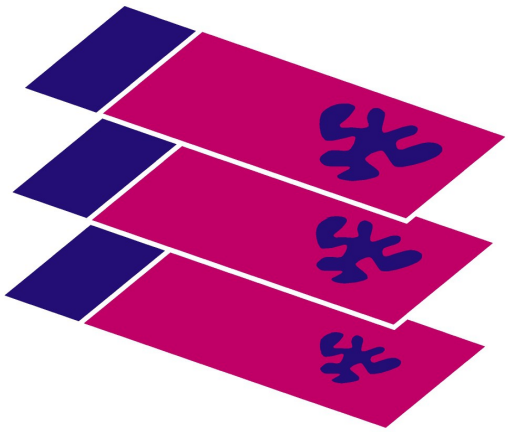

3DHISTECH

CaseCenter 2.5 SP1
User's Guide

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Character Types and Symbols

Example	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.
Example	Cross-references to other documents.
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.

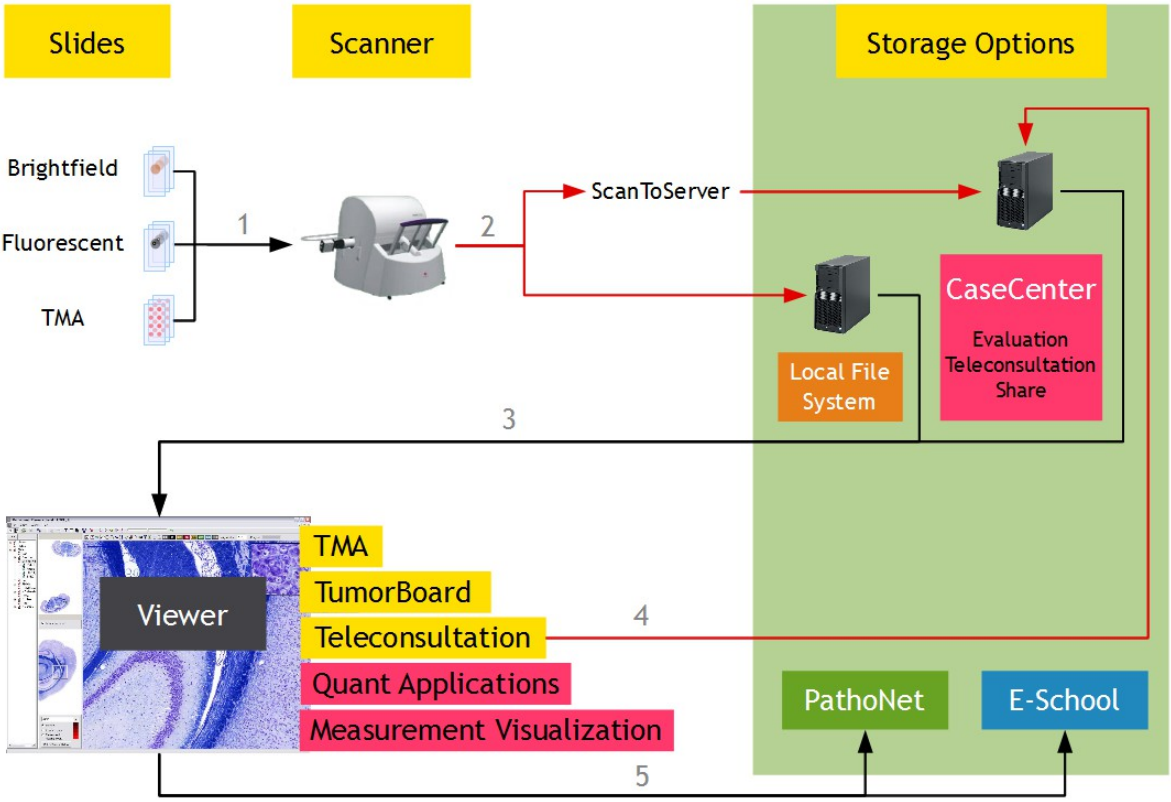
Terms and Abbreviations

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 a part of the 3DHISTECH Product Family that supports tasks in the routine 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 if the ScanToServer application is installed, the 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 Pannoramic Viewer, you can inspect the local slides and you can create *annotation*s 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** 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 an TumorBoard project).

For more information on Pannoramic Viewer modules, see ***Pannoramic Viewer 1.15.3 User's Guide***.

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

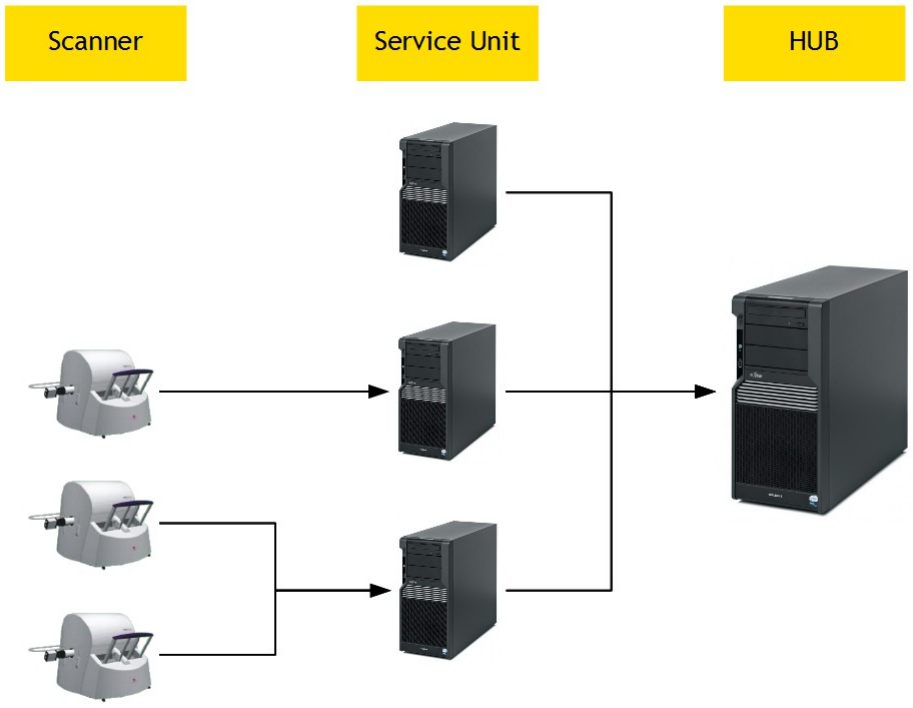
   Teleconsultation via Pannoramic Viewer allows you to view remote slides (slides stored on a CaseCenter server). With this feature of Pannoramic Viewer, you can also host a *Teleconsultation* session or participate in a session initiated by another user.

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. CaseViewer can be downloaded by clicking at the top left corner of the CaseCenter login site. For more information the application and usage, see ***CaseViewer Help 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 or a moderator user) 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).
    - 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 the slides 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/block/cases. 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.

1.3 Uploading a Slide to a CaseCenter

You need Pannoramic Viewer to upload files to the server.

Tip!

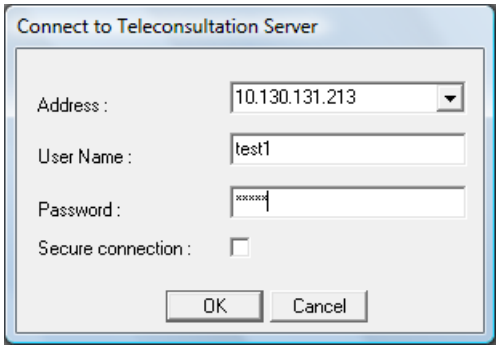
Since the upload may take a significant amount of time – depending on the slide size – it is recommended that you upload the slide to the server before starting a *Teleconsultation* session.

You can only upload one slide at a time from Pannoramic Viewer. Administrators can perform bulk uploads via file transfer.

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 field. 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.



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**.

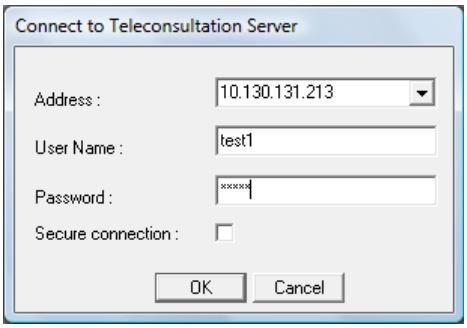
Important!

Accessing Virtual Tray or Virtual Slide requires a license, therefore without a valid license these type of slides cannot be opened nor edited with Pannoramic Viewer, but it is available for you to edit slide data in CaseCenter.

2 Connecting to CaseCenter

2.1 Connecting through Pannoramic Viewer

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



2.2 Logging in to CaseCenter through CaseViewer

After launching CaseViewer, select the CaseCenter panel from the startup page, then 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.

Important!

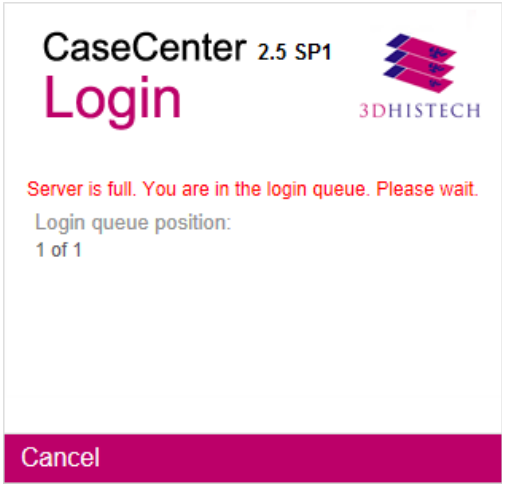
The supported browser is Google Chrome.

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!

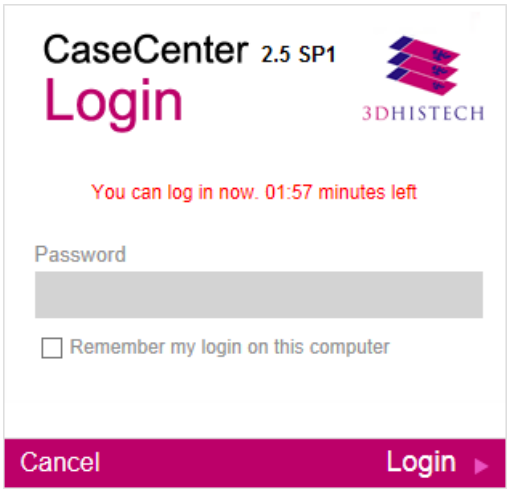
Open CaseCenter interface in one tab only with your browser, because connection issues may arise when working on the same server in several tabs.

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.

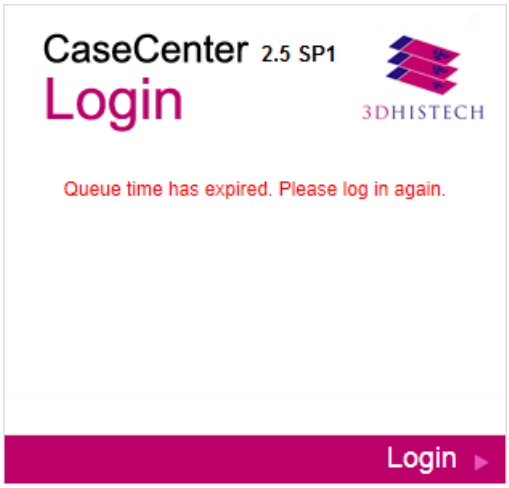


You get in the Login queue based on your user level, which means that the higher the level is, the sooner you are allowed to log in (the higher ranked user is put forward, but behind the users of the same level).

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.



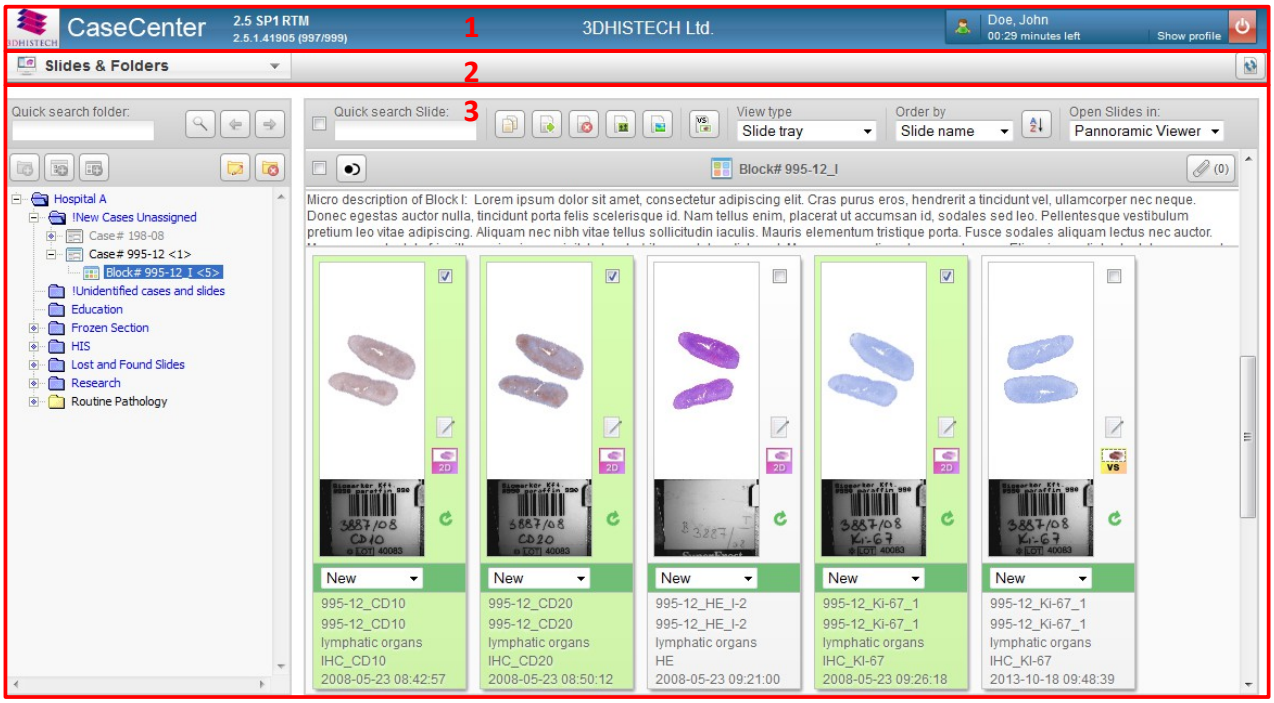
If you are at the first position in the queue and a license is set free, then you will be notified that you can access the system. If you do not wish to log in, you will be removed from the queue after a specified amount of time has passed since the notification is displayed, and the possibility of logging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



3 CaseCenter Main Application Screen

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

- **Header Bar (1)** that includes the CaseCenter logo, version information, the name of the CaseCenter server you are connected to, 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 situated 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).

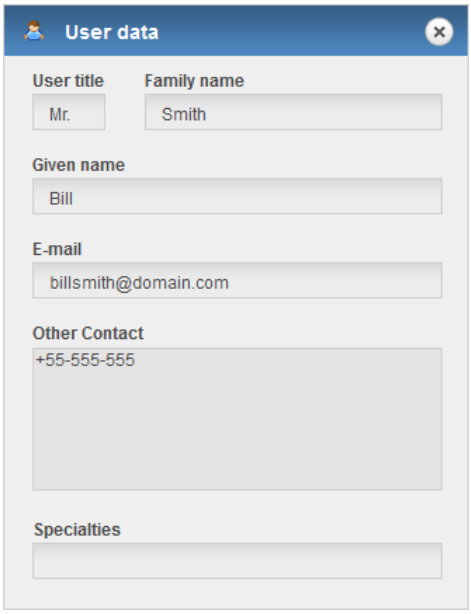


3.1 User Panel

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. User type is presented by the color of the avatar: green if the user is a Moderator, blue if Normal, and red if the user is Restricted.

The time left before you are logged out due to inactivity is displayed here.

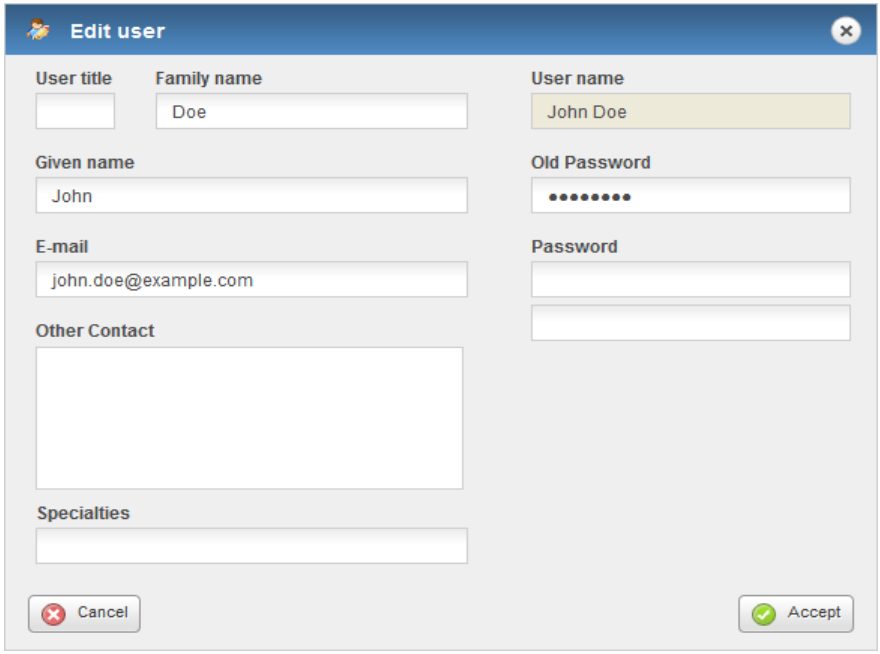
For users who cannot modify their profile data (for example, LDAP users), *View profile* is displayed instead of *Change profile*. Upon clicking **View profile**, the User data window is displayed.



If you click on the **Change profile** button the Edit user window opens in which 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 he/she has RW right (except to folders with R or 0 rights).

Click on the standby button 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 as follows:

If using **Internet Explorer**: open **New Tab**, then select **Reopen last session** option on the bottom of the tab.

If using **Mozilla Firefox**: open **Tools/Options** menu, then select **Show my windows and tabs from last time** from the **Startup options** drop-down menu on the **General** tab.

3.1.1 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.

3.1.2 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).

3.2 Menu Options

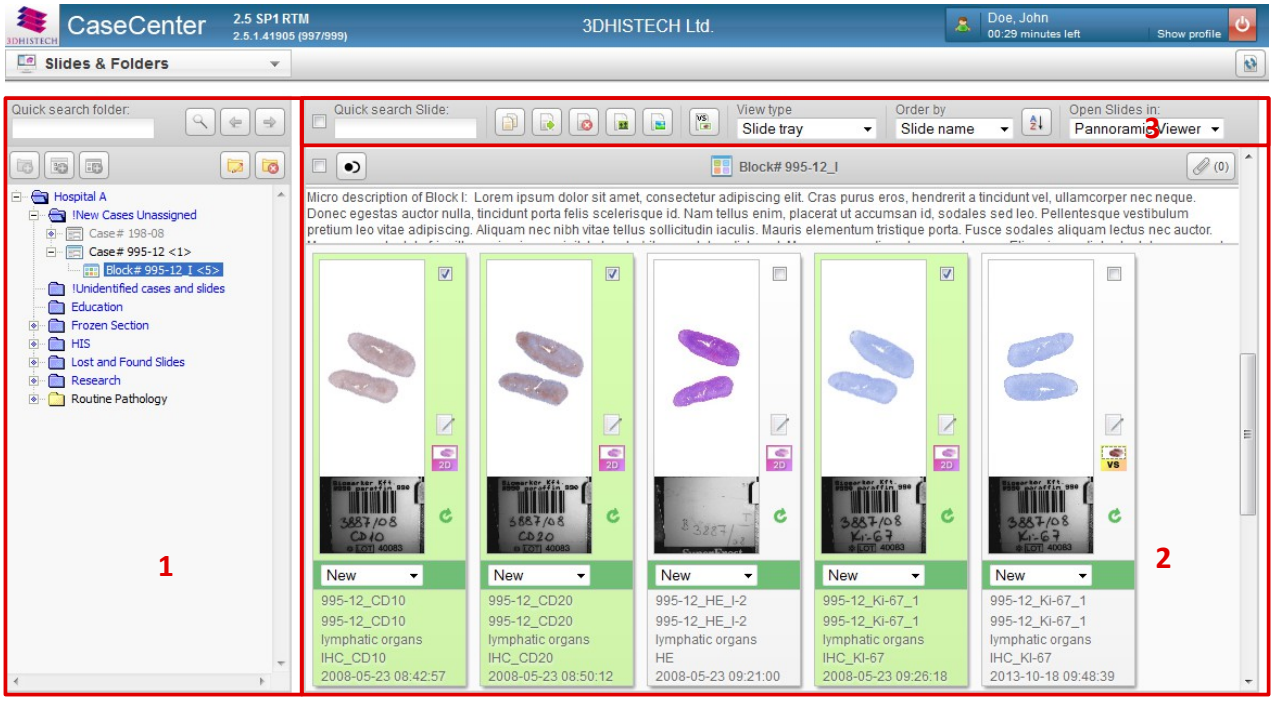
Move the cursor over the menu selector to see the list of options.

- **Slides & Folders** – Browse the folder structure of the server
- **Teleconsultation** – Opens the Teleconsultation window
- **Share** – View shares
- **Search** – Search for 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.

4 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.

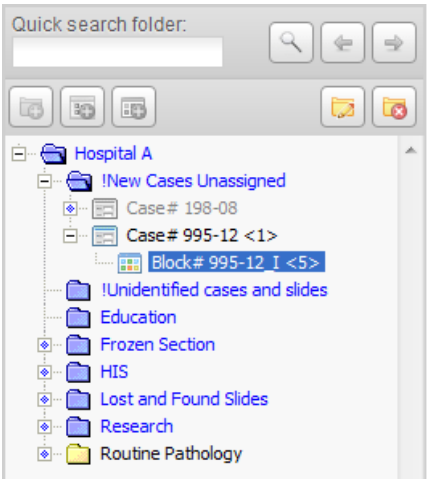
4.1 Folder Tree Panel

The tree structure of the server can be seen on this panel, where the actual folder is presented by blue background. The number of the containing slide is written after the folder name (in brackets). Hierarchically, the **Case** is a sub-level element within a folder, and the **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.

4.1.1 Folder Color Markings

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



Folder color marking and the tasks according to the different access rights are listed below:

- 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.

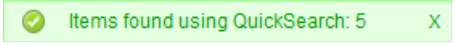
Folders, cases, or blocks are hidden for which you have no permissions at all.

For example, if a folder name appears in black characters when it contains slides to which you have read and write access, blue if the slides are read only, and gray if the slides in the folder are hidden because the slides in it are not accessible.

4.1.2 Folder operation buttons

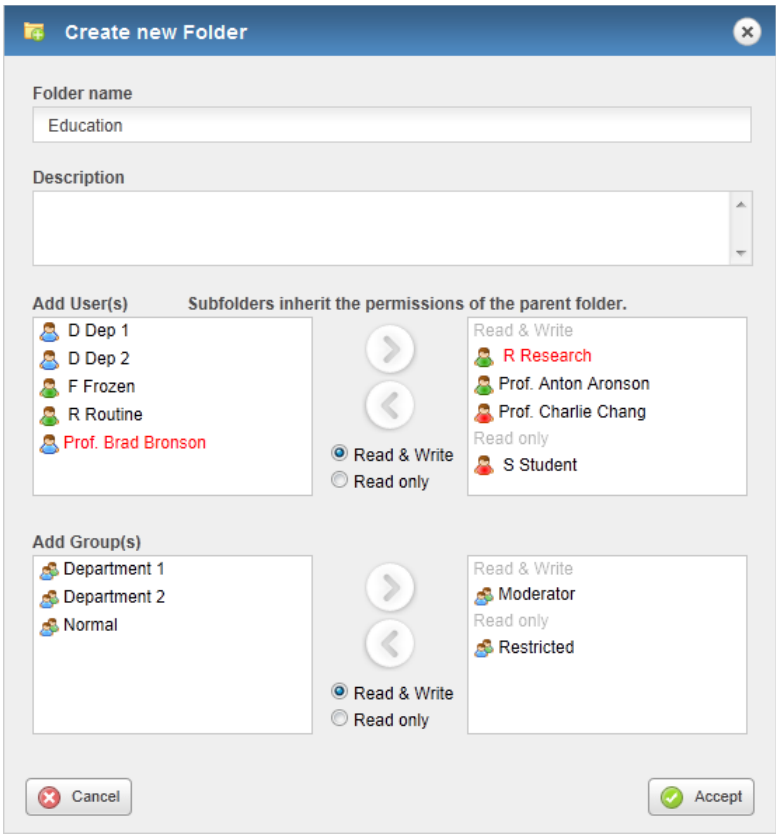
This section describes the buttons above the folder tree panel. Folder operation buttons may be inactive depending on folder-related permissions.

-

  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**



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 when with Read/Write access rights and in Moderator user level.

1. In the folder tree, click the desired folder in which you would like to create the sub-folder, and if active, click this button.
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.

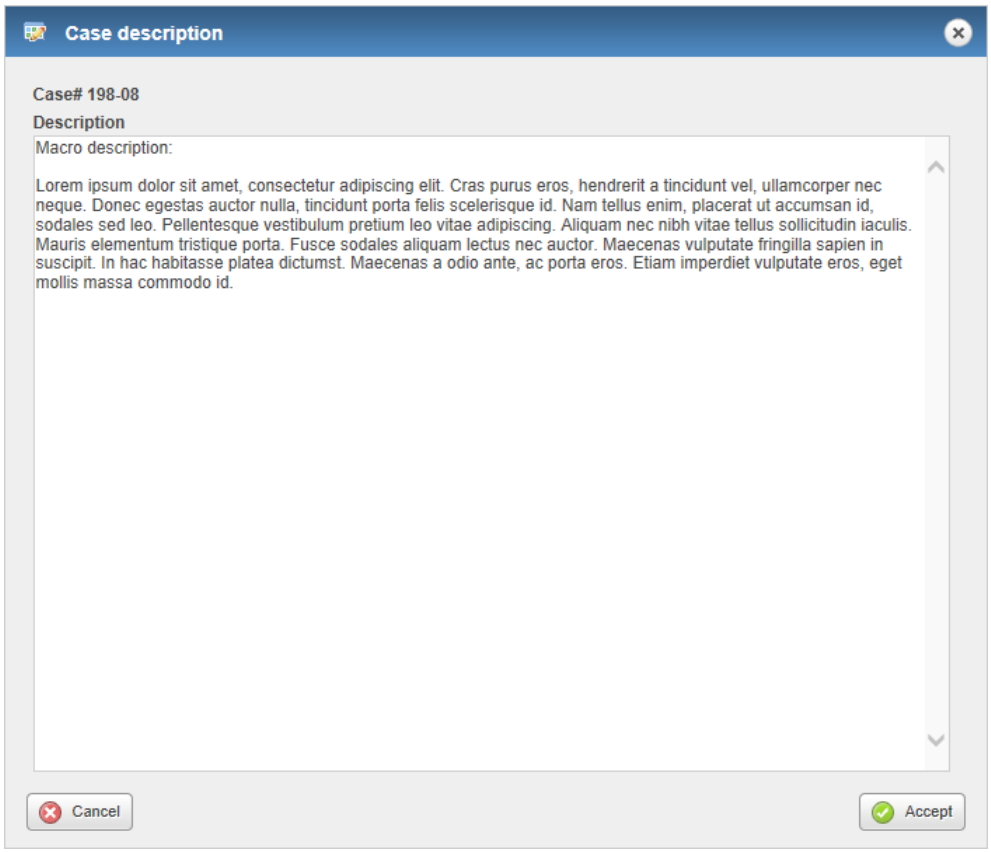
   Click the right arrow buttons to add them to the selection list. Click the left arrow button to remove items from the lists.

   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**

  By default, you can modify the folder description only. Patient or case-related information can be entered into the description field.

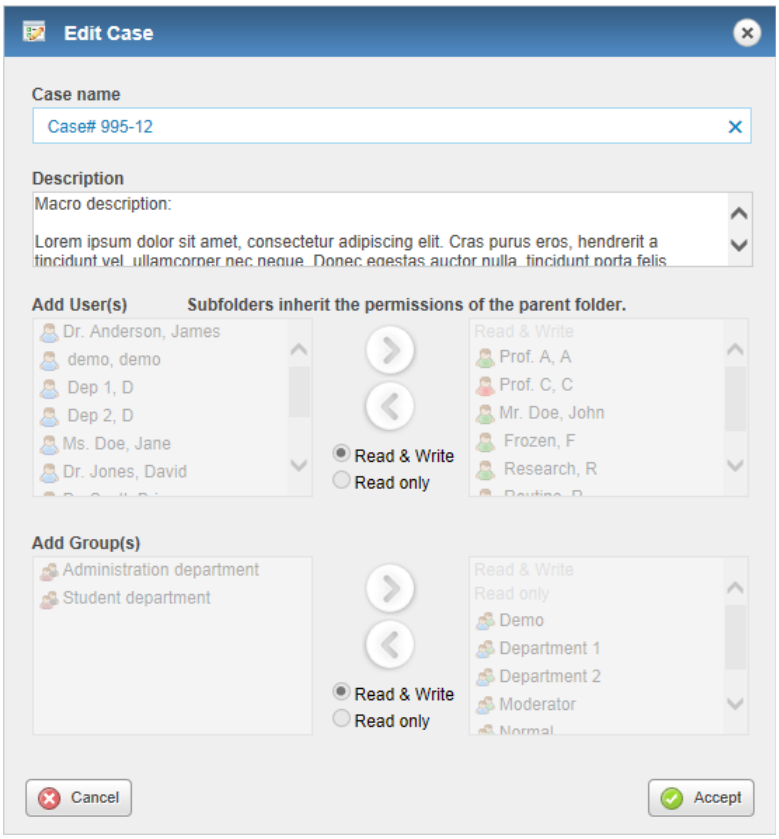
  Upon clicking on the **Description** field (in case it includes any text) of the selected folder/case/block in the **Slides & Folders** panel, a window similar to the following appears:



  Description field becomes locked whenever a user has initiated editing, so you will not be able to modify the content.

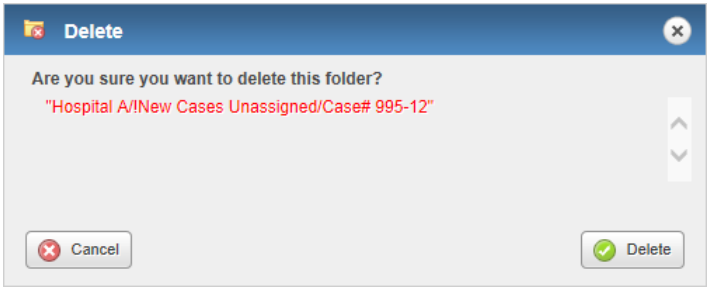
  Moderator users are allowed to change user permissions. If you would like to have the access right of a user or user group to be changed, you can contact a Moderator user. A moderator is always marked with a green avatar.

  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.

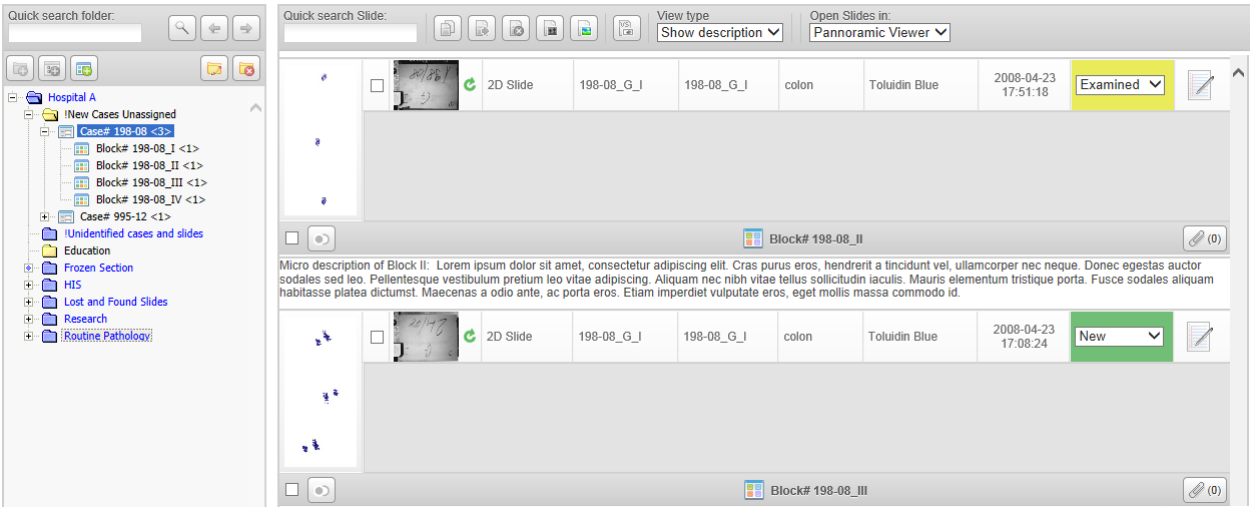
- **– New Block**

  Creates a block under the actual case. Note, that you cannot create a block under an other block. 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.

4.2 Slide Attributes and Process Options

4.2.1 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 order 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

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

  In the Edit Slide window the following slide attributes can be modified by default:

  - **Slide name**

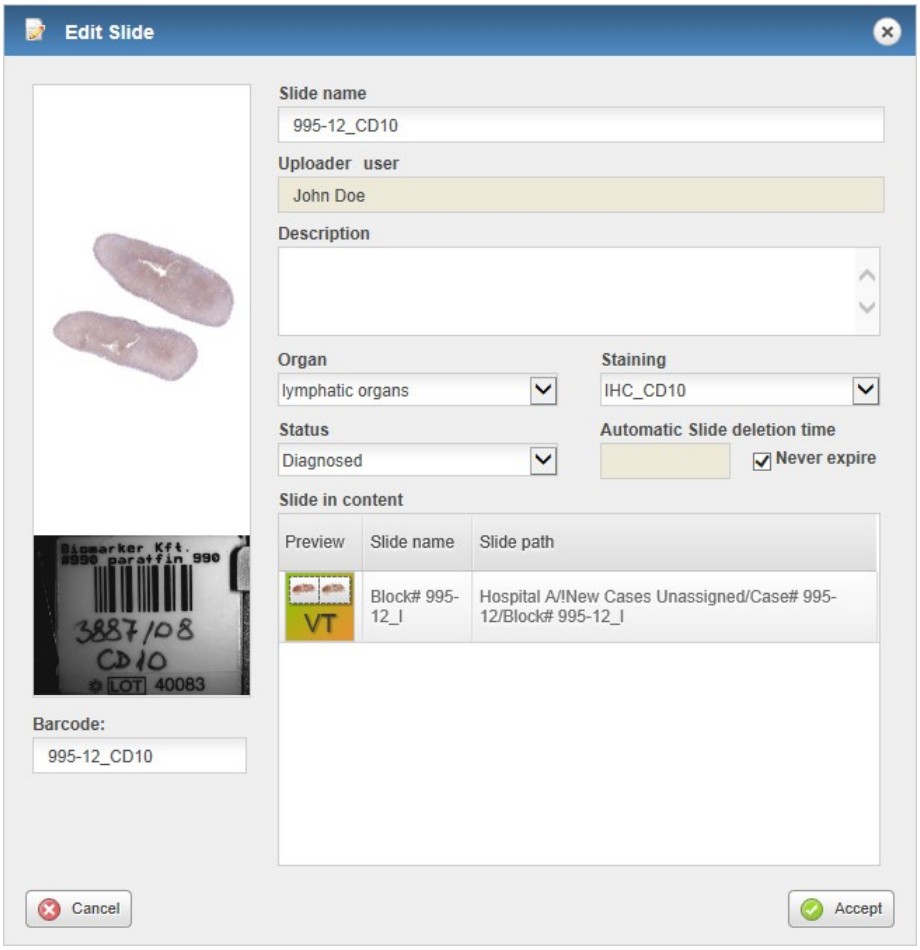
    NOTE: Slide name cannot be longer than 70 characters, and make sure it does not include the '&' character. For more information, see sections ***9.5*** and ***9.6***.

  - **Uploader user**

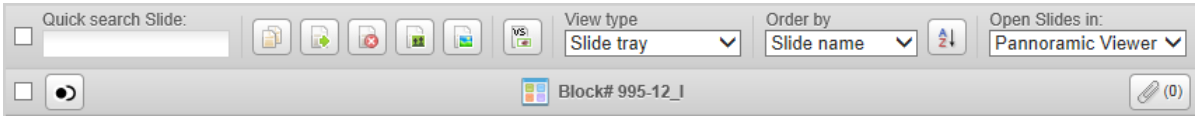
    The name of the user that has uploaded the particular slide.

  - **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**
  - **Automatic Slide deletion time**
  - Select **Never expire** or specify a date

NOTE: Slide can be opened from the Edit Slide window by clicking on its thumbnail image.



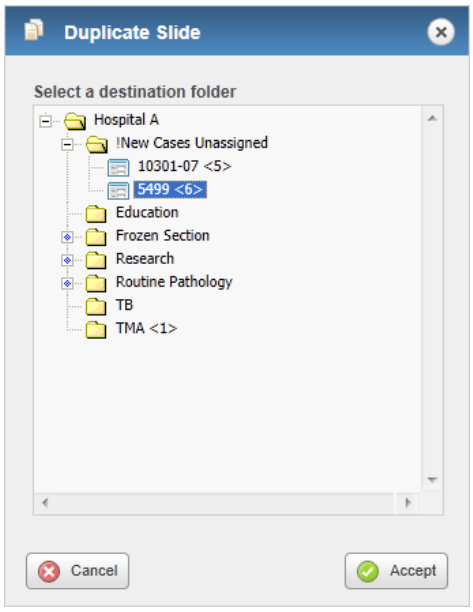
4.2.2 Slide actions



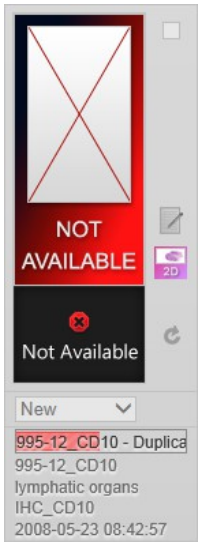
The elements of the action bar are as follows (from left to right if **Default** view is selected):

- Tick the checkbox to select all folder items for further operation.
- **Quick search** – 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 –**

  After clicking this button 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!

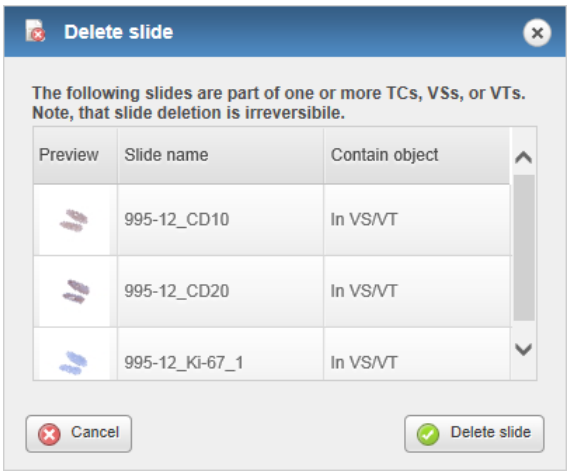
Duplication physically creates a copy of the selected slide(s) in the destination folder.

- **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.

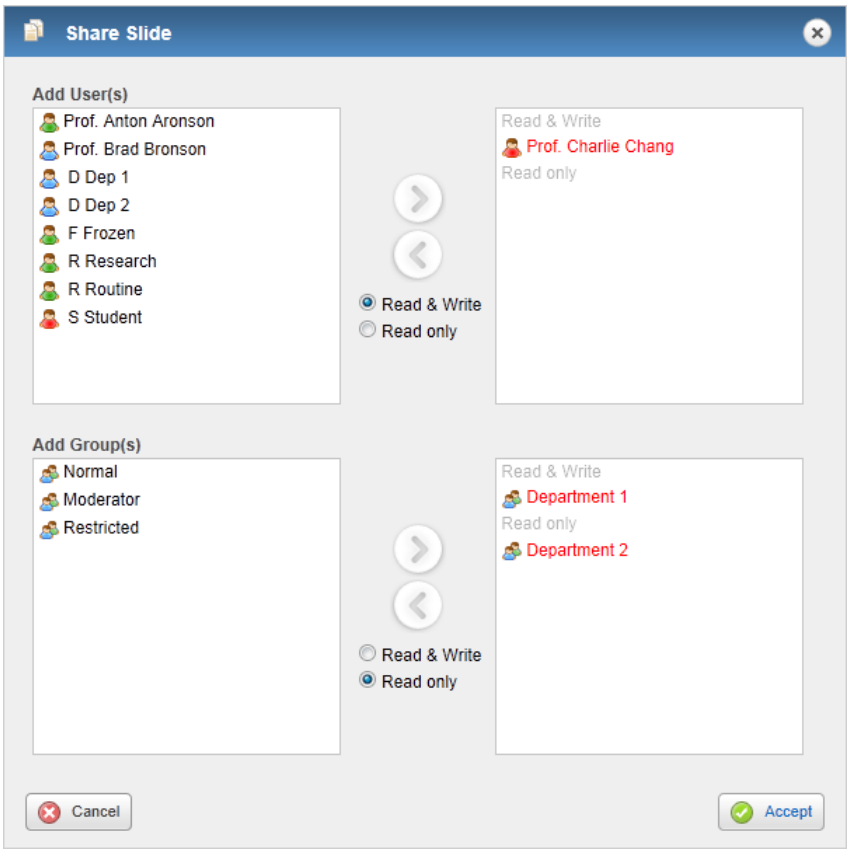
- **Delete –**

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



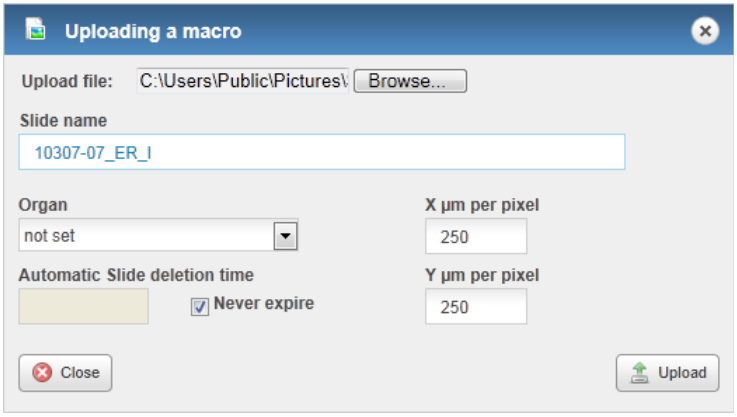
- **Share –**

  Click this button to share the selected slide(s) or project(s) with 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**.



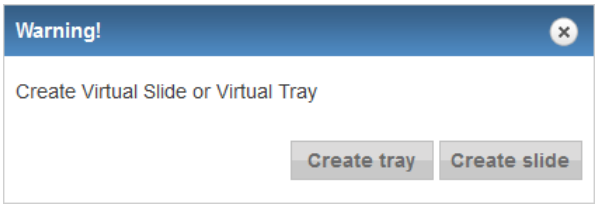
- **Upload macro –**

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

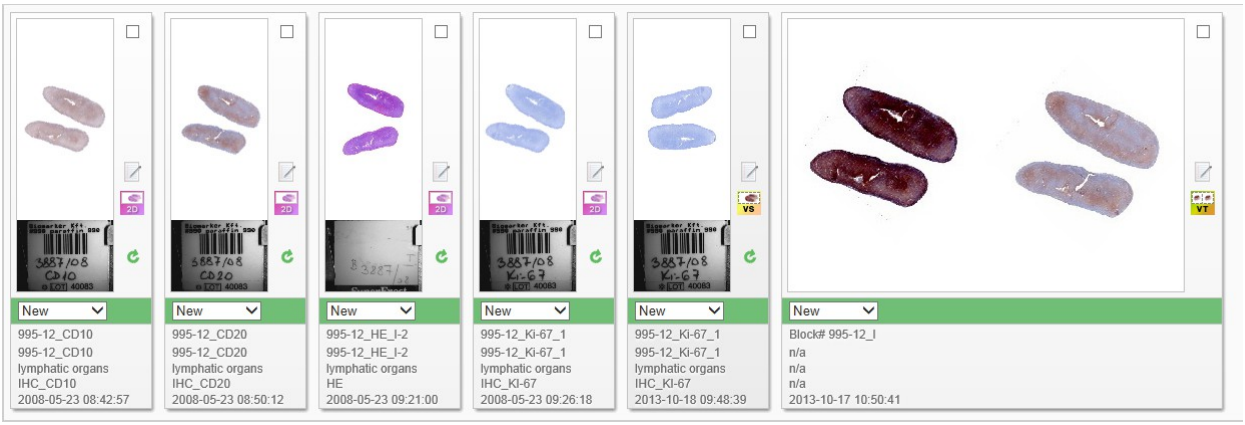


- **Create Virtual Slide or Virtual Tray –**

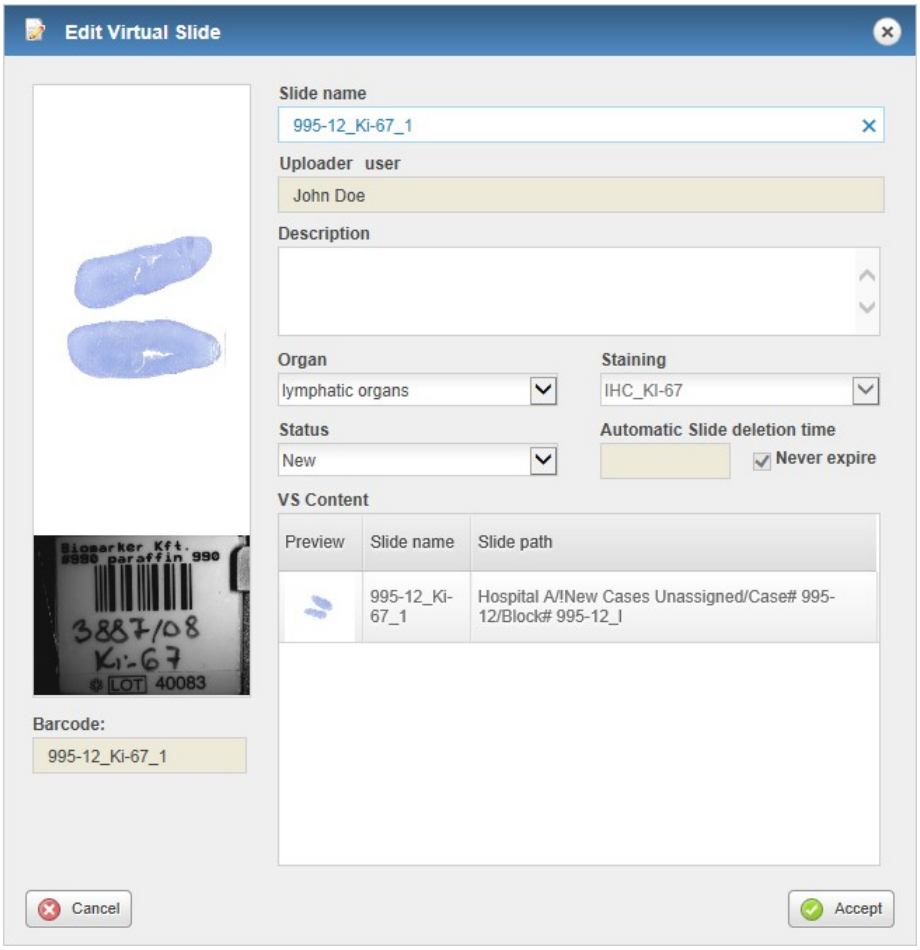
  With this feature a virtual slide or virtual tray can be created based on the original slide or slides. If you select one slide only then you click this button, and the box in which the following message appears, you can select the type of virtual item to be created.



  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.

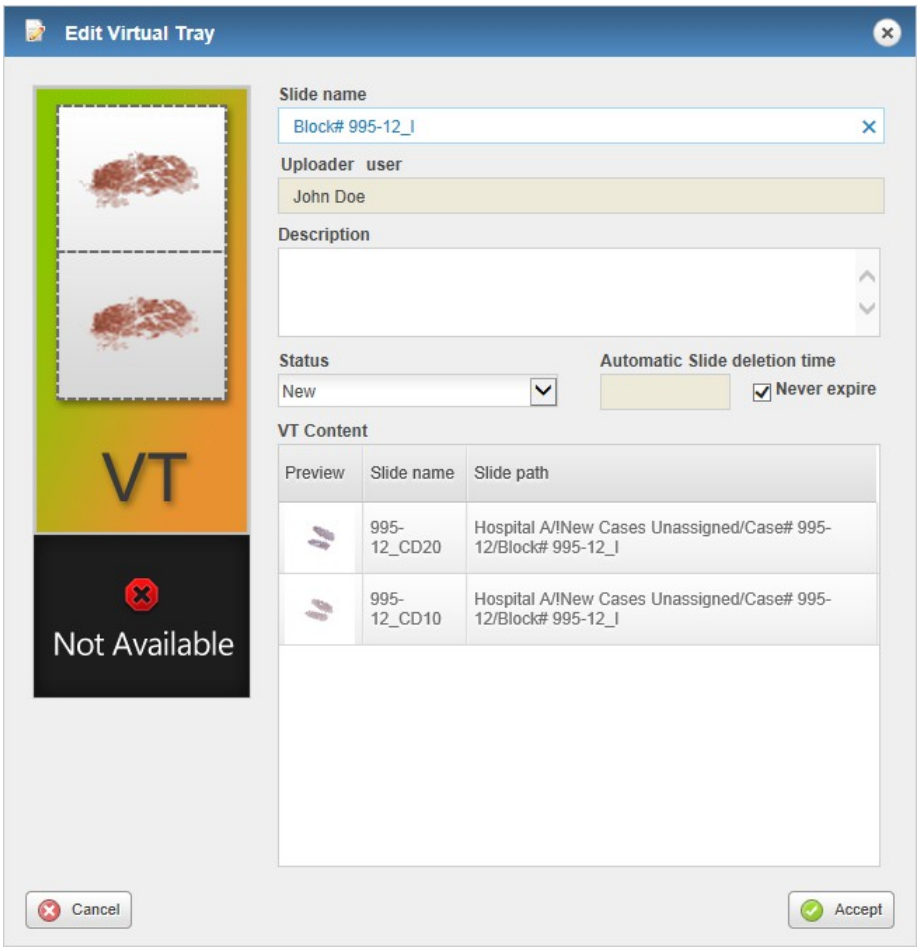


If you edit the data of the virtual slide or tray the following windows are displayed:



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.

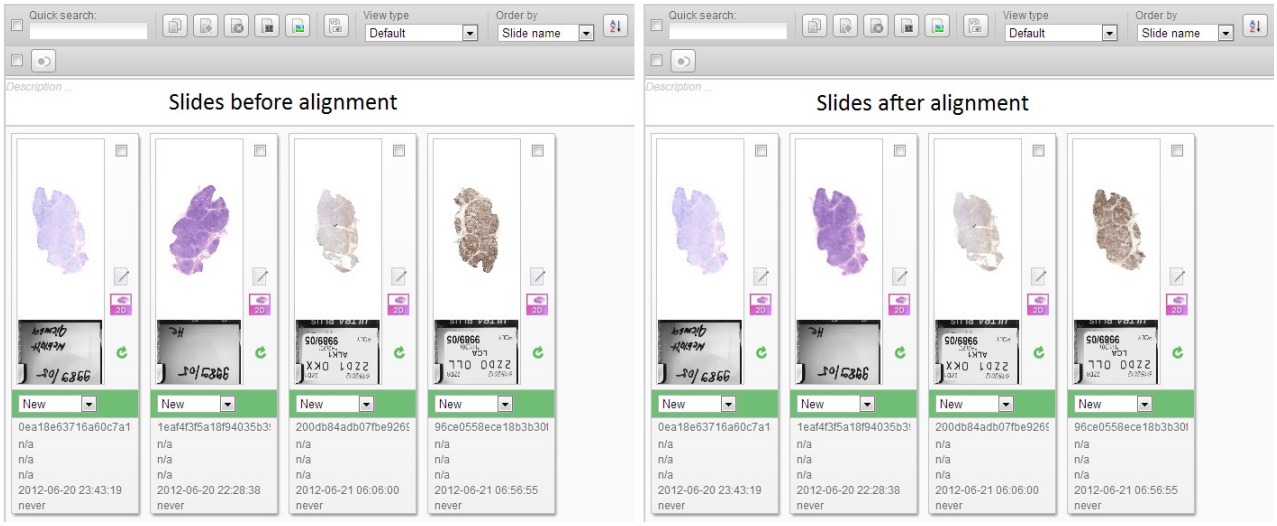
NOTE: Staining and Expiration date cannot be modified for Virtual Slides.



- **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 name
  - Status
  - Custom Order

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 to open them with Pannoramic Viewer.
- **Align** – Click to align selected slides based on a reference degree by which slides in a set can be rotated to an identical orientation.



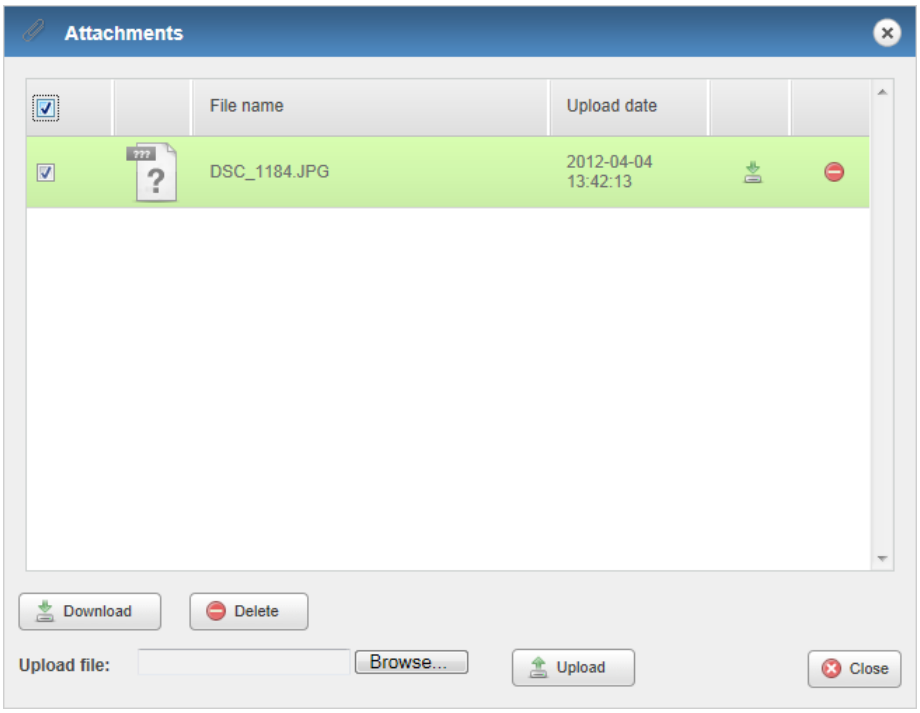
- **Folder/Case/Block name**
- **Attachment** – Click to upload files as attachments and to display the list of attachments (if there is any) belonging to the actual folder.

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.

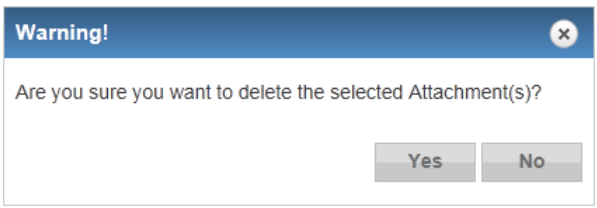
> **Important!**
>
> If an attached file name starts with a "." character, or the file extension contains a space, its downloading may fail depending on the browser type.

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

1. Click **Browse** 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.

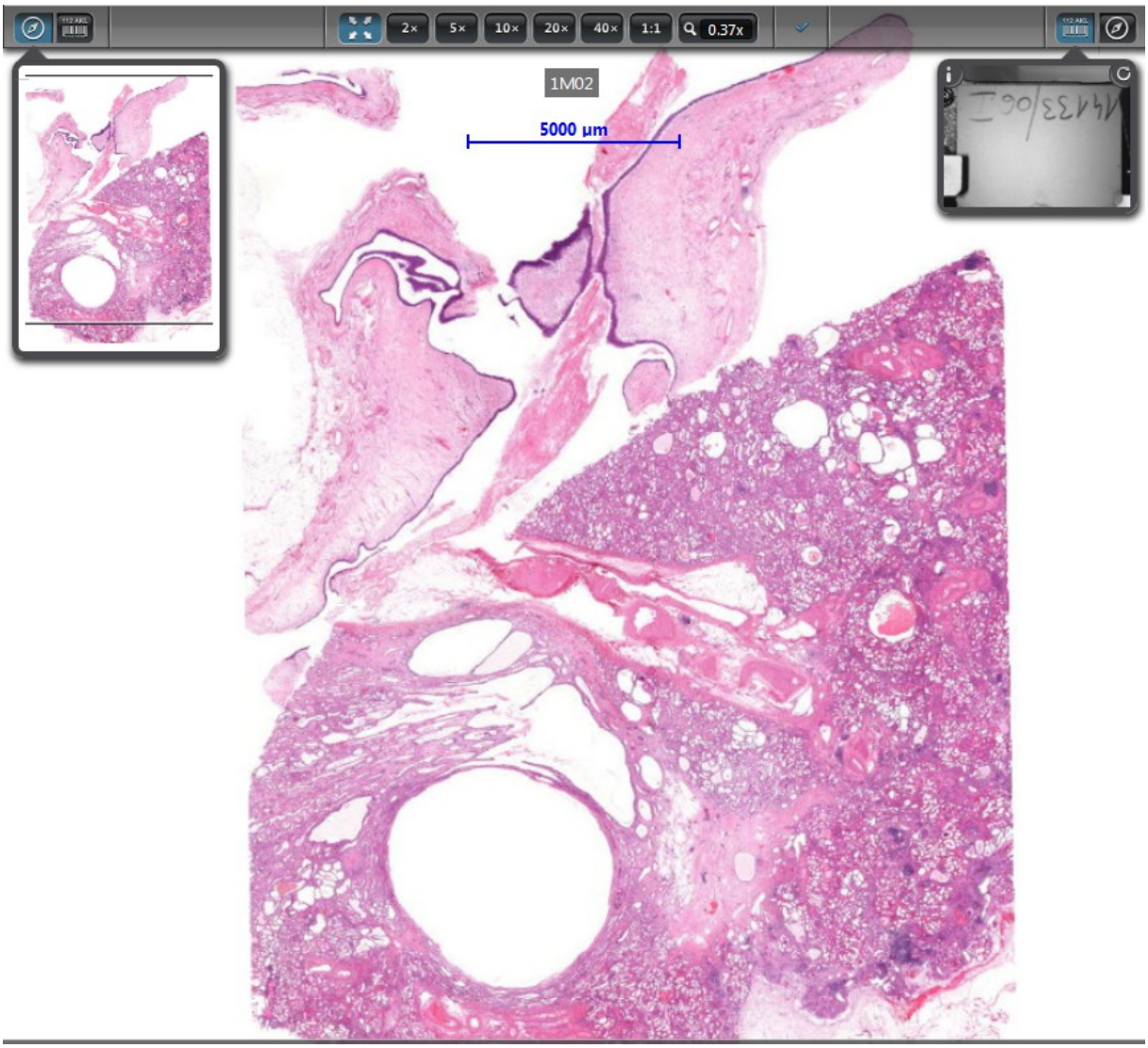


- Use the selection checkboxes at the first column or the select all checkbox at the column header to select multiple files.
- Multiple files can be downloaded by clicking the Download button, or click the icon to download a single attachment.
- To delete attachment(s) click the Delete button to batch deletion or the icon to delete a single file.
- Click **Yes** to delete selected file(s) from the list.



- **Open Slides in –** Choose Pannoramic Viewer or InstantViewer as the default slide viewer application in which the selected slides can be opened.

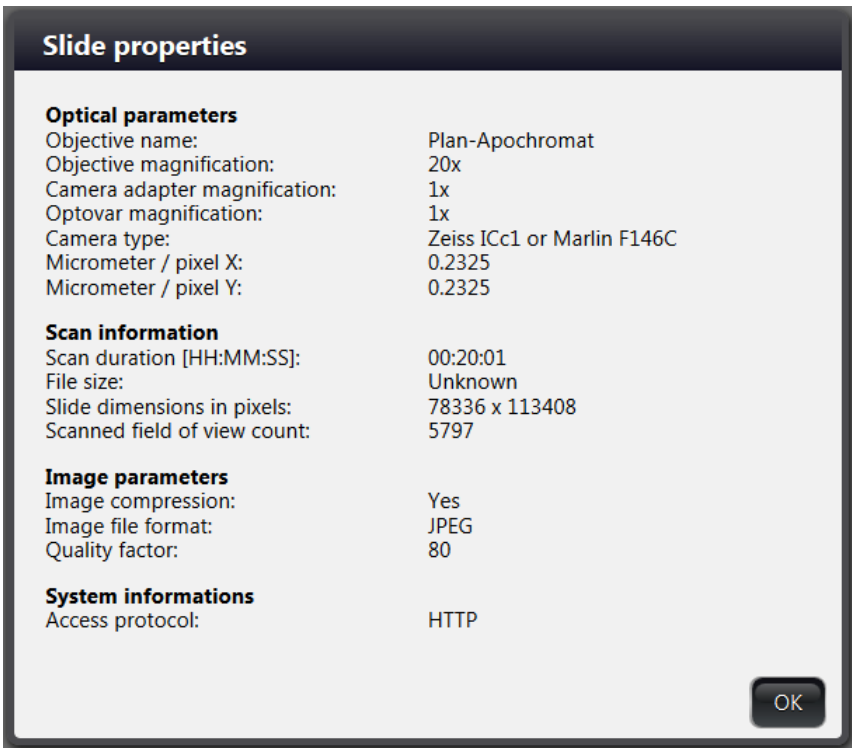
  If you select **InstantViewer** as the application for opening slides, the slide image is displayed in a new tab in your browser.



The following functions are available for you:

- **Slide overview** – Shows a low resolution overview from the whole slide to help navigation. The screened area is marked with a rectangle with gray border. It allows fast navigation through the slide by clicking onto a certain point in the overview or panning with the rectangle. You can use mouse wheel to zoom in or out on the slide image (available also when using a touch monitor, or a tablet).
- **Label area** – Shows the label area of the slide. Depending on scanner type this image can be flipped upside down. With the icon the label image can be flipped by 180°.

Slide information can be displayed by clicking the icon. Slide information is displayed in a pop up window:



- **Pan mode** – This mode is active by default, and it enables the dragging the slide image in the window (available also when using a touch monitor, or a tablet).

-

Zoom levels – There are seven pre-defined magnification levels (Fit, 2x, 5x, 10x, 20x, 40x, and 1:1) control buttons in the bar. If using the mouse wheel for zooming, the current zoom level is displayed at the far right end of the bar. Double-click on the slide image to switch between levels Fit and 1:1.

- **Slide loading indicator**

  animated mark indicating the loading process;

  still image, showing that the slide is ready to use.

- **Available color channels on a fluorescent slide**

  Fluorescent slides contain individual channels for each fluorescent signal. The panel at the bottom of the window represents the available fluorescent channels of the slide. Click the label to turn a channel on or off.

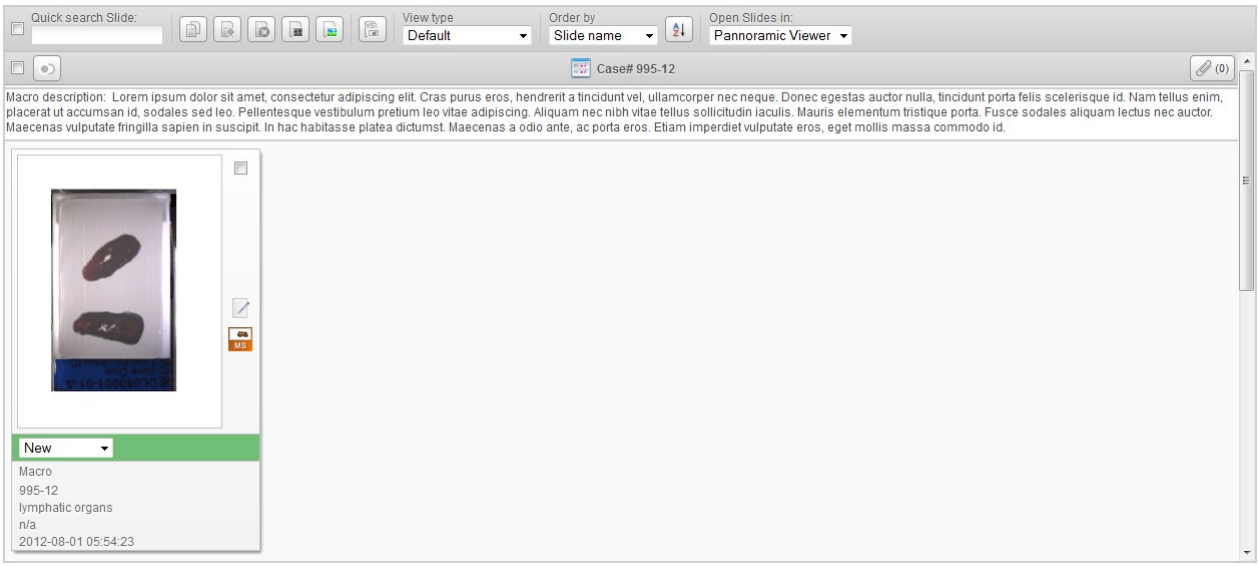
- **Hotkeys**
  - l – label area
  - n – slide overview
  - 0, 1, 2, 3, 4, 5 – represent the magnification levels from fit-to-screen to 40x

To open a slide either in Pannoramic 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.

4.3 CaseView mode

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
- Change view type
- Share
- Upload macro

Inactive functions:

- Folder tree
- Copy slide
- Move slide
- Delete slide

5 Teleconsultation

The *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*.

5.1 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.

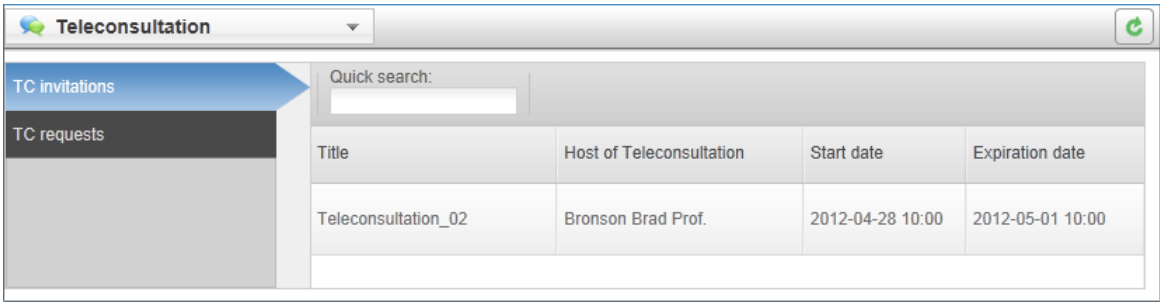
You will need the Teleconsultation module of the Pannoramic Viewer to upload slides (one-by-one) to a 3DHISTECH CaseCenter server. Uploading the slide creates a copy on the Service Unit, keeping the original slide on your local computer.

5.2 Requirements and Privileges for Hosts in a Teleconsultation Session

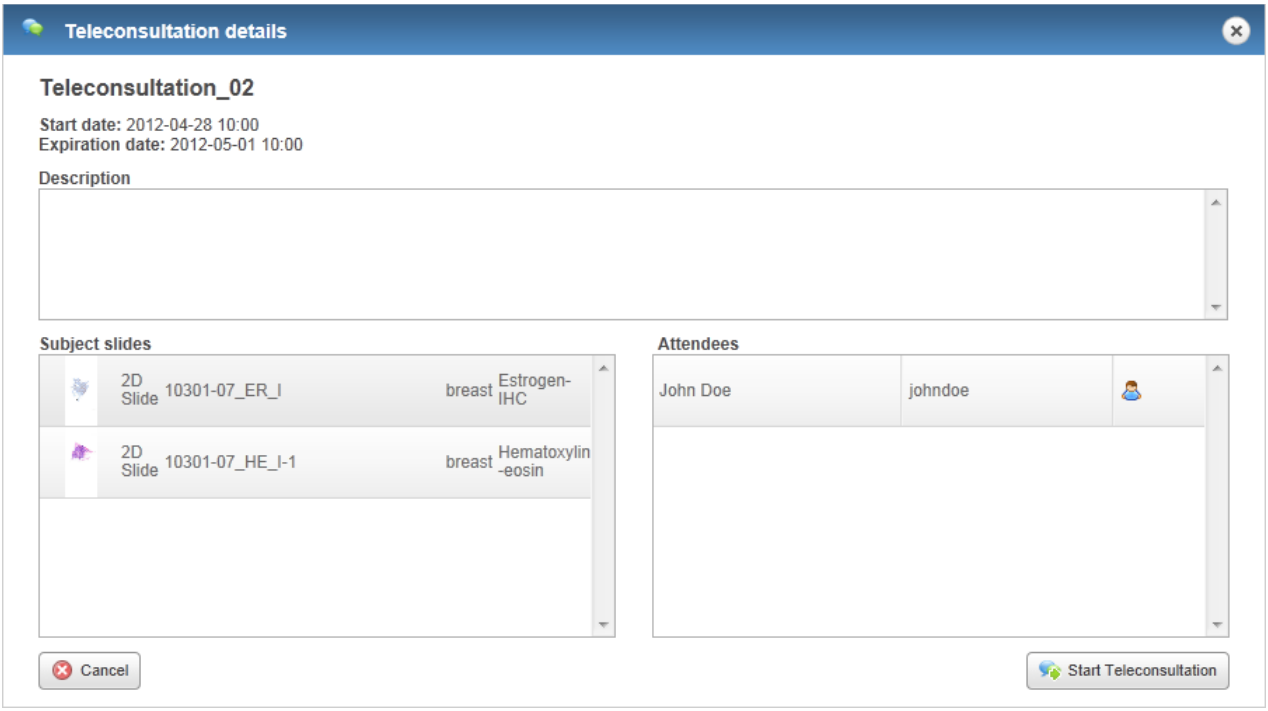
- If the *Host* quits the group, the *Teleconsultation* session closes for all *participant*s. Other *participant*s can leave the session without terminating it.
- The *Host* can modify the slide by adding *annotation*s at any time. Other *participant*s may request permission to modify the slide from the *Host*.
- Only the *Host* can edit a *Teleconsultation* report. Other *participant*s can only read the report after they received it from the *Host*.

5.3 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.



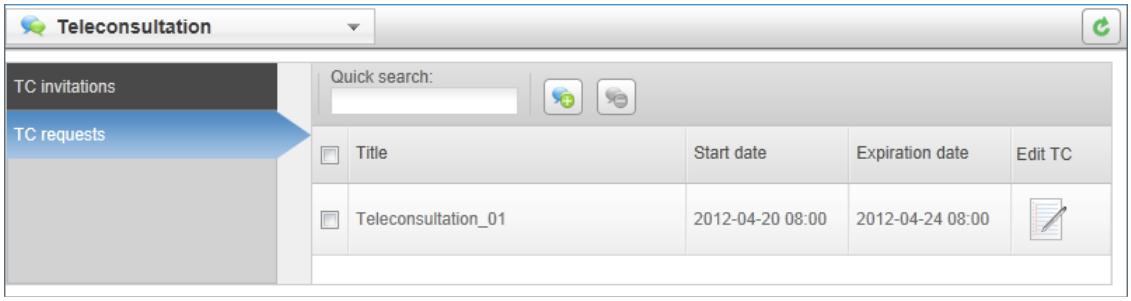
The pop-up window displays all the necessary information regarding the session, such as start date and expiration date of teleconsultation, description, subject slides or projects, and attendees.



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.

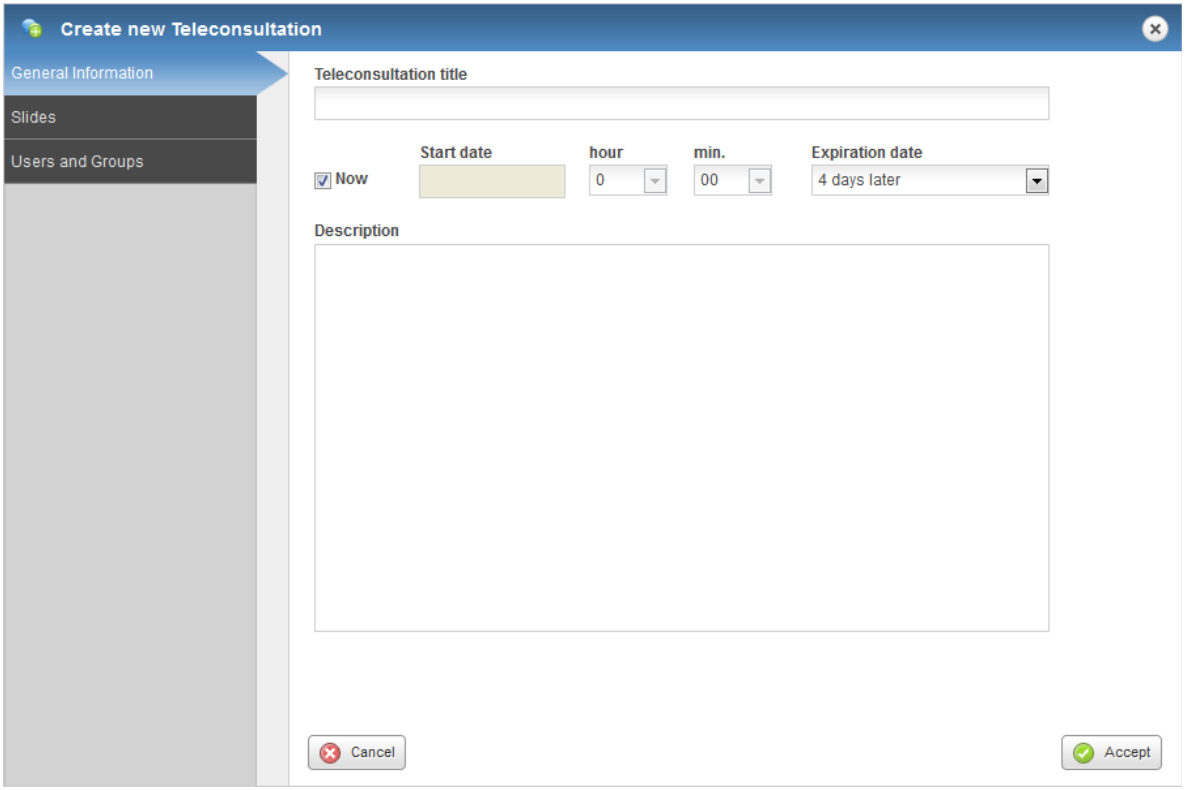
5.4 Creating a Teleconsultation Session

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

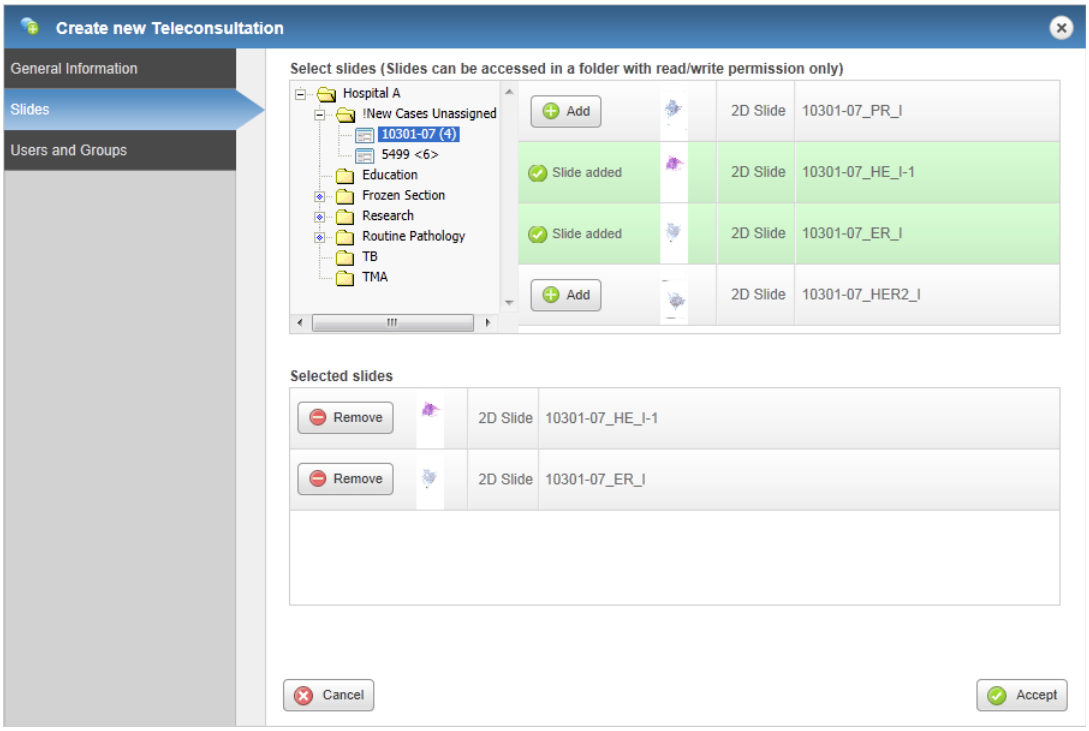


2. Click to create a Teleconsultation session.

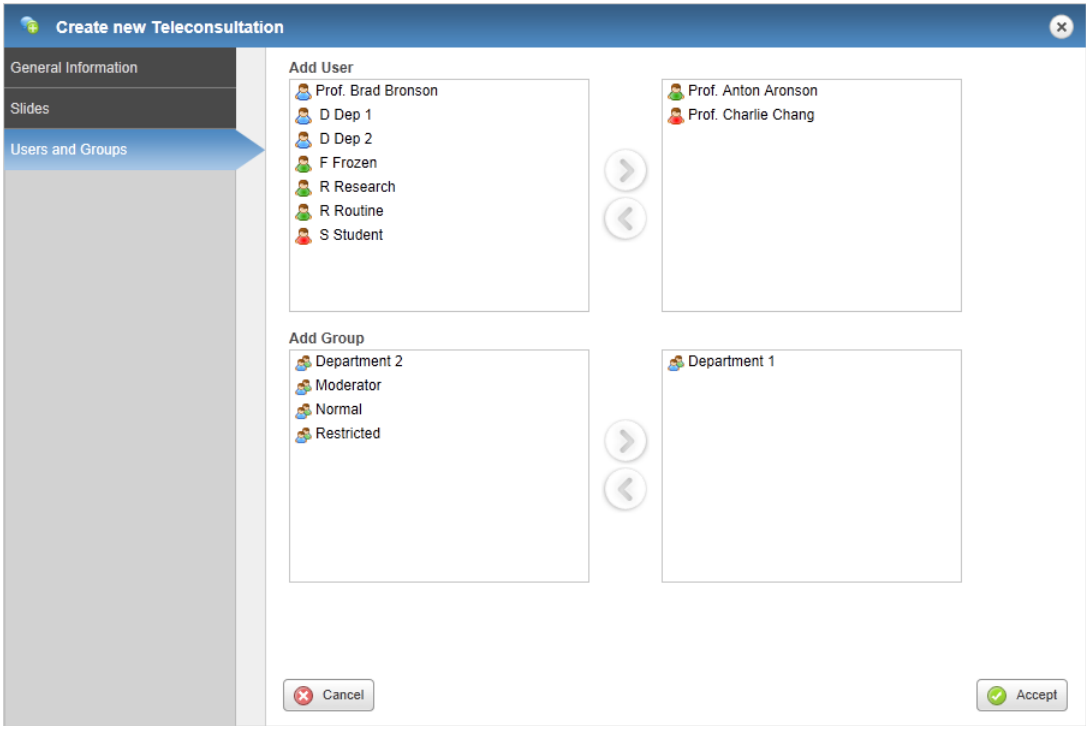
   - Fill in the fields in the **General Information** window. You can name the session, assign a start date (**Now** or as defined) and **Expiration date**, as well as write a description about the session itself.



- In the **Slides** window, click the desired folder in the folder tree, then click the **Add** button next to the slide preview at the right side of the **Select Slides** panel.



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



If the system is properly configured, 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.

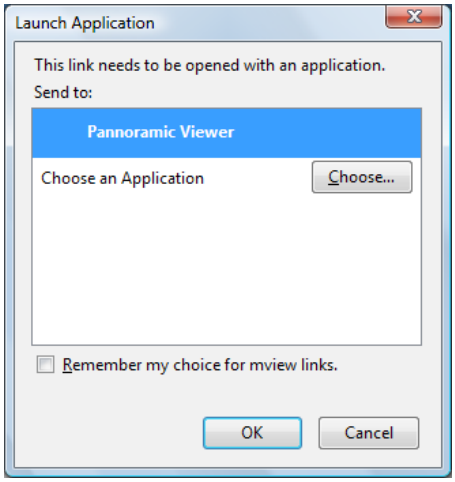
5.5 Opening a slide via Teleconsultation

In Pannoramic Viewer

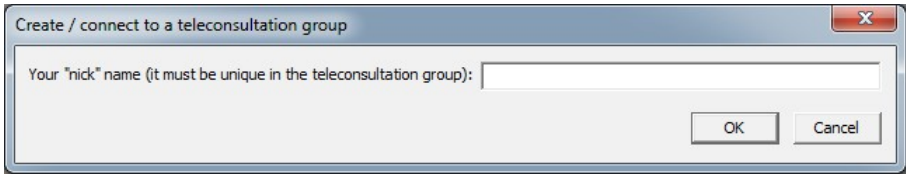
1. Start Pannoramic Viewer.
2. Connect to the 3DHISTECH Teleconsultation Server:
    a. To start *Teleconsultation*, click in the toolbar.
    b. Enter the server address and your authorization information in the dialog.
3. On the **Teleconsultation server** tab, folders and slides that you have been 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:

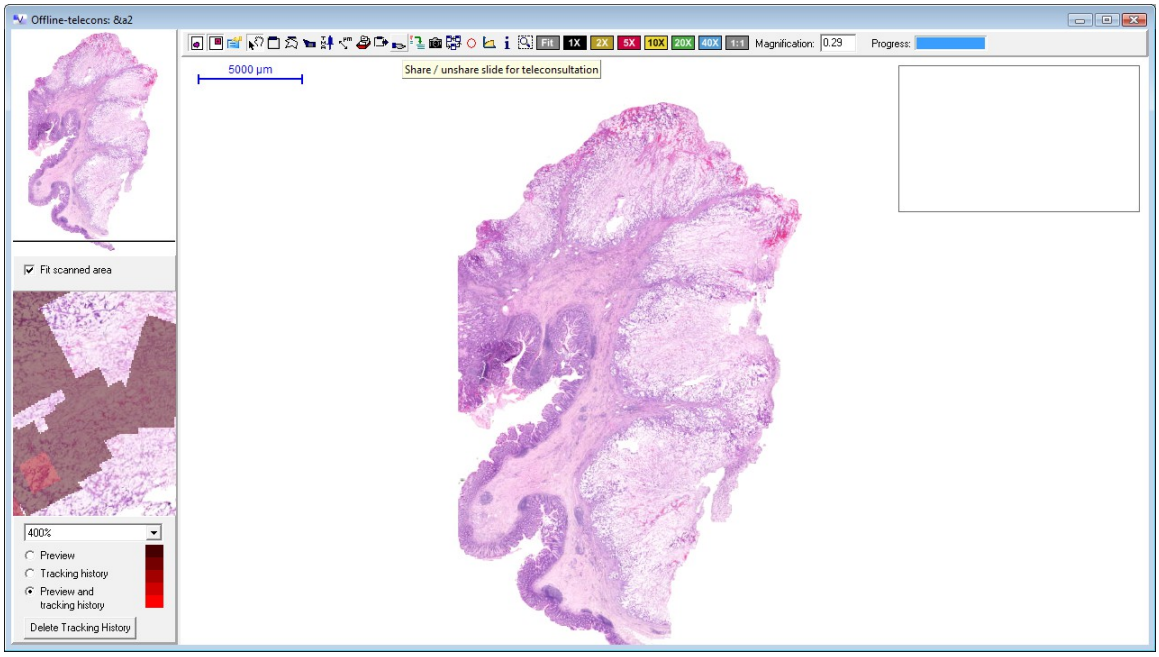


As you can see, Pannoramic Viewer is selected by default as the viewer application in which the slide will be opened. If you would like to choose a different application, click the **Choose** button and browse for it or click **OK** to continue with opening the slide with the default program. When the Pannoramic 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.



5.6 Working Simultaneously on a Slide in an Online Teleconsultation Session

1. The *Host* must ensure that all *participant*s 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 Pannoramic Viewer, or in the Teleconsultation window in CaseCenter, then open it.
5. Click the button in the slide window in Pannoramic Viewer.
6. The slide is displayed in Pannoramic Viewer for all *participant*s.



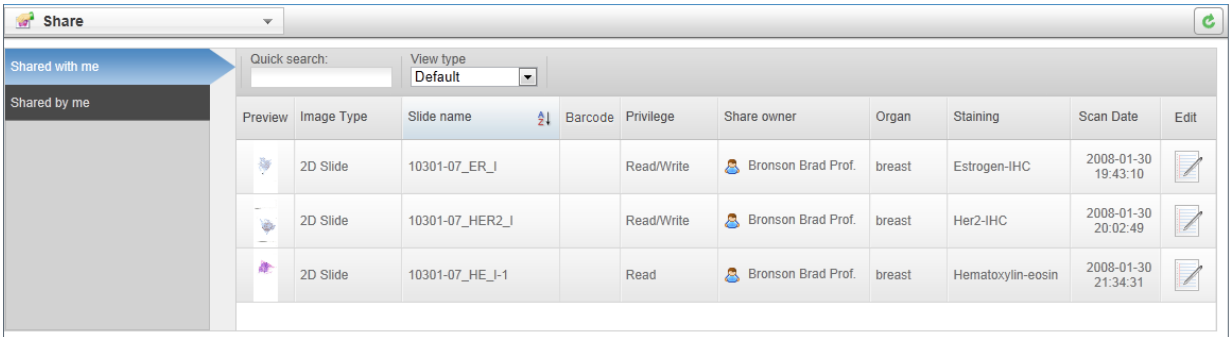
Warning!

If the *Host* tries to enable a slide that has not been uploaded to CaseCenter, *Teleconsultation* starts uploading the slide. The upload, however, 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. *Participant*s 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 Pannoramic Viewer without *Teleconsultation*.
9. The *Host* should take into consideration that Pannoramic 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. *Participant*s 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 *participant*s can also exchange comments via the chat tool.
12. To quit a *Teleconsultation* session, click in the Pannoramic Viewer toolbar.

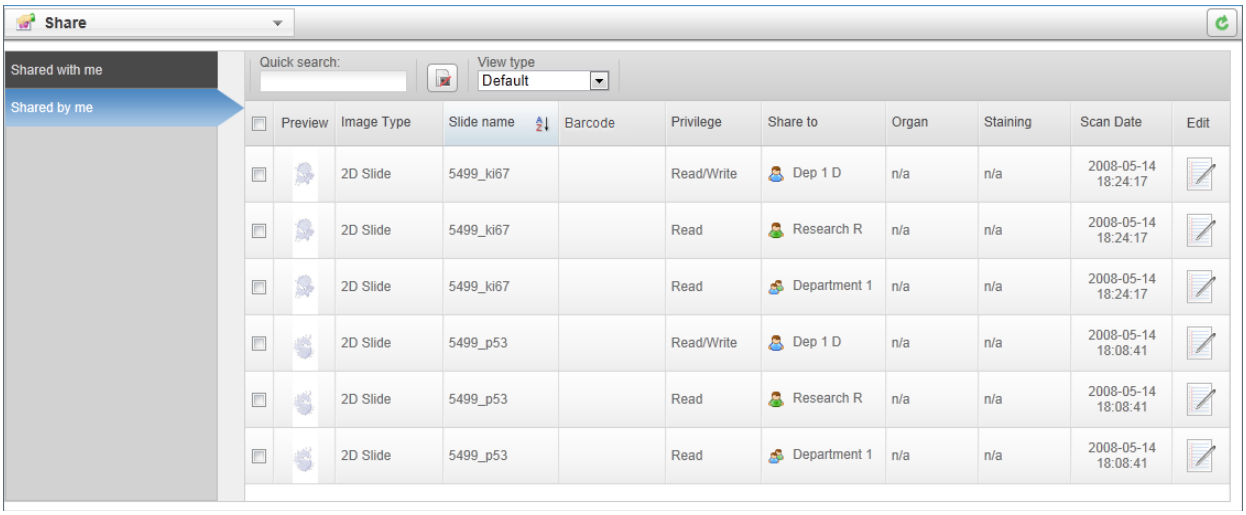
6 Slide Sharing

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.



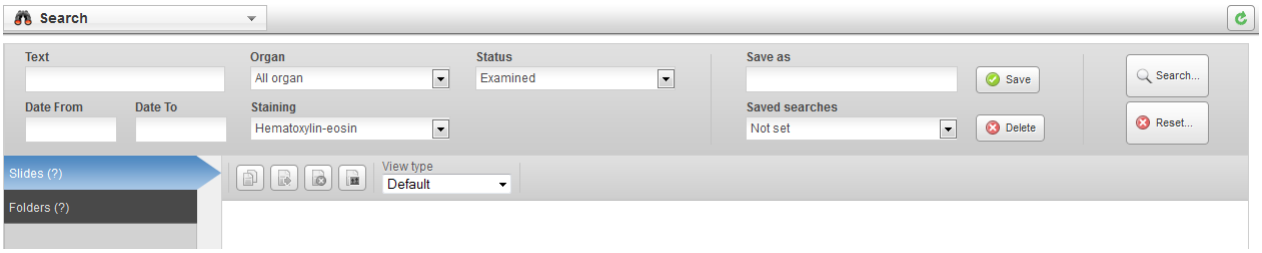
You can share your slides with other users and/or groups in the **Slides & Folders** window (see section ***4.2.2 Slide actions***).

- 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.
- Tick the checkbox on the left of the thumbnail image of the slide then click the button to cancel sharing them with a user.

7 Search in CaseCenter Server



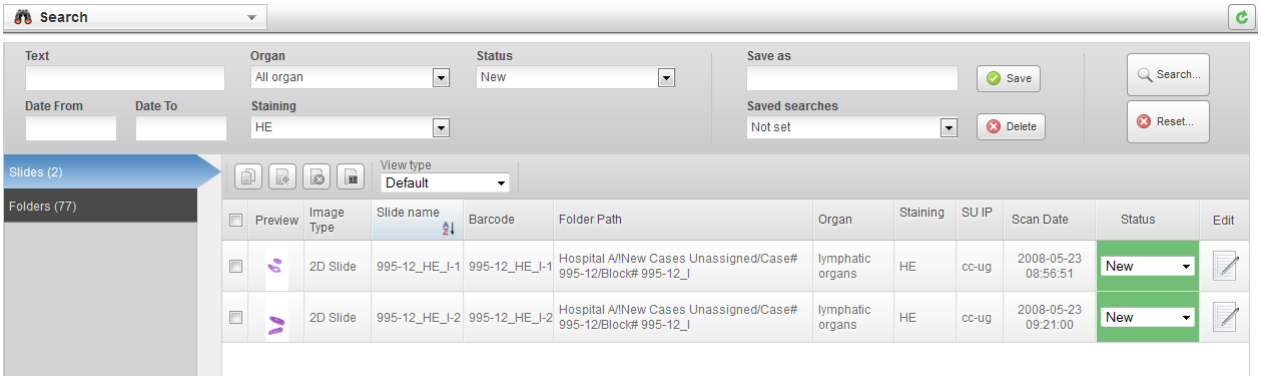
Select **Search** from the menu options to search for slides and folders stored on the CaseCenter server.

In this window you can search for the following attributes:

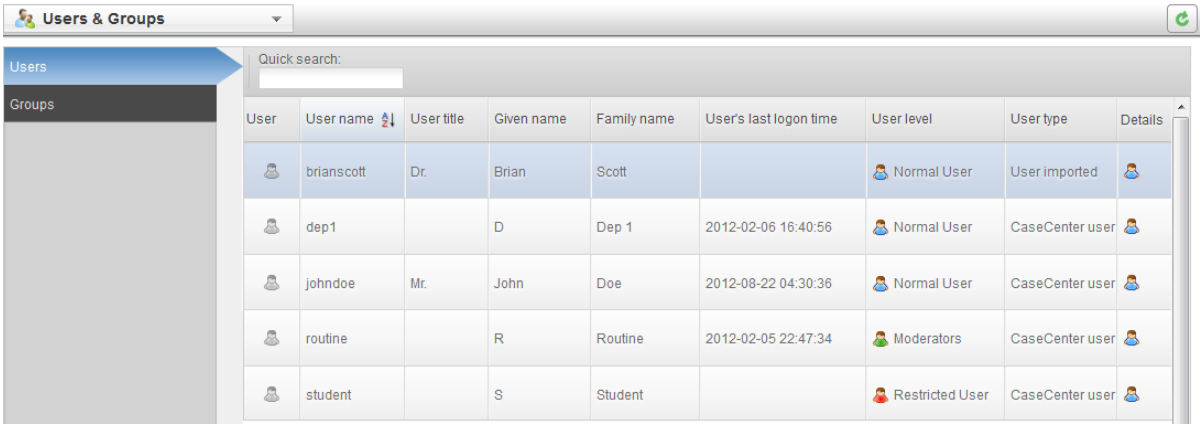
- Text (search for character string in slide name and in the description fields of folders, cases, blocks, and slides)
- Date from/to
- Organ (selectable from list)
- Staining (selectable from list)
- Status (selectable from list)

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



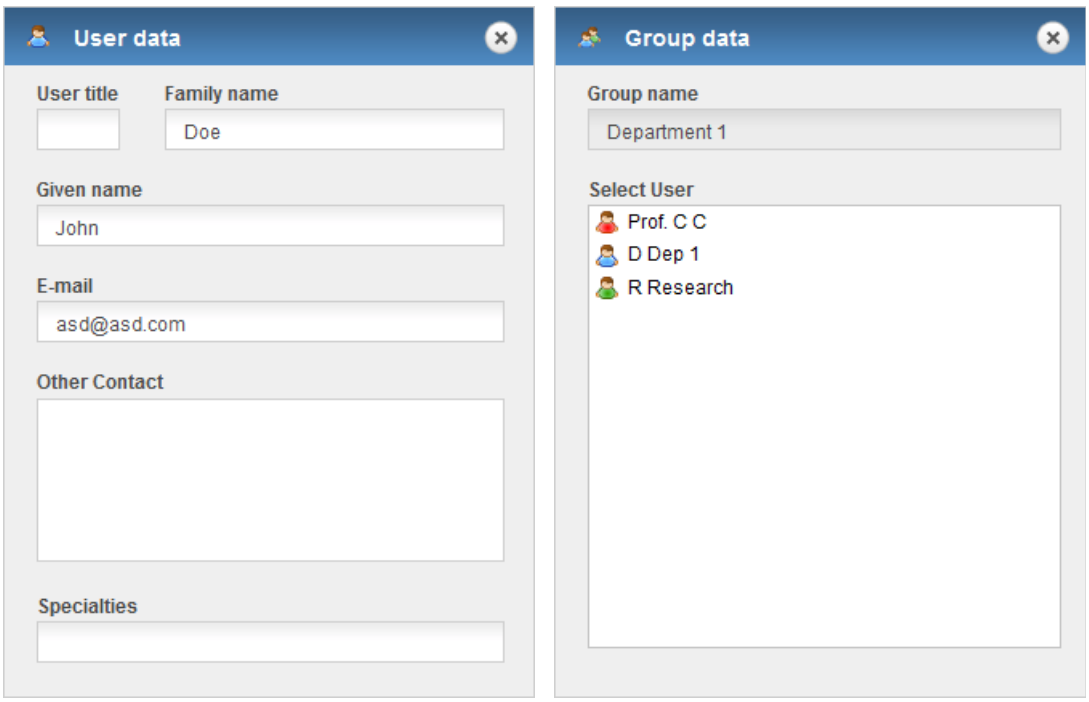
8 Users & Groups



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.

NOTE: Imported LDAP users are displayed with blue background.

To access user or group data, click the or the button.



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

9 Troubleshooting

9.1 I Cannot Connect to the CaseCenter from Pannoramic 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.

9.2 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 Pannoramic Viewer, see section 2.1.

      - via the web interface, see section.2.2.

9.3 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.

9.4 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**

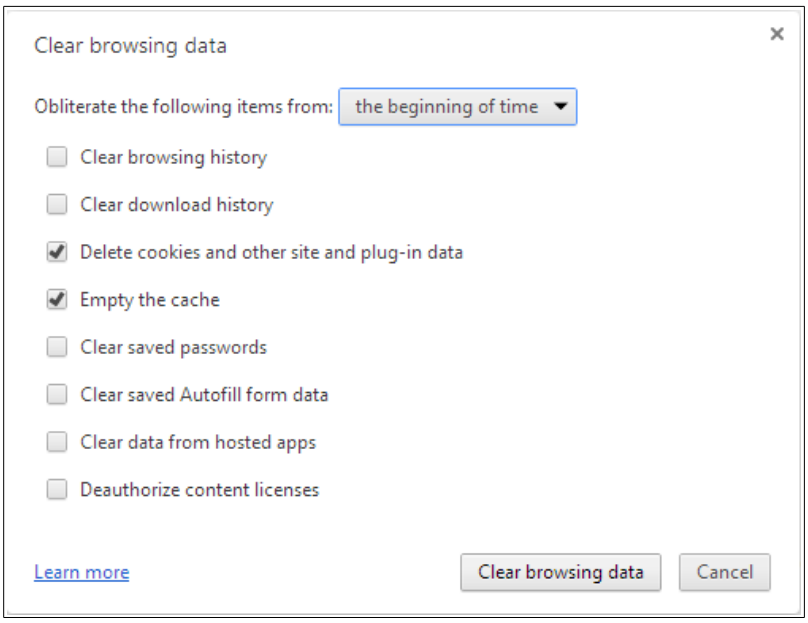
   OR

   - 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**.

9.5 Slide cannot be opened in Viewer

Some minor known issues may arise when using IE8 or IE9 as the browser for using CaseCenter.

- If you wan to open a slide starting with “&”, Pannoramic Viewer sends an error message: *"Unknown system error occurred"*.
- If the slide name ends with a “&” character, you will get a *"Connect to Teleconsultation Server"* message from Pannoramic Viewer.
- In case the “&” character is present in the string of the file name, it will be opened in Pannoramic Viewer, but its name will be displayed shorter – will end with the character immediately preceding it.

Solution to all the above mentioned issues that you rename the slide and reopen it.

9.6 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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