Wound analyzer v0.03

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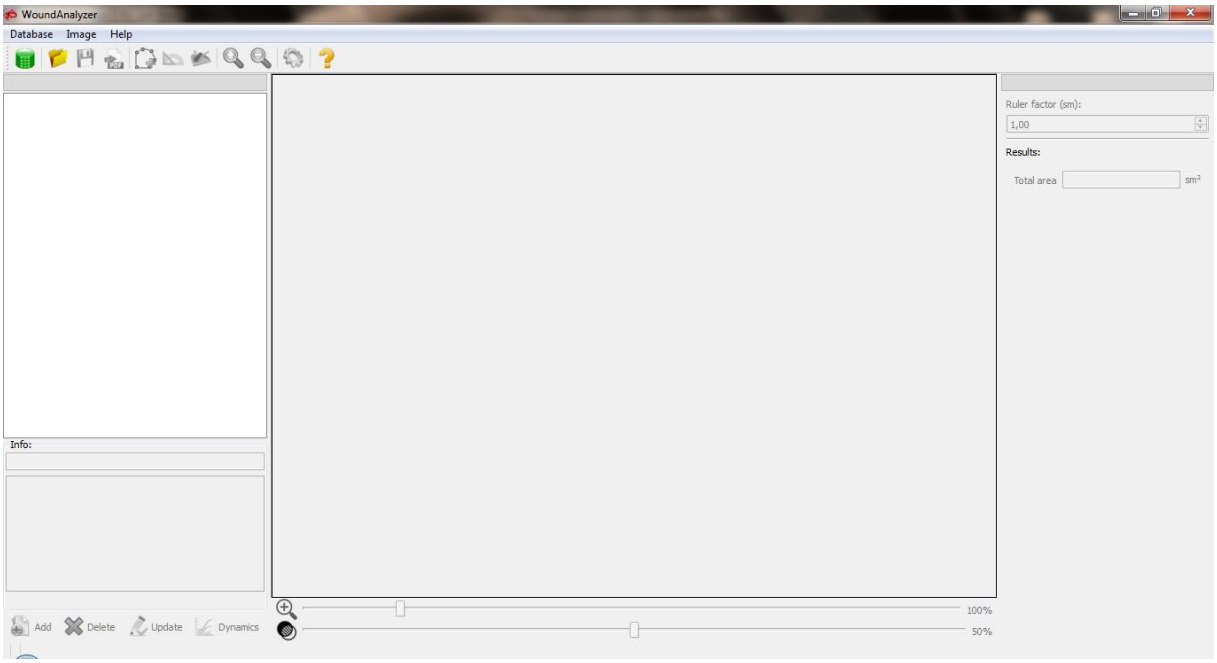
Quick start

Step 1: Run application

Run the **WoundAnalyzer.exe** at corresponding directory.

The main window should appear:



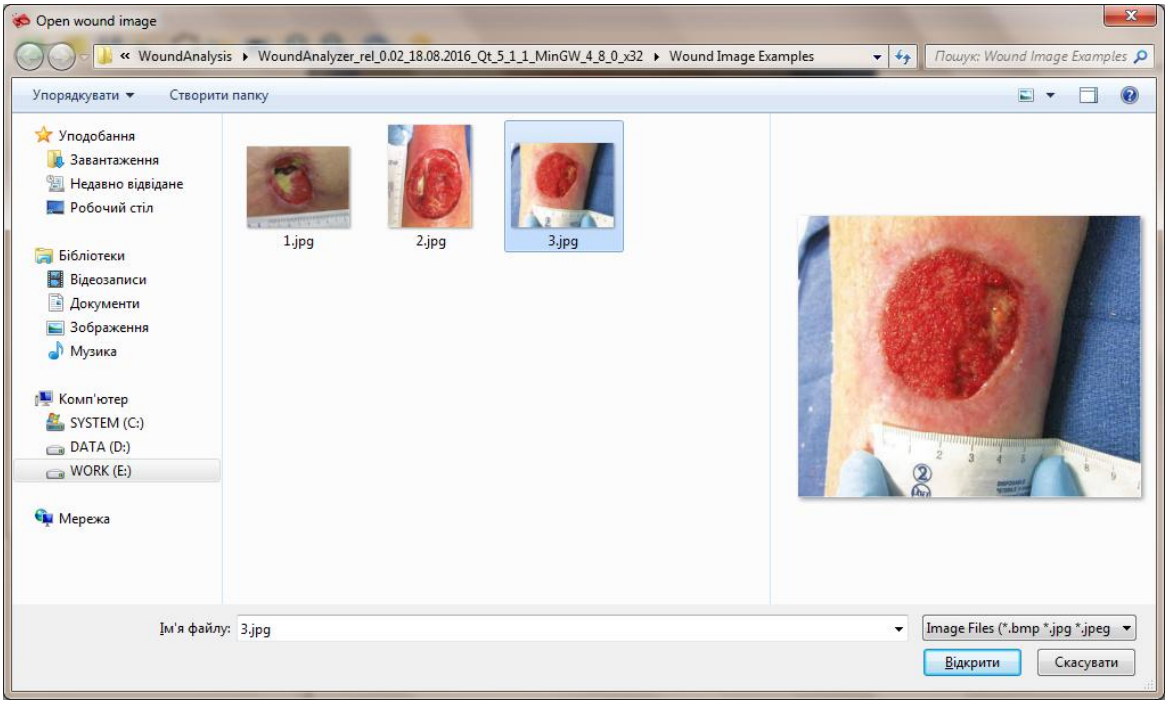
Step 2: Open wound image

Open existing wound image by running **Image→Open…** action or by pressing  icon.

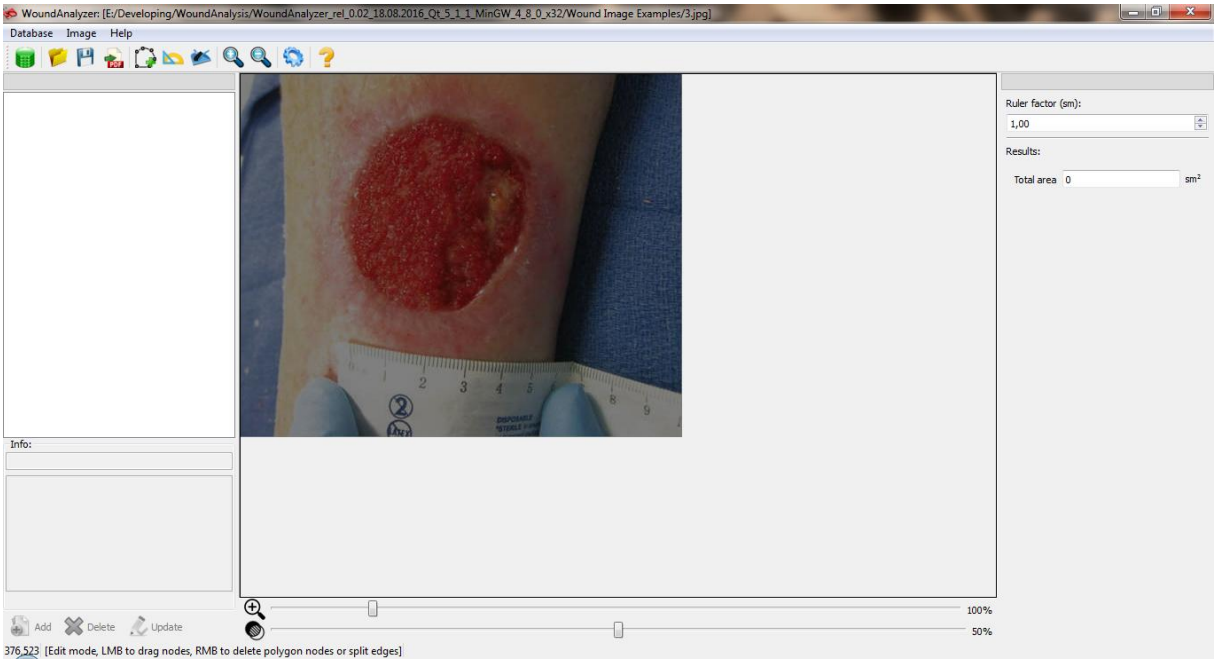
The File open dialog should appear.

 : supported image formats are ***.bmp *.jpg *.jpeg *.png *.tif *.tiff**

Example:



Press the Open button, image should be opened now:



Step 3: Select wound border(s)

Run **Image→Polygon** action or press corresponding button  :

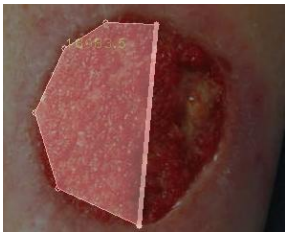
The application should be running in “Polygon mode”, see the status bar at the bottom.

Now simply do the left mouse button click (LMB) on image to add nodes:

It is possible to create more than one polygon – turn off the polygon mode by running **Image→Polygon** action then turn on it again. Previous polygon should be saved and new mouse click should create new polygon.

If a mistake occurred, the image can be cleared by running **Image→Clear** action or by pressing corresponding button  :

Polygon can be edited – turn off the polygon mode by running **Image→Polygon** action. The application should be running in “Edit mode”, see the status bar at the bottom. Hovering the mouse cursor over polygon nodes and edges should highlight them:

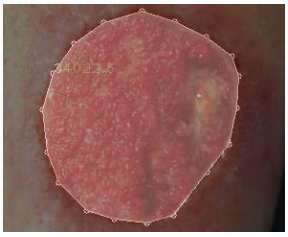


Each node can be dragged:

Each node can be deleted by right mouse button click (RMB) over it:

Each edge can be split by right mouse button click (RMB) over it:

Use this features to select wound borders:

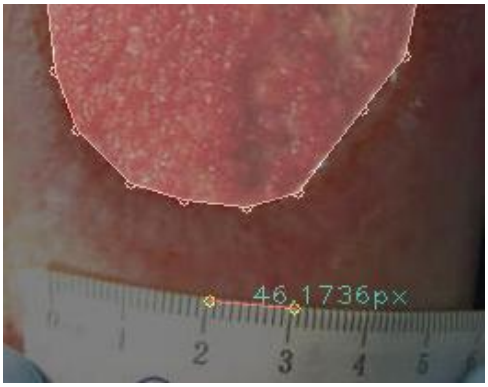


Step 4: Scale wound borders by ruler

Run **Image→Ruler** action or press corresponding button  :

The application should be running in “Ruler mode”, see the status bar at the bottom.

Now simply do two left mouse button clicks (LMB) on image to add ruler nodes:



 Ruler can be edited – turn off the ruler mode by running **Image→Ruler** action. The application should be running in “Edit mode”, see the status bar at the bottom. Hovering the mouse cursor over ruler nodes highlight them. Each node can be dragged.

Step 5: Export results

Run **Image→Save** action or press corresponding button  :

The Image save dialog should appear. Resulting image will be “what you see is that you get”:

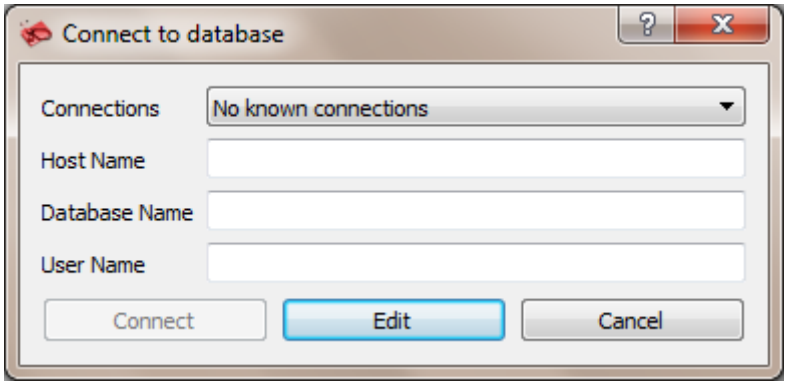
Run **Image→Export results** action or press corresponding button  :

The Document save dialog should appear. Results will be saved in pdf format.

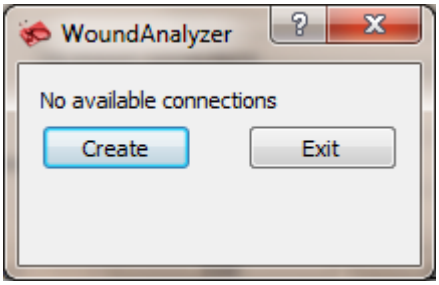
Database usage

Step 1: Connect to MySQL server

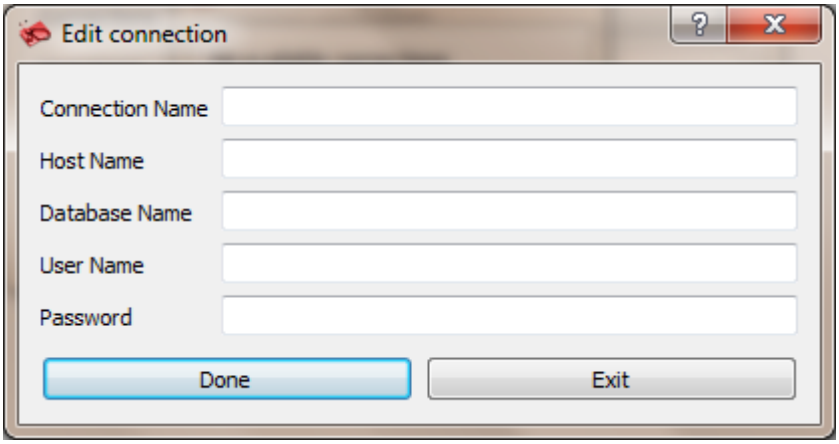
Run the **Database→Connect…** action or press corresponding button  . The “Connect to database” dialog should appear:



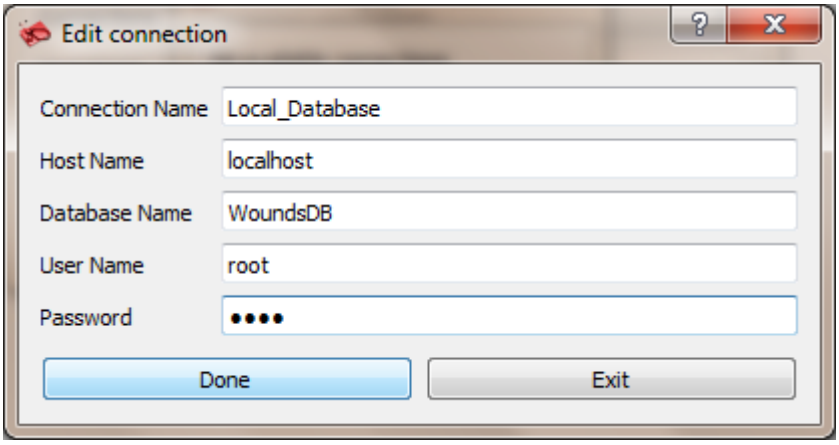
Create new connections by pressing “Edit” button, if You don’t have them yet.



Press the “Create” button, the “Edit connection” dialog should appear:

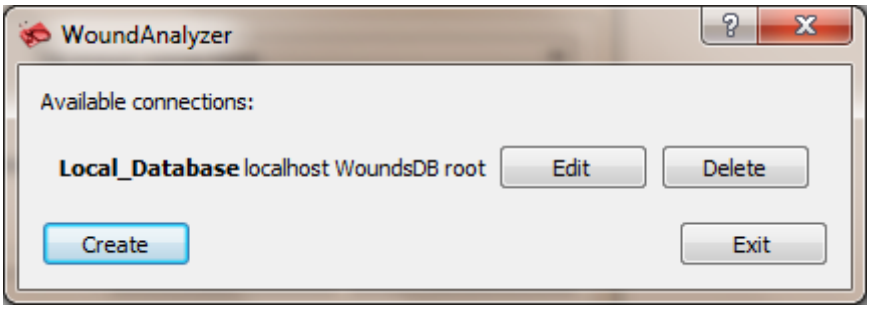


Fill all fields and press “Done”, for example:

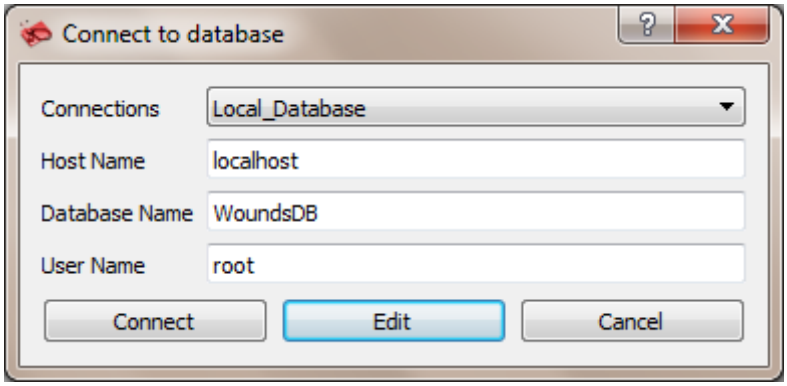


: given username will be used as corresponding doctor name.

You can see that connection is created:

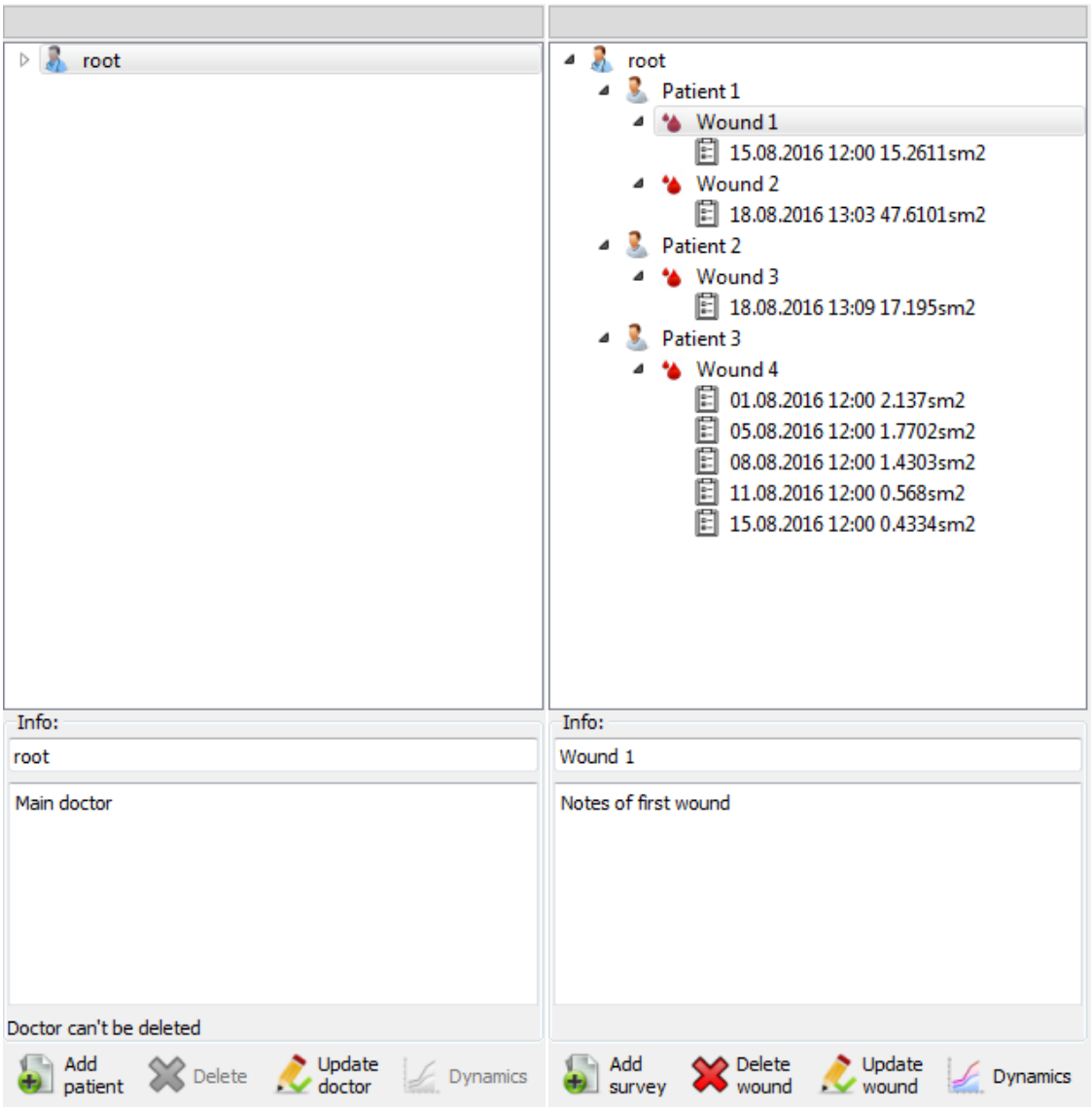


Press “Exit”, Now You can use the connection:



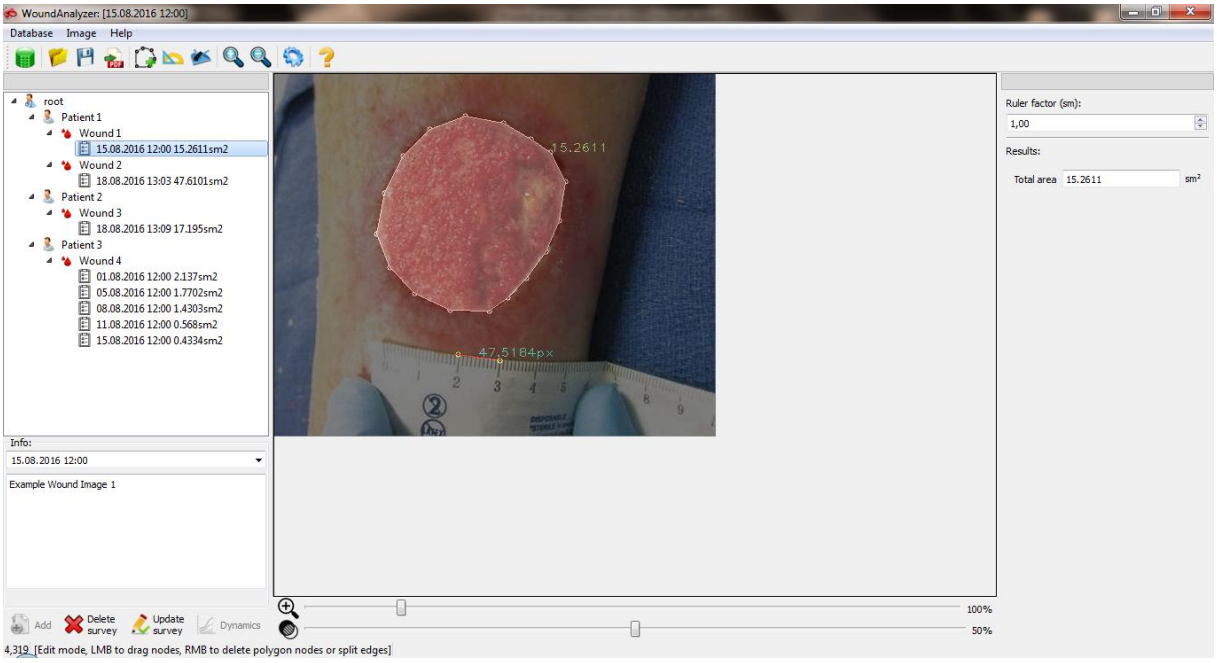
Press “Connect” to try to connect to MySQL database at given host with given name.
If connection was succeed then database tree view should be filled with corresponding database data.

Hierarchy can be represented as **Doctor**(Username for database connection) → **Patient → Wound → Survey**.



Step 2: Manage database data

Make double click on a survey to load its detailed data from database:



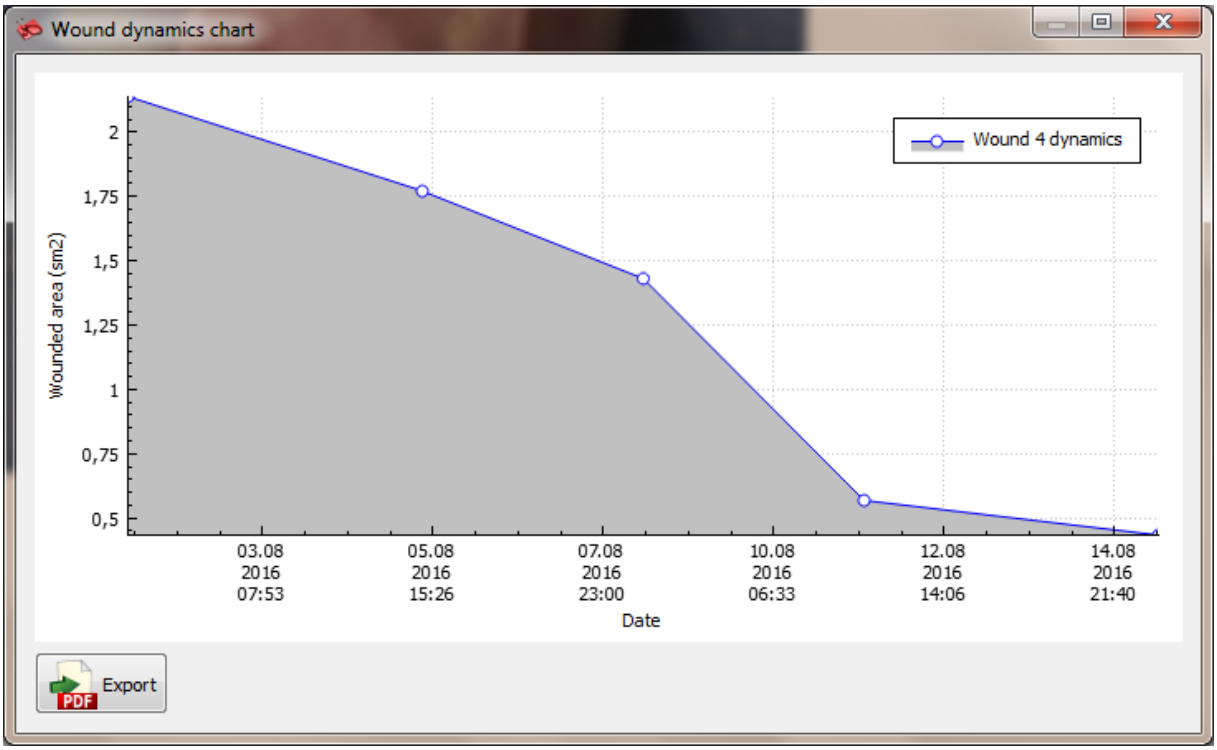
Note that loading of an image from outer folder or survey from database will erase all unsaved data.

Use **Add** , **Delete** , **Update** and **Dynamics** actions for data management.

Use **Update** action to update your current database tree selection with data that You currently see.

Step 3: Overview of dynamics

Use **Dynamics** action to build corresponding wound healing dynamics chart:



Use **Export** action for wound healing process dynamics data export.

The Document save dialog should appear. Results will be saved in pdf format.