can only be uploaded if it meets the following criteria:

- Be a file in ZIP format ending in ".zip", or a directory containing DICOM images,
- Images must be CT modality only,
- Contain the information of only one patient,
- Have a maximum size of 2GB,
- Be complete with no missing slice.

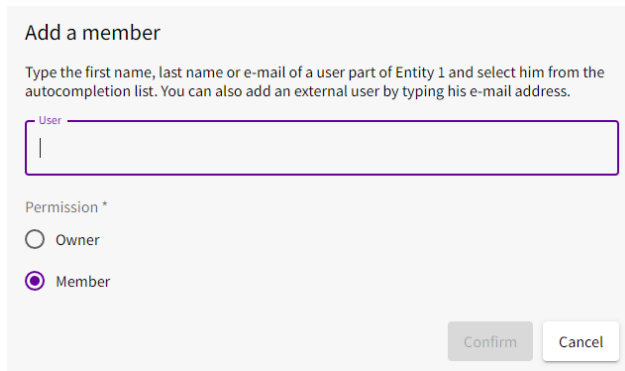
(3) Add a member to a team

① Click on the "Collaboration" tab.

② Click on the "Teams" section.




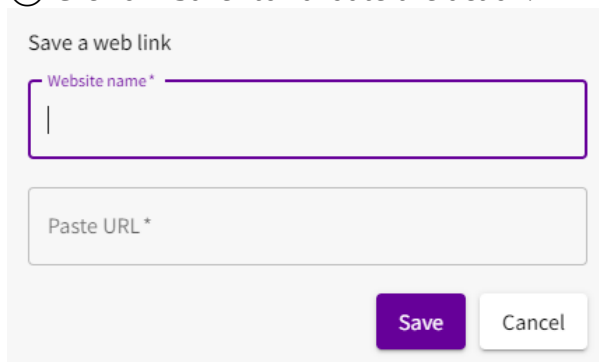
- ③ Click on the team you want to add a member to.
- ④ Click on "Add a member".
- ⑤ A pop-up opens, fill the form.




- ⑥ Click on "Confirm".

(4) Add a weblink to your Planning Assistant File (PAF)

- ① Click on the "Documents" tab .
- ② Click on "Add weblink".
- ③ A pop-up window will open. Write the name of the website and paste its URL.
- ④ Click on "Save" to validate the action.

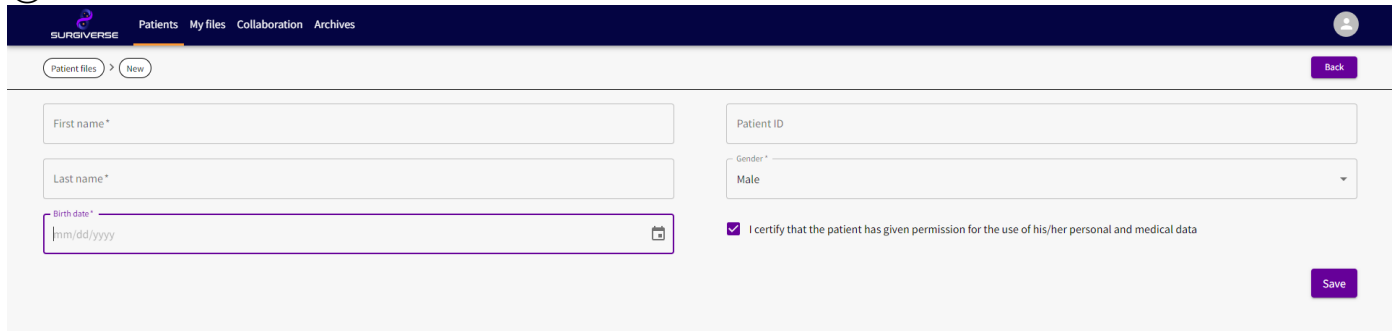



Caution: The user must ensure that the added weblinks are secure.

 Precaution of use: The use of weblinks is only intended as support prior to surgery. Therefore, the weblinks are only available in Surgiverse® Web Planning and not in Surgiverse® Digital Cockpit.

(5) Add/Create a patient file

- ① Click on the "Patients" tab.
- ② Click on the button "Add Patient file".
- ③ Fill the fields of the form.




The screenshot shows the 'Add Patient file' form in the Surgiverse Web Planning interface. The form has a dark blue header with navigation tabs: 'Patients', 'My files', 'Collaboration', and 'Archives'. Below the header, there are buttons for 'Patient files' and 'New'. The form fields include:

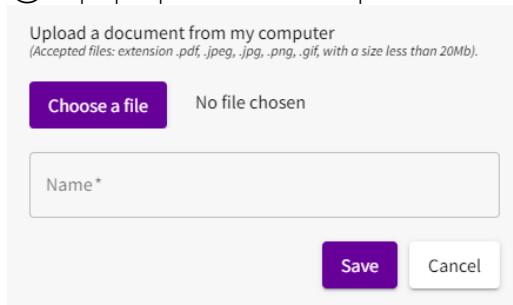
- First name* (text input)
- Last name* (text input)
- Birth date* (calendar icon, format: |mm/dd/yyyy)
- Patient ID (text input)
- Gender* (dropdown menu, currently set to 'Male')
- A checkbox: I certify that the patient has given permission for the use of his/her personal and medical data

 A 'Save' button is located at the bottom right of the form.

- ④ Click on "Save".


(6) Add documents to your Planning Assistant File (PAF)

- ① Click on the "Documents" tab .
- ② Different formats (.pdf, .png, .jpeg, .jpg, .gif) can be loaded on the platform.
- ③ Click on "Add document".
- ④ A pop-up window will open. Click on "Choose a file" and select the file from your computer.



The screenshot shows a pop-up window titled 'Upload a document from my computer'. Below the title, it lists accepted file extensions: '(Accepted files: extension .pdf, .jpeg, .jpg, .png, .gif, with a size less than 20Mb)'. There is a 'Choose a file' button and a 'No file chosen' status. Below this is a 'Name*' input field. At the bottom, there are 'Save' and 'Cancel' buttons.

- ⑤ You can change the name of the document.
- ⑥ Click on "Save".

 Cautions: The user must ensure that the elements imported on Cysware® 4H are secure (pdf, images).

(7) Administration rights management

- User creation:

- ① Click on the "Administration" tab.
- ② You should be in the "Users" section.
- ③ Click on "Create a User".

- ④ Fill the form with the necessary information.
- ⑤ Click on "Save".

- **Entity creation:**

- ① Click on the "Administration" tab.
- ② Click on the "Entities" section.
- ③ Click on "Create an Entity".
- ④ Fill the form with the necessary information.
- ⑤ Click on "Save".

- **Send an alert message:**

- ① Click on the "Administration" tab.
- ② Click on the "Alerts" section.
- ③ Write your alert in the fields.
- ④ Click on "Send".

Note: all users will receive an alert message, if they are logged in, they will receive it immediately. Otherwise, they will receive it when they log in.

(8) Archive a patient file

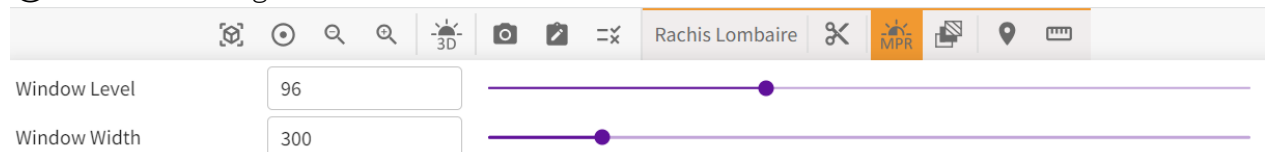
The patients are automatically archived after 180 days without modification. In that case, the patient and his data are moved to the "Archives" tab of the site, it no longer appears under the "Patients" tab and the associated files are no longer visible in the "My file" tab.

To manually archive a patient:

- ① Click on the "Patients" tab.
- ② Click on the line of the patient to archive.
- ③ Click on the button "Archive" at the top right corner.

(9) Change the Window Level and Window Width of your Planning Assistant File (PAF)

- ① Click on the brightness and contrasts tool .



- ② You can adjust the Window Level and Window Width either with the respective sliders or by manually entering numerical values, or by using the up/down arrows in the dedicated field.

Note: The brightness (Window Level) is adjustable between -1000 and +2000.

Note: The contrast (Window Width) is adjustable between 0 and +2000.

Note: The brightness and contrast settings apply only to the MPR view.

Note: These changes are not available if the PAF is validated.

Precaution of use: When working collaboratively on the same series, the modification of the window width and window level can affect other users.

(10) Change the focus of the visualization

- ① Click on the focus tool
- ② You can change the center of rotation of the 3D View by clicking a point either in a MPR view or in the 3D View.

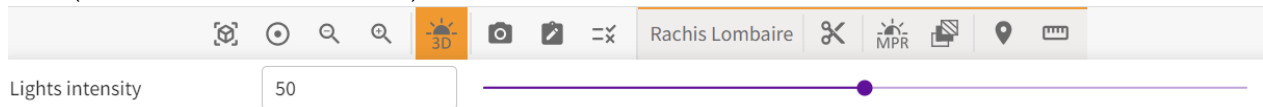
(11) Change the language

- ① Click on the avatar at the top right of the navigation bar.
- ② Click on “User preferences”.
- ③ Click on the “Change my language” button.
- ④ A pop-up opens. Choose the language you want and click on “Save”.



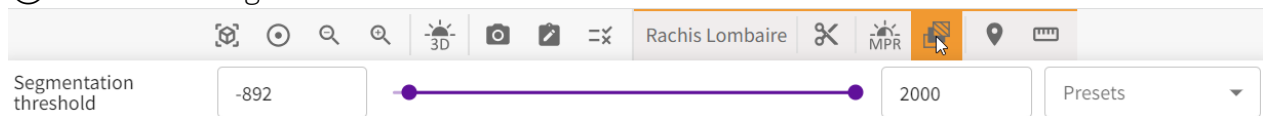
(12) Change the lights intensity of your 3D visualization

- ① Click on the light’s intensity tool
- ② You can manage the brightness of the 3D view. The management is done either by using the slider or by manually entering a numerical value or by using the up/down arrows in the dedicated field (value between 0 and 100).



(13) Change the segmentation threshold

- ① Click on the segmentation threshold tool



- ② You can adjust the segmentation threshold or use presets to select different tissues (skin, muscle, bone...) on the 3D rendering.


Presets	Minimum threshold	Maximum threshold
Default	121	2000
Lung	-900	-500
Muscle	-5	135

Soft tissue	-700	225
Cancellous bone	148	661
Cortical bone	501	2000
Skin	-718	-177
Angio	121	453


③ You can either use the slider, or manually entering a numerical value or using the up/down arrows in the dedicated field.

Note: This value is by default set between 121 and 2000 and must be between -1000 and +2000.


Note: Presets are also available.

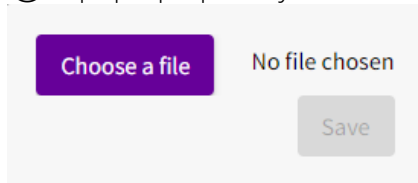
 **Precaution of use:** When working collaboratively on the same series, the segmentation threshold affects other users. To see the possible collaborative interactions, please refer to the table: [Details of collaborative interactions](#)

(14) Change the Viewpoint from the 3D visualization

- ① Click on the viewpoints tool .
- ② A menu dropped down, you can select a predefined viewpoint on the 3D view (upper, lower, anterior, posterior, left and right). The viewpoint can also be reset to its default value.


(15) Change your avatar picture

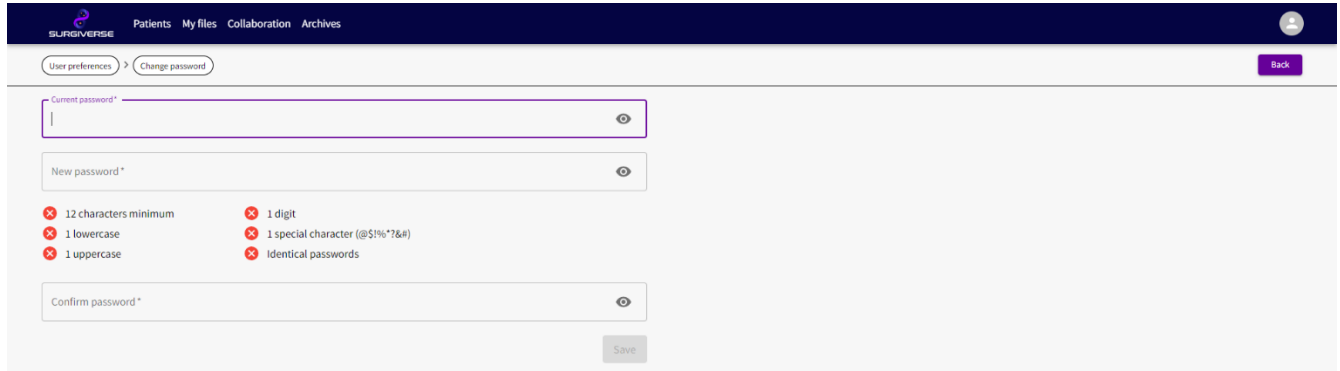
- ① Click on the avatar at the top right of the navigation bar. .
- ② Click on "User preferences"
- ③ Click on "Upload an avatar".
- ④ A pop-up opens, you can select a picture (.png or .jpg format) from your computer files..



- ⑤ Click on "Save" to save the modification.

(16) Change your password

- ① Click on the avatar at the top right of the navigation bar .
- ② Click on "User preferences".
- ③ Click on "Change my password" button.
- ④ A form opens, you must fill all the fields and click on "save" to save the changes.



(17) Consult the history of actions of a Planning Assistant File (PAF)

① In order to review the changes made to the PAF, it is possible to consult the history of all the modifications made to a PAF.

② Click on the “Changelog” tab .

(18) Create a checklist

① Click on the checklist tool .

② Click on “New checklist”.

③ Click on “Add an item” and write the title of your item.

④ Click on “Add”. Your item has been saved.

⑤ Do it as long as you have items to add.

⑥ You can manage the order of the items by dragging and dropping items when you click on .

⑦ When you are done, click on “Close” and the checklist is saved.

Note: The checklist is also available in the “Documents” tab.

(19) Create a label

① You can place points of interest, called “Labels” on the MPR and 3D views.

② Click on the label tool .

③ The mouse cursor changes  and you can select a point on the bone.

④ A pop-up opens, write the name of the label.

⑤ Click on “Save” to validate the action.

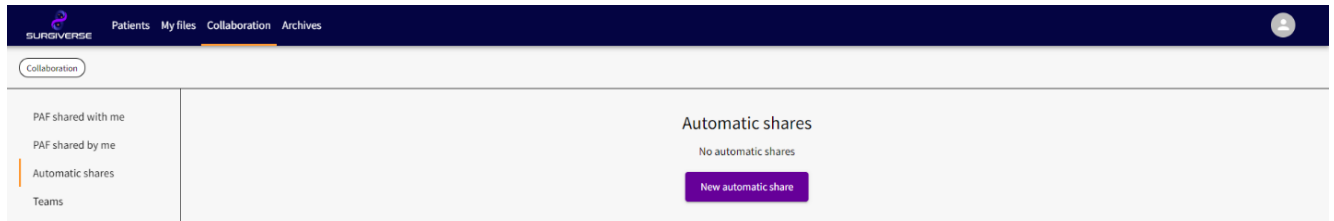
Note: These points are displayed on the MPR and 3D views.

Note: Labels are viewable with the Surgiverse® Digital Cockpit application.

(20) Create an automatic Share

① Click on the “Collaboration” tab.

② Click on the “Automatic shares” section.



- ③ Click on the "New automatic share button".
- ④ A pop-up opens, you must fill out the form.

Automatic sharing

Type the first name, last name or e-mail of a user or a team and select it from the autocompletion list. You can also add an external user by typing his e-mail address.

Target

User

Team

Email or user name*

Permissions *

Read only


Modification

Duration (in days)*

- ⑤ Click on "Confirm".

Note: When an automatic share is created, all the new files of the user will be automatically shared with the people included in the automatic share. When the automatic share is removed, new files will not be shared anymore, but files previously shared will still be shared unless you remove the shares individually for each file. If a user is removed from a team, he or she will no longer be able to access the file shared with that team.

(21) Create a new share from your Planning Assistant File (PAF)

- ① Click on the "Share" tab .
- ② Click on the "New Share" button.
- ③ A pop-up window opens. Fill the form with the necessary information.

Share a PAF

Type the first name, last name or e-mail of a user or a team and select it from the autocompletion list. You can also add an external user by typing his e-mail address.

Target *

User


Team

Email or user name *

Permissions *

Read only

Modification

Expiration date * 

Notify recipient by email

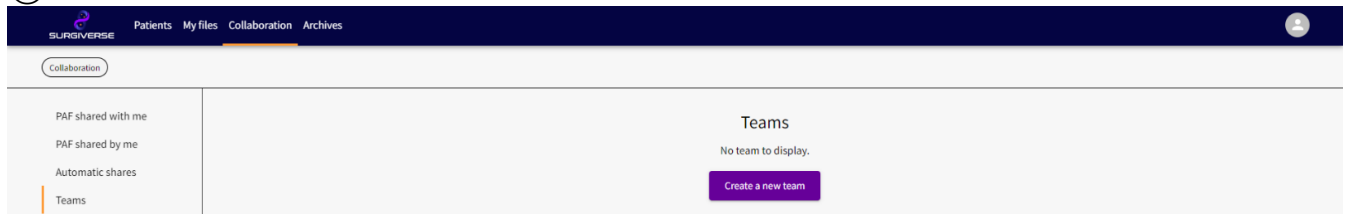
④ Then click on "Save" to validate the action.



Precaution of use: It is necessary for the recipient to have a Surgiverse® Web Planning account to perform the sharing.

(22) Create a team

- ① Click on the "Collaboration" tab.
- ② Click on the "Teams" section.



③ A pop-up opens.

Creation of a team

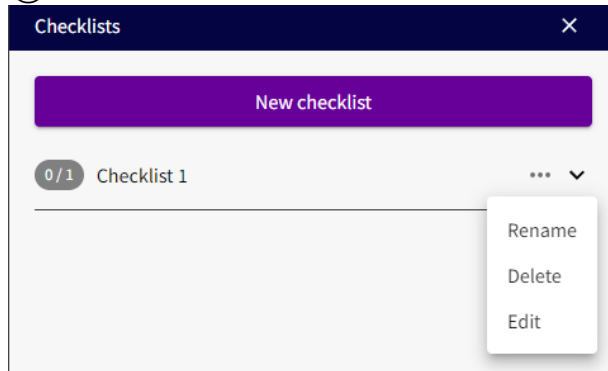
Name *

④ Write the name of your team and click on "Confirm".



(23) Delete a checklist

- ① On the line of the checklist to delete, click on "...".

- ② Click on “Delete”.
- ③ Click on “OK”.

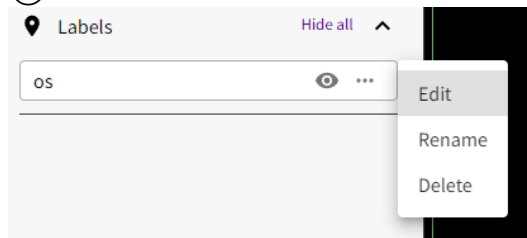


(24) Delete a document from your Planning Assistant File (PAF)

- ① Click on the “Documents” tab .
- ② Click on the icon , located to the right of the document title of the document to delete.
- ③ Click on “OK”.

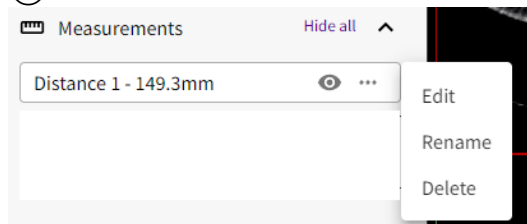
(25) Delete a label

- ① Labels are displayed in a list on the left side of the screen in the 3D section.
- ② You can delete the label by clicking on “...” next to the label to delete.
- ③ Click on “OK”.



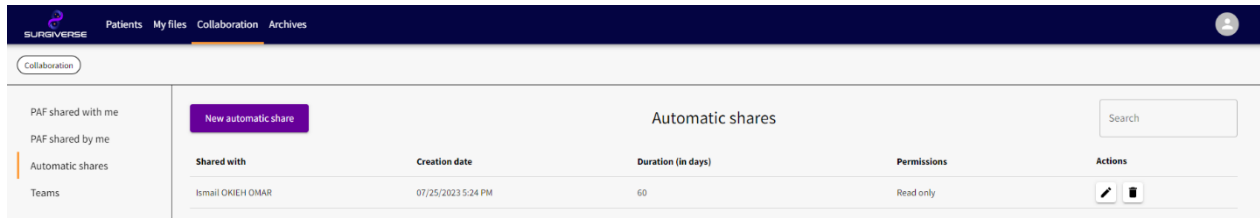
(26) Delete a measurement

- ① Measurements are displayed in a list on the left side of the screen in the 3D section.
- ② Click on the “...” next to the measurement to delete.
- ③ Click on “Delete”.
- ④ Click on “OK”.



(27) Delete an automatic share

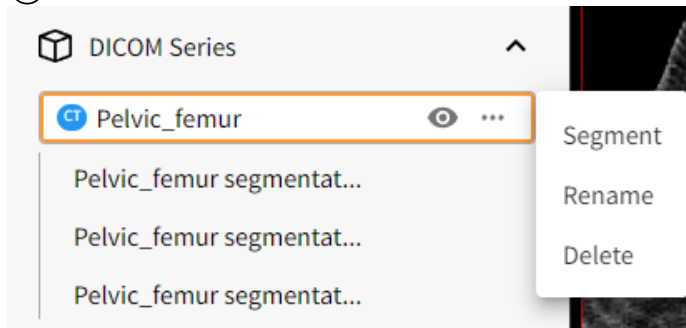
- ① Click on the “Collaboration” tab.
- ② Click on the “Automatic shares” section.





③ Click on the  to delete the automatic share.

(28) Delete a series

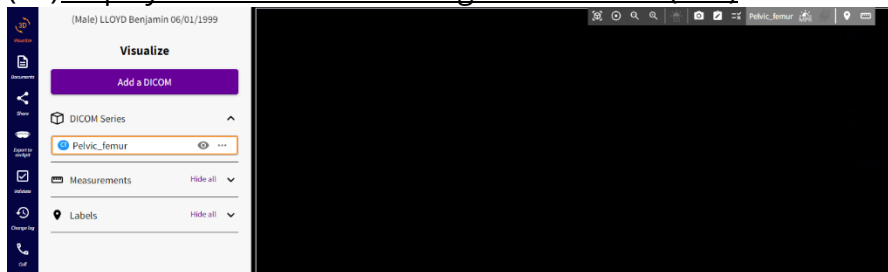
- ① On the left side of the screen, click on the series to delete.
- ② Click on the "...".
- ③ Click on "Delete".
- ④ Click on "OK".



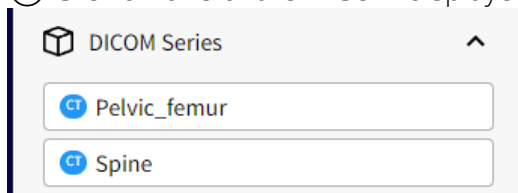
(29) Delete existing share from your **Planning Assistant File (PAF)**

- ① Click on the "Share" tab .
- ② On the line of the share to delete, click on .
- ③ Click on "OK".

(30) Display a DICOM in a **Planning Assistant File (PAF)**



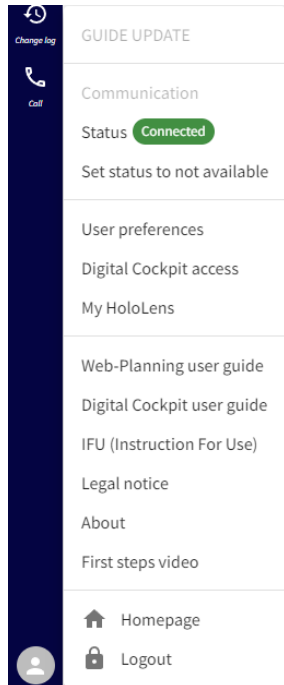
- ① Click on one of the DICOM displayed in your "Item Management" section.



(31) Documentation access

① Open the user menu

- At the top right-hand side of the home page
- At the bottom left side of a PAF



② You can open the software documentation by clicking on the dedicated buttons: User guide, IFU, Legal notice, About, First steps video.

- User guide, IFU and legal notice are stored on the Surgiverse.ai website.
- Dedicated section of the Surgiverse.ai website will open in new tabs.



SURGEON LOGIN ▾

REQUEST DEMO

USER GUIDE

User guide for Surgiverse Web Planning and Surgiverse Digital Cockpit. Surgiverse is a 510k cleared medical device.

Surgiverse® Web Planning

User Guide for Surgiverse® Web Planning (US version)

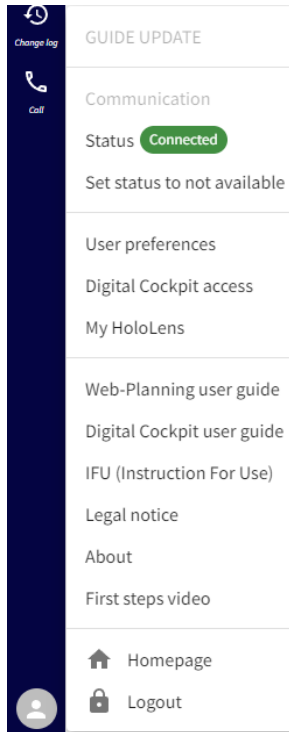
Surgiverse® Digital Cockpit

User Guide for Surgiverse® Digital Cockpit (US version)

(32) Logout from Surgiverse® Web Planning

① Open the user menu

- At the top right-hand side of the home page
- At the bottom left side of a PAF

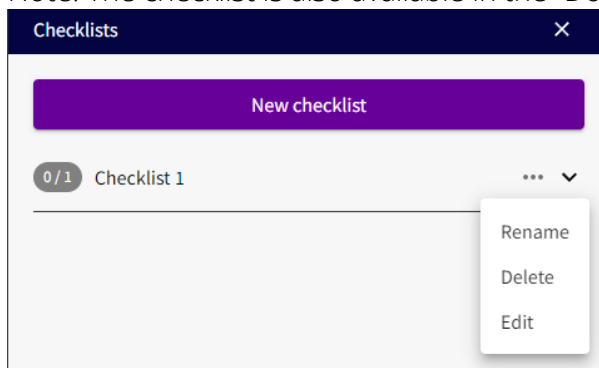


② Click on the “Logout” button

(33) Edit a checklist

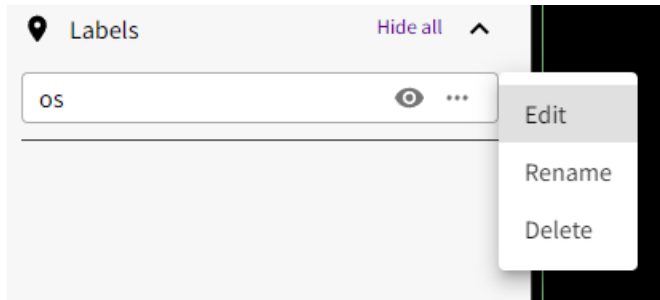
- ① On the line of the checklist to edit, click on “...”.
- ② Click on “Edit”.
- ③ Manage your modifications.
- ④ Click on “Close”.
- ⑤ You can also click on the items one after the other to validate or invalidate them.

Note: The checklist is also available in the “Documents” tab.



(34) Edit a label


- ① Labels are displayed in a list on the left side of the screen in the 3D section.
- ② You can hide or show them by clicking on the eye.
- ③ You can edit the label by clicking on “...” next to the label to edit.



④ You can move the label point by clicking on the point in the 3D or MPR view. Then click where you want your label to be moved.

Note : it is possible to manipulate the view by pressing the alt key and changing the view angle with the mouse cursor.

⑤ You can also move the name of your label with the same method.

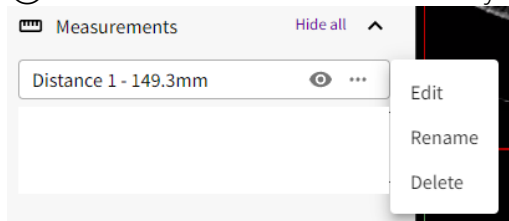
⑥ When you are done, click on  at the top of your screen in the toolbar.

(35) Edit a measurement

① Measurements are displayed in a list on the left side of the screen in the 3D section.

② You can hide or show them by clicking on the eye.


③ You can edit the measurement by clicking on “...” next to the measurement to edit.



④ You can move the measurement point by clicking on the point in the 3D or MPR view. Then click where you want your measurement point to be moved.

Note : it is possible to manipulate the view by pressing the alt key and changing the view angle with the mouse cursor.

⑤ You can also move the displayed information (distance) of your measurement with the same method.

⑥ When you are done, click on  at the top of your screen in the toolbar.

(36) Edit a patient file

① Click on the “Patients” tab.

② Click on the line of the patient to modify.

③ Click on the button “Details” at the top right corner.

④ Click on the button “Edit” at the top right corner.

⑤ Modify the fields you want to change.

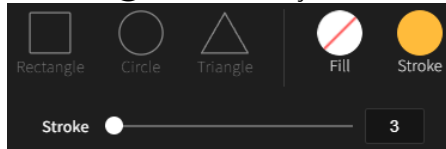
⑥ Click on the “Save” button.

(37) Edit a screenshot

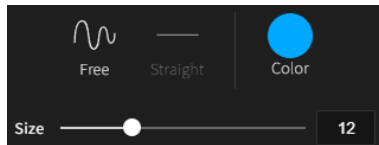
When you take a screenshot, it is possible to add elements to it:



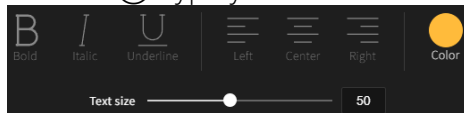
- You can add a shape:
 - ① Several shapes are available (rectangle, circle and triangle). Click on the desired shape.
 - ② Click and drag in the desired area until the desired size is reached.
 - ③ You can customize the background and outline color.
 - ④ You can adjust the thickness of the outline is adjustable with a slider.



- You can draw:
 - ① Chose the color of your drawing.
 - ② Chose the thickness of your drawing with the slider.
 - ③ Two options are available: either you can draw on the capture freely or in a straight line.



- You can write a text:
 - ① Select the font (Bold, Italic, Underline).
 - ② Select the centering of the text area (center, left, right).
 - ③ Select the color of the text.
 - ④ Select the size of the text (thanks to the slider).
 - ⑤ Select the area you want to write on.
 - ⑥ Type your text.



If you are not satisfied of your edition, you can use the toolbar on the bottom of the screen.




- Zoom in,
- Zoom out,
- Hand,
- Undo the last action / go back,
- Redo the action,
- Reset,
- Delete,
- Delete all.

Note: a CTRL+Z and the "Delete" key can be used to respectively undo the last action or delete an item.

Note: this action is also possible from the "Documents" tab.

(38) Edit a team

- ① Click on the "Collaboration" tab.
- ② Click on the "Teams" section.
- ③ Click on the team to edit.
- ④ Click on the .
- ⑤ Modify the fields.
- ⑥ Click on "Confirm".

- ❗ When a user is added to a team, he has access to all files shared with this team (old and future).
When a member of a team is deleted, he/she no longer has access to the files shared with that team (old and future).

(39) Navigate in the displayed series of the Planning Assistant File (PAF)

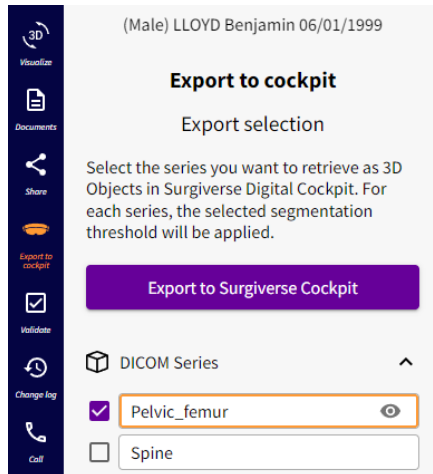
In the viewer, you can navigate around the objects:

- Rotation of the 3D object by clicking on the mouse wheel and moving the cursor.
- Zoom + and - (activated by clicking in the 3D view), it is also possible to use the mouse wheel.
- You can move the MPR anatomical planes by clicking on the axis and move it to adapt the position of the object in the 3D view. This action will move the objects in the 3D view so that the intersection of the planes in the MPR view is always centered.

- ⚠ Precaution of use: When working collaboratively on the same series, the modification of the MPR axis can affect other users.

(40) Export to Surgiverse® Digital Cockpit from the Planning Assistant File (PAF)

- ① Once the changes have been applied to the 3D imaging and you are satisfied of your segmentation, you can export it to Surgiverse® Digital Cockpit.
- ② Click on the "Export to Surgiverse® Digital Cockpit" tab .
- ③ Select the segment to export and click on "Export to Surgiverse® Digital Cockpit".



④ Surgiverse® Web Planning will show you how your medical image will appear on Surgiverse® Digital Cockpit. If you are satisfied of it, click on “Validate 3D objects”. If you are not satisfied, you can still change it by clicking on “Change 3D objects export parameters”.

Note :

- To obtain a better-quality 3D image, some tricks can be adopted: better segmenting to target the area, changing the different thresholds, ...
- Exporting to Surgiverse® Digital Cockpit is only necessary for 3D objects. Other information and documents are available without an export.

⑤ If you click on “Validate 3D objects”, a pop-up opens. Click on “OK”.

(41) Forgotten password

① If you already have an account and have forgotten your password, it is possible to reset it by clicking on the "Forgotten Password" link.

[Forgotten password](#)

[Log in](#)

② This link will send an email to the address associated with the account explaining the reset procedure.




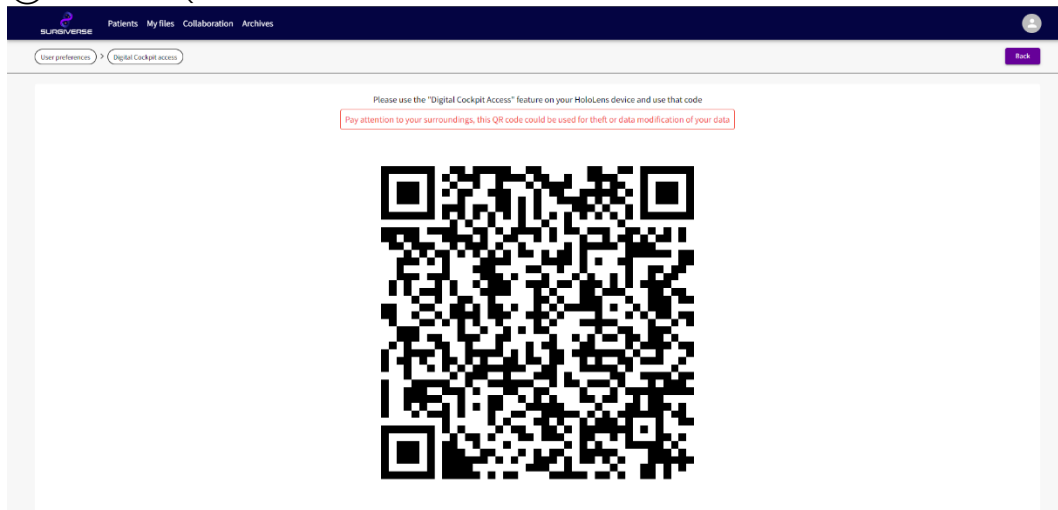
Email address*

Ask for a new password

③ Once the procedure completed, return to the login screen to log in.

(42) Get access to Surgiverse® Digital Cockpit

- ① Click on the avatar at the top right of the navigation bar .
- ② Click on "Surgiverse® Digital Cockpit Access".
- ③ Scan the QR code with the HoloLens 2.




Note: For safety reasons, the QR code changes every 30 sec.

Note: You may need to reduce the brightness of your screen.

(43) Hang off a communication


- ① While you are in communication you can hang off by clicking on the  button.

(44) Invalidate a Planning Assistant File (PAF)

- ① Click on the “Validation” tab .
- ② Click on “Invalidate”.
- ③ Adding a comment is mandatory.
- ④ Click on “Invalidate”.

Note: When the PAF is invalidated, it is no longer in read only mode and can be modified, until a new validation.

(45) Leave a team

- ① Click on the “Collaboration” tab.
- ② Click on the “Teams” section.
- ③ Click on the team to leave.
- ④ Click on the .
- ⑤ A pop-up opens, click on “OK”.

(46) Mouse shortcuts in the 3D visualization

- ① A right click and hold on the mouse allows you to zoom in/out on the 3D view.
- ② Left click and hold to rotate the 3D view.
- ③ Left click and hold to translate the view in a MPR view segment.
- ④ The scroll wheel allows scrolling through slices in an MPR view segment.
- ⑤ CTRL + left click and hold to zoom in/out on a given segment in the MPR views.

(47) Multifactor authentication

- ① For some users, two-factor authentication is required. It is therefore required to use a password and a code from an allowed authentication application.


Install an authenticator application on your smartphone or any compatible device. Some app providers also have web and desktop applications available

See the following table for examples

Android	Twilio Authy Authenticator , Duo Mobile , LastPass Authenticator , Microsoft Authenticator , Google Authenticator , Symantec VIP
iOS	Twilio Authy Authenticator , Duo Mobile , LastPass Authenticator , Microsoft Authenticator , Google Authenticator , Symantec VIP

In the application, add an account. If requested, choose "Other account"

Scan the image below




If you are unable to scan the image, enter the following information in your application :
Account name : A name of your choice to remember it is a Surgiverse code. It can be "Surgiverse"
Secret key :

Please enter the six-digit code displayed in the application

[Cancel](#)

② Scan the QR code with the application and enter the number in the blank spaces.

(48) Mute/unmute your microphone

- ① While you are in communication you can mute your microphone by clicking on the  button.
- ② You can unmute your microphone by clicking on the same button.

(49) Opening a Planning Assistance File (PAF) from a PAF details

- ① Click on a patient file.
- ② Click on the eye at the end of the PAF you want to consult.
- ③ Click on "Open the PAF" at the top right side of the screen.

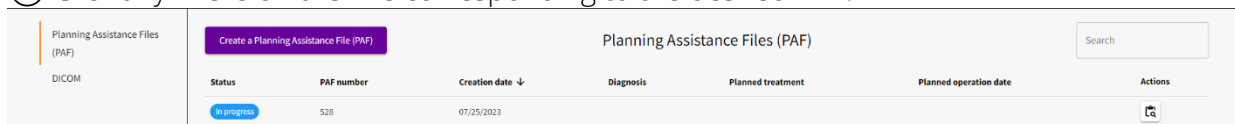


The screenshot shows the Surgiverse web interface. At the top, there are navigation tabs: Patients, My files, Collaboration, Archives. Below this, the breadcrumb path is: Patient files > (Male) Benjamin LLOYD - 06/02/1999 > PAF 528. On the right side, there are buttons: Open the PAF, Edit, Back. The main content area is divided into two columns:

Anatomical region	Planned treatment
Spine	
Side	Planned operation date
Undefined	
Diagnosis	Comment

(50) Opening a Planning Assistance File (PAF) from a patient file

- ① Click anywhere on the line corresponding to the desired PAF.



The screenshot shows the Surgiverse web interface with the "My Files" tab selected. The page title is "Planning Assistance Files (PAF)". There is a search bar and a "Create a Planning Assistance File (PAF)" button. Below is a table with columns: Status, PAF number, Creation date, Diagnosis, Planned treatment, Planned operation date, and Actions.

Status	PAF number	Creation date	Diagnosis	Planned treatment	Planned operation date	Actions
In progress	528	07/25/2023				

(51) Opening a Planning Assistance File (PAF) from the "My Files" tab

- ① Click on the "My Files" tab.

② Click on the line of the desired PAF.

My current files									
PAF number	Patient name	Creation date ↓	Anatomical region	Side	Planned treatment	Planned operation date	Status	Actions	
528	Benjamin LLOYD	07/25/2023	Spine	Undefined			In progress		

(52) Opening the patient file

① Click on the "Patients" tab.

② Click on the line of the patient whose file you want to open.

(53) Planning Assistance File (PAF) creation from the patient file

① Click on the "Planning Assistance Files (PAF) tab.

② Click on the "Create a Planning Assistance File (PAF)" button.

③ A form opens, fill the fields.

Note: A patient can have several PAFs.

(54) Rename a checklist



① On the line of the checklist you want to rename, click on "...".

② Click on "Rename".

③ Change the name.

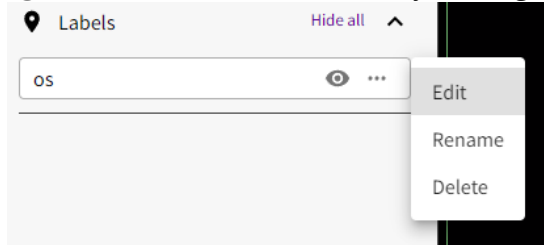
④ Click on "Save".

(55) Rename a document from your Planning Assistant File (PAF)

- ① Click on the “Documents” tab .
- ② Click on the icon , located to the right of the document title of the document to rename.
- ③ Change the name and click on “Save”.

(56) Rename a label

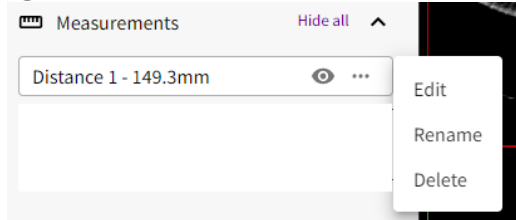
- ① Labels are written in a list on the left side of the screen.
- ② You can rename the label by clicking on “...” next to the label to rename.



- ③ Write the name you want.
- ④ Click on “Save”.

(57) Rename a measurement

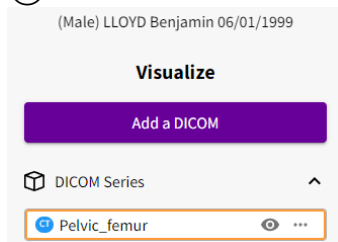
- ① On the left side of the screen, there are your measurements.
- ② Click on the “...” next to the measurement to rename.
- ③ Click on “Rename”.



- ④ A pop-up opens, change the name.
- ⑤ Click on “Save”.

(58) Rename an object from your series in the Planning Assistant File (PAF)

- ① Click on the “...” of the series.

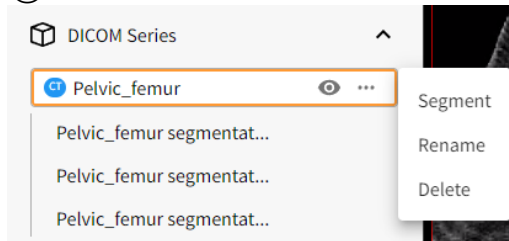


- ② You can rename the series: a pop-up appears. You can write a new name and click on “Save” to validate the action.

(59) Rename a series

- ① On the left side of the screen, click on the series to rename.

- ② Click on the "...".
- ③ Click on "Rename".



- ④ Change the name.
- ⑤ Click on "Save".

(60) Segmentation with an exclusive polygon



Cautions: Extraction tools are for informational purposes only and not intended for diagnostic use.

The polygon segmentation isolates parts of a volume using polygon.

Two types of polygon segmentation:

- Inclusive polygon: the area inside the polygon is preserved
- Exclusive polygon: the area inside the polygon is deleted

- ① Click on the series to segment.
- ② Click on the scissor icon in the contextual toolbar to open a new segmentation




- ③ You are now on the tab "Segmentation". The left side of the screen shows the timeline of the changes made on the medical images.

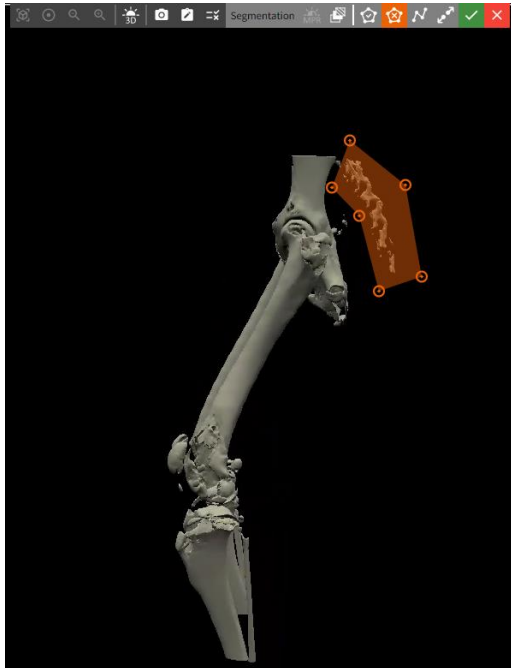
- ④ the toolbar also changes, the first part remains the same, but the lighter part is different.




- ⑤ Click on the exclusive polygon tool .

- ⑥ When the mouse cursor is this shape , you can define the area to remove by clicking at some different points until the area is well defined.

- ⑦ You can click as many times as you want.

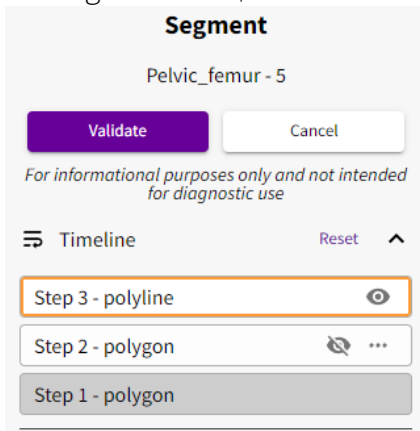



⑧ You must validate your selection by clicking on the green icon  or cancel it by clicking on the red one .

⑨ You can move a point by clicking on it and clicking on its new position.

⑩ When you validate your segmentation, it is the last version of it that will be uploaded in the 3D visualization.

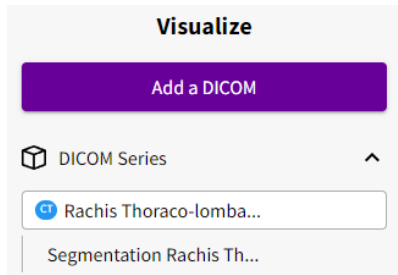
⑪ While the segmentation is not validated, you can restore another version of the segment by clicking on the "...", then "Restore".



⑫ A new section "Segmentation" is available on the navigation bar . You can navigate through the different section while you are doing your segmentation.

⑬ Click on "Validate".

⑭ Once the segmentation is validated, the segmented sub-series is available in the 3D section. The active view is surrounded by orange.



(61) Segmentation with an inclusive polygon

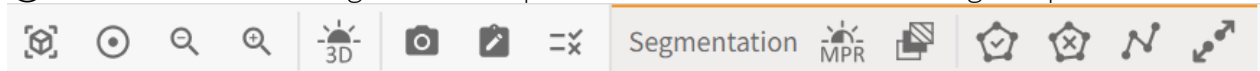



Cautions: Extraction tools are for informational purposes only and not intended for diagnostic use.

- ① Click on the series to segment.
- ② Click on the scissor icon in the contextual toolbar to open a new segmentation




- ③ You are now on the tab "Segmentation". The left side of the screen shows the timeline of the changes made on the medical images.
- ④ The toolbar also changes, the first part remains the same, but the lighter part is different.



- ⑤ Click on the inclusive polygon tool .
- ⑥ You can take away some part of the medical image.



⑦ When the mouse cursor is this shape , you can create the area to keep by clicking at some different points until the area is well defined.

⑧ You can click as many times as you want.

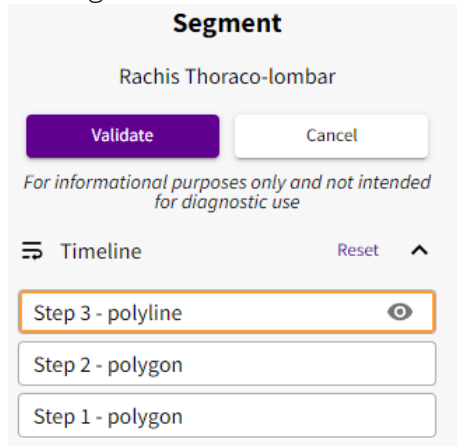



⑨ You must validate your selection by clicking on the green icon  or cancel it by clicking on the red one .

⑩ You can move a point by clicking on it and clicking on its new position.

⑪ When you validate your segmentation, it is the last version of it that will be uploaded in the 3D visualization.

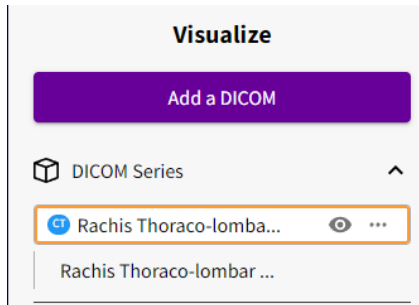
⑫ While the segmentation is not validated, you can restore another version of the segment by clicking on the "...", then "Restore".



⑬ Since a new tab "Segment" appeared on the navigation bar , you can navigate through the different tabs while you are doing your segmentation.

⑭ Click on "Validate".

⑮ Once the segmentation is validated, you can access to the first version of it and the new segmentation on the left side of the screen. The active view is surrounded by orange.



(62) Segmentation with a polyline



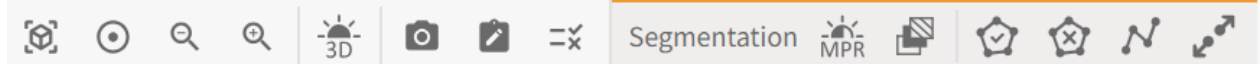
Cautions: Extraction tools are for informational purposes only and not intended for diagnostic use.


- ① Click on the series to segment.
- ② Click on the scissor icon in the contextual toolbar to open a new segmentation




- ③ You are now on the tab "Segment", it looks a lot like the "3D" tab but the left side of the screen changes and shows the timeline of the changes made on the medical images.

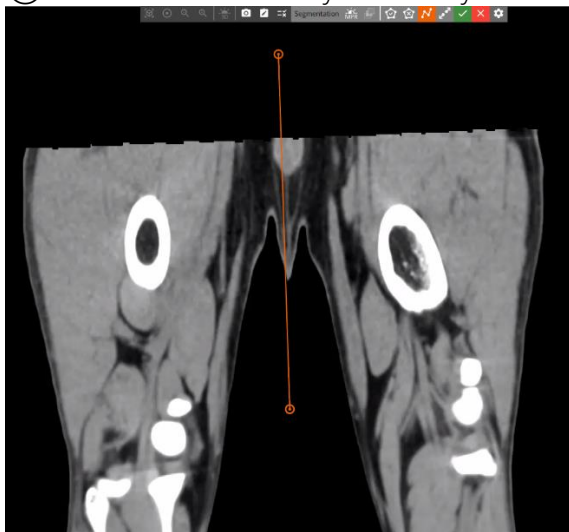
- ④ The toolbar also changes, the first part remains the same, but the lighter part is different.





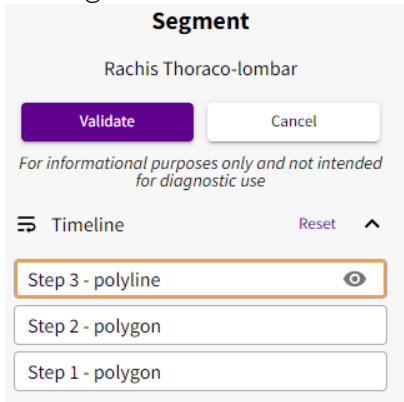
- ⑤ Click on the polyline tool . This tool allows you to cut the object along the polyline. It is particularly useful in combination with the proximity tool.


- ⑥ When the mouse cursor is this shape , you can define the segments where you want to cut the object.

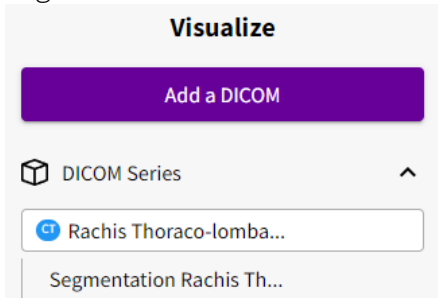
- ⑦ You can click as many times as you want, thus creating several segments at the same time.




- ⑧ You must validate your selection by clicking on the green icon  or cancel it by clicking on the red one .
- ⑨ When you validate your segmentation, it is the last version of it that will be uploaded in the 3D visualization.
- ⑩ While the segmentation is not validated, you can restore another version of the segment by clicking on the "...", then "Restore".



- ⑪ Since a new tab "Segment" appeared on the navigation bar , you can navigate through the different tabs while you are doing your segmentation.
- ⑫ Click on "Validate".
- ⑬ Once the segmentation is validated, you can access to the first version of it and the new segmentation on the left side of the screen. The active view is surrounded by orange.



(63) Segmentation with a proximity tool

 Cautions: Extraction tools are for informational purposes only and not intended for diagnostic use.

- ① Click on the series to segment.
- ② Click on the scissor icon in the contextual toolbar to open a new segmentation



- ③ You are now on the tab "Segment", it looks a lot to the "3D" tab but the left side of the screen changes and shows the timeline of the changes made on the medical images.

④ The toolbar also changes, the first part remains the same, but the lighter part is different.

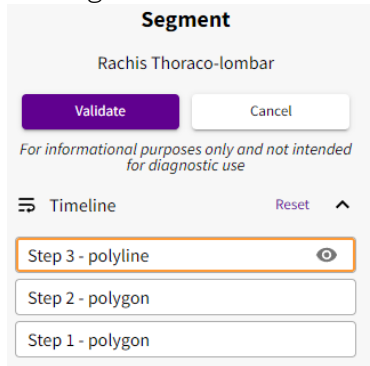



⑤ Click on the proximity tool . This tool allows to select a point, all the area connected with this point will remain visible, the rest of the object will disappear.

⑥ Click on the point you want to keep.

⑦ When you validate your segmentation, it is the last version of it that will be uploaded in the 3D visualization.

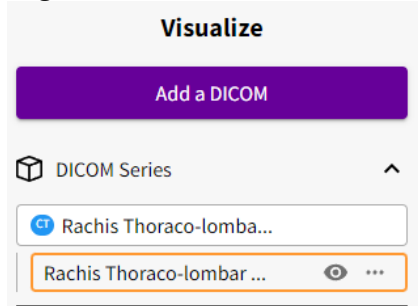
⑧ While the segmentation is not validated, you can restore another version of the segment by clicking on the "...", then "Restore".




⑨ Since a new tab "Segment" appeared on the navigation bar , you can navigate through the different tabs while you are doing your segmentation.

⑩ Click on "Validate".

⑪ Once the segmentation is validated, you can access to the first version of it and the new segmentation on the left side of the screen. The active view is surrounded by orange.



(64) Set your microphone and speakers during a communication

① While you are in communication you can change your parameters of microphone and speaker by clicking on the  button.

② Select the speaker and the microphone you want to use.

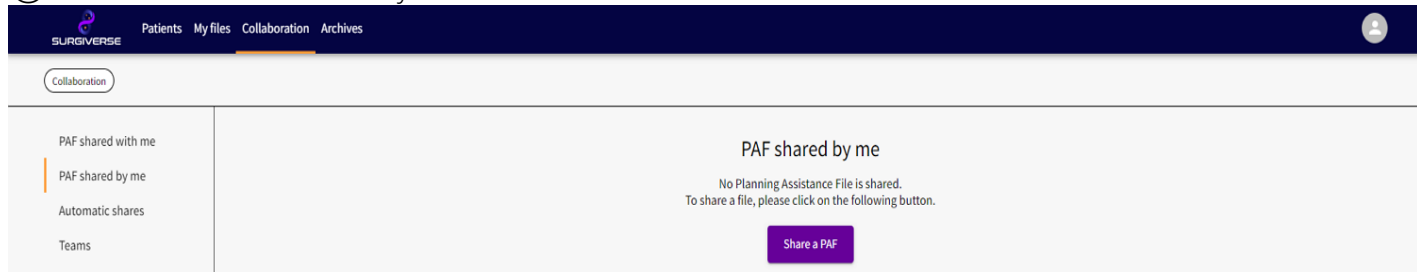
(65) Set your status

① Click on the avatar at the top right of the navigation bar .

② Click on "Set status to not available".

(66) Share a Planning Assistant File (PAF) from the “Collaboration” tab

- ① Click on the “Collaboration” tab.
- ② Click on the “PAF shared by me” section.




- ③ Click on “Share a PAF”.
- ④ Select the number of the PAF to share.




Cautions: It is necessary for the recipient to have a Cysware 4H account to perform the sharing


(67) Share your screen during a communication

- ① While you are in communication you can share your screen by clicking on the  button.
- ② Select your preference about the sharing.

(68) Show/hide the participants of a communication

- ① While you are in communication you can show the list of the participants by clicking on the  button.
- ② You can hide the list by clicking on the same button.


(69) Show/hide the screen of a participant during a communication

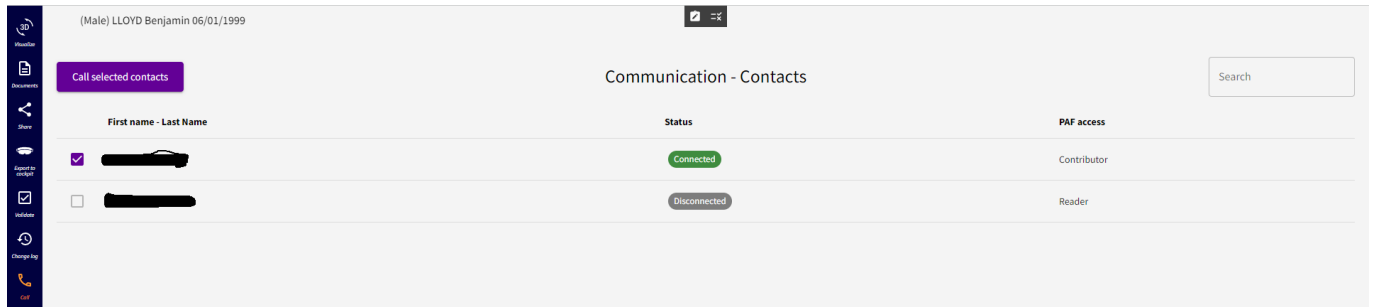
- ① While you are in communication you can hide the screen of a participant by clicking on the  button.
- ② You can show the screen by clicking on the same button.

(70) Sort a table

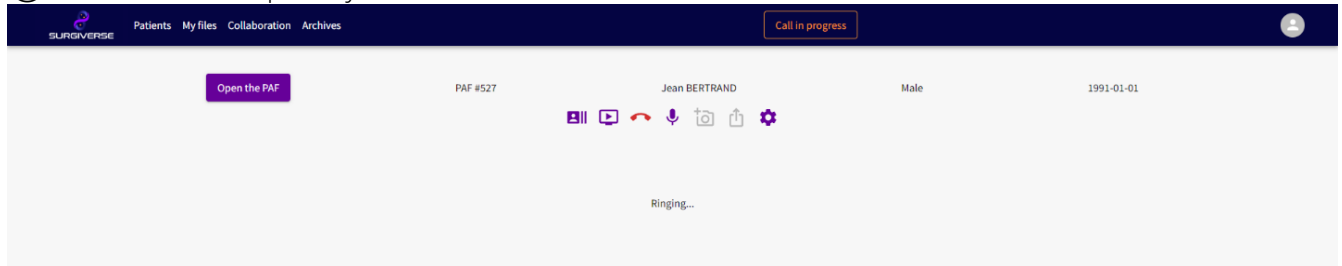
- ① In a tab, click on the header of the column to sort.
- ② The order is represented by an arrow up or down.

(71) Start a communication

- ① While consulting the PAF, you can reach out to another user of Surgiverse in the “Communication” tab .
- ② It opens a screen with a list of people with whom you had shared your PAF with.
- ③ You can select users connected on the platform.
- ④ You must click on “Call selected contacts” and the call starts.



⑤ A new window opens, you are now in communication.



Precaution of use: it is recommended to not add more than 4 users to a call for performance purposes.

(72) Take a measurement: angle

① Click on the measurements tool

② Select the "Angle" measure.

④ You must click three times: a first click on the starting point of the first segment, a second click on the end of the first segment and the start of the second segment, a third click on the end of the second segment.

The angle measured is the angle between the two segments.

⑤ You can give a name to your distance by clicking on the "..." next to the distance you've just created. Then click on "Rename".

⑥ The measurement is done in degrees (°).

Note: While you are taking the measurement, you can change the point of view on the medical image by pressing on the "Alt" key.

Note: You can find your measures on the left of the screen. By clicking on the eye, you can hide or show the distance in the MPR view and edit, rename, or delete it by clicking on the "...".



Caution: The measurements made from Abys® Medical Surgiverse® Web Planning are given as an indication with an accuracy of 3° for angle measurements.

(73) Take a measurement: distance

① Click on the measurements tool


② Select the "Distance" measure.

③ You must click twice: a first click on the starting point of the distance you wish to measure and then a second click on the end point.


- ④ The distance appears in white until you click on the end point.
- ⑤ You can give a name to your distance by clicking on the “...” next to the distance you just created. Then click on “Rename”.
- ⑥ The measurement is done in millimeters (mm).

Note: While you are taking the measurement, you can change the point of view on the medical image by pressing on the “Alt” key.


Note: You can find your measures on the left of the screen. By clicking on the eye, you can hide or show the distance in the MPR view and edit, rename, or delete it by clicking on the “...”.

 **Caution:** The measurements made from Abys® Medical Surgiverse® Web Planning are given as an indication with an accuracy of 1.25mm for distance measurements

(74) Take a screenshot during a communication

- ① While you are in communication you can take a screenshot by clicking on the  button.
- ② This action is possible only if someone is sharing his screen.
- ③ The screenshot is stored in the “Documents” tab.

(75) Take a screenshot from the Planning Assistant File (PAF)

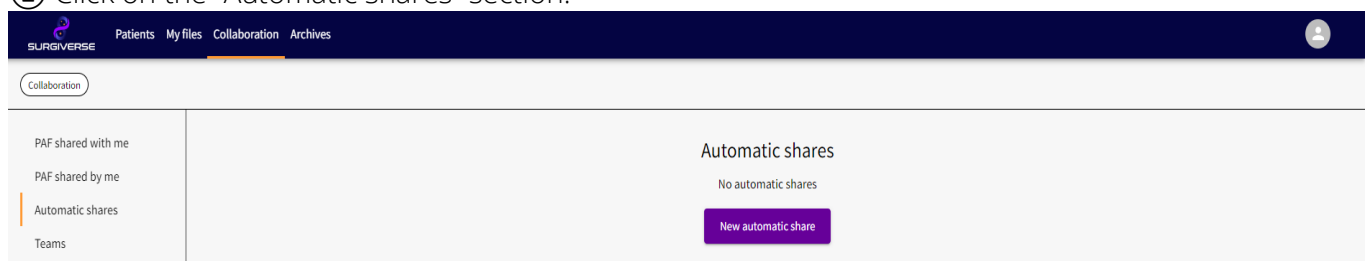
- ① Click on the screenshot tool .
- ② There is a capture of the current screen accessible in the “Documents” tab.
- ③ You can edit the screenshot.


(76) Unarchiving a patient file

- ① Click on the “Archives” tab.
- ② Click on the patient to unarchive.
- ③ Click on the “Unarchive” button at the top right of the screen.


(77) Update an automatic Share

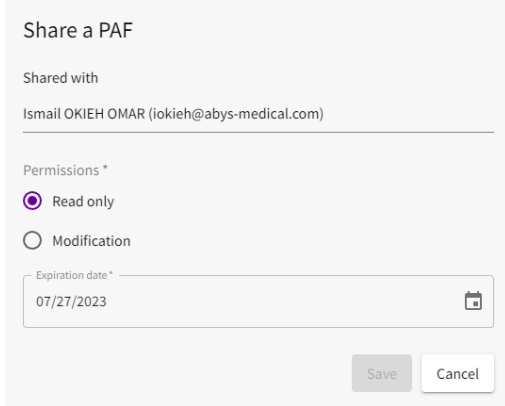
- ① Click on the “Collaboration” tab.
- ② Click on the “Automatic shares” section.



- ③ Click on the  to update the automatic share.
- ④ Click on “Confirm”.


(78) Update existing shares from the Planning Assistant File (PAF)

- ① Click on the “Share” tab.
- ② On the line of the share to update, click on .
- ③ A pop-up opens. Modify the fields to change.




- ④ Click on “Save”.

(79) Validate a Planning Assistant File (PAF)

- ① Click on the “Validation” tab .
- ② Click on “Validate”.
- ③ You can add a comment.
- ④ Click on “Validate”.

Note: Once validated, the PAF can be consulted new information can be added but existing information cannot be modified.

(80) Write or edit a note

- ① Click on the notepad tool .
- ② An area in the right side of the screen is opened to write or edit the note.
- ③ Edit the text.
- ④ Close the area by clicking on the cross at the top of the screen.


Note: All users (creator + user with share with modifications) can write notes and save them.

Note: There is only one note for all users, you can write or modify the preexisting note.

Note: The note is saved as it is modified.

Note: adding or editing a note is also possible from the “Documents” tab.

(81) Zooming in or out of the 3D visualization

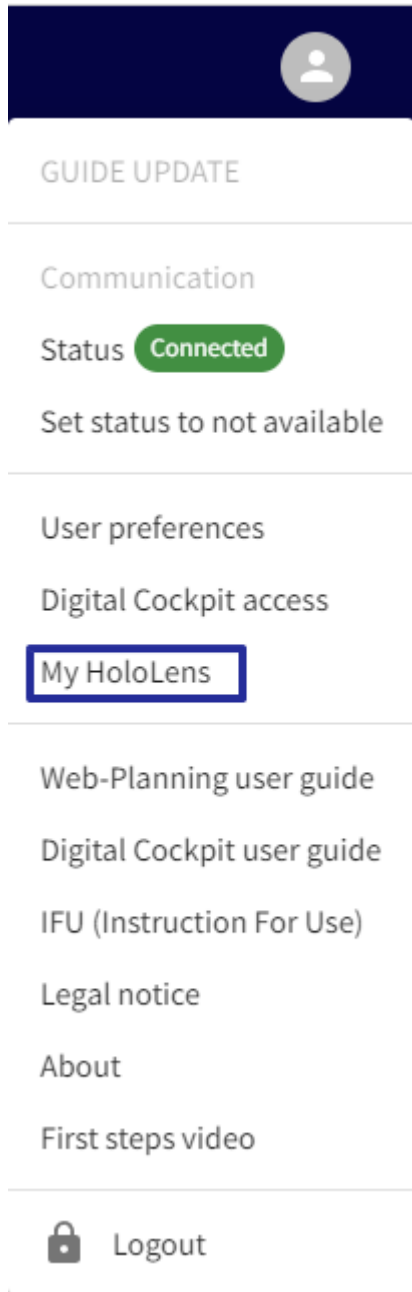
- ① Click on the zooming tool .
- ② You can zoom in (+) or zoom out (-) on a given segment.

③ You must click on the desired segment and then click on the " - " or " + " depending on the action desired in order to perform the action. This action can be applied to both MPR and 3D segments.

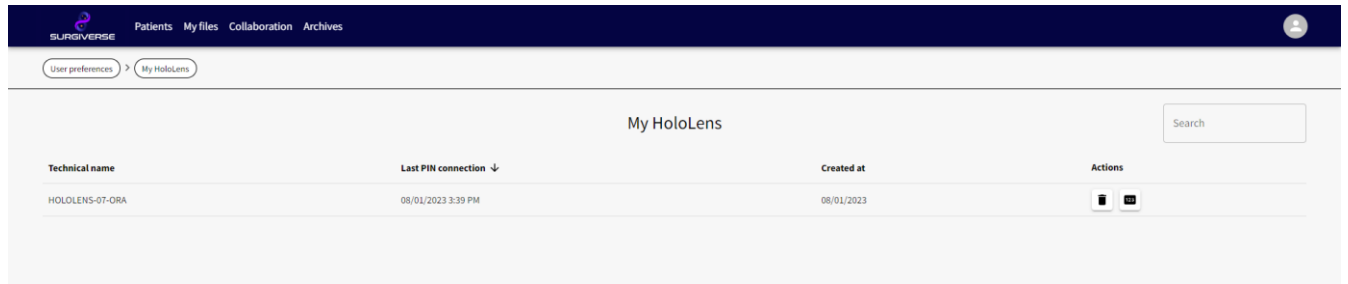
Note: Mouse shortcuts exist to perform the "zoom in/zoom out" action.

(82) Management of HoloLens devices

① Click on the avatar at the top right of the navigation bar .

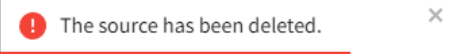


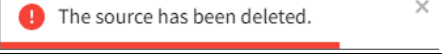
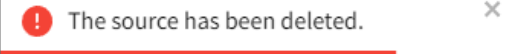
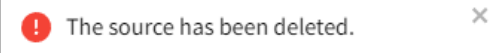
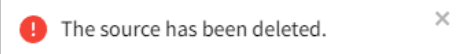
② Click on "My HoloLens".

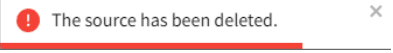


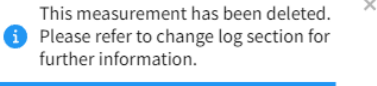
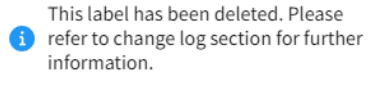
V. Details of collaborative interactions

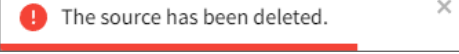
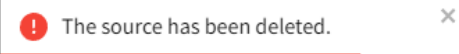
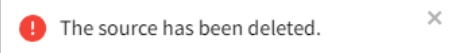
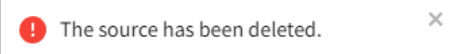
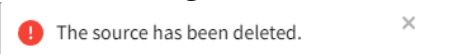
Action	Result
Delete a series while another person is viewing it (active)	The series is deleted and the user who was viewing the deleted series now has no active series selected.
Delete a series while someone else is renaming it	The series is deleted and the user who was renaming it no longer has an active series selected.
Delete a series while another person changes the 3D threshold	The series is deleted and the user who was changing the 3D threshold now has no active series selected, the 3D threshold tool is deselected.
Delete a series while another person changes the MPR threshold	The series is deleted and the user who was changing the MPR threshold now has no active series selected, the MPR threshold tool is deselected.
Delete a series while another person creates a measure on this series	The series is deleted and the user who was performing a measurement no longer has an active series selected, the measurement tool is deselected.
Delete a series while another person creates a label on that series	The series is deleted and the user who was placing a label changes the active series (to the one below), the label tool is deselected.
Delete a series while someone else is editing a measure in that series	The series is deleted and the user who was editing a measurement changes the active series (to the one below). He also receives a notification.

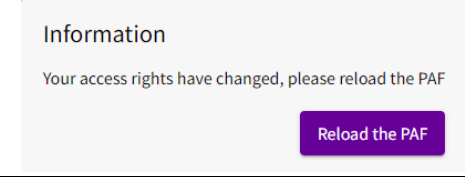
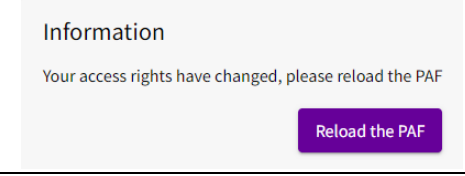
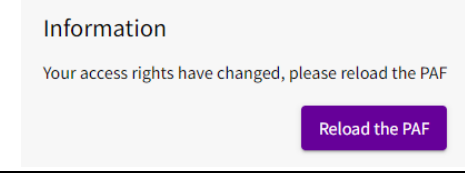
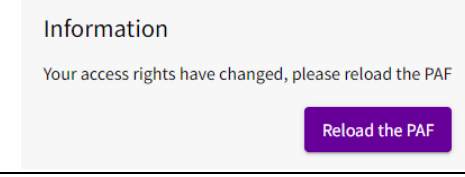
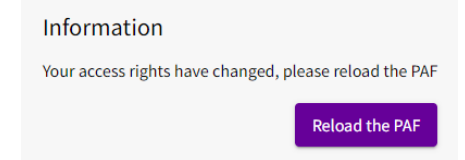
Action	Result
Delete a series while someone else is editing a label in that series	The series is deleted and the user who was editing a label changes the active series (to the one below). He also receives a notification.
Delete a series while someone else renames a measure in that series	The series is deleted, the user who was renaming the measurement no longer has an active series selected.
Delete a series while someone else is renaming a label in that series	The series is deleted, the user who was renaming the label no longer has an active series selected.
Delete a series while another person is deleting a label from that series (open modal before confirmation)	The series is deleted, the user who was deleting the label no longer has an active series selected, however, the delete label pop-up is still open. Nothing happens no matter which button is clicked.
Delete a series while another person is deleting a measure from this series (open modal before confirmation)	The series is deleted, the user who was deleting the measure no longer has an active series selected, however, the measure deletion pop-up is still open. Nothing happens no matter which button is clicked.
Delete a series while someone else is deleting a sub-series (open modal)	The series and its sub-series are deleted, the user who was deleting the sub-series no longer has an active series selected, however, the pop-up for deleting the sub-series is still open. Nothing happens no matter which button is clicked.
Delete a series while someone renames a sub-series (open modal)	The series and sub-series are deleted, the user who was renaming the sub-series no longer has an active series selected.
Delete a series while a segmentation is open on this series	The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept and he receives a notification. 

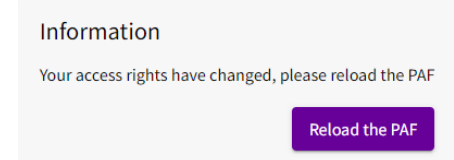
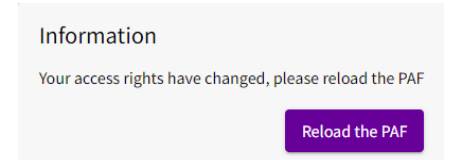
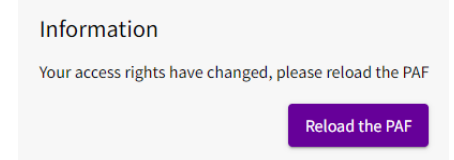
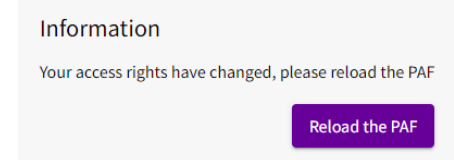
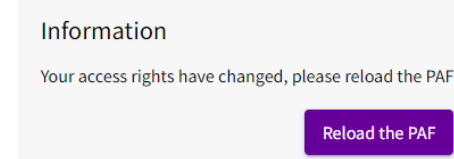
Action	Result
Delete a series while a segmentation is open on a sub-series of this series	<p>The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a series while another person changes the 3D threshold of a sub-series of this series	<p>The series is deleted and the user who was changing the 3D threshold now has no active series selected, the 3D threshold tool is deselected.</p>
Delete a series while another person changes the MPR threshold of a sub-series of this series	<p>The series is deleted and the user who was changing the MPR threshold now has no active series selected, the MPR threshold tool is deselected.</p>
Rename a series during a segmentation on this series	<p>The series is renamed, and the segmentation is not interrupted. When the segmentation is validated, the new name is considered and is used to name the produced sub-series.</p>
Delete a series while another user moves the MPR axes	<p>The series is deleted, the user who was manipulating the MPR axes no longer has an active series selected.</p>
Delete a series during a segmentation on this series	<p>The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a series during a segmentation validation (open modal)	<p>The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a series while a segmentation algo is running	<p>The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 

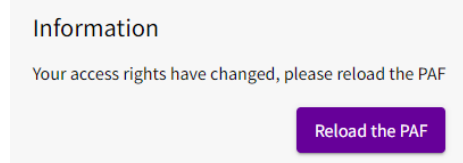
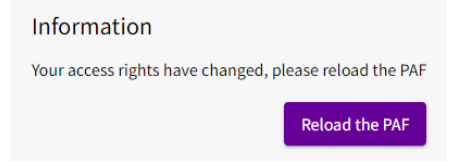
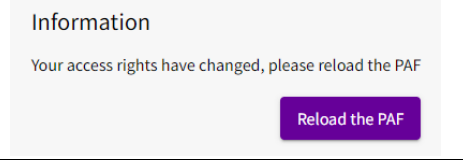
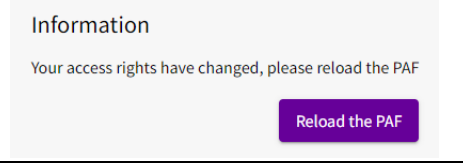
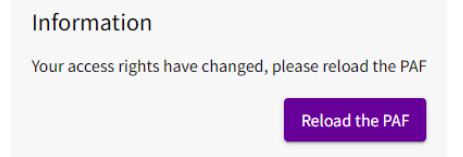
Action	Result
Delete a series while a segmentation tool is open	<p>The series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a series during an export to Surgiverse Digital Cockpit by another user	Once the export is started, the process ends even if the series is deleted. Meshes of deleted series are not kept. If no series are available, the window is grayed out
Delete a sub-series while another person is viewing it (active)	The series is deleted and the user who was viewing the deleted series now has no active series selected.
Delete a sub-series while someone else is renaming it	The series is deleted and the user who was renaming it no longer has an active series selected.
Delete a sub-series while another person changes the 3D threshold	The series is deleted and the user who was changing the 3D threshold now has no active series selected, the 3D threshold tool is deselected.
Delete a sub-series while someone else changes the MPR threshold	The series is deleted and the user who was changing the MPR threshold now has no active series selected, the MPR threshold tool is deselected.
Delete a sub-series while another person creates a measure on this series	The series is deleted and the user who was performing a measurement no longer has an active series selected, the measurement tool is deselected.
Delete a sub-series while another person creates a label on that series	The series is deleted and the user who was placing a label changes the active series (to the one below), the label tool is deselected.

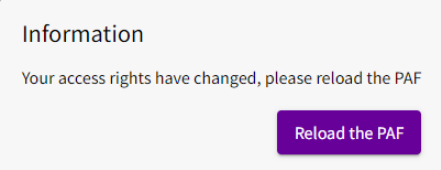
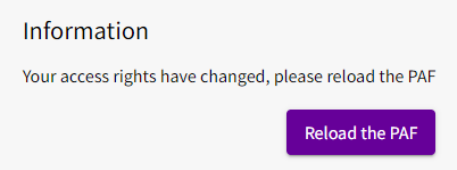
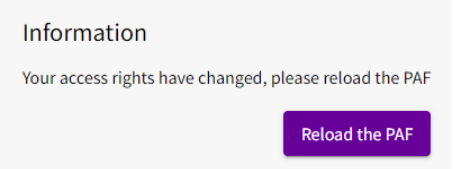
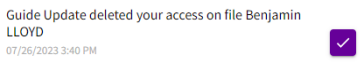
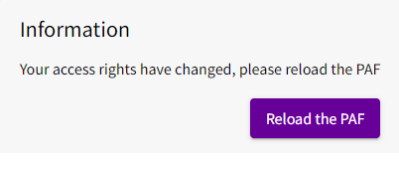
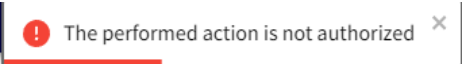
Action	Result
Delete a sub-series while someone else is editing a measure in that series	<p>The series is deleted and the user who was editing a measurement changes the active series (to the one below). He also receives a notification.</p> 
Delete a sub-series while someone else is editing a label in that series	<p>The series is deleted and the user who was editing a label changes the active series (to the one below). He also receives a notification.</p> 
Delete a sub-series while someone else is renaming a measure in that series	<p>The series is deleted, the user who was renaming the measurement no longer has an active series selected.</p>
Supprimer une sous série alors qu'une autre personne renomme un label de cette série	<p>The series is deleted, the user who was renaming the label no longer has an active series selected.</p>
Delete a sub-series while another person is deleting a label from this series (modal open before confirmation)	<p>The series is deleted, the user who was deleting the label no longer has an active series selected, however, the delete label pop-up is still open. Nothing happens no matter which button is clicked.</p>
Delete a sub-series while another person is deleting a measure from this series (open modal before confirmation)	<p>The series is deleted, the user who was deleting the measure no longer has an active series selected, however, the measure deletion pop-up is still open. Nothing happens no matter which button is clicked.</p>
Delete a sub-series while another person is viewing it (not active)	<p>The sub-series is deleted, the user who was viewing it no longer has an active series selected.</p>


Action	Result
Delete a sub-series while a segmentation is open on this series	<p>The sub-series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Rename a sub-series during a segmentation on this sub-series	<p>The sub-series is renamed and the segmentation is not interrupted. When the segmentation is validated, the new name is taken into account and is used to name the produced sub-series.</p>
Delete a sub-series while another user moves the MPR axes	<p>The sub-series is deleted, the user who was manipulating the MPR axes no longer has an active series selected.</p>
Delete a sub-series during a segmentation on this series	<p>The sub-series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a sub-series during a segmentation validation (open modal)	<p>The sub-series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a sub-series while a segmentation algo is running	<p>The sub-series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a sub-series while a segmentation tool is open	<p>The sub-series is deleted but the segmentation does not end. When the user validates the segmentation, he is returned to the 3D visualization screen, his segmentation is not kept, and he receives a notification.</p> 
Delete a sub-series during an export to Surgiverse® Digital Cockpit by another user	<p>Once the export is started, the process ends even if the sub-series is deleted. Meshes of deleted sub-series are not kept.</p>

Action	Result
<p>Change read-only rights on a PAF while someone is renaming a series</p>	<p>The rights are changed, the modification of the series name is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF.</p> 
<p>Change the read-only rights on a PAF while someone renames a measure</p>	<p>The rights are changed, the modification of the measure is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF.</p> 
<p>Change read-only rights on a PAF while someone renames a label</p>	<p>The rights are changed, the label modification is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF.</p> 
<p>Change the rights to read-only on a PAF while someone is creating a measure</p>	<p>The rights are changed, the measurement is interrupted and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF.</p> 
<p>Change the rights to read-only on a PAF while someone creates a label</p>	<p>The rights are changed, the labelling is interrupted and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF.</p> 

Action	Result
<p>Change the read-only rights on a PAF during a non-validated segmentation</p>	<p>The rights are changed, the user who has his rights changed while he was in segmentation receives a notification that his rights have been changed. However, the segmentation is not interrupted, but the user who is read-only no longer has access to it.</p> 
<p>Change the read-only rights on a PAF during a measure modification</p>	<p>The rights are changed, the modification of the measure is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. There is no change to the measure.</p> 
<p>Change the read-only rights on a PAF during a label modification</p>	<p>The rights are changed, the modification of the label is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. The label does not change.</p> 
<p>Change the read-only rights on a PAF while deleting a measure (open modal)</p>	<p>The rights are changed, the deletion of the measure is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. There is no change to the measure.</p> 
<p>Change read-only rights on a PAF while deleting a label (open modal)</p>	<p>The rights are changed, the deletion of the label is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. There is no change to the label.</p> 

Action	Result
<p>Change read-only rights on a PAF while deleting a series (open modal)</p>	<p>The rights are changed, the deletion of the series is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. There is no change to the series.</p> 
<p>Change read-only rights on a PAF while deleting a sub-series (open modal)</p>	<p>The rights are changed, the deletion of the sub-series is interrupted, and a pop-up window opens indicating that the user's rights have changed and that he must reload the PAF. There is no change to the sub-series.</p> 
<p>Change read-only rights on a PAF while someone is running a segmentation with a segmentation tool</p>	<p>The rights are changed, the segmentation continues. The user whose rights have changed receives a pop-up indicating that his rights have changed and that he must reload the PAF. The segmentation ends and the other users who have the modifying accesses can access it and validate it or not.</p> 
<p>Change the read-only rights on a PAF during an upload of a new DICOM</p>	<p>The rights are changed, the user who was trying to upload a DICOM sees a pop-up indicating that his rights have changed and that he must reload the PAF. The loading of the DICOM is interrupted.</p> 
<p>Change the read-only rights on a PAF during a document addition</p>	<p>The rights are changed, the user who was trying to upload a document sees a pop-up indicating that his rights have changed and that he must reload the PAF. The upload of the document is interrupted.</p> 

Action	Result
Change the read-only rights on a PAF during a document renaming	<p>The rights are changed, the user who tried to change the name of a document sees a pop-up indicating that his rights have changed and that he must reload the PAF. The name of the document is not changed.</p> 
Change the rights to read-only on a PAF while I edit a checklist	<p>The rights are changed, the user who tried to modify a checklist sees a pop-up indicating that his rights have changed and that he must reload the PAF. The checklist is not modified.</p> 
Change read-only rights on a PAF while renaming a checklist (open modal)	<p>The rights are changed, the user who tried to modify the name of a checklist sees a pop-up indicating that his rights have changed and that he must reload the PAF. The name of the checklist is not changed.</p> 
Delete a user while he is on a PAF	<p>The user receives a notification at the bottom left of the screen that they no longer have access to the PAF they were removed from.</p> 
Delete a user from a PAF while he is on this PAF	<p>The user who is currently viewing a PAF receives a pop-up indicating that his rights have changed and that he needs to reload the PAF. When he reloads the PAF, he is sent to the Surgiverse® Web Planning home page and receives a notification.</p>  

Action	Result
Delete a team, shared on a PAF, during the consultation of this PAF	<p>The team is deleted, and the user receives a notification saying so. However, the user is not disconnected from the PAF and can continue to manipulate it. However, once they leave the PAF, they no longer have access to the PAFs shared with them.</p> <p>The team "Hopital_Team" has been deleted. 07/26/2023 3:44 PM </p>
Validate a PAF while someone renames a series	The user who was renaming a series sees the window close. No changes are made to the series name.
Validate a PAF while someone renames a measure	The user who was renaming a measure sees the window close. No changes are made to the measure name.
Validate a PAF while someone renames a label	The user who was renaming a label sees the window close. No changes are made to the label name.
Validate a PAF while someone is creating a measure	The user who was in the process of carrying out a measurement can finish his action despite the validation of the PAF.
Validate a PAF while someone is creating a label	The user who was in the process of placing a label can finish his action despite the validation of the PAF.
Validate a PAF during a non-validated segmentation	The Segmentation section closes as soon as one of the users validates the PAF. The current segmentation is not saved.
Validate a PAF during a measurement modification	The current action is automatically stopped
Validate a PAF during a label modification	The current action is automatically stopped
Validate a PAF while deleting a measure (open modal)	The confirmation modal is closed
Validate a PAF while deleting a label (open modal)	The confirmation modal is closed

Action	Result
Validate a PAF while deleting a series (open modal)	The confirmation modal is closed
Validate a PAF while deleting a sub-series (open modal)	The confirmation modal is closed
Validate a PAF during the launch of a segmentation tool	The segmentation stops when the PAF is validated.
Validate a PAF while a segmentation algo is running	The segmentation stops when the PAF is validated.
Validate a PAF during an upload of a new DICOM	DICOM loading stops when the PAF is validated.
Reset segmentation while a segmentation tool is open for another user	The user who wants to reset takes over and the one who was in the process of segmentation no longer has the sub-series he was working on.
Restore segmentation while a segmentation tool is open for another user	The user who decides to restore the segmentation takes over. The active series of the user who had opened a segmentation tool changes.
Cancel a segmentation while someone is changing the 3D threshold	The user who decides to cancel the segmentation takes over. Both users are returned to the 3D visualization section.
Cancel a segmentation while someone changes the MPR threshold	The user who decides to cancel the segmentation takes over. Both users are returned to the 3D visualization section.
Validate a segmentation while someone is modifying the 3D threshold	The user who decides to validate the segmentation takes over. Both users are returned to the 3D viewing section. The changes made by the 3D threshold change are saved.

Action	Result
Validate a segmentation while someone changes the MPR threshold	The user who decides to validate the segmentation takes over. Both users are returned to the 3D visualization section. The changes made by the MPR threshold change are saved.
Add a DICOM during a segmentation	This is not a problem, the two actions can be carried out together.
Run an export to Surgiverse® Digital Cockpit while a segmentation algo is running	This is not a problem, the two actions can be carried out together.
Run a segmentation algo while an export to Surgiverse® Digital Cockpit is in progress	This is not a problem, the two actions can be carried out together.
Delete a document from the PAF while another user is viewing the document	The document is deleted, however the user who is viewing the document still has access to it as long as he does not leave the document. Once the user has left the document, it becomes inaccessible.

Table 5 - Table of interactions in collaborative mode

VI. Residual risks and associated recommendations



Risk of inappropriate treatment: user must make sure to open the right planning assistance folder for his(her) patient on Abys® Medical Surgiverse® Web Planning. (Double check patient's identity and surgery type).



Risk of inappropriate treatment: user may check appropriateness of dimensions between original CT scan and file displayed on Abys® Medical Surgiverse® Web Planning by means of integrated measurement tool and must systematically verify the right side of the limb that is going to be operated.



Risk of inappropriate treatment: when planning assistance files are used in clinical collaboration user should monitor the modifications made by his(her) peers before surgery.



Risk of data loss: for data security, the user is responsible for letting other people accessing device with his/her QR code. Abys® Medical declines all responsibility in case of use of the Abys® Medical Surgiverse® Web Planning by a person other than the one who was provided his(her) with credentials at registration.



Risk of data loss: user must ensure that he(she) logs out of Abys® Medical Surgiverse® Web Planning when he(she) no longer uses it to avoid abusive use by a third and related issues.

VII. Software installation / maintenance / decommissioning

No installation, maintenance or decommissioning procedures are needed for users. Surgiverse® Web Planning is a web platform under responsibility of Abys Medical® ensuring all operations.

Users will be noticed for updates and related timelapses of unavailability of platform if needed. In the event of a major modification of **Surgiverse® Web Planning** that could have an impact on the clinical or technical performance of **Surgiverse® Web Planning**, a re-validation will be performed. If applicable, the new performance parameters will be communicated to users if they are modified.

VIII. Complaints

Any healthcare professional with a complaint regarding the quality of this medical device, its identity, reliability, safety, efficacy or performance should notify Abys® Medical. Any malfunction of this medical device, and/or any malfunction that may have caused or contributed to a patient's death or serious injury, must be notified immediately to Abys® Medical and to the concerned competent authority. For any claim on this medical device, please provide the name, part number and version of the medical device, your name and address, and a detailed description of the claim. For additional information on this medical device, or to obtain free hard copy instructions for use within 7 days, please contact Abys® Medical Customer Service at support@abys-medical.com.

IX. Legal information

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