Notes for Mac Users of Lertap 5.10.99

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Thank you for taking this version of Lertap 5 for a test drive. These notes assume that you're working on a Macintosh computer of some sort, and have the latest Mac version of Microsoft Excel running[1].

This document provides comments on how to get started, and has a list of all the files you should have in your Lertap folder once the downloaded file has been saved on your computer and unzipped.

Once Lertap 5 is installed and working, following the instructions below, you'll find that it will have a restriction: it will process just the first 100 data records found in the Data worksheet. If there are more data records, they will be ignored. This is how the default version of Lertap 5 works, a version referred to as the "Mini version".

It is certainly possible to remove the restriction of 100 data records; please refer to this document, and note: the document appears to limit itself to Windows versions of Lertap 5 – but its instructions also apply to the Mac version.

Installation

The Mac version of Lertap 5 does <u>not</u> have an installation program or procedure. It is not packaged like the "apps" are in the Apple App Store.

Instead, to get Lertap 5 for the Mac, you should:

1. Begin by making a folder for Lertap. You would probably name it the "Lertap" folder.

2. Download the "zip archive" with the suite of Lertap files. It's called "Lertap51099.zip", and may be found here.

3. Copy the Lertap51099.zip file from your Mac's "Downloads" folder to the folder you created for Lertap.

4. Unzip the file. This is often called "uncompressing", or "extracting". It's a simple process on a Mac: double click on

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[1] Excel 2016 version 16.12 was what I was using as of the date shown above.

the file (Lertap51099.zip) and, all being well, the suite of Lertap files will be extracted from the zip and you'll see them. If help is needed, search "how to unzip on a Mac" on the internet – here's [an example](#) of what you might find.

The names of the files you'll see are listed way below, under the heading "Complete files list".

Getting going

The quickest start? See these [PowerPoint slides](#). One of the pdf files included in the Lertap folder you created on your Mac has a copy of these slides. It's called "An introduction to Lertap 5". (You might also be wowed by the [introductory website](#).)

The slides show Lertap running under Windows with Excel 2010. The Lertap version you now have is designed to run with Excel 2016 for the Mac; the menus on the Excel Ribbon are similar to those in the slides, but not exactly identical.

When Lertap 5 cranks up on your Mac, using Excel, what you want to see is shown in the screen snapshot below. Note the tabs that are showing, and their names: Lertap, Home, Insert, …, Data. If the Lertap tab does not show, it means that "macros" are not enabled in Excel. Refer to "TipsForMacUsers" for instructions on how to enable macros.
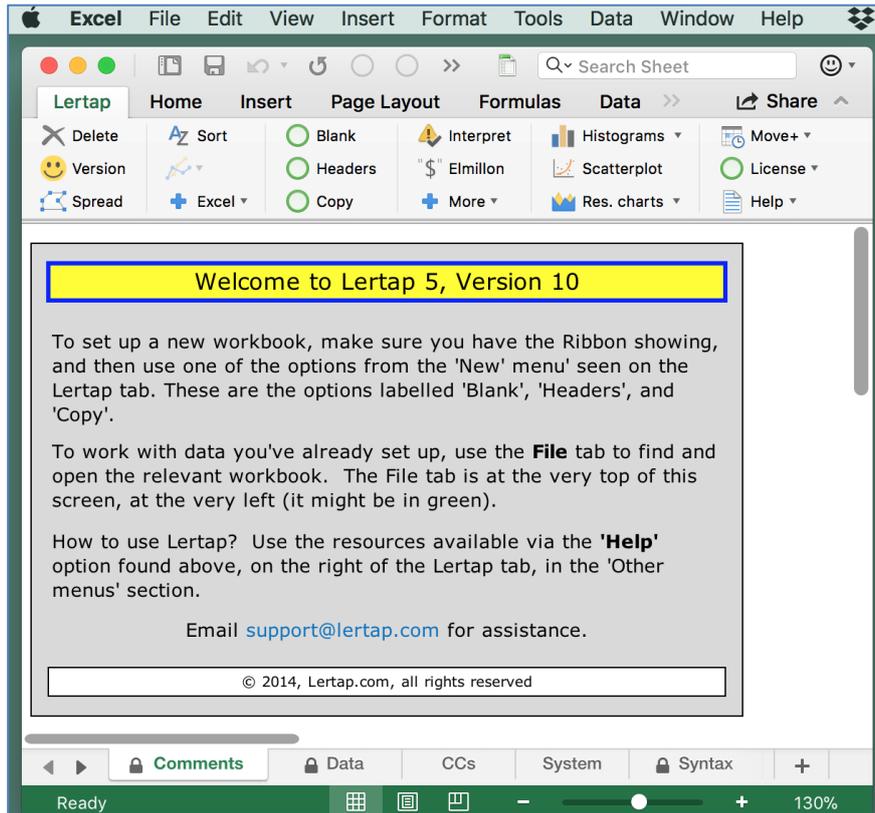
If you'd like to get right into Lertap without fiddling around with reading, you certainly can. A sample workbook, "Mquiz100.xlsx", has been included in the suite of Lertap files. You can use it. Here's what you would do:

1. Start Lertap (open the Lertap5.xlsm file).

2. Open the Mquiz100.xlsx file. It has been adapted from a well-known Lertap dataset called "MathsQuiz". More information about MathsQuiz is here; Mquiz100 uses just the initial 100 records from MathsQuiz.

3. Select the "Interpret" option from the Lertap tab, followed by the "Elmillon" option[2].

4. Refer to Chapter 2 of the manual for an explanation of the output, or use the "little h" helper that appears at the top of most Lertap worksheet reports – it's mentioned in the "TipsForMacUsers" document.

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[2] These steps are exemplified in the "Introduction to Lertap5.pdf" document. If "Production mode" is enabled in Lertap, Elmillon will start automatically after Interpret completes, and focus will go to the 'Freqs' worksheet report.

Known Limitations of the present Mac version

Some of the options under the Macs Menu are not working (such as the Omega1 option). The EIRT add-in does not work on a Mac, and, consequently, the EIRT macro will not work on the Mac either. The RSA analysis option does not create the special data file for use with Wesolwsky's Scheck program (ScheckData1.DAT)[3].

These limitations are likely to be addressed as time permits – send a message to us at support@lertap.com to tell us if you're eager to see a particular option working – that may encourage us to work on it more actively (*thanks*).

Time Trials

Here are some typical times found when running Lertap on a late 2013 MacBook Pro, a computer having a fourth-generation i5 Intel processor. No doubt times would be better with a newer computer – the i5 processor is now into its eight generation – I'd guess we could probably halve these times using a new i5, even better with a new i7.

The times reported below were recorded when running Lertap in "production mode". All of the tests used in the trials were multiple-choice[4].

> With three university classes
> > class 1, 30 items, 127 students: processed in 29 seconds
> > class 2, 34 items, 132 students: processed in 41 seconds
> > class 3, 100 items, 424 students: processed in 1 minute, 17 seconds
>
> From an international certification centre
> > 60 items, 1,769 students: processed in 1 minute, 7 seconds
>
> From a national assessment test of language ability
> > 50 items, 5,504 students: processed in 1 minute, 46 seconds
>
> From the same national assessment test, but now scoring three subtests of 10 items, 40 items, and 50 items: just under 4 minutes total

Excel 2016 running on a Windows computer blows these times to bits; nonetheless, it is now clearly possible to process sizable datasets on a Mac with Excel 2016[5], even on my aging MacBook Pro.

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[3] This may not be a major limitation as the SCheck is no longer readily obtainable.

[4] It is possible to process other item types. Here is an example.

[5] My Mac Excel says it's version 16.10 – I assume this is Excel 2016.

Note: when running with large datasets, having many student records, Excel may report that it "is not responding" and ask what you might prefer to do, wait for it to recover, or cancel. The best option is to click the wait button, and then wait.

Lertap program files

Of all the files in the Lertap folder, only three are required to actually run Lertap. They are Lertap5.xlsm, Lertap5MacroSetA.xlam, and LertapRibbon.xlam.

Lertap5.xlsm is the file to open; it automatically loads the other two files. Read more in the "TipsForMacUsers1.pdf" file.

Complete files list

These are the files in the Lertap folder, as of 12 April 2018:

An introduction to Lertap 5.pdf

   A simple but fairly complete intro. Highly recommended.

EDT0.xls

   This is a special template workbook used by the Exam Developer macro. It may be opened just like any other workbook, but it may not make sense if you're not familiar with Exam Developer.

Lertap5.xlsm

   This is the main Lertap file, the one to open whenever you want to run Lertap. It has macros, lots of them, so you'll have to have macros enabled in Excel in order to get the Lertap toolbar to show.

   When this file opens, it automatically calls the file with the set of additional macros, Lertap5MacroSetA.xlam.

   There's more about this in another of the documents included in the folder – see the "TipsForMacUsers1.pdf" file.

Lertap5MacroSetA.xlam

   A file with a set of numerous special macros which extend the functionality of Lertap. Some of them have been contributed by users. When Lertap is running, access to these macros is via the "Macs" drop-down menu.

LertapRibbon.xlam

   A file with a set of macros responsible for placing the Lertap 5 tab
   on the Excel Ribbon.

Lertap5UserManual.pdf

   This is the original manual, created at the turn of the century. It's
   still a top-flight reference, and a highly recommended read for
   getting started (see Chapter 2), and for interpreting the statistics
   found in Lertap's main reports: Stats1f, Stats1b, and Stats1ul.

   Individual chapters from the manual are available here.

LRTP57Hhelp.chm

   This is a "compiled Microsoft help file". Files like this one, with an
   extension of chm, are not of much use at all on a Mac. Please
   read the "TipsForMacUsers1.pdf" document for more information.

LRTP57Hhelp.pdf

   Features a discussion of the many options which have been
   added since the manual was printed in 2001. An online version is
   here.

LRTP59Hhelp.pdf

   Presents several sample datasets which show Lertap in action.
   Highly recommended. An online version is here.

Mquiz100.xlsx

   This is a sample of 100 cases taken from a high school maths
   test. Refer to this page for more information. One of the
   questions in the quiz, I11, has been incorrectly scored – an error
   was made in the *key line of the worksbook's CCs worksheet. As
   a result, the test's reliability (coefficient alpha) appeared to be
   considerably lower than it would have been had the error not
   been made.

   Try this out for yourself. Open the workbook and take the
   standard Lertap options: "Interpret" and then "Elmillon"[6]. The
   reliability figure appears towards the bottom of the Stats1f

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[6] If "Production mode" is on, then Elmillon automatically runs when Interpret finishes.

report, and also in the Stats1b report, just above the scatterplot of item difficulty be item discrimination. Note how I11's "blip" appears at the bottom of the scatterplot, sort of like a sore thumb.

Try correcting the error in the *key line, and then use the Interpret and Elmillon options again to see how coefficient alpha improves.

ReadMe.pdf

The file you're reading now.

TipsForMacUsers1.pdf

Has some very important information and therefore is *a must read.*

Okay, there you have it. Drop a note if (when) you have problems, comments, or questions: support@lertap.com.

Yours, Larry

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