

LabSpeed – Exporting Data

LabSpeed works with all instrument data internally in a common form, no matter what the source of the data or what type of instrument produced the data. This allows LabSpeed to view data from different instruments in a common way. Instrument data is represented internally as a relational set of tables.

LabSpeed can view the data using Charts, Reports, Tables and Drilldown Grids. Each View can export the data in a variety of appropriate formats:

LabSpeed View	Export Formats
Chart	BMP, WMF, TXT
Report	XLS, CSV, HTML, PDF, RTF, TIFF
Table	XLS, CSV
Research Grid	XLS, CSV

Where

CSV is **C**omma **S**eparated **V**alues (Text)

RTF is **R**ich **T**ext **F**ormat (Microsoft WORD)

PDF is **P**ortable **D**ocument **F**ormat (Adobe)

TIFF is **T**agged **I**mage **F**ile **F**ormat

HTML is **H**yper**T**ext **M**arkup **L**anguage

BMP is **B**it**M**ap (Windows image)

WMF is **W**indows **M**eta**F**ile (Windows vector image)

TXT is **T**ext

XLS is **E**xcel **S**preadsheet (Microsoft Excel)

Using the built-in designers, LabSpeed users have complete control over the contents and layout of each View type and therefore complete control over how the data is exported.

Exporting Data to 3rd Party Programs such as ERP Systems

Most applications that import data support the universally accepted “CSV” text format (comma separated values).

CSV is a tabular view of the data where each row represents a unique “sample” that contains multiple columns of data separated by commas. The first row can be a special header row that contains the column names.

The Table View in LabSpeed is ideal for exporting CSV text files because the user can specify what data is to be included in the table and in what order. The Table Designer lets the user build a table of any complexity by simply dragging and dropping fields. Related information from multiple sources can be added to create a single flat table.

Here is an example of a flat table to which was added just three fields – “SampleName” from Samples data, “ElementName”, which includes the element symbol, wavelength and order from Element data, and “ElementConcentration” from Element data.



Exported to: 'C:\LimsData\LimsExport.txt' on Tuesday, February 27, 2007 at 5:32:54 PM

Table (DisplayAverage)				
SampleName	Co 228.616 {147}	Co 237.862 {141}	Cr 283.563 {118}	Cu 224.700 {150}
Sample-2	10.07	10.07	14.99	7.469
Sample-3	10.07	10.05	14.87	7.492
Sample-4	100.2	100.5	148.6	75.03
Sample-5	101.4	101.3	151.1	75.81
Sample-6	89.23	89.07	132.2	66.39
Soils-1	11.07	11.07	1.983	4.002
Soils-2	11.03	11.07	1.992	3.986
Soils-3	12.11	12.21	2.191	4.411
Soils-4	16.60	16.50	2.979	5.985
Soils-5	13.24	13.26	2.390	4.773
Soils-6	11.06	11.03	1.979	4.009
Soils-7	11.02	11.12	1.988	3.971
Soils-8	17.75	17.59	3.180	6.358
Soils-9	11.04	11.06	1.988	3.988
Soils-10	14.34	14.46	2.582	5.201

To export the data manually is as simple as clicking on the *Export Now* toolbar button. A record of the file path and time of export is displayed on the same toolbar.

Here is what the data looks like when exported as CSV:

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SampleName,Co 228.616 {147},Co 237.862 {141},Cr 283.563 {118},Cu 224.700{150},Cu 324.754 {103},Mo 202.030
{166},Mo 204.598 {164}, ...
Sample-2, 10.07, 10.07, 14.99, 7.469, 7.503, 12.51, 12.43, 20.04, 1.002
Sample-3, 10.07, 10.05, 14.87, 7.492, 7.479, 12.53, 12.45, 20.00, 1.000
Sample-4, 100.2, 100.5, 148.6, 75.03, 75.08, 125.2, 125.1, 199.6, 9.988
Sample-5, 101.4, 101.3, 151.1, 75.81, 76.46, 127.4, 126.5, 204.1, 10.17
Sample-6, 89.23, 89.07, 132.2, 66.39, 66.62, 112.1, 111.0, 178.1, 8.898
Soils-1, 11.07, 11.07, 1.983, 4.002, 4.004, 6.501, 6.503, 25.10, .7462
Soils-2, 11.03, 11.07, 1.992, 3.986, 4.021, 6.506, 6.472, 25.10, .7467
Soils-3, 12.11, 12.21, 2.191, 4.411, 4.375, 7.209, 7.100, 27.57, .8257
Soils-4, 16.60, 16.50, 2.979, 5.985, 6.004, 9.777, 9.707, 37.56, 1.126
Soils-5, 13.24, 13.26, 2.390, 4.773, 4.807, 7.817, 7.808, 30.02, .9027
Soils-6, 11.06, 11.03, 1.979, 4.009, 3.985, 6.514, 6.526, 25.07, .7507
Soils-7, 11.02, 11.12, 1.988, 3.971, 3.993, 6.518, 6.463, 24.99, .7560
Soils-8, 17.75, 17.59, 3.180, 6.358, 6.363, 10.43, 10.36, 40.07, 1.204
Soils-9, 11.04, 11.06, 1.988, 3.988, 3.997, 6.498, 6.474, 25.12, .7507
Soils-10, 14.34, 14.46, 2.582, 5.201, 5.167, 8.427, 8.427, 32.46, .9802

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Advanced Export Options

The Table Designer allows you to configure the Table View for Exporting. Here are the options available:

- Include the *Export Now* button toolbar on the Table View
- Pre-specify a filename and path to export to each time, or request the user to enter a filename and path each time *Export Now* is clicked.
- Preview the exported data in a window before committing it to disk.
- Choose one of three different flat table layouts or “styles”
- Include the Column Headings row
- Specify a field delimiter other than comma (e.g. semicolon, tab, space or “other”)
- Specify a line trailer to be included at the end of each row
- Map field names to different column names for exporting

Monitor Mode

In Monitor Mode, a database or file can be monitored for changes that would indicate new data is available. Selected Views can be setup to perform an automatic output action. For example, a Report can be setup to auto-print to a specific printer and a Table can be setup to automatically export to a particular file path. Additional reports and tables in the same Template can be used to auto print to multiple printers and auto-export to multiple locations when new data is detected.

Clipboard

The Table View fully supports the Windows™ Clipboard. Specific rows, columns and even individual cells in the table can be selected and copied to the Clipboard using the standard “Control-C” key input. The data can then be directly pasted into Microsoft Word™ and Excel™.