

3D HISTECH

CaseCenter 2.9 SP1 User's Guide

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Character Types and Symbols

<i>Example</i>	Abbreviation or term that is explained in section Terms and Abbreviations .
Example	Words or characters that appear on the screen. These include field names, screen titles, push-buttons and menu names, paths or options. Keys on the keyboard. For example, function keys (such as F11) or the Ctrl+O key combination.
<i>Example</i>	Cross-references to other documents or sections within this document.
 Warning!	Indicates that you need an additional module to use the feature or that there are prerequisites for the task.
 Important!	Contains an important piece of information or a recommendation. The application will work if you choose not to follow the recommendation but its performance might be less than optimal.
 Tip!	Contains a suggestion about using the application in some other way or to some interesting purpose.

Terms and Abbreviations

Annotation	A particular detail of a digitized slide.
Host	User who uploaded the digital slide to CaseCenter and who initiates the Teleconsultation about the slide.
CaseCenter user group	Group created by a CaseCenter administrator.
Participant	User invited to participate in the evaluation of a slide stored on CaseCenter.
Teleconsultation	Provides access to digitized slides for several users and supports their collaboration in inspecting and evaluating the virtual slide.
Teleconsultation group	Group created by the Host for a Teleconsultation session independently of the user groups that exist on CaseCenter. Several Teleconsultation sessions (and therefore several Teleconsultation groups) can be activated on a CaseCenter in parallel.
Telepathology	Teleconsultation in the field of pathology: pathologists exchange information and evaluate a slide together via Teleconsultation.

1 About CaseCenter

CaseCenter is an application through which you can store and manage virtual slides on a designated server.

CaseCenter is part of the 3DHISTECH Product Family that supports tasks in the educational and research workflow of pathologists.

1. Digitize slides (which can also be tissue microarrays or slides stained with fluorescent probes) with a 3DHISTECH scanner microscope, for example, with Pannoramic SCAN 150. For more information on Pannoramic microscopes, see product brochures or the current issues of user's guides of Pannoramic scanners.
2. The Pannoramic scanner microscope creates digitized slides that can be saved on a local computer connected to the scanner, or, slides can be uploaded through the scanner software directly to the CaseCenter server where slides can be evaluated, shared, and you can also create Teleconsultation session to discuss specific cases with pathologists.
3. Slides can be opened from the local computer or the CaseCenter via CaseViewer and InstantViewer, you can inspect the local slides and you can create *annotations* on them to mark interesting areas.

Pannoramic Viewer is a platform for the following applications, called modules:

- With the **Teleconsultation** module, you can upload slides to a dedicated server and share them with other Pannoramic Viewer users to request their analysis.
- With the **TMA** module, you can view and analyze slide sets in which each slide is a cut from a tissue microarray. Combined with the TumorBoard module, the TMA module provides you with a powerful tool to perform research-scale analyses on digital slides.
- With the **TumorBoard** module, you can perform an immunohistochemical analysis on a slide set. If you purchase the TMA module as well, you can run your TumorBoard analysis on a tissue microarray and score the TMA project in TumorBoard.
- With **HistoQuant**, **MembraneQuant**, **NuclearQuant**, **FISHQuant**, **CISHQuant**, **CISH-RNSQuant**, and **DensitoQuant** modules, you can define algorithms to measure various parameters on a slide. Combined with TumorBoard, you can run the Quant algorithm on one slide or on a set of slides (grouped into a TumorBoard project).

For more information on Pannoramic Viewer modules, see *Pannoramic Viewer 1.15.4 User's Guide*.

4. You can upload slides to a CaseCenter server also from the local storage with file transfer via *Teleconsultation* in Panoramic Viewer.

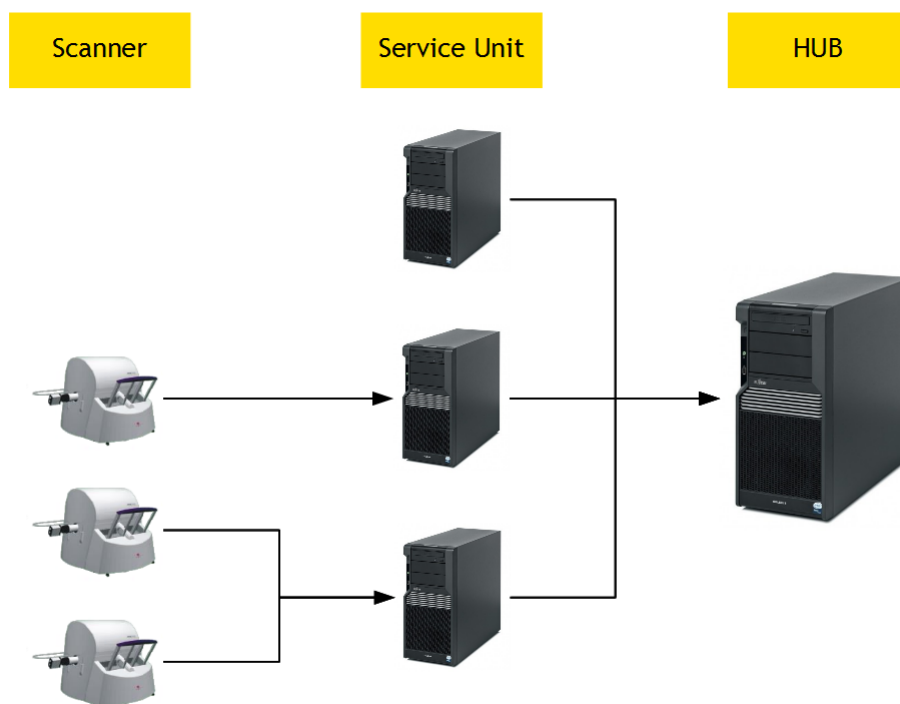
Teleconsultation via Panoramic Viewer allows you to view remote slides (slides stored on a CaseCenter server). With this feature of Panoramic Viewer, you can also host a *Teleconsultation* session or participate in a session initiated by another user.

5. You can also share slides for E-School. For information on that product, see ***E-School 1.11 User's Guide***. One example of a server-based teleconsultation solution is www.pathonet.org.

Slides stored in CaseCenter server may be shared and can be opened with CaseViewer application. For more information the application and usage, see ***CaseViewer User's Guide***.

1.1 Storing and Managing Digital Slides through CaseCenter

CaseCenter is a platform for managing folders, slides, cases, blocks and other documentations. The figure below demonstrates how slides can be stored and managed on a server.



A Service Unit is an element of the system where slides are physically stored on and slide processes take place at as well; slide access and management is attained through the HUB.

Users who have registered on the server (registration is performed by the server administrator) can manage and use their slides on the server in the following ways:

- upload slides to the server.
- arrange slides in folders, cases, or blocks, for example, group slides according to their staining types or your research projects.
- share slides with other users:
 - with users who have an account on the same CaseCenter (either having read only or read/write access to the folder/case/block containing your slide, or if you share the slide with them explicitly).
 - who are not registered CaseCenter users (Public Share Users), but can access publicly shared slides via a share URL.
 - with users who will access the slide via E-School.
- invite other users into *Teleconsultation* sessions to discuss slides.
- participate in *Teleconsultation* sessions initiated by another user.

1.2 Accessing a Slide

Whether you can open and view a slide stored on a CaseCenter server depends on the following criteria:


- you can always access slides stored in a folder/case/block for which you have read only, and upload slides with read/write access rights.
- you can see slides that other users share with you (for instructions, see [section 6](#)).

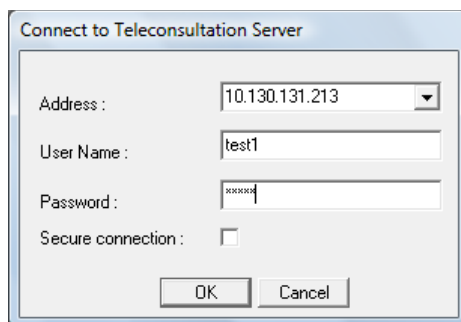
Administrators or users with moderator privilege can give permission to particular users or groups for accessing specific folders/cases/blocks. This means that you might not be able to see all the slides stored on the server, and it is possible that some of the slides are not even visible to other users except they are shared.

For example, if a parent folder is protected (some of its content is hidden because you are a user with limited user privileges, therefore, the folder name is grayed out), but it is possible for you to access the content of a sub-folder if you are permitted by the administrator or a user with moderator rights.

2 Connecting to CaseCenter

2.1 Connecting through Panoramic Viewer

1. Launch Panoramic Viewer on your computer.
2. To start *Teleconsultation*, click  in the toolbar.
3. Enter server address and user credentials into the corresponding fields. HTTPS connection can be established by selecting the **Secure connection** option. Click **OK** when finished.



The image shows a dialog box titled "Connect to Teleconsultation Server". It contains four input fields: "Address" with a dropdown menu showing "10.130.131.213", "User Name" with the text "test1", "Password" with masked characters "*****", and "Secure connection" with an unchecked checkbox. At the bottom are "OK" and "Cancel" buttons.

2.2 Logging in to CaseCenter through CaseViewer

1. Launch CaseViewer
2. Select the CaseCenter panel from the startup page
3. Enter user credentials to access the designated server

For more information on CaseViewer, read *CaseViewer Help Guide*.

2.3 Logging in to CaseCenter through the Web Interface

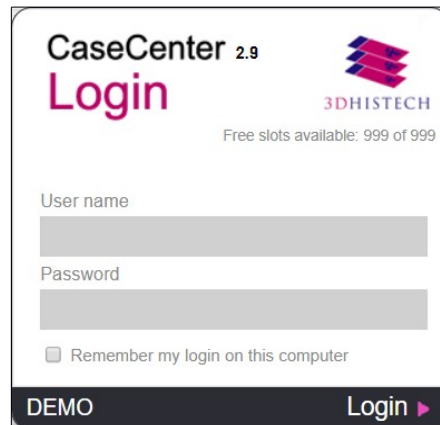
1. Type the URL of the CaseCenter (the local System Administrator can assist you with the proper address) in your web browser to access the CaseCenter.



Warning!

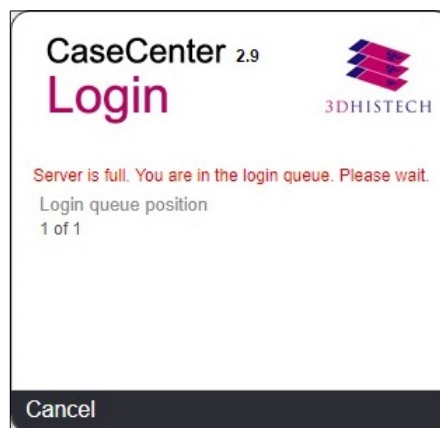
The supported browser is **Google Chrome**. Do **NOT** use other browser types as it can result in serious error in functions.

2. Enter your User Name and Password, and click **Login** to access the page. If a global cookie is set to 'ON' by the administrator, the login box may contain a checkbox to make the computer remember the user's login. Upon selecting this option, it is not necessary for the user to log in to the server again through the same browser before the cookie expires.

**Important!**

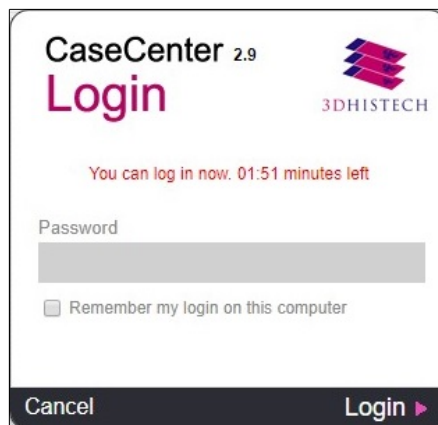
Open CaseCenter interface in one tab only with your browser, because connection issues may arise when working on the same server in several tabs.

If there are no free slots left to access the server, you receive a message displayed in the login window informing you that you are placed in the login queue.



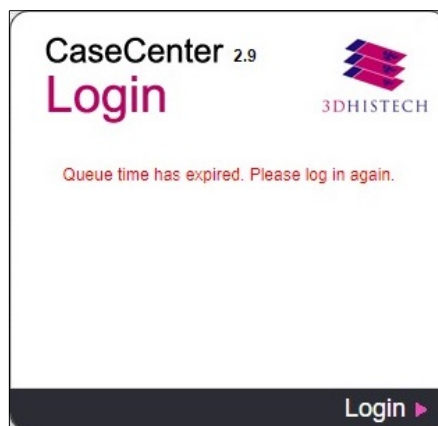
You get in the login queue based on your user level, which means that the higher the user level is, the sooner you are allowed to log in (the higher ranked user is put forward, but behind the users of the same level).

Queue number (position in the queue) is displayed and automatically updated. You may leave the queue by clicking **Cancel**, and every other user behind will be placed forward.



The image shows a login dialog box for CaseCenter 2.9. At the top left, it says "CaseCenter 2.9 Login" with the 3DHISTECH logo to the right. Below this, a red message states "You can log in now. 01:51 minutes left". There is a "Password" label above a grey input field. Below the input field is a checkbox labeled "Remember my login on this computer". At the bottom, there are two buttons: "Cancel" on the left and "Login ▶" on the right.

If you are at the first position in the queue and a license is set free, then you will be notified that you can access the system. If you do not wish to log in, you will be removed from the queue after a specified amount of time has passed since the notification is displayed, and the possibility of logging in is given to the user next on hold.



The image shows a login dialog box for CaseCenter 2.9. At the top left, it says "CaseCenter 2.9 Login" with the 3DHISTECH logo to the right. Below this, a red message states "Queue time has expired. Please log in again.". At the bottom right, there is a "Login ▶" button.

3 Slide Upload to CaseCenter


3.1 Uploading slides with CaseViewer

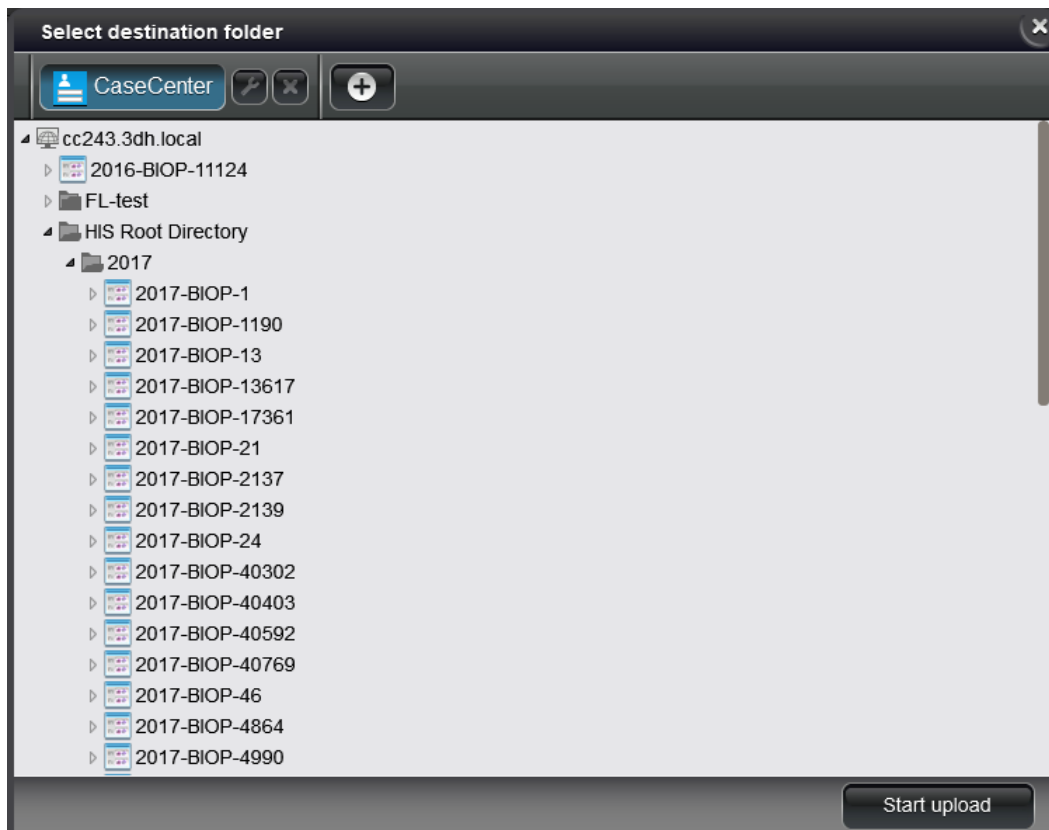
After opening **CaseViewer** and selecting **Local Computer**, the tree structure of the selected drive can be expanded in the left pane of the main window. If you click on a folder, the thumbnails and label areas of the included slides are displayed in the right pane of the window. Click the slide thumbnail to open the slide in CaseViewer.



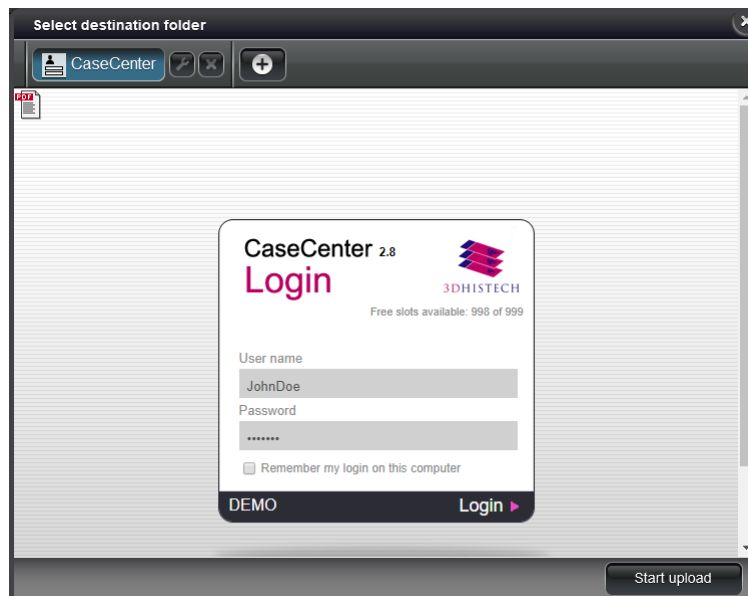
- – the **Upload/Processing** panel serves to collect slides for upload to CaseCenter or for batch processing.
- First, select the slide or a single folder in the tree-view, then click to add it to the list. You can remove a slide from the list by clicking . If you want to delete all items, click .
- Batch upload of slides to CaseCenter server can be initiated by clicking .



- a) If you already are logged in to the server, the tree-view of the server is displayed. First select a folder as destination, then click **Start upload**. To connect to another server as destination, click  at the header bar.




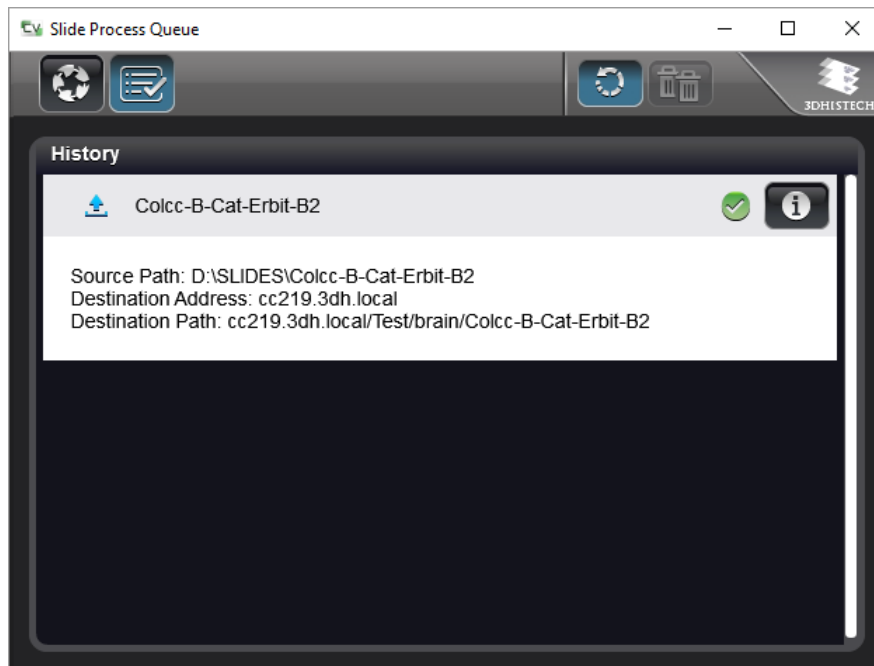
- b) If you are not yet connected to any servers, click the button of the predefined server to which you can connect to, or create a new connection. After logging in to a server, the tree-view is displayed.






- After clicking **Start Upload**, the Slide Process Queue window is displayed in which the upload progress of slides is visible.



- Click  to display the panel including the list of slides successfully uploaded in the History panel.



- Click  to display slide information on the source and destination. There is a  button to remove slide from the list.
- If the upload process is interrupted or could not be performed, the slide name is visible in red, and gets to the bottom of the list. Click  to retry upload. In the info panel the cause of the error is displayed.

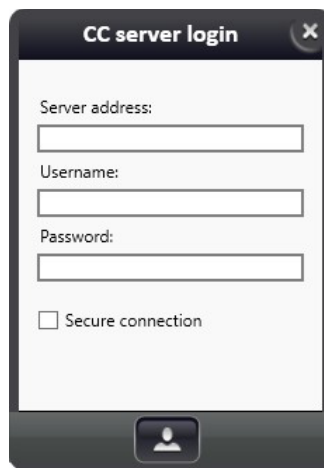
For more information, please read ***CaseViewer 2.2 User's Guide***.

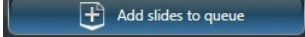
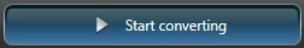
3.2 Uploading slides with SlideConverter

It is possible to upload slides when converting them in SlideConverter and selecting a CaseCenter folder as destination.

- If CaseCenter destination has been selected, the following login data must be entered to establish connection: server address, user name, password, and protocol type (http/https).

- Click  to connect.




- Click  to select slides to be added to conversion queue. Multiple slides of the same type with identical parameters can be added at a time. After conversion, input slides can be deleted without confirmation (works also for slides received from CaseCenter)
- Finally, click  to launch conversion and upload to the selected CaseCenter folder.

3.3 Uploading slides with Pannoramic Viewer

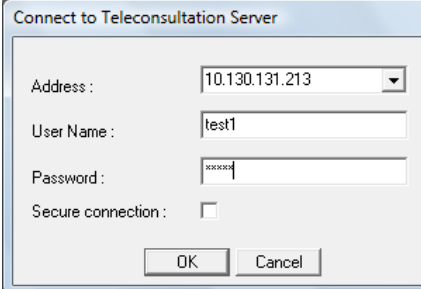
**Tip!**

Since the upload may take a significant amount of time – depending on the slide size – it is recommended that you upload the slide to the server before starting a *Teleconsultation* session.

You can perform bulk uploads from Pannoramic Viewer. See section **4.4.1 Upload Slides to CaseCenter** in *Pannoramic Viewer 1.15.4 User's Guide*.

1. Launch Pannoramic Viewer on your computer.
2. To connect to the CaseCenter server, click  in the toolbar.
3. Enter server address and your authorization information (User Name and Password) into the corresponding fields. HTTPS connection can be established by selecting the **Secure connection** option. Click **OK** when finished.

NOTE: If you encounter a problem, contact the CaseCenter administrator.



Connect to Teleconsultation Server

Address : 10.130.131.213

User Name : test1


Password : xxxxxx

Secure connection :

OK Cancel


4. Ensure that the slide is visible in the navigation tree on the **Local** tab in Pannoramic Viewer.

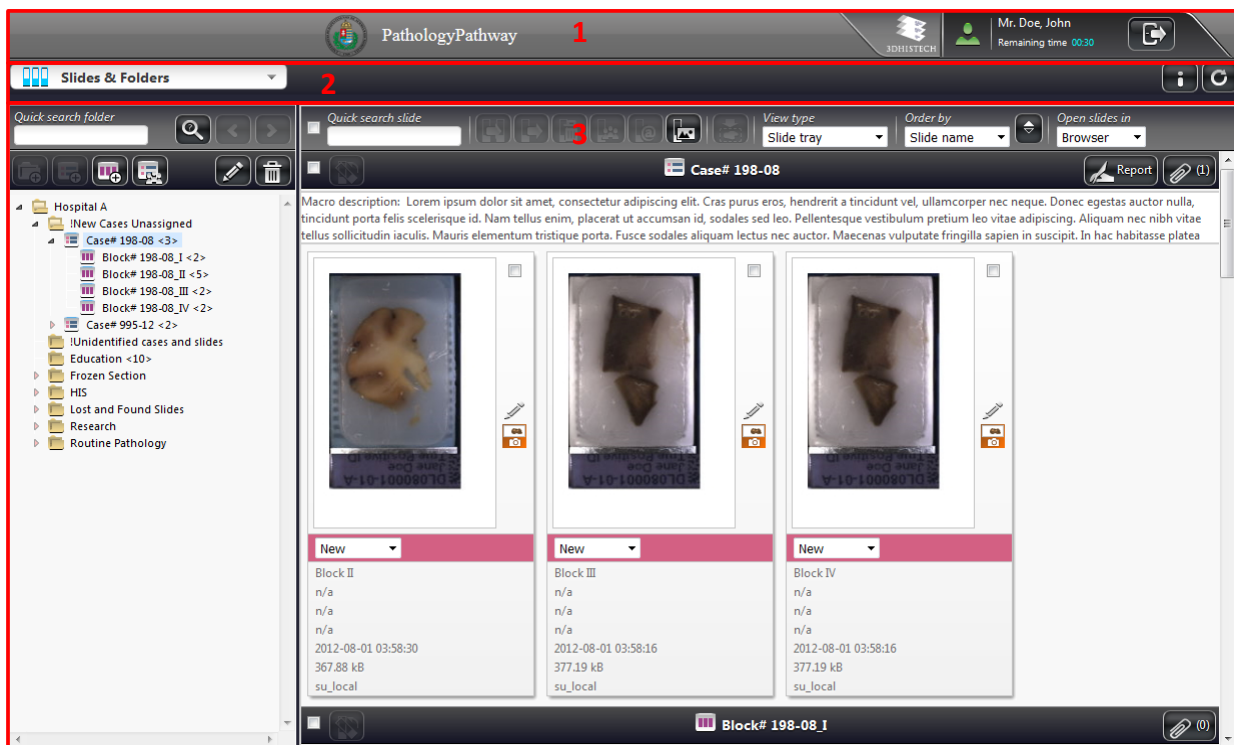
If the slide is not visible, add the containing folder to the navigation tree:

- a. To open the slide, click  in the toolbar
 - b. Browse for the folder that contains the slide
 - c. Click **Add Folder** then click **Close**
5. Right-click the slide that you want to upload and then select **Upload Slide to Teleconsultation Server**.
 6. Set the properties for the copy of the slide to store on CaseCenter.
 7. Click **Start Upload**.

4 CaseCenter Main Application Screen

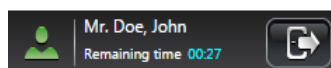
The main application screen can be divided into the following elements:

- **Header Bar (1)** that includes the name of the CaseCenter server you are connected to, the logo of the institute, version information, and the User panel.
- **Main Menu Selector (2)** is a drop-down element from which you can select the desired menu option. A  button is located at the right side of this bar. Click this button to immediately update the content of the display after you effect a change (for example, in the folder structure), but normally, the screen is automatically updated within four seconds.
- **Menu Panel (3)** modifies according to the selected menu option. Panels may be displayed differently (according to uniquely customized column settings for the specific user type).



4.1 User Panel

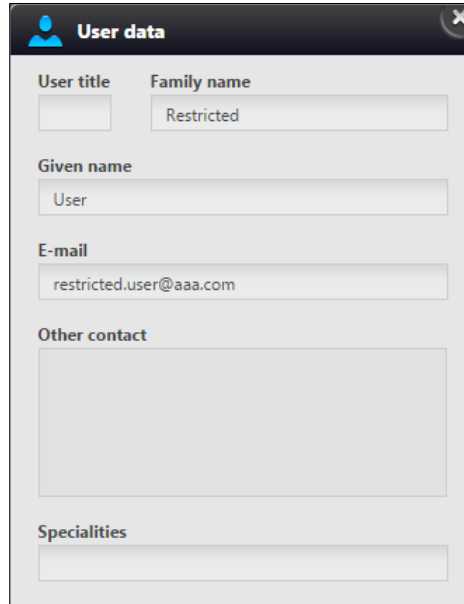
At the top right corner of the main application screen there is a panel to display the name and type of the user currently logged in. The time left before you are logged out due to inactivity is displayed below the user name.



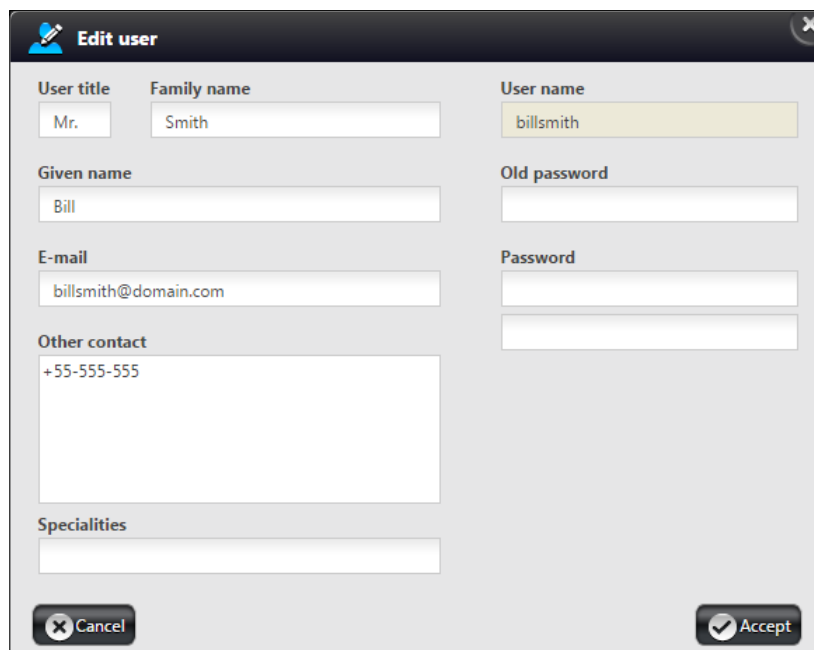
User type is presented by the color of the avatar:

 - Moderator;  - Normal;  - Restricted;  - Public share

For users who cannot modify their profile data (for example, LDAP users), **User data** window is displayed instead of **Edit user** window. Upon clicking the avatar, the User data window is displayed.



If you click on your avatar, and the user rights granted allows you to edit all your data except user name, the **Edit user** window opens.




The following options are available for you to change user preferences:


- You can change your title, family and given name, e-mail address, password, other contacts, and specialties. User name and Moderator right is given by the administrator, therefore the **User name** field is inactive in this window.

NOTE: Use only printable ASCII characters (32..126) when creating a new password.

NOTE: Moderator user is allowed to set other users' access rights for folders to which they have RW right (except to folders with R or O rights).

Click  to log out from the CaseCenter interface.

NOTE: If closing the browser tab/window, and your browser is set not to remember to previous session, it may happen that you cannot log in again because of licensing issues (the maximum number of user licenses is reached). Modify browser settings of **Google Chrome** as follows:

- Click  at the top right corner of the Chrome window.
- Select **Settings** menu from the list.
- Select **Continue where you left off** option at **On Startup** section.

4.1.1 Managing a CaseCenter User Account

Your user account (user name and password) is created by the CaseCenter administrator. There are no restrictions on how many slides you can upload to the CaseCenter server, assuming that there is still enough storage place on the server.



Important!

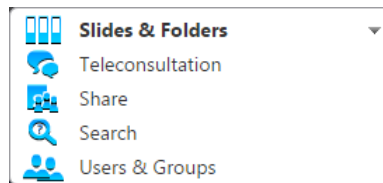
You might not be able to change the password assigned to you by the administrator who enables or disables password resetting when your account is created. If you have trouble with resetting your password, contact your CaseCenter administrator.

4.1.2 Changing a User Password

If you are allowed to change your password, do the following:

1. Open the CaseCenter main page in your web browser.
2. Enter your **User name** and **Password** and click **Login**.
3. Click **Change profile** in the User panel and modify the password in the Edit user window (see this section above).

4.2 Menu Options



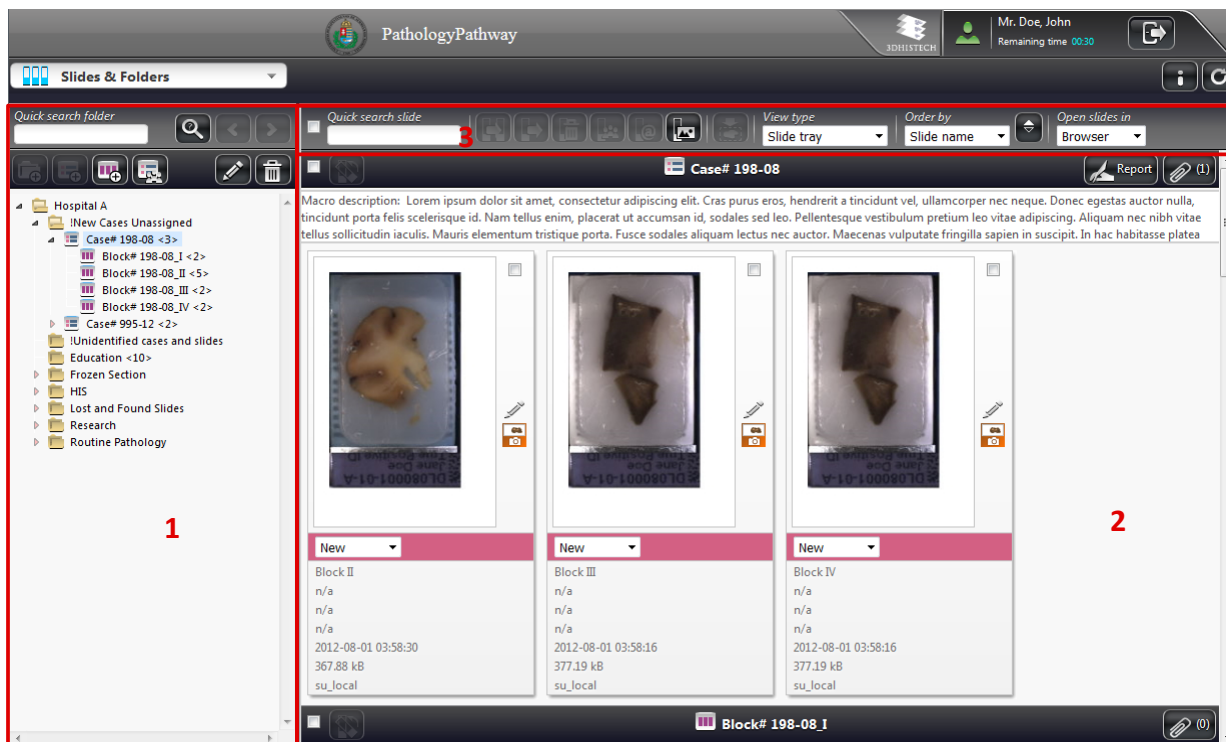
Move the cursor over the menu selector to see the list of options.

- **Slides & Folders** – Browse the folder structure of the server and manage slides
- **Teleconsultation** – Start or join a Teleconsultation
- **Share** – Manage shares
- **Search** – Search and arrange slides or folders
- **Users & Groups** – Show users and groups

NOTE: Only those tabs are visible that are selected to be accessible for the specific user type.

5 Slides and Folders

Upon loading the CaseCenter web interface, the **Slides & Folders** window is displayed by default.



It consists of the following interface elements:

- **Folder Tree Panel (1)** including a tree view of the server content and structure, and folder operation buttons
- An informational region related to the actual folder/case/block (its name and description) together with the included slides and their attributes on the **Folder Content Panel (2)**
- **Action Field (3)** with several additional options for searching through, ordering, and filtering the content.

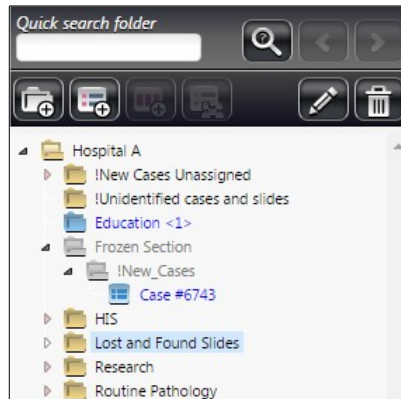
5.1 Folder Tree Panel

The tree structure of the server can be seen on this panel, where the actual folder is presented by blue background. Hierarchically, **Case** is a sub-level element within a folder, and **Block** is a sub-level element of a Case. You can create several cases within a folder and several blocks in a case.

Folder may contain slides and cases, case can contain slides and blocks, but only slides can be stored within a block. The number of elements within a folder is specified in a bracket at the end of the folder name.

5.1.1 Folder Color Markings

User access rights are presented in different colors of folders in the tree panel.





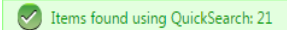


Folder names are displayed in different colors in accordance with the different access rights and the related tasks:

- Black – Folder Read and Write access
- Blue – Folder Read only access
- Gray – No access permission, but a sub-folder can be visible if you have read only or read/write access rights for that specific sub-folder, case, or block.

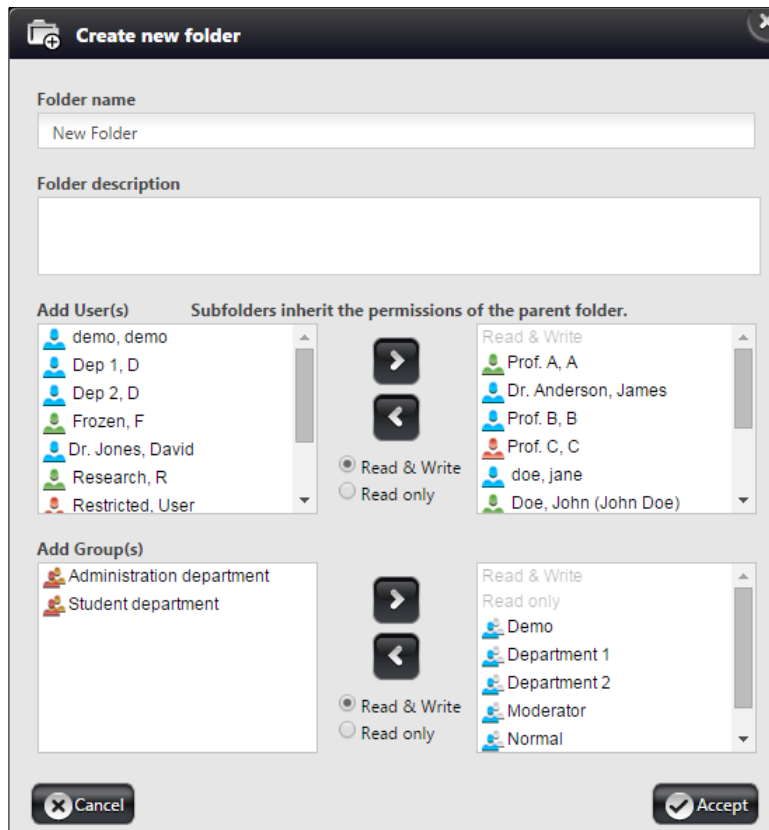
Folders, cases, or blocks are hidden for which you have no permissions at all.

5.1.2 Folder Operation Buttons

This section describes the buttons above the folder tree panel. Folder operation buttons may be inactive depending on folder-related permissions.

- 
 1. Enter a string of characters (as a part of a slide/block/case/folder name) into the textbox, then click .
 2. A message appears at the top of the window informing you about the number of found items related to your search: .
 3. To move between items click  or .

-  – New folder



Create new folder

Folder name
New Folder

Folder description

Add User(s) Subfolders inherit the permissions of the parent folder.

demo, demo
Dep 1, D
Dep 2, D
Frozen, F
Dr. Jones, David
Research, R
Restricted, User

Read & Write
Prof. A, A
Dr. Anderson, James
Prof. B, B
Prof. C, C
doe, jane
Doe, John (John Doe)

Read & Write
Read only

Add Group(s)

Administration department
Student department


Read & Write
Read only
Demo
Department 1
Department 2
Moderator
Normal

Read & Write
Read only

Cancel Accept

Define properties of a new folder that you want to add to the structure. This option is available for users with Read/Write access rights, therefore the button is inactive if a folder cannot be created at that level.

Access permissions for the new folder can be added only with Read/Write access rights in Moderator user level, or by a CaseCenter Administrator.

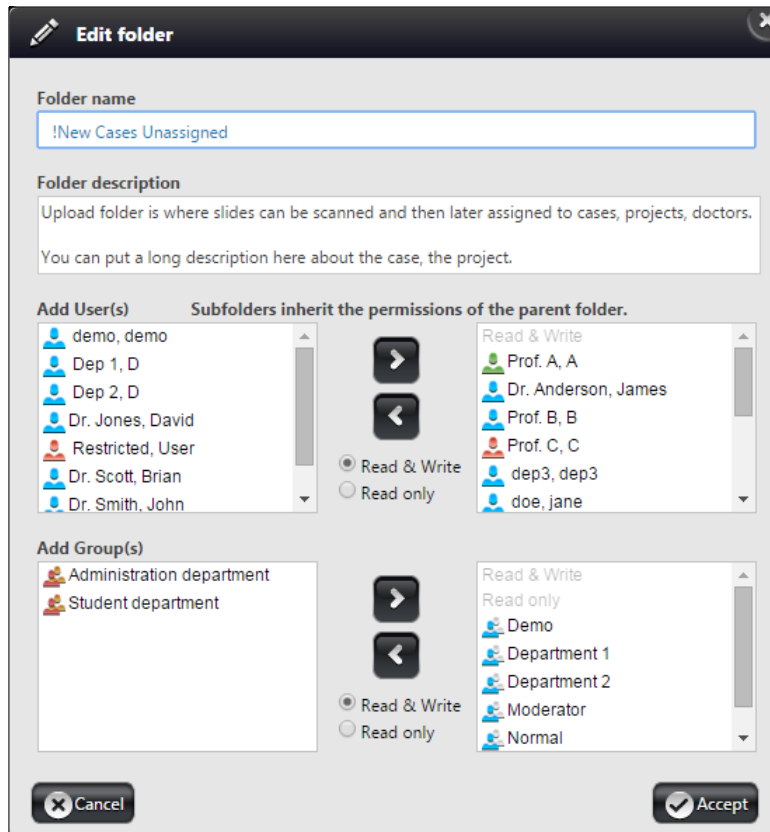
1. In the folder tree, click the desired folder in which you would like to create the sub-folder, and if active, click .
2. The **Create new folder** window opens. Type in the **Folder name**, add some information in the **Description** field if necessary.
3. Select users and/or groups you would like to give access to this folder, and set their permissions.

Click the right arrow button to add them to the selection list. Click the left arrow button to remove items from the lists.

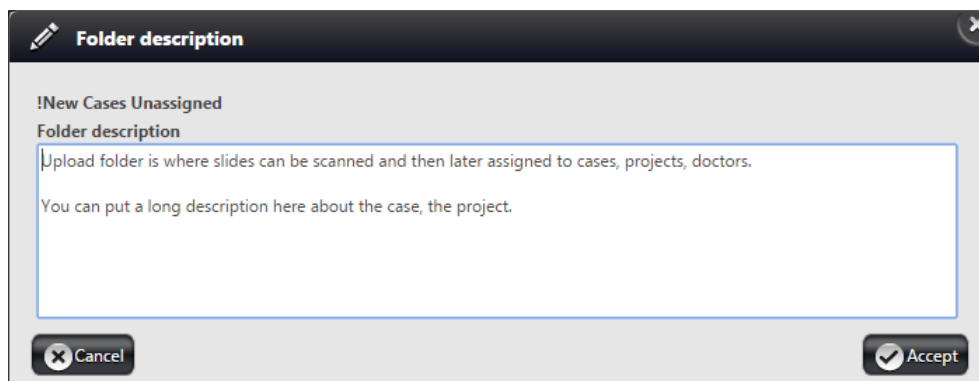
By default, users are displayed with the given permissions for the parent folder, and will be marked with red if you modify their permissions.

- ✎ – Edit folder

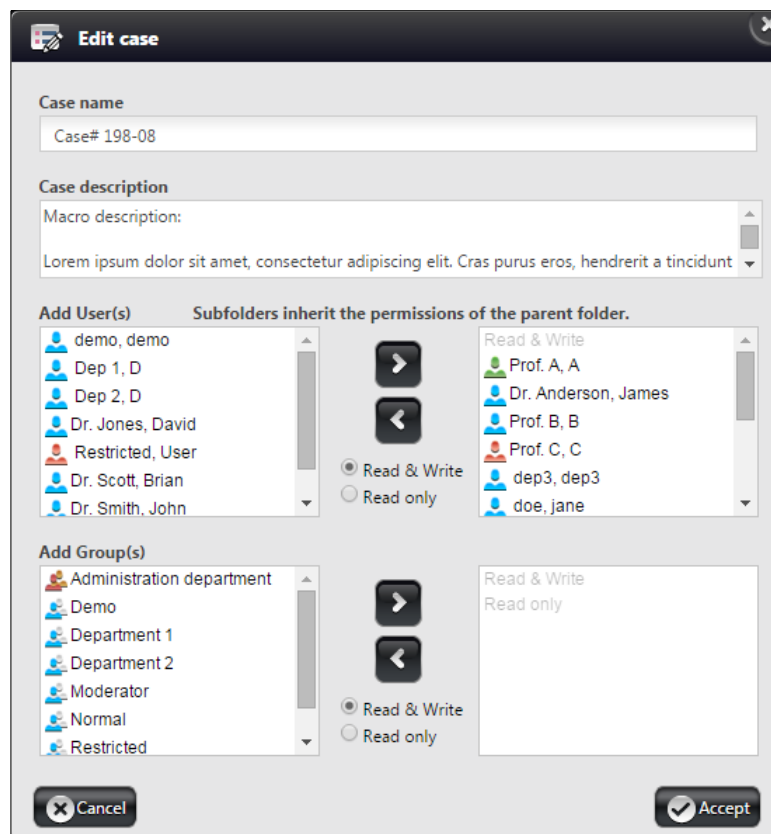
Except for Moderator users, only folder description can be modified by default. Patient or case-related information can be entered into the description field.



- Upon clicking on the **Description** field (in case it includes any text) of the selected folder/case/block in the **Slides & Folders** panel, a window similar to the following appears:

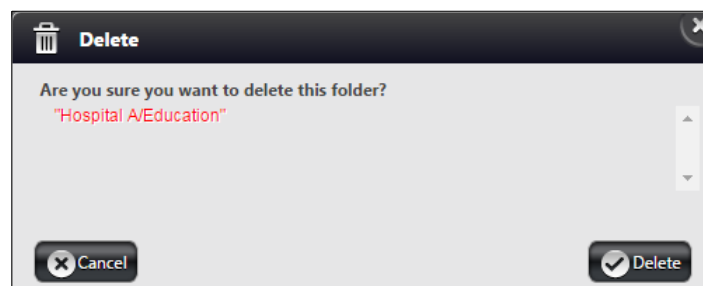


Description field becomes locked whenever a user has initiated editing, so you will not be able to modify the content. Moderator users are allowed to change user permissions. If you would like to have the access right of a user or user group to be changed, you can contact a Moderator user. A moderator is always marked with a green avatar. Click **Accept** to confirm changes.



-  – Delete folder

After clicking the **Delete** button a dialog window opens. Click **Delete** to confirm the removal of the folder.



NOTE: Only empty folders can be deleted, therefore, upon clicking the **Delete** button a notification message appears that the folder cannot be deleted as it contains sub-element(s). The folder that will be deleted is highlighted on the left in the folder tree.


-  – **New Case**

Creates a case under the actual folder. Note, that a case cannot be created under an other case or block. Similarly to the **Create new folder** window, description can be added to the case as well as determining users and groups and their access rights to the case. Click the **Accept** button to create the case.

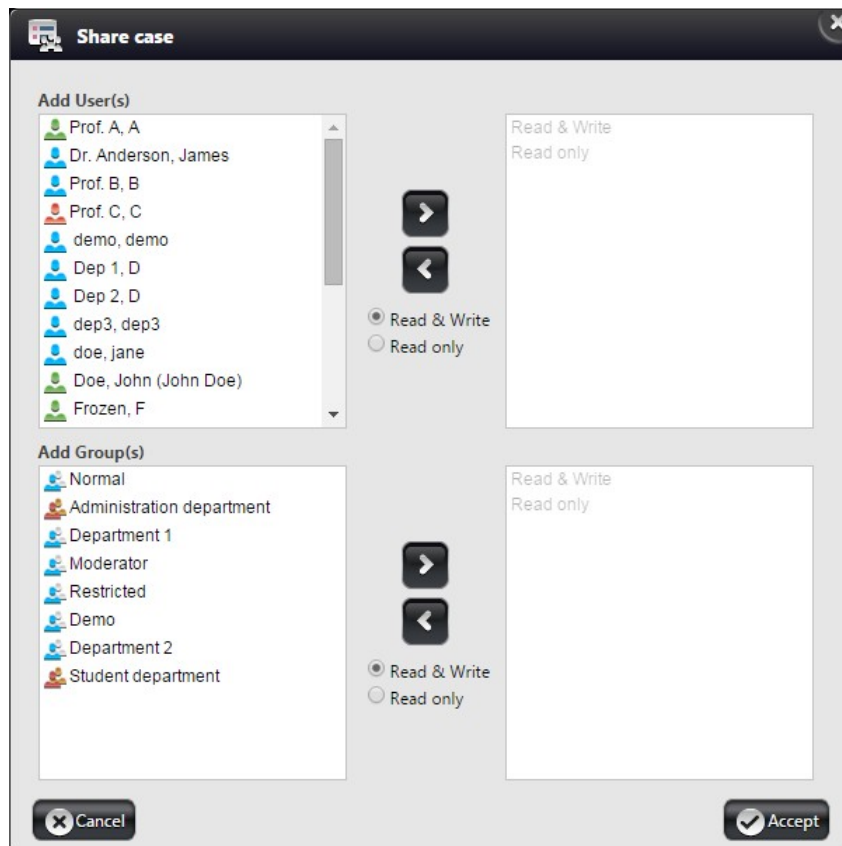
-  – **New Block**

Creates a block under the actual case. Description can be added to the block as well as determining users and groups and their access rights to the block. Click **Accept** to finalize block creation.

NOTE: You cannot create a block under a folder or another block.

-  – **Share Case**

Share a selected Case by clicking this button, then move users and/or groups from the Add User(s) / Add Groups(s) list by clicking the arrow buttons in the Share Case window. Click **Accept** to initiate share.



If you share a Case with others and the Case is opened, templates can be attached to the shared Case by clicking the **View report in browser** button in the **Attachments** window.

5.2 Slide Attributes and Process Options

5.2.1 Slide types

The following slide types can be managed or created in CaseCenter:

- **2D slide:** a slide digitized with scanner or converted from another slide format
- **Macro slide:** a slide photo or an uploaded image file
- **Project slide:** a project generated with TMA or TumorBoard module
- **Virtual slide:** a slide created based on a slide or its annotation, which has its own metadata but image data are taken from the source slide
- **Virtual tray:** consists of several virtual slides

The slide types supported by slide viewers are as follows:

- **InstantViewer:** 2D slide, Macro slide
- **Pannoramic Viewer:** 2D slide, Macro slide, Project slide
- **CaseViewer:** 2D slide, Macro slide, Virtual slide, Virtual tray

5.2.2 Slide attributes

The view of slide attributes can be modified by selecting one of the four view modes (**Default**, **Simple**, **Show description**, or **Slide tray**) from the **View type** drop-down list. Default view is **Slide tray**.




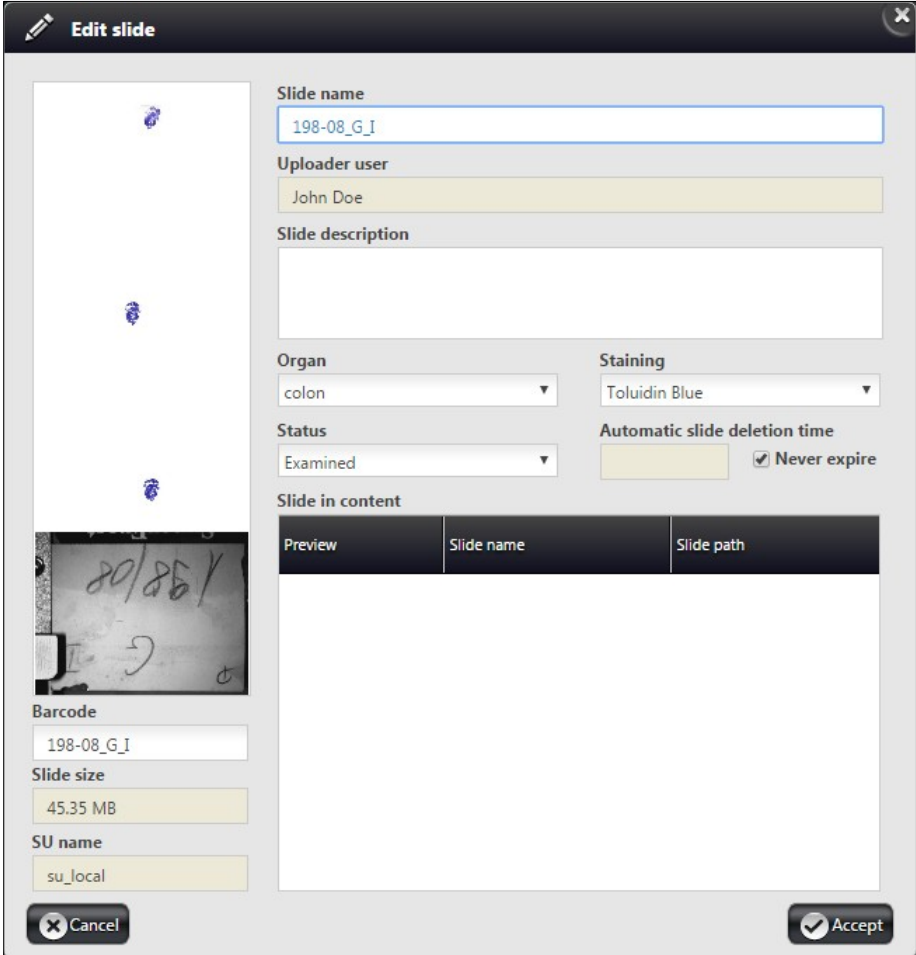
The folder content panel changes according to the selected view type, but if a Case contains several Blocks, the root content of the Case and of the Blocks are displayed as well.

The set of attributes belonging to a specific view type may vary according to the settings made by administrators. The selected View type will be saved automatically, and loaded next time you log in.

Attributes (according to **Show description** view type)

- **Checkbox**
- **Preview** (Thumbnail view of the slide or image)
- **Slide type** (2D Slide, 3D Slide, MacroSlide, TMA Project, or TumorBoard Project)
- **Slide name**
- **Barcode**
- **Description**
- **Organ** (name of the organ where the tissue specimen was originally sectioned from)
- **Staining** (name of the applied stain)
- **Scan date** (time of slide digitization)
- **Status** indicates the stage the slide is in. Status attribute can be selected from the drop-down menu, and by default it is set to **New** (either newly imported, scanned, or uploaded). Once a slide is opened, its status will be automatically switched to **Examined**. Statuses **Diagnosed** and **Reopened** both can be set manually.
- **Slide size**
- **SU name**

- **Edit** (the  icon is displayed only if you have write access to the specific slide)



Edit slide

Slide name
198-08_G_I

Uploader user
John Doe

Slide description

Organ
colon

Staining
Toluidin Blue

Status
Examined

Automatic slide deletion time
 Never expire

Slide in content

Preview	Slide name	Slide path

Barcode
198-08_G_I

Slide size
45.35 MB

SU name
su_local

In the Edit Slide window the following slide attributes are displayed by default:

- **Slide name**

NOTE: Slide name cannot be longer than 70 characters, and make sure it does not include the '&' character. For more information, see section 9.5.
- **Uploader user**

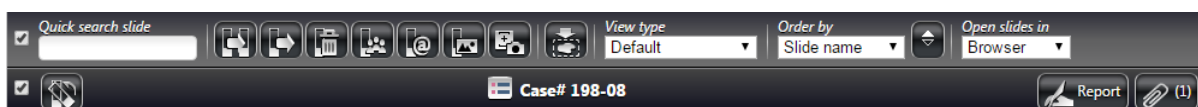
The name of the user that has uploaded the particular slide.
- **Description**
 - Click the Description field to enter/modify information regarding the specific Folder, Case, or Block.
- **Staining**
 - Types can be set by Administrator, select one from the drop-down menu

- **Organ**
 - Types can be set by Administrator, select one from the drop-down menu
- **Status**
 - New
 - Examined
 - Diagnosed
 - Reopened
- **Barcode**
- **Slide size**
- **SU name**
- **Automatic Slide deletion time**
 - Select **Never expire** or specify a date

NOTE: In case of specific type of HIS integration, it is possible to make the slide to be included in HIS, or to be removed from HIS.

NOTE: **Uploader user**, **Slide size**, and **SU name** fields cannot be edited. Slide can be opened from the Edit Slide window by clicking on its thumbnail image.

5.2.3 Slide Actions

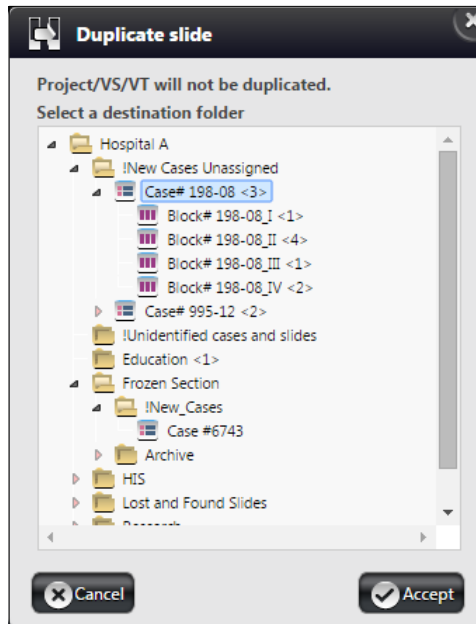


The elements of the action bar are as follows (from upper row, left to right, if **Default** view is selected):

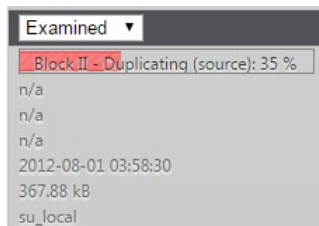
- Tick the checkbox to select all folder items for further operation.
- **Quick search Slide** – Enter the text or character string you are looking for in the search field. Search results are listed automatically in accordance with the entered text.


- **Duplicate** – Select slides, then after clicking  the folder tree is displayed in the **Duplicate Slide** window.

Click the destination folder, case, or block and the slide(s) will be copied to that specific container by clicking the **Accept** button.




A progress bar can be seen in the **Slide name** field, displaying the percentage of completion.



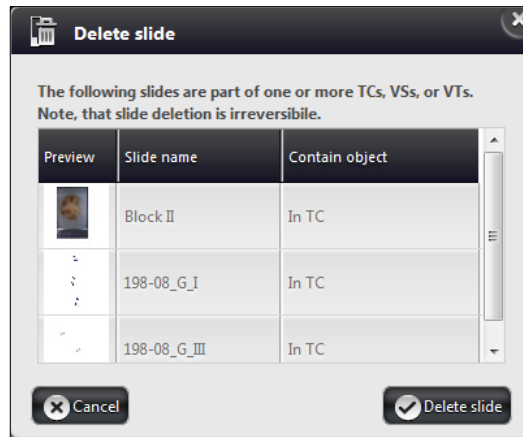
 **Important!**

Duplication physically creates a copy of the selected slide(s) in the destination folder.

- **Move** –  Moves the selected slides to the desired folder in the folder tree. A window similar to the Duplicate slide window appears – select the destination folder to which the selected slide(s) will be moved from the original folder.

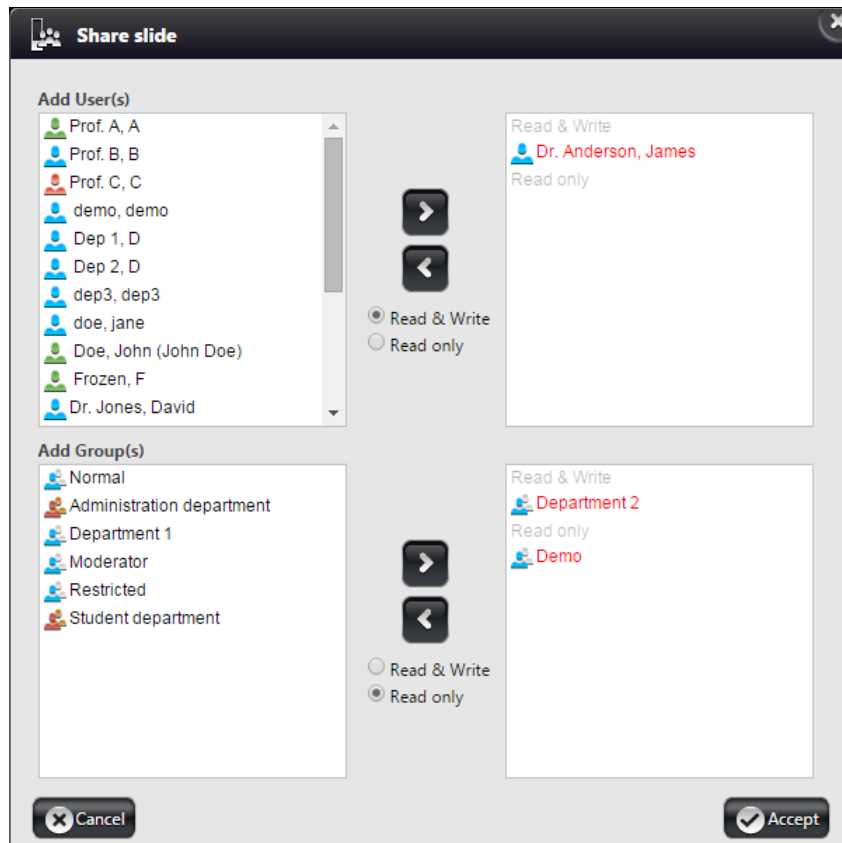
- **Delete** – 

Removes the selected slides and the related data from the server.



- **Share** – 

Click this button to share the selected slide(s) or project(s) with existing CaseCenter users or groups. Sharing a slide generates a link pointing to the original slide.





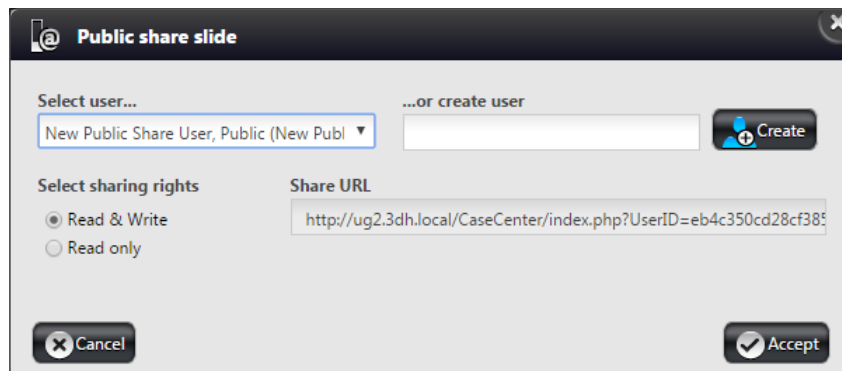
When a slide is shared with a user or groups, it will show up in their **Share** menu, and its status will be automatically set to **New**. For more information, see section **6 Slide Sharing**.

- **Public Share** – 

For users that are not registered on a CaseCenter server, slides can be accessed via opening a URL in platform independent InstantViewer (or Panoramic Viewer 1.15.4, if installed).

Follow the below steps to share a slide publicly:

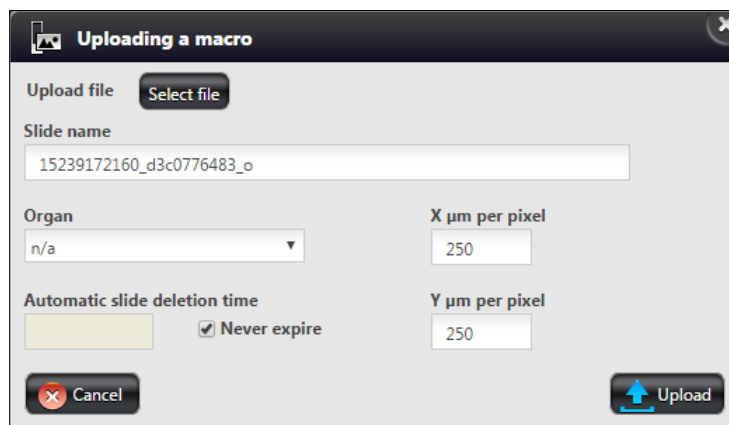
1. Select the slide or slides to be shared
2. Click 
3. Select an already existing user (created as Public Share User by the Administrator) from the **Select User..** drop-down list or create a new user in the **..or Create User** field of the Public Share Slide window.
4. The **Share URL** is generated after the existing user is selected or the new user is created by clicking . Select sharing rights, then copy the URL and send it to the user. After clicking **Accept**, the share is visible on the **Shared by me** panel of the **Share** window.



5. If you would like to cancel the public share, remove user from the user list, or unshare the slide.


- **Upload macro** – 

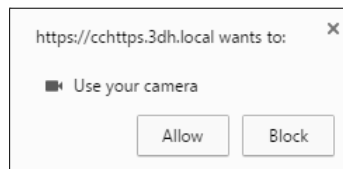
Click this button to upload macro images. Only JPEG or JPG images can be uploaded, file size is maximum 1MB.




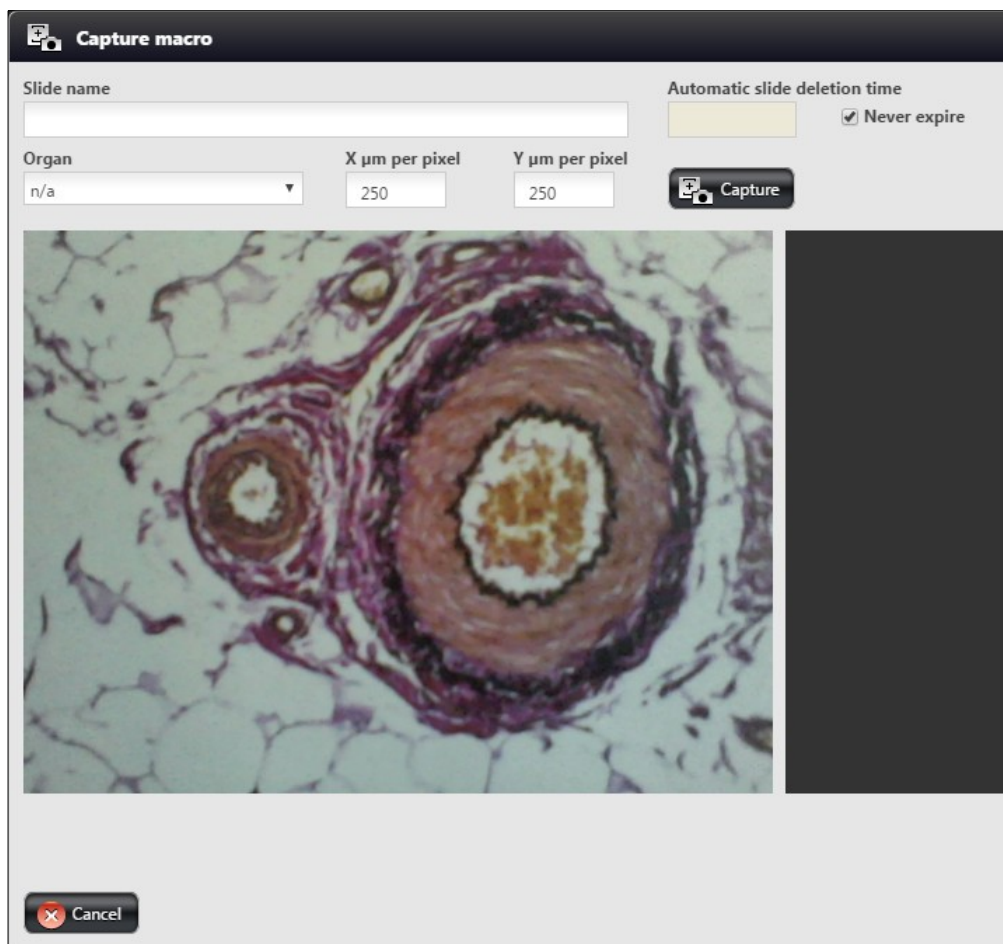
- **Capture macro** – 

If a webcam is connected to your computer (or it is installed with a built-in-camera), it can be used for capturing macro images directly.

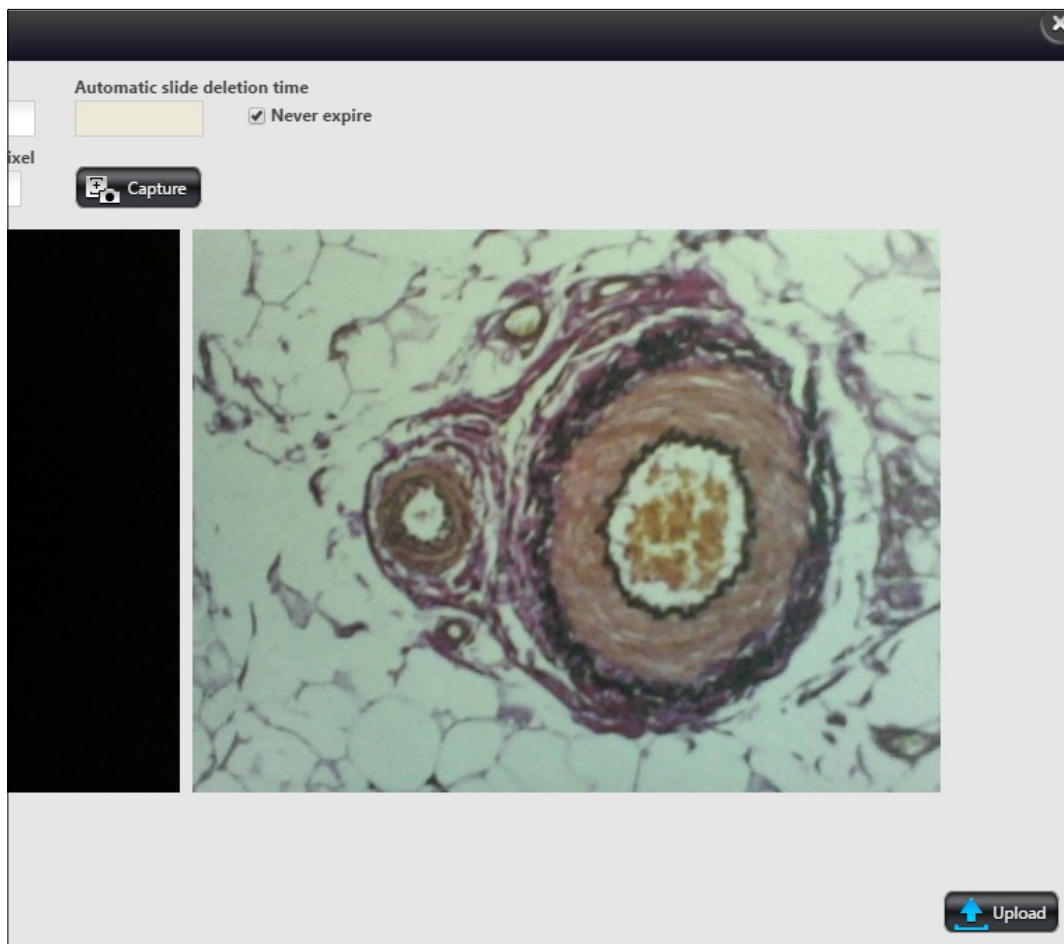
1. Click 
2. Chrome pops up a message to allow using the camera. Click **Allow** to accept.





3. Move the object in front of the camera, then click  **Capture** to capture image.

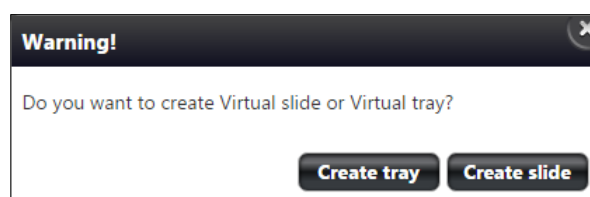




- The captured image is then displayed at the right pane of the window. Recapture image if necessary.



- Enter **Slide name**, select **Organ** from the drop-down list, set **deletion time** and **pixel size**.
 - Click  **Upload** to upload macro image. The image can be opened via InstantViewer, CaseViewer, and Panoramic Viewer.
- Create Virtual Slide or Virtual Tray** – 

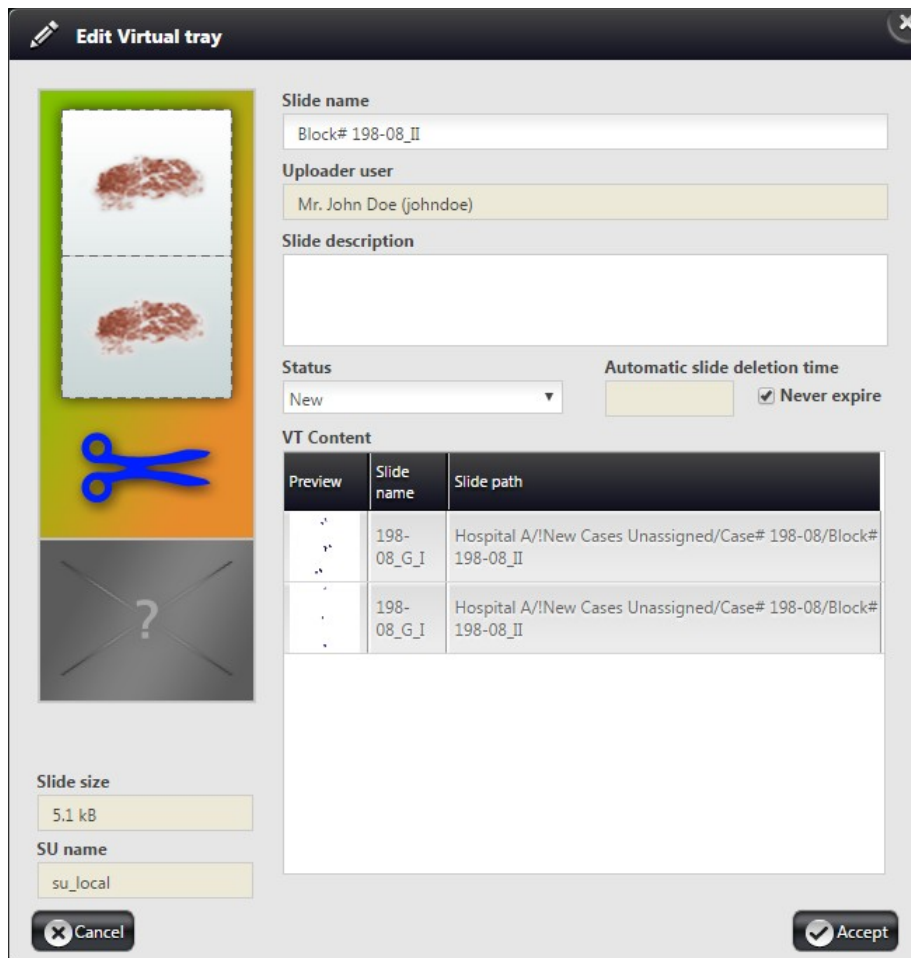
With this feature a virtual slide or virtual tray can be created based on the original slide or slides. If you select one slide only then you click this button, and the box in which the following message appears, you can select the type of virtual item to be created.



In the folder content panel virtual slide is marked with a  label, and virtual tray is with a  label next to the preview image of the virtual item.



If you edit the data of the virtual slide or tray the following windows are displayed:




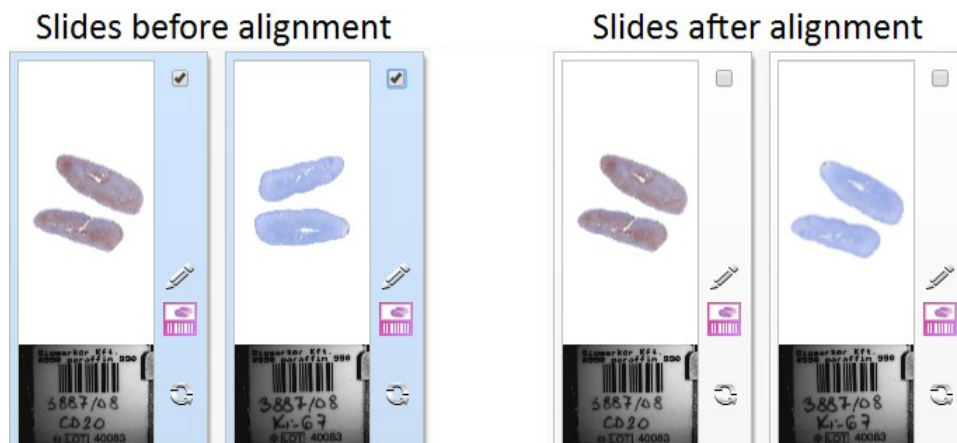
At the bottom areas of these windows, sections such as **VS Content** and **VT Content** display the preview image and related data of the included slide or slides.


NOTE: Staining and Expiration date cannot be modified for Virtual Slides.

- **View type** – select any of the following options:
 - Default (Slide tray view)
 - Simple
 - Show description
 - Slide tray
- **Order by** – you can select any of the following ordering methods from the drop-down list:
 - Image type
 - Slide name
 - Organ
 - Staining
 - Scan date
 - Status
 - Custom Order

NOTE: Since slides can be reordered by dragging in Slide tray view mode, order will automatically be displayed as **Custom order**.

- **Checkbox** – Check to select every item of the Folder/Case/Block for further operations.
- **Align** – Click  to align all of the slides within a Case based on the reference degree of the first slide in the set (slides in a set will be rotated to an identical orientation).



- **Folder/Case/Block name**
- **Attachment** – Click  to upload files as attachments and to display the list of attachments (if there is any) belonging to the actual folder.

NOTE: Attachments can be uploaded for the current folder and not for a specific slide. Omit using accented letters in file names you want to upload, as these characters will change after batch download of attachments and decompressing the ZIP file.

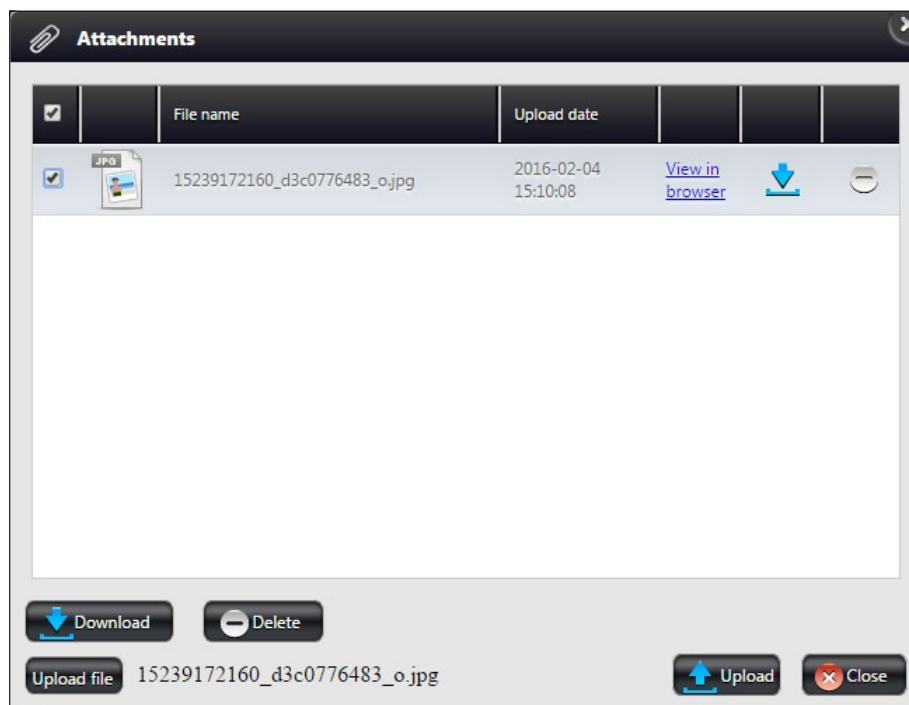


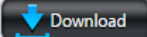

Important!

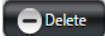

If an attached file name starts with a “.” character, or the file extension contains a space, its downloading may fail depending on the browser type.

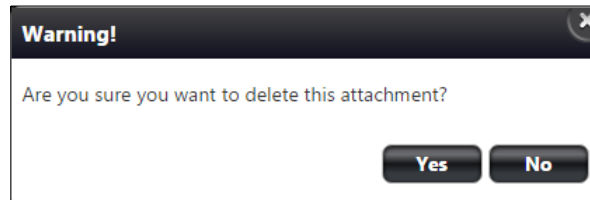
To attach a file to the actual folder, follow the below steps:

1. Click **Choose File** in the **Attachments** window to upload a file as an attachment.
2. Select the file then click **Open** in the File Upload window.
3. Click the **Upload** button in the **Attachments** window to upload the file.




- Use the selection checkboxes at the first column or the select all checkbox at the column header to select multiple files.
- Multiple files can be downloaded by clicking the  button, or click the  icon to download a single attachment.

- Click **View in browser** to open attachment in a browser window. The URL of the file can be shared.
- To delete attachment(s) click the  button to batch deletion or the  icon to delete a single file.
- Click **Yes** to delete selected file(s) from the list.

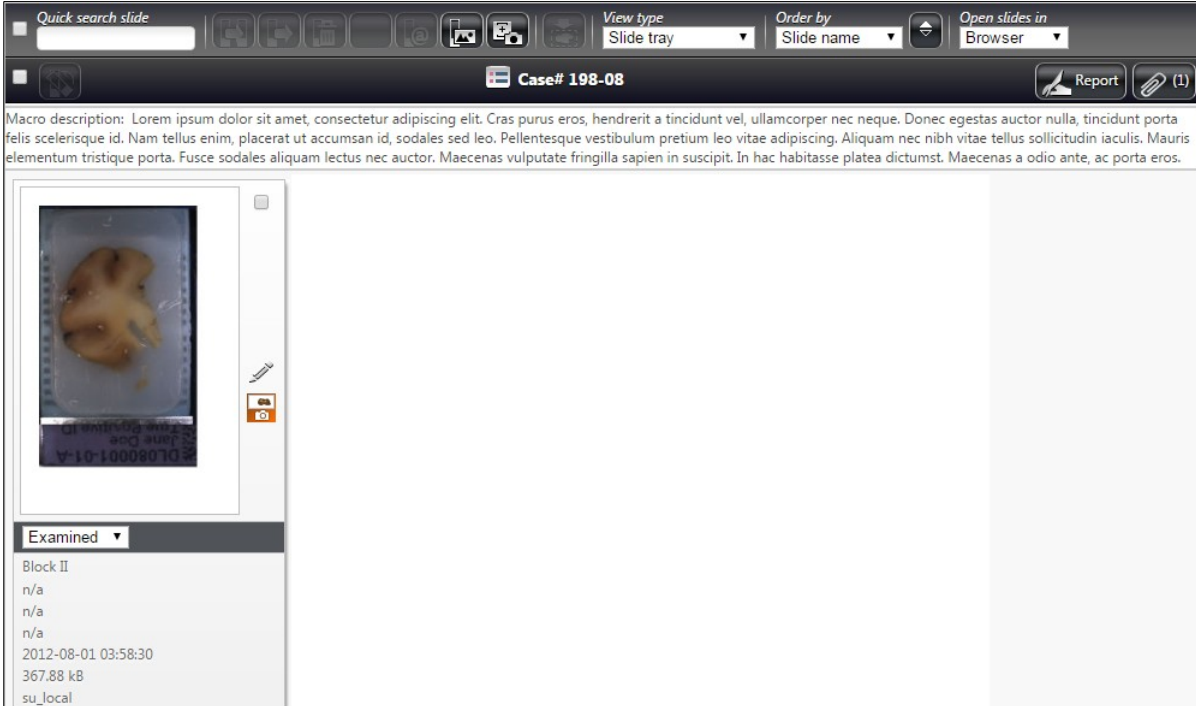


- **Open Slides in** – Choose **Application** or **Browser** option from the drop-down list to select Panoramic Viewer or InstantViewer respectively, as the default slide viewer application in which the selected slides can be opened. If you select **Browser** for opening slides, the application will open the slide in a new tab of your browser. For more information on how to use **InstantViewer**, read *InstantViewer User's Guide*.

To open a slide either in Panoramic Viewer or in InstantViewer, click on the thumbnail image of the slide.

To edit slide attributes click the corresponding  icon at the right side of the panel.

5.3 CaseView Mode



The screenshot displays the CaseView Mode interface for Case# 198-08. At the top, there is a search bar and navigation icons. Below that, the 'View type' is set to 'Slide tray', 'Order by' is 'Slide name', and 'Open slides in' is 'Browser'. The main content area shows a slide thumbnail of a biological specimen. To the right of the thumbnail is an edit icon. Below the thumbnail is a metadata panel with a dropdown menu set to 'Examined'. The metadata includes:

- Block II
- n/a
- n/a
- n/a
- 2012-08-01 03:58:30
- 367.88 kB
- su_local

At the top right of the interface, there are 'Report' and '(1)' icons. A macro description is visible above the slide thumbnail, containing placeholder text.

CaseView mode is available through HIS (Hospital Information System). A link is generated for a specific case in HIS, and upon opening this link with a user account, in CaseView mode a restricted user interface of the slidemanager view is displayed.

Available functions:

- Editing or handling slide data
- Attachments
- Open slide
- Copy slide
- Move slide
- Delete slide
- Change view type
- Share
- Public Share Slide
- Upload macro
- Capture macro

Inactive function:

- Folder tree

6 Teleconsultation

Teleconsultation gives you access to digitized slides from a remote location. Slides can be examined and evaluated by users who have invited by the host during a Teleconsultation session. You can consult about slides with other users in real-time or in asynchronous mode also with the chat support.



Important!

Note, that the file sizes of digitized slides are large: the size of the MRXS file and the associated folder is often 1GB or above. Therefore, it is recommended that you use an Internet connection that has at least 1000 kilobit/s capacity when you are uploading slides or when you participate in a *Teleconsultation*.

6.1 Overview of Teleconsultation

You can use *Teleconsultation* for telepathology to evaluate digitized slides stored on a 3DHISTECH CaseCenter server via the Internet using the CaseCenter application in online mode.

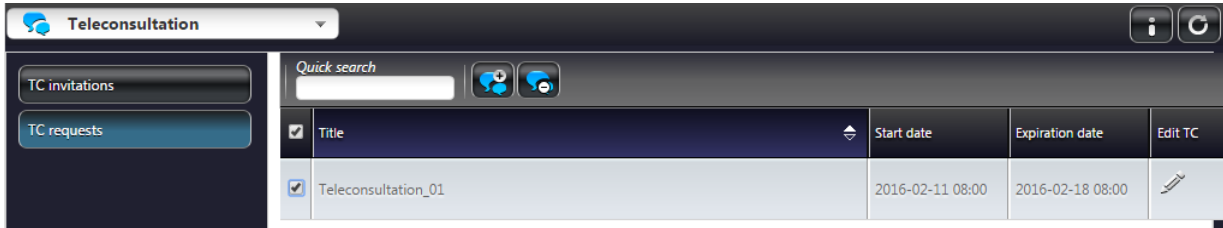
You will need the Teleconsultation module of the Panoramic Viewer to upload slides (one-by-one) to a 3DHISTECH CaseCenter server. Uploading the slide creates a copy on the Service Unit, keeping the original slide on your local computer.

6.2 Requirements and Privileges for Hosts in a Teleconsultation Session

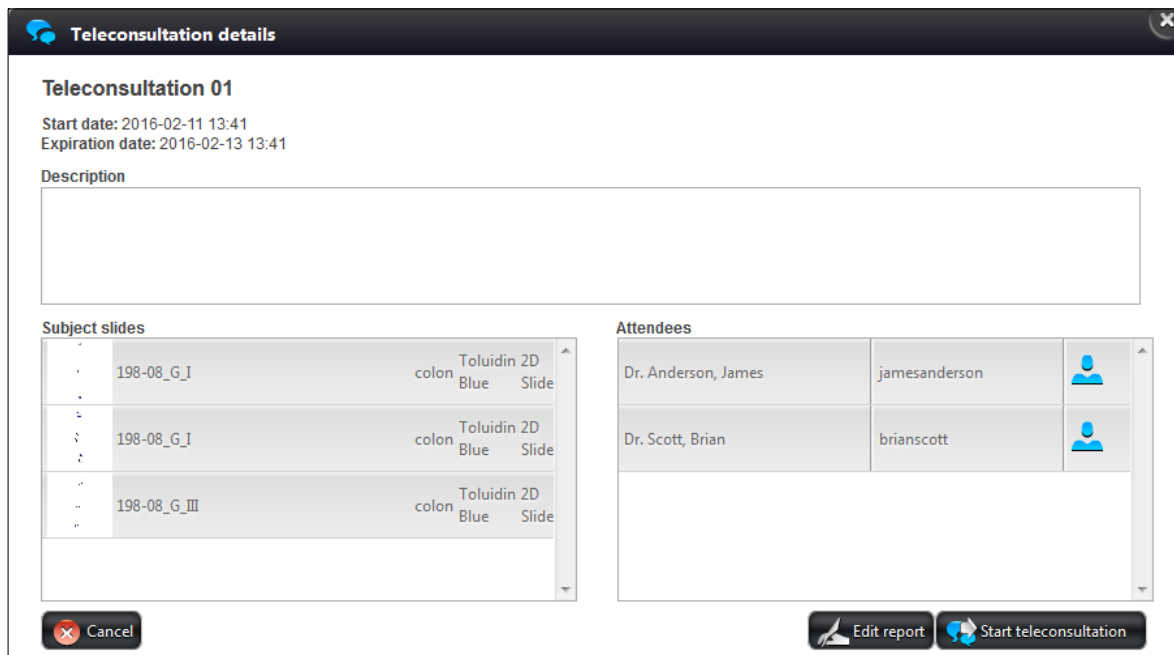
- If the *Host* quits the group, the *Teleconsultation* session closes for all *participants*. Other *participants* can leave the session without terminating it.
- The *Host* can modify the slide by adding *annotations* at any time. Other *participants* may request permission to modify the slide from the *Host*.

6.3 Creating a Teleconsultation Session

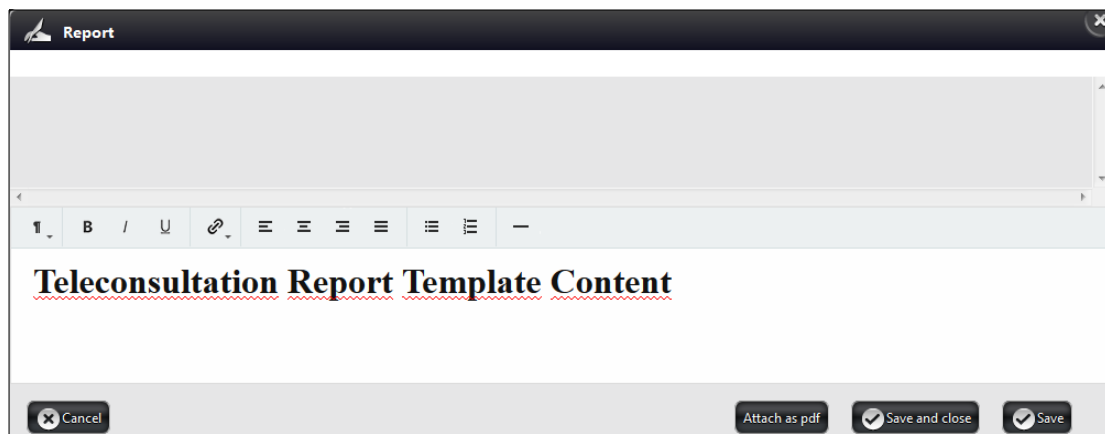
1. Switch to Teleconsultation window then select the **TC Requests** option.



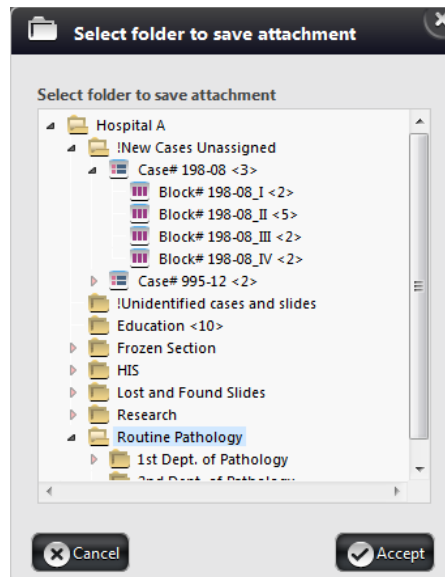
- To see session details, click the session header.




- Report can be edited and created by clicking the **Edit report** button:

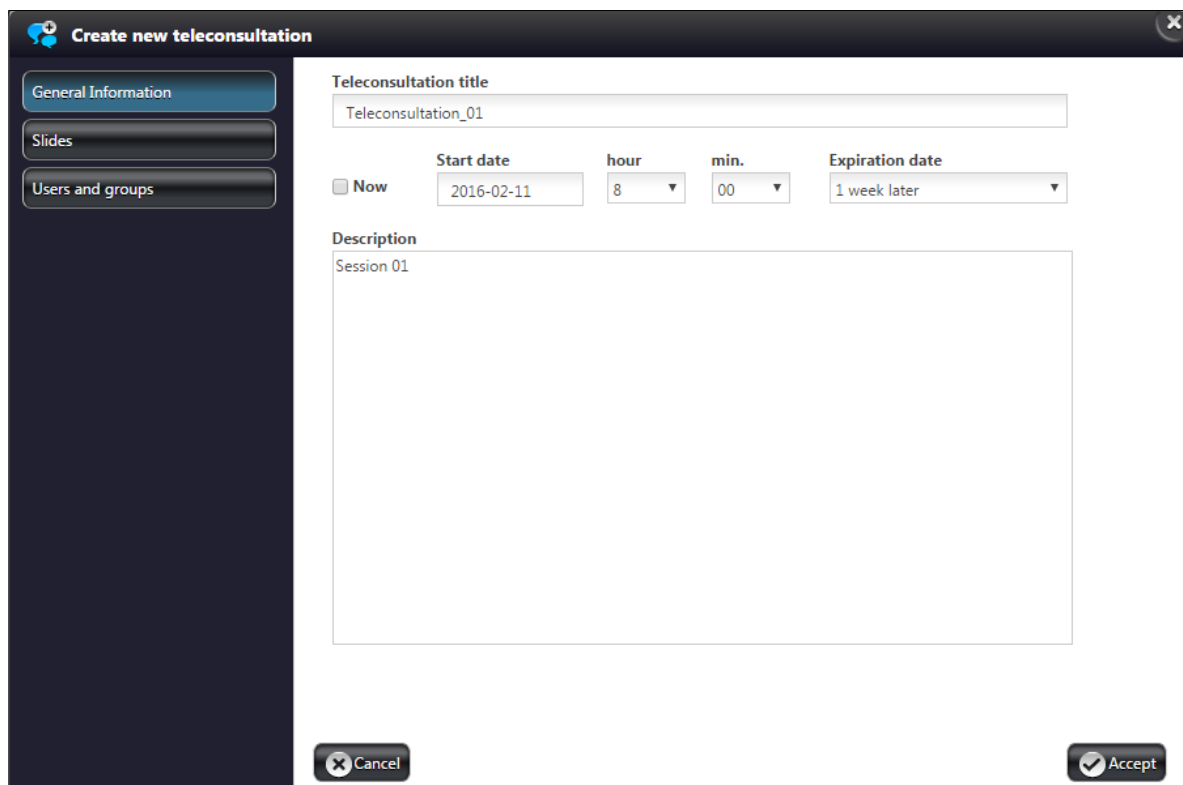


- When saving the created report as an attached PDF by clicking **Attach as PDF**, the location must be selected.



2. Click  to create a Teleconsultation session.

- Fill in the fields in the **General Information** panel. You can name the session, assign a start date (**Now** is active as default) and **Expiration date**, as well as write a description about the session itself.



Create new teleconsultation

General Information

Slides

Users and groups

Teleconsultation title
Teleconsultation_01

Now

Start date: 2016-02-11

hour: 8

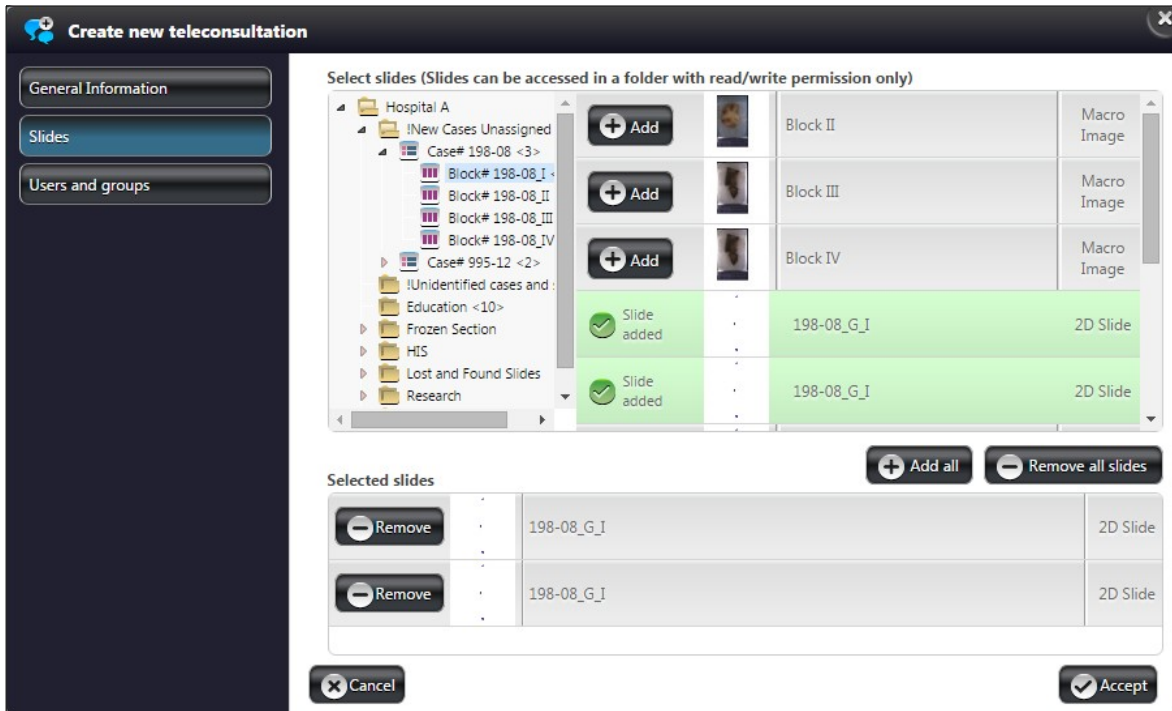
min.: 00

Expiration date: 1 week later

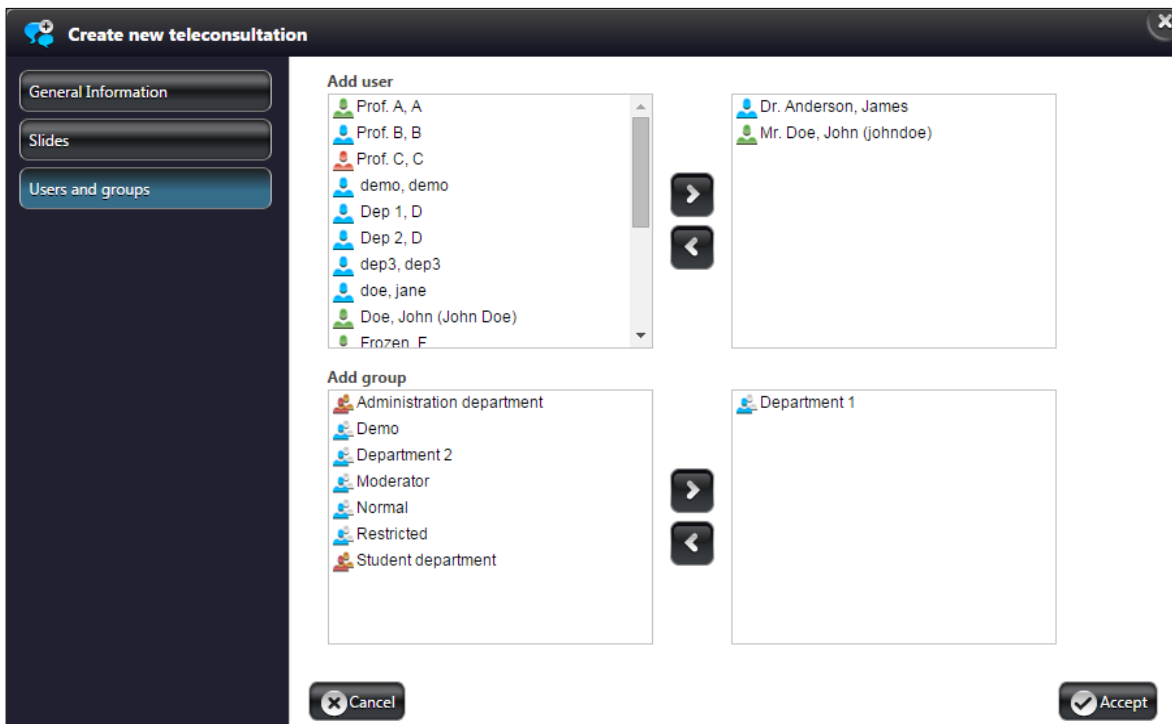
Description
Session 01

Cancel Accept

- In the **Slides** window, click the desired folder in the folder tree, then click **+ Add** next to the slide preview at the right side of the **Select Slides** panel. To add all the slides included in the selected folder, click **+ Add all**. Slides can be removed from the **Selected slides** list one by one by clicking **- Remove**, or to remove all of them, click **- Remove all slides**.



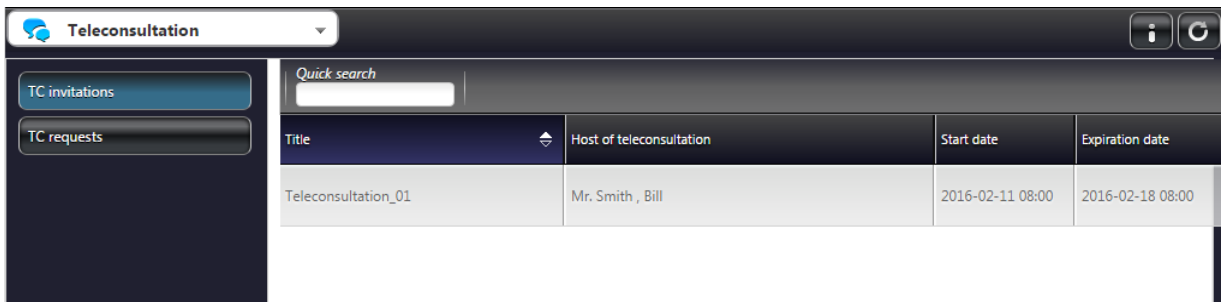
- Finally, select the participants in the **Users and Groups** window, and click **Accept**.



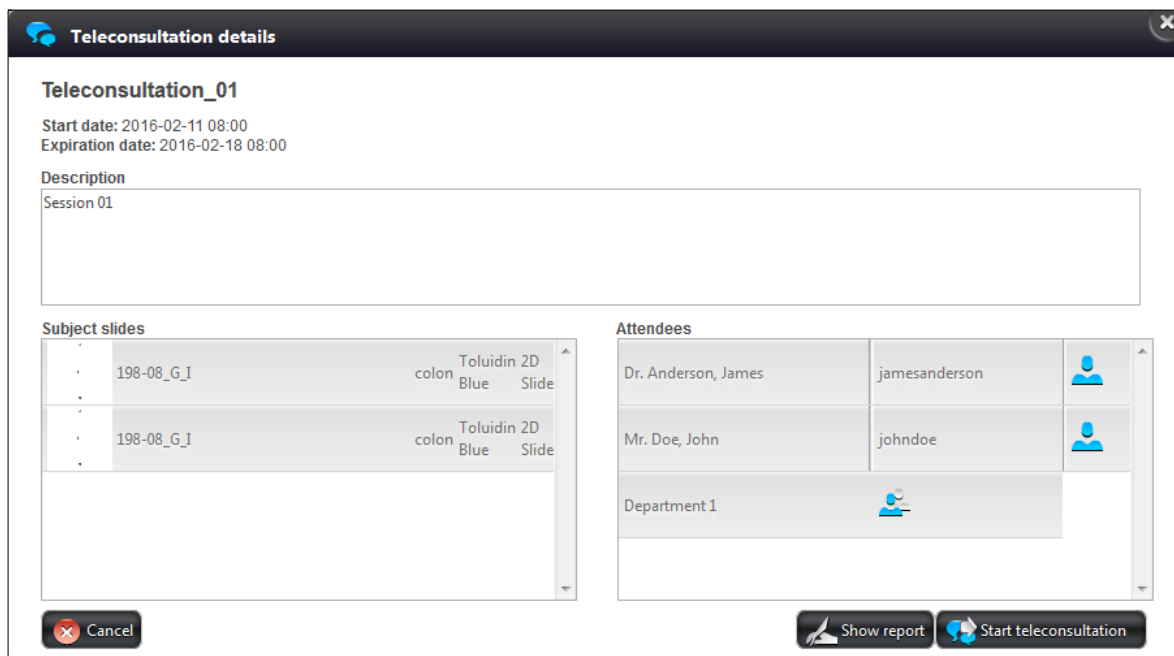
Each of the participants receive an invitation that is visible under the **TC invitations** panel of the **Teleconsultation** menu. If the system is properly configured, also a message will be sent to a participant's e-mail address whenever a Teleconsultation session is created, or there is any modification regarding the session.

6.4 Joining a Teleconsultation Session

In the **TC Invitations** window there is a list of Teleconsultation sessions you have been invited to. Select the one you want to participate in by clicking on the list item.




The pop-up window displays all the necessary information regarding the session, such as start date and expiration date of teleconsultation, description, subject slides or projects, and attendees.



To close the window without participating in the session, click the **Cancel** button, or you can start evaluating the slide or slides by clicking the **Start Teleconsultation** button.

6.5 Opening a slide via Teleconsultation

In Panoramic Viewer

1. Start Panoramic Viewer.
2. Connect to the 3DHISTECH Teleconsultation Server:
 - a. To start *Teleconsultation*, click  in the toolbar.
 - b. Enter the server address and your authorization information in the dialog.
3. On the **Teleconsultation server** tab, folders and slides that you have been granted access to are displayed.
4. Double-click the slide that you want to open.


In CaseCenter

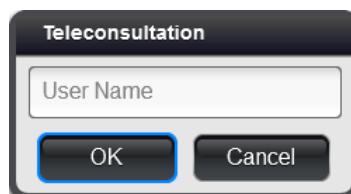
After you opened the window of the selected Teleconsultation session you have been invited to, and clicked the **Start Teleconsultation** button (see section **5.3 Joining a Teleconsultation Session**), the following window appears:

As you can see, Panoramic Viewer is selected by default as the viewer application in which the slide will be opened. If you would like to choose a different application, click the **Choose** button and browse for it or click **OK** to continue with opening the slide with the default program. When the Panoramic Viewer is launched you are asked to write your name in the displaying window to connect to the Teleconsultation session. You can start working on the slide after you logged in.

In CaseViewer




To open a slide that is included in a Teleconsultation session, and attend teleconsultation via CaseViewer, do the following:

1. Click the server thumbnail in the startup window.
2. Login to CaseCenter.
3. Go to **Teleconsultation** window, **TC requests** panel
4. Select the TC session you are invited to.
5. Click  to join the session.
6. Enter **User Name** (can be different than the CaseCenter user name) in the Teleconsultation window, then click **OK**.






7. The first slide selected for the Teleconsultation session is displayed in the CaseViewer window. A button panel with additional buttons related to teleconsultation functions are displayed at the top left corner.



- If you are the host of the session, the  button is active (as seen above), otherwise you can request for slide control by clicking the  button. To turn slide movement on/off, thus making it visible or hidden for guests, click the  button.


NOTE: The host must approve the request, and the control can be taken back any time the host wants to.

- To quit session, click . The CaseCenter server window turns active again.
- To open a chat window, click . Type your message to the field at the bottom, then click .




6.6 Working Simultaneously on a Slide in an Online Teleconsultation Session

1. The *Host* must ensure that all *participants* can access the slide. Note, that participants cannot modify the slide or take over the control.
2. In CaseCenter, on the Teleconsultation panel select the session and click **Start Teleconsultation**.
3. Enter your nick or name into field of Create / connect to a teleconsultation group window.

4. If connected to server, select the slide you want to share with others either from the folder tree on **Teleconsultation server** tab in Panoramic Viewer, or in the Teleconsultation window in CaseCenter, then open it.
5. Click the  button in the slide window in Panoramic Viewer.
6. The slide is displayed in Panoramic Viewer for all *participants*.

**Warning!**

Upload might take time because digitized slides are usually large files (often 500MB, 1GB or larger). Uploading a 1GB slide over a 2000 kilobits/sec connection requires more than 70 minutes. If uploading is started during *Teleconsultation*, the waiting period for the slide might be unmanageably long and the background upload process might also reduce the speed of *Teleconsultation*.

7. It is possible to work with several slides at the same time. *Participants* always see the same slide(s) and the same part of the active slide as the *Host*.
8. The *Host* can work with the slide, for example move around on it to check its parts as in Panoramic Viewer without *Teleconsultation*.
9. The *Host* should take into consideration that Panoramic Viewer might be displayed with different resolutions on other participants' screens. The best *Teleconsultation* result can be achieved with screen resolutions that do not differ significantly from each other.
10. *Participants* can take over from the *Host*: click **Request control** in the slide toolbar. A request is sent to the *Host*. The *Host* can cede or deny control to the *participant*. The name of the user who moderates the session is shown in red in the *participant* list (in the message box).
11. The *Host* and the *participants* can also exchange comments via the chat tool.
12. To quit a *Teleconsultation* session, click  in the Panoramic Viewer toolbar.

NOTE: It is available for you to open a slide that is included in a Teleconsultation session, and attend teleconsultation via CaseViewer. For more information, read **CaseCenter server** paragraph at the end of **section 2** in **CaseViewer 2.1 User Guide**.

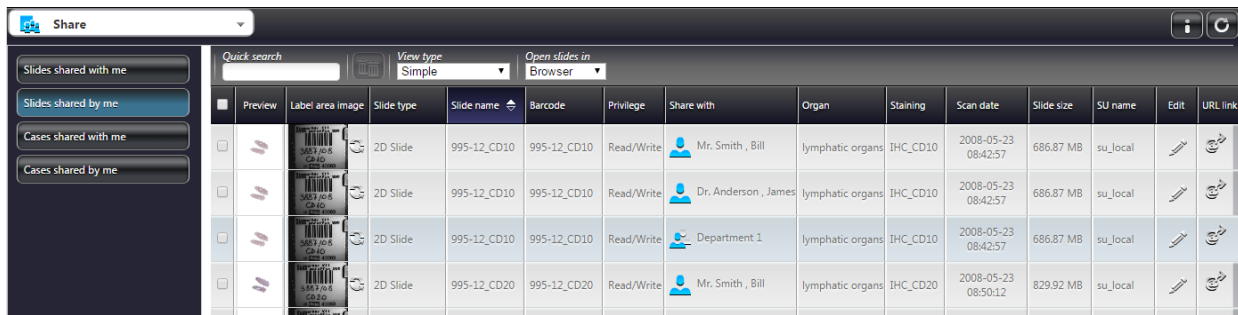
7 Slide and Case Sharing

Select the Share menu option from the main menu. If a user has shared a slide with you it will be listed in the **Shared with me** window.

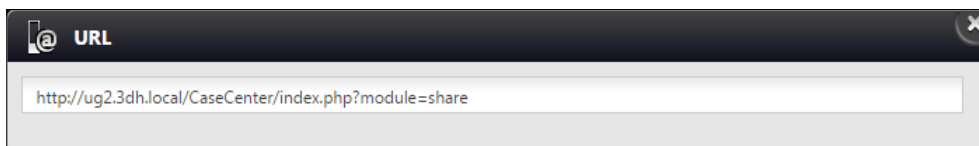


You can share your slides with other users and/or groups in the **Slides & Folders** window (see section **4.2.2 Slide actions**).

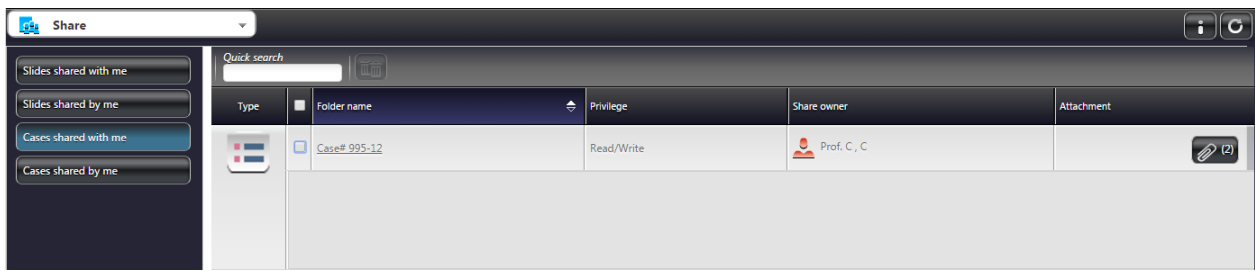
- When you share a slide on the server, all the designated users will be able to see the slide if they check their **Shared with me** window.
- You can use the CaseCenter groups created by the administrator, for example a group of users who specialize in a particular cancer type.



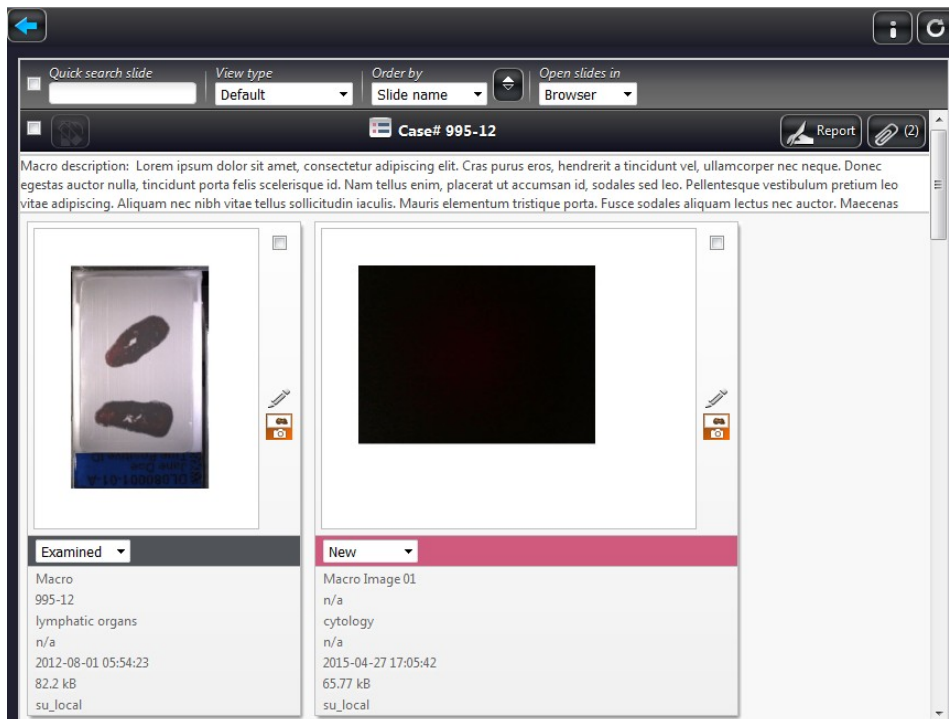
- Click to edit slide data, and modify them if necessary in the appearing Edit Slide window.
- To view the URL for the shared slide, click .



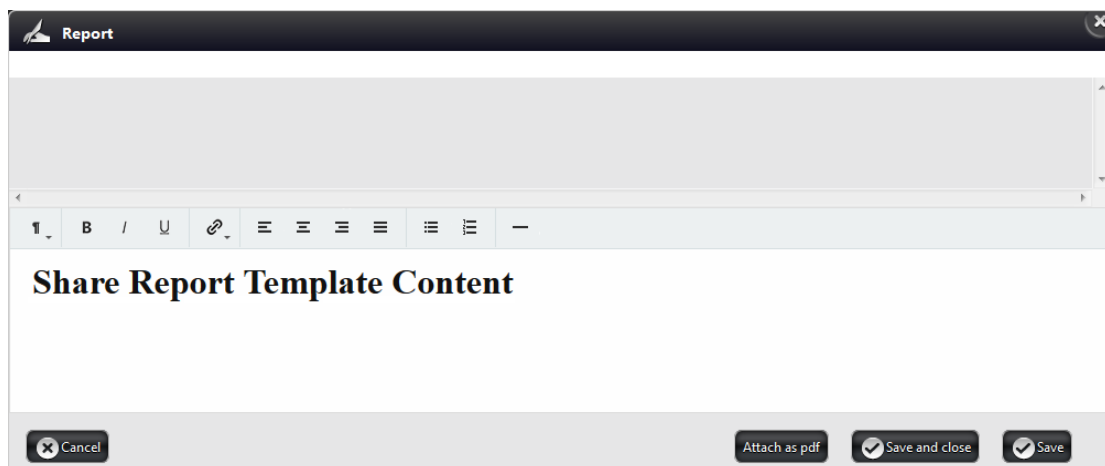
If someone has shared a Case with you, the Case is listed on the **Cases shared with me** panel.



- Click the case header to view details of the shared Case.

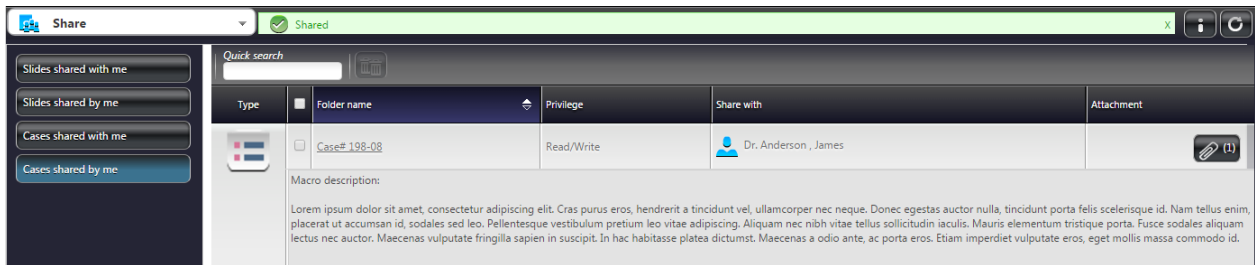


- If you click the **Report** button the Share Report Template editor window is opened in which you can create a report for the actual Case.

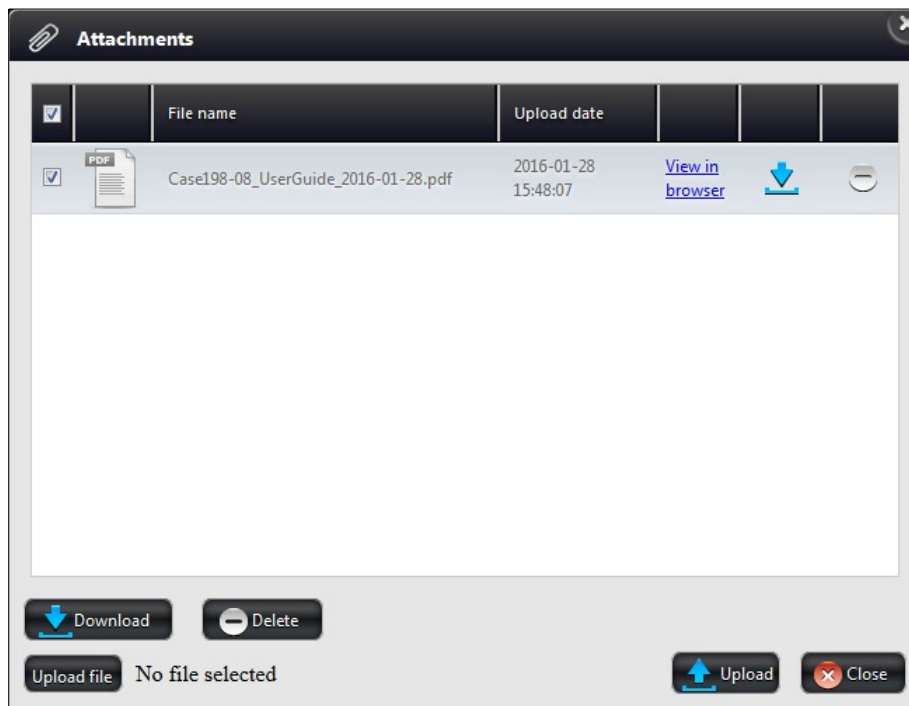


- It is available for you to edit, download, and also to delete reports. The saved report in PDF format will be added as an attachment to the Case.
- If you are granted, you can create a snapshot that can be embedded into the report.


If you have shared a Case with others, it will be listed on the **Cases shared by me** panel.

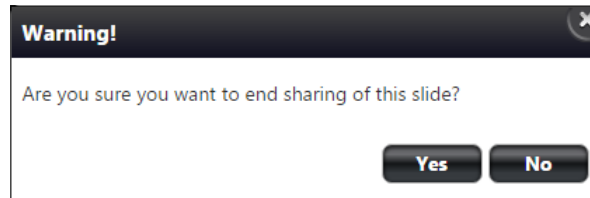


- Click the shared Case to view its details. Click **Report** to see if someone has written a report to the Case.
- If you click the button, the attached files will be displayed. If a report has been attached as PDF, it can be viewed in browser, downloaded, or even deleted.



Do the following to cancel sharing slides or cases with the assigned users (normal, moderator, public share, or users of a group):

1. Tick the checkbox on the left of the thumbnail image of the shared slide or case
2. Click the  button.
3. Click **Yes** in the message box to cancel sharing.



8 Search in CaseCenter Server

Select **Search** from the menu options to search for slides and folders stored on the CaseCenter server.

In this window you can search for the following attributes:

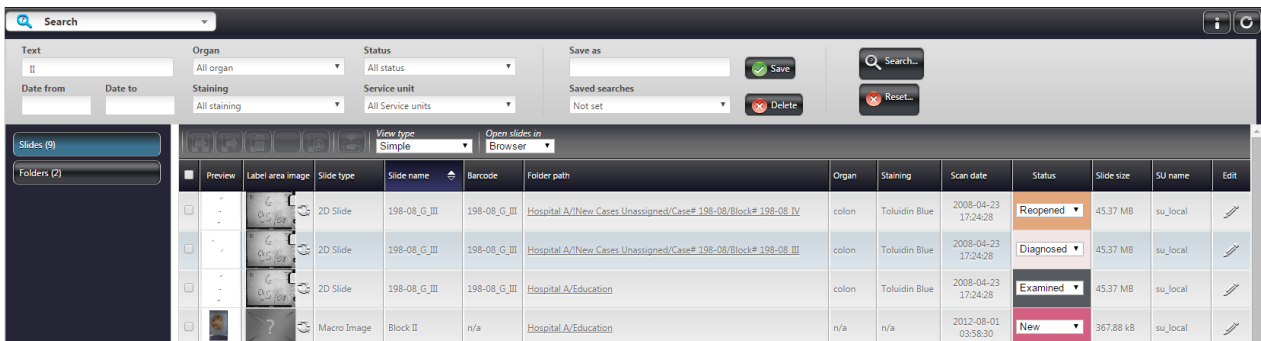
- Text (search for character string in slide name and in the description fields of folders, cases, blocks, and slides)
- Folder
- Date from/to
- Organ (selectable from list)
- Staining (selectable from list)
- Status (selectable from list)sd
- Service Unit (selectable from list)

Except for temporary LDAP users, search parameters can be saved for later use by entering a text into the **Save as** field and clicking **Save**, or delete after selecting the entry from the **Saved searches** drop-down list then clicking the **Delete** button.

Search results will be displayed after clicking the **Search...** button. Results are listed in hundreds, so for showing the next 100 results, click the page number button you want to get to or the arrows to step forward or back.



You may narrow the list by adding other criteria, such as Date From or Date To, Organ, Staining, Status, or Service Unit.



9 Users & Groups

The **Users & Groups** window displays information regarding the data of registered users and groups created by administrators. The Users and Groups information is separately displayed on two different panels. To select a user or group in order to see their data, scroll down the list in this window. Also, you can search for users or groups, to narrow the search results enter the text in the **Quick search** text box. Each column can be ordered by clicking the column header. Users who currently are logged in are displayed with active avatars in the **User** column.

User	User name	User title	Given name	Family name	User last logged in at	User level	User type	Details
	jamesanderson	Dr.	James	Anderson	2015-10-29 13:10:06	Normal user	CaseCenter user	
	research		R	Research	2012-02-06 10:07:22	Moderator user	CaseCenter user	
	awest		Abraham	West		Public share user	CaseCenter user	
	Public Share User 01		Public	Public Share User 01	2015-04-16 15:54:49	Public share user	CaseCenter user	
	RestrictedUser		User	Restricted	2016-02-04 10:36:49	Restricted user	CaseCenter user	

NOTE: Imported LDAP users are displayed with blue background.

To access user or group data, click the or the button in the **Details** column.

Group data

Group name:

Select user:

- Prof. C C
- D Dep 1
- R Research

User data

User title:

Family name:

Given name:

E-mail:

Other contact:

Specialities:

User and group data can be edited by administrators only. If you find something that is needed to be modified, contact your administrator directly.

10 Troubleshooting

10.1 I Cannot Connect to the CaseCenter from Panoramic Viewer

Check the following to ensure that you can access the server:

1. Is your Internet connection in order?
2. Are you entering the correct name or address to the server?
 - If you are not sure that you are entering the correct data in the connection dialog, contact your CaseCenter administrator who can give you the name and/or address of the server.
3. Are you entering the correct user name and password?
 - You can double-check by logging in to CaseCenter via the web interface. If you can log in to the Server that way, your user name and password is correct.

10.2 I Cannot Open the Slide from the Link Someone Sent Me

Check the following to ensure that you can access the server and the slide stored there:

1. Is your Internet connection in order?
2. Does the link point to a CaseCenter where you are a user?
 - Check the server name in the link.
3. Is the CaseCenter working?
 - Double-check by logging in to CaseCenter
 - from Panoramic Viewer, see [section 2.1](#).
 - via the web interface, see [section.2.2](#).

10.3 I Cannot Change My CaseCenter Password

You might not be able to change the password assigned to you by the administrator who enables or disables password resetting when your account is created.

If you have trouble with resetting your password, contact your CaseCenter administrator.


10.4 CaseCenter Server upgraded by the Administrator

In case the CaseCenter server is reinstalled by the administrator, the browser cache must be cleared on the client's side.

Follow the below procedure to clear browsing data in *Google Chrome*:

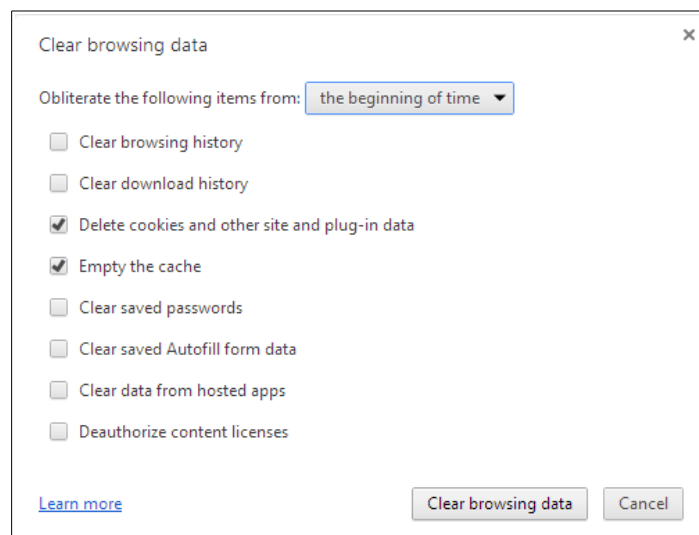
1. Press **Ctrl+Shift+Del**

OR

- Click the Chrome menu  on the browser toolbar, then **Tools**.
 - Select **Clear browsing data...**
2. From the drop down menu at the top of the dialog window select the time how far back in time you want to go. It is advised to select **the beginning of time** as time range.

Make sure that the following boxes are checked:

- **Delete cookies and other site and plug-in data**
- **Empty the cache**



3. When you finished checking boxes, click **Clear browsing data**.

10.5 Slide name is too long

The maximum length of slide name is a string of 70 characters in CaseCenter, but if scanning options are set in the Scanner software application that the digital slide receives its barcode string as its file name, the name string can be as long as 256 characters.

In CaseCenter, during editing any of the attributes (organ, staining, etc.) of a slide which name contains more than 70 characters, make sure to cut or rename the slide and type less than 70 characters in the file name field.

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