**Wound analyzer v0.03**

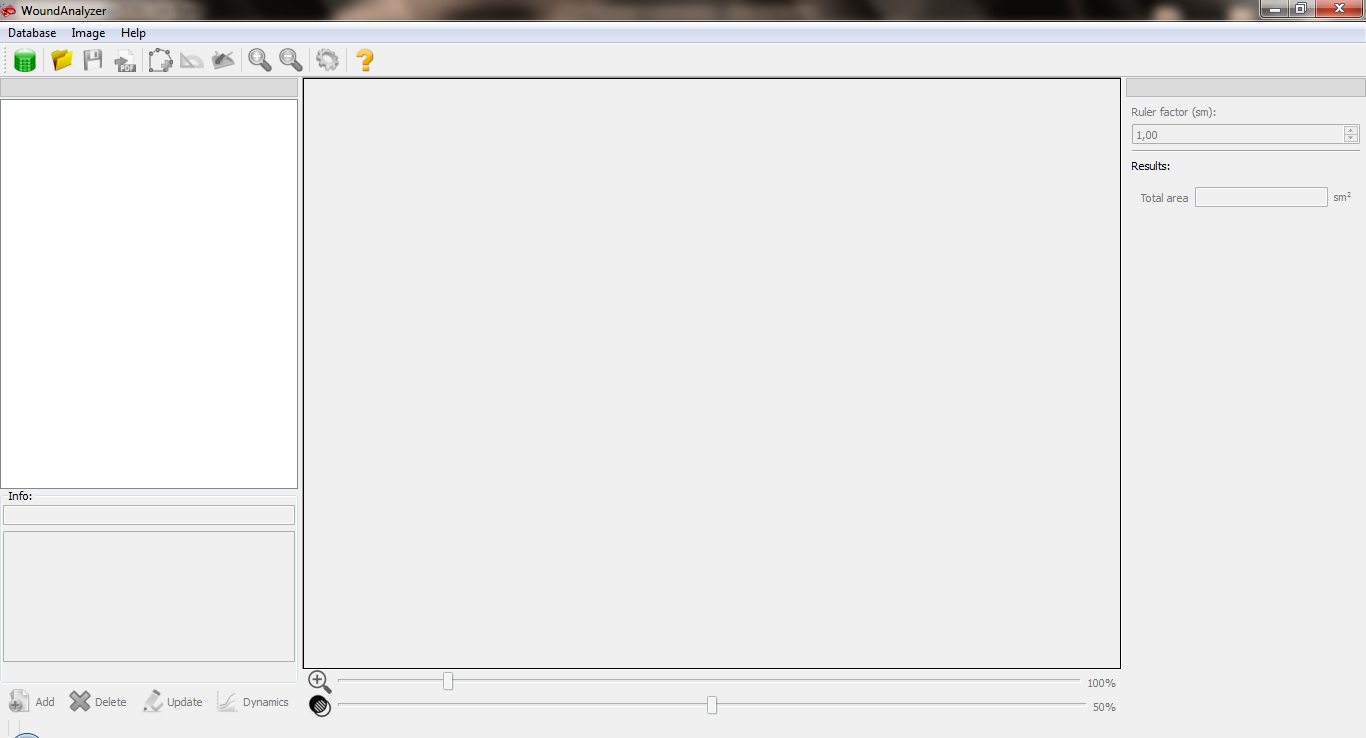
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# Quick start

## Step 1: Run application

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

The main window should appear:



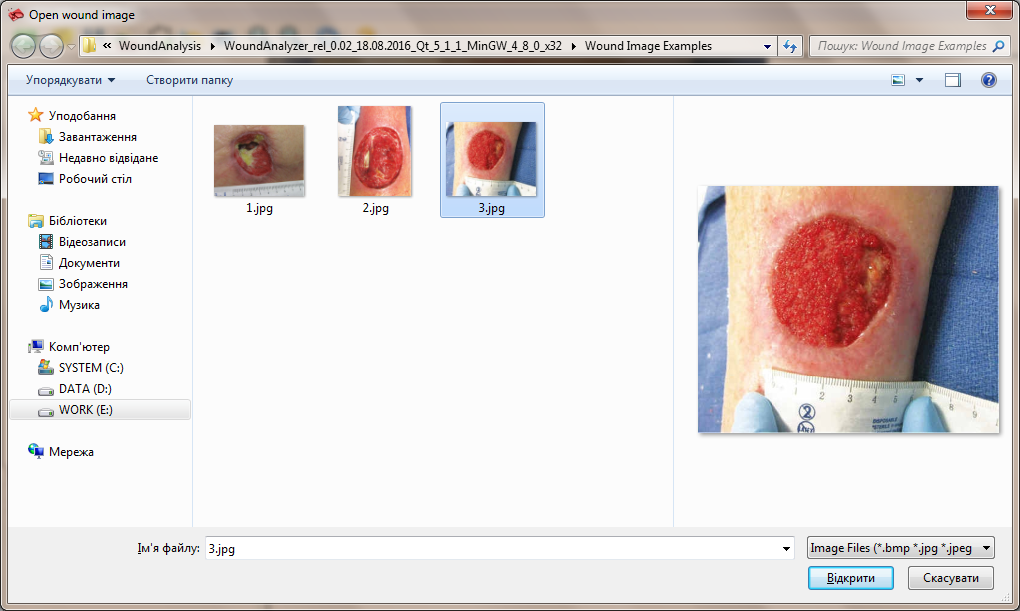
## Step 2: Open wound image

Open existing wound image by running **Image→Open…** action or by pressing E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Open.png icon.

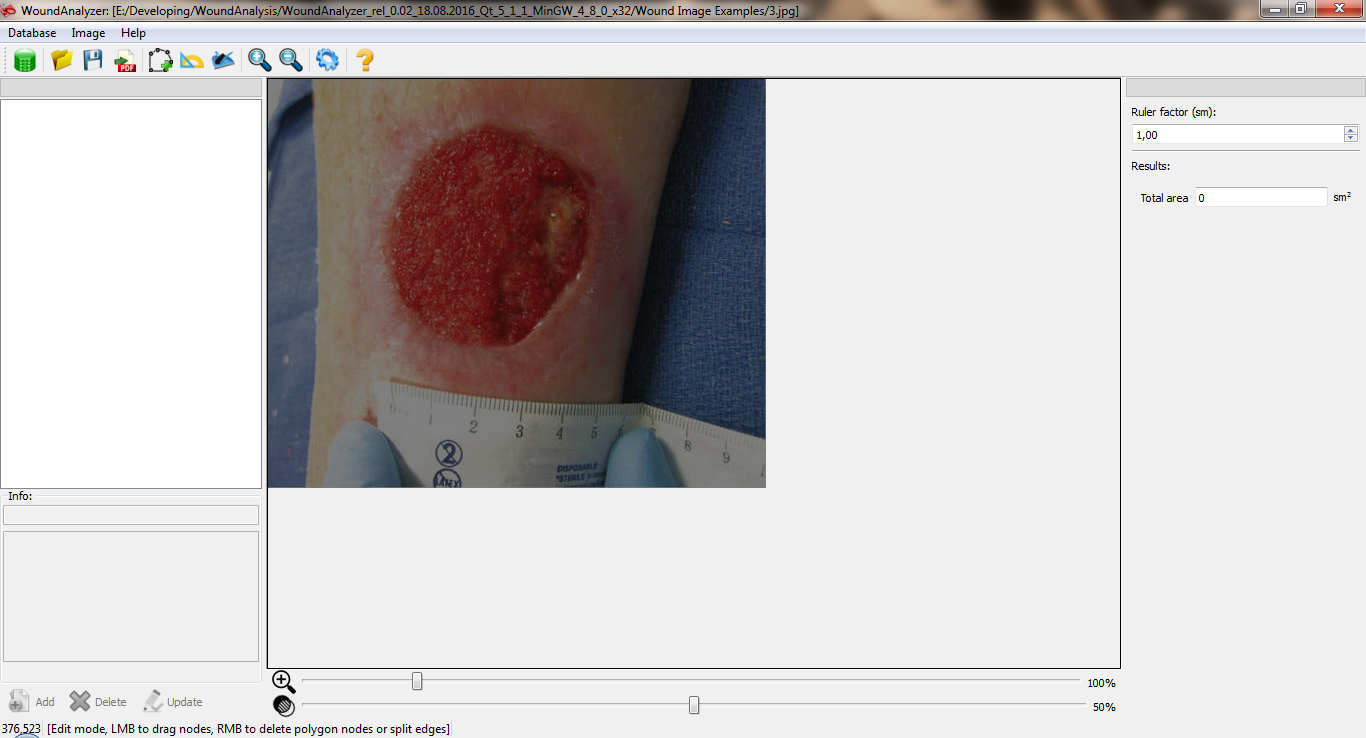
The File open dialog should appear.

http://icons.iconarchive.com/icons/graphicrating/koloria/32/Warning-2-icon.png: 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 E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Polygon.png:

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:



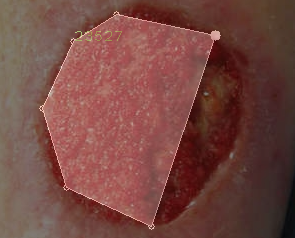
E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png It is possible to create more than one polygon – turn off the polygon mode by running **Image→Polygon** action then turn on it again. Previous polygon should be saved and new mouse click should create new polygon.

E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png If a mistake occurred, the image can be cleared by running **Image→Clear** action or by pressing corresponding button E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Clear.png:

E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png 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:



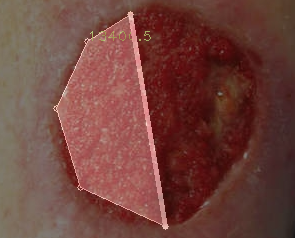
Each node can be dragged:



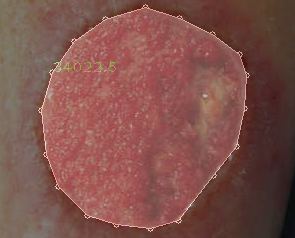
Each node can be deleted by right mouse button click (RMB) over it:



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 E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Ruler.png:

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:



E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png 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 E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Save.png:

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



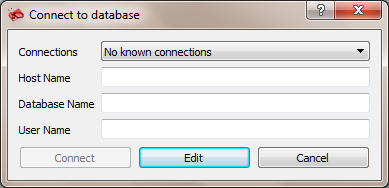
Run **Image→Export results** action or press corresponding button E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Export.png:

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

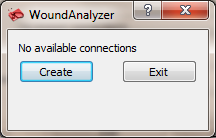
# Database usage

## Step 1: Connect to MySQL server

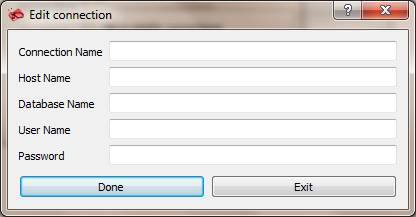
Run the **Database→Connect…** action or press corresponding button E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Database.png. The “Connect to database” dialog should appear:



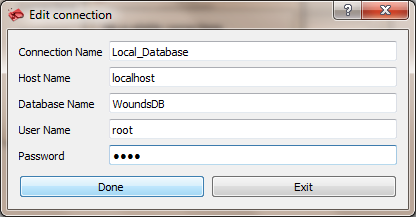
Create new connections by pressing “Edit” button, if You don’t have them yet.



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

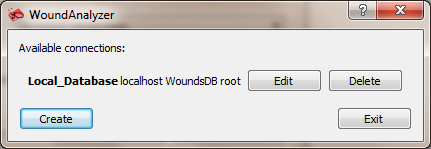


Fill all fields and press “Done”, for example:

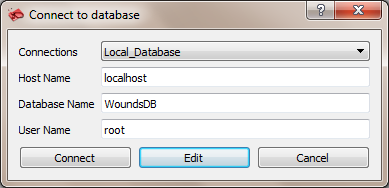


http://icons.iconarchive.com/icons/graphicrating/koloria/32/Warning-2-icon.png: given username will be used as corresponding doctor name.

You can see that connection is created:



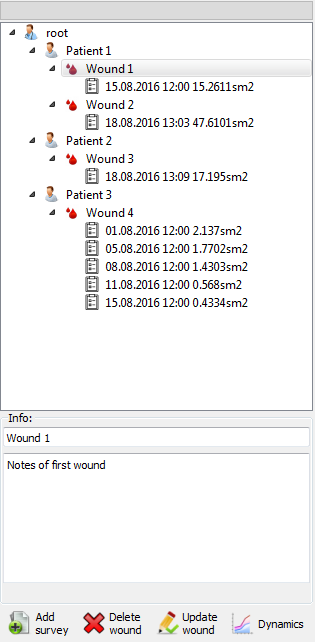
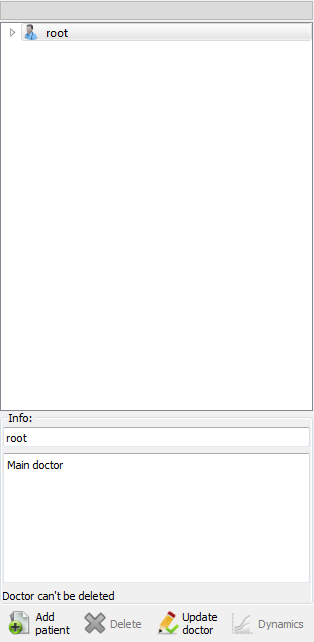
Press “Exit”, Now You can use the connection:



Press “Connect” to try to connect to MySQL database at given host with given name.

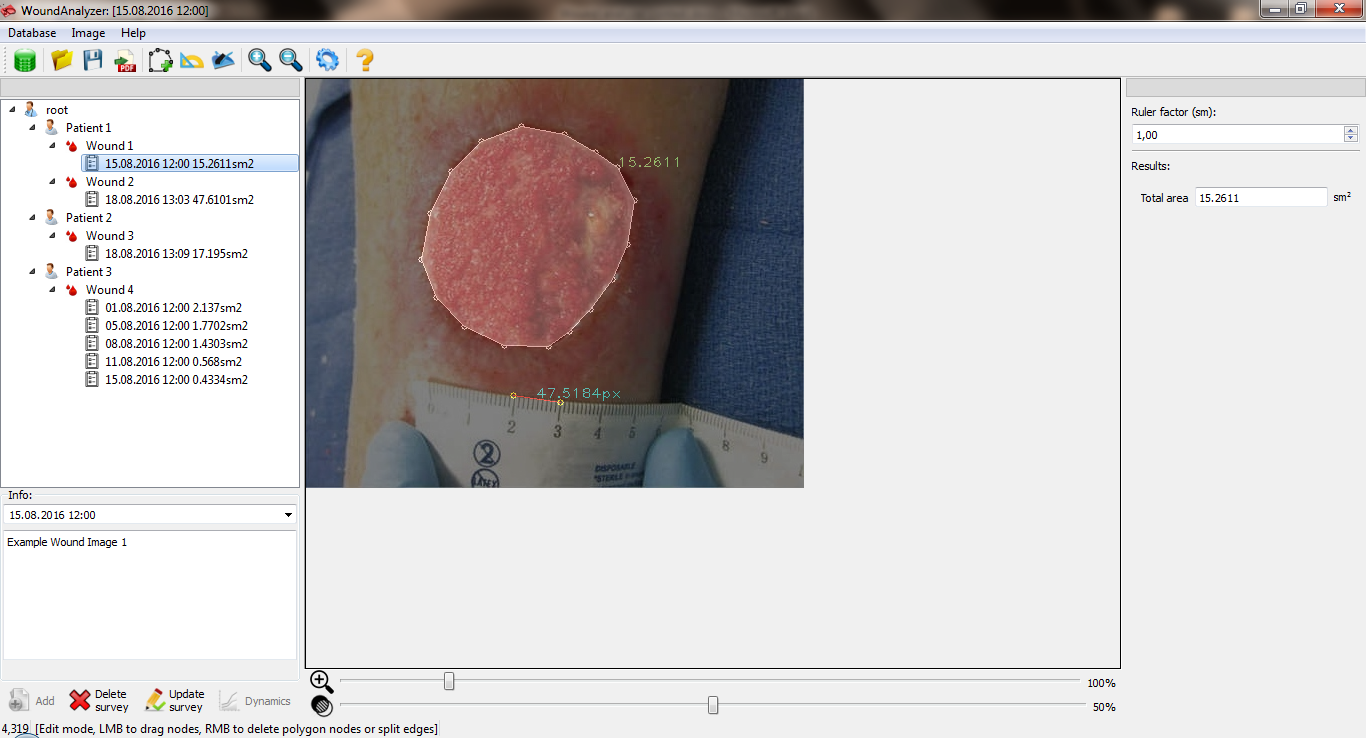
If connection was succeed then database tree view should be filled with corresponding database data.

E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png 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:



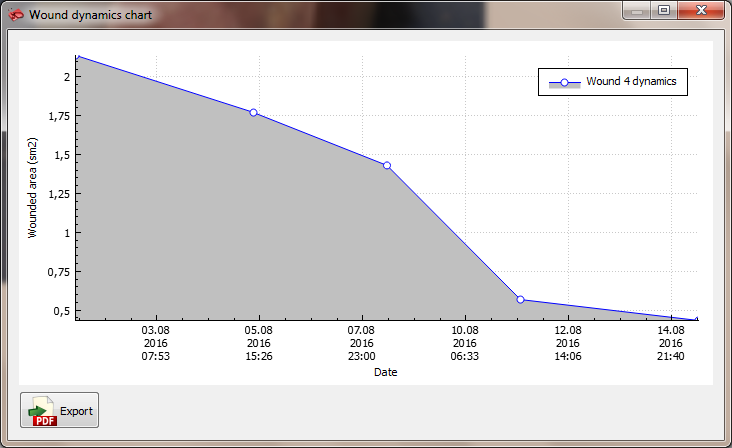
http://icons.iconarchive.com/icons/graphicrating/koloria/32/Warning-2-icon.png Note that loading of an image from outer folder or survey from database will erase all unsaved data.

E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png Use **Add** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Add.png, **Delete** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Delete.png , **Update** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Edit.png and **Dynamics** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Chart.png actions for data management.

E:\Developing\WoundAnalysis\WoundAnalyzer_rel_0.01_27.07.2016_Qt_5_1_1_MinGW_4_8_0_x32\Icons\About.png Use **Update** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Edit.png action to update your current database tree selection with data that You currently see.

## Step 3: Overview of dynamics

Use **Dynamics** E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Chart.png action to build corresponding wound healing dynamics chart:



Use **Export E:\Developing\WoundAnalysis\WoundAnalyzer\Ui\Icons\Export.png** action for wound healing process dynamics data export.

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