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Per-Gunnar Martinsson, Vladimir Rokhlin, Yoel Shkolnisky, and Mark Tygert

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- \* C. Zhu, R. H. Byrd and J. Nocedal. L-BFGS-B: Algorithm 778: L-BFGS-B, FORTRAN routines for large scale bound constrained optimization (1997), ACM Transactions on Mathematical Software, 23, 4, pp. 550 560.
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pandas

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qsturng-py (code included in statsmodels.stats.libqsturng)

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\$Id: license gen.txt,v 2.2 2008/12/17 18:16:30 stevew Exp \$

This document explains how to create a LICENSE file, needed to run XicTools products.

1. The validate program.

LICENSE files are generated with the validate program, which resides in xictools/src/secure. This program is not built automatically, you must cd to that directory and type make validate if the program binary does not currently exist.

The validate program is not intended to be installed globally, but an administrator can move it to an arbitrary location if desired. It is standalone and does not access any fixed-location files.

- 2. Running validate.
- 2.1 The host name and IP address entries.

There are some important things that need to be known in order to successfully create a LICENSE file. This interface is rather arcane, as this program is not intended for general use.

The licensing keys off of two data items: the "host name" and the IP address. In the simplest form, the host name is the actual machine name, i.e., it never includes the domain components. On Unix/Linux, the "hostname" system command will print the full hostname. For example:

> hostname

chaucer.localdomain

In this example, the "hostname" for the validate program is "chaucer".

The IP address must be a static IP address that the machine resolves for its own name. It should not be the loopback address (127.0.0.1).

In more complex cases, there are variations.

a) To generate a class C license, i.e., one that will work for any machine in a class C range of addresses, the hostname will be the word  ${\sf var}$ 

anv

and the IP address will be the site's IP, with the last component given as 0, for example

126.24.6.0

b) Similarly, to generate a class B license, which will enable any host in a class B range, the hostname given should be any b and the IP address will be the site's IP address with the last two components given as 0, for example

126.24.0.0

c) Using the ethernet address rather than an IP address.

There are times when it is preferable to key off of the machine's hardware (ethernet) address, rather than an IP address. This is necessary, for example, when licensing a single machine and the IP address is non-static.

In this case the hostname takes the form

host:xx:xx:xx:xx:xx

Where the "host" is the machine name, which is followed by a colon (':'), which is followed by the six-component Ethernet address. There should be no white space, and each address component should be a two-character hex value, 0-padded. For example

seattle:00:30:28:c5:94:1e

# **SYNOPSYS®**

for machine name "seattle" with ethernet address "00:30:28:c5:94:1e".

In this case the IP address \*must\* be a special "magic" address, which is 192.168.0.1

d) Microsoft Windows support.

This is left undocumented for now.

2.2 The program code.

The program to be licensed is given by a code number. These numbers are listed at the top of the xictools/src/secure/secure.h file, and are

SERVER\_CODE 3 (for license server)
XIV\_CODE 7 (for Xiv program)
XICII\_CODE 9 (for XicII program)
XIC CODE 11 (for Xic program)

XIC DAEMON CODE 12 (For Xic running non-graphically)

WRSPICE CODE 14 (for the WRspice program)

There is an enabling hierarchy:

The Xic code (11) will also enable Xiv (7), XicII (9), and daemon (12).

The XicII code (9) will also enable Xiv (7).

The license server is no longer itself licensed in the Generation 3 products.

2.3 Overview and running validate.

The LICENSE file consists of up to 64 records. Each record enables a specific program on a specific host, or IP range of hosts in the class B/C variations.

The validate program will prompt, on the command line, for the data needed for each record. At the end of each record, the user is asked whether to create an additional record, or exit.

The validate program takes no arguments under Unix/Linux.

Below are the specific prompts that validate gives for a record.

Program code? [0]

Reply with the program code number from the list in 2.2 above.

Months active? [unlimited]

This specifies the time duration of the license, in months. If

you give 0 or just press Enter, there is no time limit.

Otherwise, give a positive number to set the termination date.

Hostname (+/-)? [yourhost]

Give the host name string as described in 2.1 above. Ignore the "(+/-)" in the prompt, this has no current meaning.

Internet address? [your ip addr]

Give the corresonding IP address, as described in 2.1 above.

Slave server? [n]

This only appears when the program code is "3" (license server).

Always give "n", or just press Enter.

Add another block ('r' to repeat last)? [n]

This completes the record. Give 'y' if you need to add another record. You can enter 'r' to repeat the present record, if you entered something wrong. Enter 'n' or just press Enter if you're done. If you give 'y' or 'r', the sequence of prompts begins again.

When exiting, there may be additional prompts, like



Code 12 user limitation? [0]

These set the number of program instances that the license server will accept simultaneously. Enter 0 or just press Enter for no limit.

A log of the transactions will be written in the current directory in a file named "log.hostname", where "hostname" is the host name of the present machine. This should be kept for documentation purposes.

2.4 The LICENSE file

The LICENSE file should appear in the current directory. This will be given to the end user for installation.

The LICENSE file is a binary file of size 1536 bytes. It can be corrupted by ascii-mode ftp transmission, so be sure to use binary mode. If a LICENSE file has a size different than 1536 bytes, it is corrupt and must be replaced.

It is not possible to "decrypt" a LICENSE file to retrieve the original entries.

A license file can be tested with the lfinfo program, which, like the validate program, resides in xictools/src/secure. It must be built in this directory by giving

make lfinfo

Like validate, the executable can be moved to a new location if desired.

To test a LICENSE file, start the lfinfo program - it takes no arguments.

The first prompt is

Enter path to LICENSE file:

Enter the path to the LICENSE file to test, or just "LICENSE" if the file is in the current directory.

The remaining prompts are analogous to the prompts in validate.

Here are two example sessions:

Enter path to LICENSE file: ./LICENSE

Enter program code [0]: 3

Enter host [none specified]: kipling

Enter IP address [0.0.0.0]: 192.168.1.16

License expires: Never

User limit: None

Enter 'q' or ^C anytime to quit.

Enter program code [3]: ^C

Enter path to LICENSE file: ./LICENSE

Enter program code [0]: 3

Enter host [none specified]: mickeymouse

Enter IP address [0.0.0.0]: 192.168.1.16

Authorization check failed:

Host mickeymouse is not licensed to run this binary.

Enter 'q' or ^C anytime to quit.

Enter program code [3]: ^C

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code



derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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- 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
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such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

- 4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.
- If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.
- 5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable



is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

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- b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.



It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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# LGPL-2.1

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Version 2.1, February 1999

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Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by



limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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- 6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
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- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.



- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
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