THE USER INTERFACE

The LVis user interface has four major parts:

1. Tool bar
2. Menu bar
3. Configuration bar
4. Desktop

IMAGE MISSING

Tool Bar

The tool bar provides quick access per mouse click to different actions within the application. The actions are represented using icons. These actions are not always possible in the current program status. In such cases, the icon is highlighted in gray (no colors).

Important
If the actions refer to measurements (e.g., Start, Stop, Analyze, etc.), then the icons are only active if measurements are open on the desktop. If measurements run in the background, meaning that they are not shown on the desktop, then the respective actions can only be activated in the configuration bar by directly selecting the detector. If several measurements are open, the actions (icons) in the tool bar refer to the currently active measurement!

The following actions can be initiated via the tool bar.

IMAGE MISSING

Open File

Clicking the folder icon in the tool bar automatically opens the basic directory of all measurements, which is defined under Settings. Then you can open a .LVM file stored there.

IMAGE MISSING

This action is identical to the “Open file” menu item in the menu bar under “File”. As LVis can in general manage several instances at the same time (several detectors can measure at the same time, several spectra can be opened at the same time), this action is always possible, independent of the actual program status.

Save File

Via the floppy disc icon, you can save an open project (spectrum, spectrum with adjusted analysis parameters or spectrum with analysis parameters, etc.) can be saved as an .LVM file

Important
If a name is assigned for this file in the parameter set, then the file will be saved without confirmation prompt into the basic directory, in a folder with the detector name, and there in a folder with the name of the parameter set.

If no name is entered, you must define via a dialog where and under which name the project should be saved (corresponds to the Windows action “Save as”). The possibility to save a project is of course only available, if a spectrum or a measurement is open.

Analyze Active Spectrum

Using this icon, an active spectrum (hence a spectrum, which is shown on the desktop and is active and was started parameterized, can be evaluated using the parameters defined at the beginning of the measurement.

If for an active spectrum on the desktop the analysis parameters are not available (since it was started manually) you will have to define all parameters manually as well.

Normally this icon can be used to check a running measurement by a preliminary analysis (e.g., if the limit of detection is reached) or to analyze a finished measurement.

Start Spectrum Acquisition

In order to start spectra acquisition without parameters, click on “Start spectra acquisition”. This is possible if the detector (or the memory content of the corresponding electronic measurement equipment) is active and shown on the desktop. In addition, it is possible to continue a stopped spectra acquisition.

If the memory content is not shown on the desktop, then you can only start spectra acquisition from the context menu of a detector in the configuration bar.

Important
For this action it is not important whether the spectrum was started in the memory of

electronic measurement equipment with measurement parameters and has already been evaluated or if the memory is empty. The spectrum currently stored in the memory of electronic measurement equipment is simply continued.

Stop Spectrum Acquisition

Using this action, you can stop a spectrum acquisition started without parameters (not parameterized). Parameterized started measurements can only be stopped via the context menu of a detector in the configuration bar (Choose “Analyze” — after saving the measurement you will be asked if the acquisitions shall be stopped). This action is only available for spectra, which are currently shown on the desktop and are active.

Delete Spectrum (manually acquired spectra only)

This command clears the detector memory (hence, the spectrum) corresponding to the currently active spectrum window on the desktop. This only applies to spectra acquisition started without parameters. It does not matter whether data acquisition is currently underway place or not.

Login (green “padlock” icon)

Click on the green “Open lock icon” to unlock protected functions of the application. This requires the administrator password. If the administrator is logged in, this icon is highlighted in gray.

Logoff (red “padlock” icon)

If the “Closed lock icon” is active (red) this indicates that the application is currently unlocked. Clicking this icon locks the program.

Peak Search

Using this icon, you can start a peak search in the currently active spectrum window. The results of a peak search started via the tool bar are subsequently shown in the spectrum. However, they will not be saved and cannot be used for a report. They are only used for a quick verification of the energy calibration. In order to distinguish between analysis results, the peak description always displays a question mark next to the nuclide name. The illustration of the peak search results can be hidden by repeated clicking on the icon in the tool bar.

IMAGE MISSING

The peak search basically corresponds to a GammaVision WAN32 analysis without library (or a library

without content), hence to a pure Mariscotti peak search.

Important
GammaVision requires a library without entries for this peak search. The used library file Null.lib can be found in the \Config folder under the LVis program directory. Do not delete or change this file, otherwise peak search will not function anymore.

All other peak search parameters required for peak search are different, depending if it is a manually or a parameterized started data acquisition.

If the measurement was started using a parameter set, then the parameters defined in the Spectrum section of the Analysis tab apply:

IMAGE MISSING

The results of the peak search are subsequently compared with the entries in the Analysis library defined in the parameter set. The nuclide, whose peak energy is closest to a found centroid and which is inside the specified match width, will be assigned to the peak.

If data acquisition was started manually, the parameters adjusted in the Default.sdf file apply and the comparison is performed using the suspect library defined in the global settings.

Info
In case of parameterized spectra, this peak search corresponds to the automatic peak search within the scope of spectrum analysis (see Peak search results).

Change Sample

This button is only active, when a sample changer controlled by the ORTEC hardware I/O is defined for the currently selected detector. Clicking this button changes the output level on the “CHANGE SAMPLE” output of your ORTEC MCB.

SampleSetEditor

LabJournal

Menu bar

Report Editor

View

Windows

Settings

Global Settings

Pre-Defining Sample Size Units for Parameter Sets

Pre-Defining Users, Sample Descriptions, and Sample Locations for Parameter Sets

Editors

Analysis Library Editor

Correction Library Editor

Peak Background Correction Editor

Geometry Correction Editor

Materials Editor

External Database Editor

Admin

Login and Logoff

Change Password

Set Start Password

LabJournal

Help

Configuration bar

Detectors

Detector Context Menus

Adding Detectors

Removing Detectors

Reconnecting Detectors (eg after replacement of hardware)

Detector Configuration

Detector Calibration

Parameter Sets

Create and Delete Parameter Sets

Edit Parameter Set

Copy Parameter Set - Insert Parameter Set

Save Parameter Set — Load Parameter Set

Import Parameter Set from existing .LVM-file

Reference Sources

Creation of a New Reference Source

Save and Load Reference Sources

Edit Reference Source

Buffer

Spectrum Summing – Spectrum Subtraction

Multi-Detector Configurations

Creation of a Multi-Detector Configuration

Starting a Multi-Detector Configuration

Edit or Delete a Multi-Detector Configuration

Save and Restore the LVis Configuration

Restoring a Configuration

Currently Open

Desktop

Spectrum Window – Live Detector Display

Measurement Presentation