

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to **www.keysight.com**.



IC-CAP
2014.04
HF3

Licensing (For Administrators)

Notice

© Keysight Technologies, Inc. 2000-2015

3501 Stevens Creek Blvd., Santa Clara, CA 95052 USA

No part of this documentation may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Keysight Technologies, Inc. as governed by United States and international copyright laws.

Acknowledgments

UNIX ® is a registered trademark of the Open Group.

MS-DOS ®, **Windows ®**, and **MS Windows ®** are U.S. registered trademarks of Microsoft Corporation.

Pentium ® is a U.S. registered trademark of Intel Corporation.

PostScript® is a trademark of Adobe Systems Incorporated.

Java™ is a U.S. trademark of Sun Microsystems, Inc.

Mentor Graphics is a trademark of Mentor Graphics Corporation in the U.S. and other countries.

Qt Version 4.8.4

Qt Notice

The Qt code was modified. Used by permission.

Qt Copyright

Qt Version 4.8.4, Copyright (c) 2010 by Nokia Corporation. All Rights Reserved.

Qt License Your use or distribution of Qt or any modified version of Qt implies that you agree to this License. This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA Permission is hereby granted to use or copy this program under the terms of the GNU LGPL, provided that the Copyright, this License, and the Availability of the original version is retained on all copies. User documentation of any code that uses this code or any modified version of this code must cite the Copyright, this License, the Availability note, and "Used by permission." Permission to modify the code and to distribute modified code is granted, provided the Copyright, this License, and the Availability note are retained, and a notice that the code was modified is included.

Qt Availability <http://www.qtsoftware.com/downloads>

Patches Applied to Qt can be found in the installation at:

`$HPEESOF_DIR/prod/licenses/thirdparty/qt/patches`.

You may also contact Brian Buchanan at Keysight Inc. at brian_buchanan@Keysight.com for more information. For details see: http://bmaster.soco.Keysight.com/mw/Qt_License_Information

Python

A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

=====

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at <http://www.pythonlabs.com/logos.html> may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: <http://hdl.handle.net/1895.22/1013>".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

bzip2

This copy of Python includes a copy of bzip2, which is licensed under the following terms:

This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2007 Julian R Seward. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Julian Seward, jseward@bzip.org

bzip2/libbzip2 version 1.0.5 of 10 December 2007

OpenSSL

This copy of Python includes a copy of openssl, which is licensed under the following terms:

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL

please contact openssl-core@openssl.org.

OpenSSL License

Copyright (c) 1998-2008 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).
The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

"This product includes cryptographic software written by
Eric Young (eay@cryptsoft.com)"

The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related.

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:

"This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence **including the GNU Public Licence**.

Tcl

This copy of Python includes a copy of Tcl, which is licensed under the following terms:

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, ActiveState Corporation and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

GOVERNMENT USE: If you are acquiring this software on behalf of the U.S. government, the Government shall have only "Restricted Rights" in the software and related documentation as defined in the Federal Acquisition Regulations (FARs) in Clause 52.227.19 (c) (2). If you are acquiring the software on behalf of the Department of Defense, the software shall be classified as "Commercial Computer Software" and the Government shall have only "Restricted Rights" as defined in Clause 252.227-7013 (c) (1) of DFARs. Notwithstanding the foregoing, the authors grant the U.S. Government and others acting in its behalf permission to use and distribute the software in accordance with the terms specified in this license.

Tk

This copy of Python includes a copy of Tk, which is licensed under the following terms:

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

GOVERNMENT USE: If you are acquiring this software on behalf of the U.S. government, the Government shall have only "Restricted Rights" in the software and related documentation as defined in the Federal Acquisition Regulations (FARs) in Clause 52.227.19 (c) (2). If you are acquiring the software on behalf of the Department of Defense, the software shall be classified as "Commercial Computer Software" and the Government shall have only "Restricted Rights" as defined in Clause 252.227-7013 (c) (1) of DFARs. Notwithstanding the foregoing, the authors grant the U.S. Government and others acting in its behalf permission to use and distribute the software in accordance with the terms specified in this license.

Mersenne Twister

The `_random` module includes code based on a download from <http://www.math.keio.ac.jp/matsumoto/MT2002/emt19937ar.html>. The following are the verbatim comments from the original code:

A C-program for MT19937, with initialization improved 2002/1/26. Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using `init_genrand(seed)` or `init_by_array(init_key, key_length)`.

Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura, All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of its contributors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Any feedback is very welcome. <http://www.math.keio.ac.jp/matsumoto/emt.html>
email: matumoto@math.keio.ac.jp

Sockets

The socket module uses the functions, `getaddrinfo()`, and `getnameinfo()`, which are coded in separate source files from the WIDE Project, <http://www.wide.ad.jp/>.

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS "AS IS" AND GAI_ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR GAI_ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON GAI_ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN GAI_ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Floating point exception control

The source for the fpectl module includes the following notice:

/ Copyright (c) 1996. \

The Regents of the University of California.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

This work was produced at the University of California, Lawrence Livermore National Laboratory under contract no. W-7405-ENG-48 between the U.S. Department of Energy and The Regents of the University of California for the operation of UC LLNL.

DISCLAIMER

This software was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, or assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately-owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the University of California, and shall not be used for advertising or product \ endorsement purposes. /

MD5 message digest algorithm

The source code for the md5 module contains the following notice:

Copyright (C) 1999, 2002 Aladdin Enterprises. All rights reserved.

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

L. Peter Deutsch
ghost@aladdin.com

Independent implementation of MD5 (RFC 1321).

This code implements the MD5 Algorithm defined in RFC 1321, whose text is available at <http://www.ietf.org/rfc/rfc1321.txt>

The code is derived from the text of the RFC, including the test suite (section A.5) but excluding the rest of Appendix A. It does not include any code or documentation that is identified in the RFC as being copyrighted.

The original and principal author of md5.h is L. Peter Deutsch <ghost@aladdin.com>. Other authors are noted in the change history that follows (in reverse chronological order):

2002-04-13 lpd Removed support for non-ANSI compilers; removed references to Ghostscript; clarified derivation from RFC 1321; now handles byte order either statically or dynamically.
1999-11-04 lpd Edited comments slightly for automatic TOC extraction.
1999-10-18 lpd Fixed typo in header comment (ansi2knr rather than md5); added conditionalization for C++ compilation from Martin Purschke <purschke@bnl.gov>.
1999-05-03 lpd Original version.

Asynchronous socket services

The asynchat and asyncore modules contain the following notice:

Copyright 1996 by Sam Rushing

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Sam

Rushing not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

SAM RUSHING DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL SAM RUSHING BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Cookie management

The Cookie module contains the following notice:

Copyright 2000 by Timothy O'Malley <timo@alum.mit.edu>

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Timothy O'Malley not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

Timothy O'Malley DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL Timothy O'Malley BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Profiling

The profile and pstats modules contain the following notice:

Copyright 1994, by InfoSeek Corporation, all rights reserved.

Written by James Roskind

Permission to use, copy, modify, and distribute this Python software and its associated documentation for any purpose (subject to the restriction in the following sentence) without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of InfoSeek not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. This permission is explicitly restricted to the copying and modification of the software to remain in Python, compiled Python, or other languages (such as C) wherein the modified or derived code is exclusively imported into a Python module.

INFOSEEK CORPORATION DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INFOSEEK CORPORATION BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Execution tracing

The trace module contains the following notice:

portions copyright 2001, Autonomous Zones Industries, Inc., all rights...

err... reserved and offered to the public under the terms of the

Python 2.2 license.

Author: Zooko O'Whielacronx <http://zooko.com/> zooko@zooko.com

Copyright 2000, Mojam Media, Inc., all rights reserved.

Author: Skip Montanaro

Copyright 1999, Bioreason, Inc., all rights reserved.

Author: Andrew Dalke

Copyright 1995-1997, Automatrix, Inc., all rights reserved.

Author: Skip Montanaro

Copyright 1991-1995, Stichting Mathematisch Centrum, all rights reserved.

Permission to use, copy, modify, and distribute this Python software and its associated documentation for any purpose without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of neither Automatrix, Bioreason or Mojam Media be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

UUencode and UUdecode functions

The uu module contains the following notice:

Copyright 1994 by Lance Ellinghouse

Cathedral City, California Republic, United States of America.

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Lance Ellinghouse not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

LANCE ELLINGHOUSE DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL LANCE ELLINGHOUSE CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Modified by Jack Jansen, CWI, July 1995:

- Use binascii module to do the actual line-by-line conversion between ascii and binary. This results in a 1000-fold speedup. The C version is still 5 times faster, though.
- Arguments more compliant with Python standard

XML Remote Procedure Calls

The xmlrpc.lib module contains the following notice:

The XML-RPC client interface is

Copyright (c) 1999-2002 by Secret Labs AB

Copyright (c) 1999-2002 by Fredrik Lundh

By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

test_epoll

The test_epoll contains the following notice:

Copyright (c) 2001-2006 Twisted Matrix Laboratories.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Select kqueue

The select and contains the following notice for the kqueue interface:

Copyright (c) 2000 Doug White, 2006 James Knight, 2007 Christian Heimes
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

strtod and dtoa

The file Python/dtoa.c, which supplies C functions dtoa and strtod for conversion of C doubles to and from strings, is derived from the file of the same name by David M. Gay, currently available from <http://www.netlib.org/fp/>. The original file, as retrieved on March 16, 2009, contains the following copyright and licensing notice:

```
/*-----*/
```

The author of this software is David M. Gay.

Copyright (c) 1991, 2000, 2001 by Lucent Technologies.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR LUCENT MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

```
*/-----/
```

expat

The pyexpat extension is built using an included copy of the expat sources unless the build is configured --with-system-expat:

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd
and Clark Cooper

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

libffi

The `_ctypes` extension is built using an included copy of the libffi sources unless the build is configured `--with-system-libffi`:

Copyright (c) 1996-2008 Red Hat, Inc and others.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

zlib

The zlib extension is built using an included copy of the zlib sources unless the zlib version found on the system is too old to be used for the build:

Copyright (C) 1995-2010 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu

pywin32

Unless stated in the specific source file, this work is
Copyright (c) 1994-2008, Mark Hammond
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither name of Mark Hammond nor the name of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

win32com

Unless stated in the specific source file, this work is Copyright (c) 1996-2008, Greg Stein and Mark Hammond.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither names of Greg Stein, Mark Hammond nor the name of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

adodbapi

adodbapi - A python DB API 2.0 (PEP 249) interface to Microsoft ADO

Copyright (C) 2002 Henrik Ekelund, version 2.1 by Vernon Cole

- <http://sourceforge.net/projects/pywin32>
- <http://sourceforge.net/projects/adodbapi>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

django adaptations and refactoring by Adam Vandenberg

isapi

Copyright 2002-2003 by Blackdog Software Pty Ltd.

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Blackdog Software not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

BLACKDOG SOFTWARE DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL BLACKDOG SOFTWARE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Scintilla and SciTE

Copyright 1998-2003 by Neil Hodgson <neilh@scintilla.org>

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

NEIL HODGSON DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL NEIL HODGSON BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Numpy

Numpy license

Copyright ? 2005-2012, NumPy Developers.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the NumPy Developers nor the names of any contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Scipy

Copyright (c) 2001, 2002 Enthought, Inc.
All rights reserved.

Copyright (c) 2003-2012 SciPy Developers.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- a. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- b. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- c. Neither the name of Enthought nor the names of the SciPy Developers may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Matplotlib

Matplotlib only uses BSD compatible code, and its license is based on the PSF license. See the Open Source Initiative licenses page for details on individual licenses. Non-BSD compatible licenses (eg LGPL) are acceptable in matplotlib toolkits-index. For a discussion of the motivations behind the licencing choice, see Licenses.

License agreement for matplotlib 1.2.0

1. This LICENSE AGREEMENT is between John D. Hunter ("JDH"), and the Individual or Organization ("Licensee") accessing and otherwise using matplotlib software in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, JDH hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use matplotlib 1.2.0 alone or in any derivative version, provided, however, that JDH's License Agreement and JDH's notice of copyright, i.e., "Copyright (c) 2002-2009 John D. Hunter; All Rights Reserved" are retained in matplotlib 1.2.0 alone or in any derivative version prepared by Licensee.
3. In the event Licensee prepares a derivative work that is based on or incorporates matplotlib 1.2.0 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to matplotlib 1.2.0.

4. JDH is making matplotlib 1.2.0 available to Licensee on an "AS IS" basis. JDH MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, JDH MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF MATPLOTLIB 1.2.0 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. JDH SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF MATPLOTLIB 1.2.0 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING MATPLOTLIB 1.2.0, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between JDH and Licensee. This License Agreement does not grant permission to use JDH trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using matplotlib 1.2.0, Licensee agrees to be bound by the terms and conditions of this License Agreement.

libpng

This copy of the libpng notices is provided for your convenience. In case of any discrepancy between this copy and the notices in the file png.h that is included in the libpng distribution, the latter shall prevail.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.

This code is released under the libpng license.

libpng versions 1.2.6, August 15, 2004, through 1.6.2, April 25, 2013, are Copyright (c) 2004, 2006-2012 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.2.5 with the following individual added to the list of Contributing Authors

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5 - October 3, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux

Eric S. Raymond

Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger
Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

A "png_get_copyright" function is available, for convenient use in "about" boxes and the like:

```
printf("%s",png_get_copyright(NULL));
```

Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar.jpg (88x31)" and "pngnow.png" (98x31).

Libpng is OSI Certified Open Source Software. OSI Certified Open Source is a certification mark of the Open Source Initiative.

Glenn Randers-Pehrson
glennrp at users.sourceforge.net
April 25, 2013

Errata The IC-CAP product may contain references to "HP" or "HPEESOF" such as in file names and directory names. The business entity formerly known as "HP EEs of" is now part of Keysight Technologies and is known as "Keysight EEs of." To avoid broken functionality and to maintain backward compatibility for our customers, we did not change all the names and labels that contain "HP" or "HPEESOF" references.

Warranty The material contained in this documentation is provided "as is", and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Keysight disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Keysight shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Keysight and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend U.S. Government Restricted Rights. Software and technical data rights granted to the federal government include only those rights customarily provided to end user customers. Keysight provides this customary commercial license in Software and technical data pursuant to FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for the Department of Defense, DFARS 252.227-7015 (Technical Data - Commercial Items) and DFARS 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation).

Table of Contents

Licensing Overview	31
Contents	31
License Types	31
Contents	31
Node-locked Licenses	31
Node-locked License	31
Figure: Nodelocked License Setup	31
Floating Licenses	32
Floating Licenses	32
Figure: Floating License Setup	32
Recognize License Type	33
Node-locked License	33
Floating License	34
Understand Your License File	35
Contents	35
License File Structure	35
License Summary Header	35
License Codewords	38
License File Syntax	39
SERVER Line Syntax	39
VENDOR Line Syntax	40
INCREMENT Line Syntax	40
Licensing Architecture	41
License Server Supported Platforms	41
Licensing Attributes	43
User-Display-Host (UDH)	43
License Security	43
License Counting	44
Job Control	44

License Version Compatibility	46
Contents	46
License Codeword Version Compatibility	46
FlexNet Version Compatibility	49
Licensing Behavior	51
Session Start-up Flow	51
Active or In-Session Flow	52
Setting Up Licenses on Windows	53
Setting Up Nodelocked License on Windows	53
License tied to a CPU ID	53
Step 1: Start License Server Managers	53
Step 2: Create Windows Service	54
Step 3: Set Product Environment Variable	55
License tied to USB Dongle	56
Step 1: Attach Dongle	56
Step 2: Install USB Dongle Drivers	56
Step 3: Start License Server Manager and Create Windows Service	56
Step 4: Set Product Environment Variable	56
Setting Up Floating License on Windows	56
Step 1: License Server Setup	56
Step 2: Client Setup	57
Setting Up Licenses on Linux and Solaris	58
Setting Up Nodelocked License on Linux and Solaris	58
License tied to CPU ID	58
Step 1: Start License Server Managers (Imgrd and agileesofd)	58
Step 2: Automate FlexNet License Server Startup	59
Step 3: Set Product Environment Variable	60
License tied to USB Dongle	60
Step 1: Attach Dongle	60
Step 2: Install USB Dongle Drivers	61
Step 3: Start License Server Manager and Automate License Server Manager Restart	62
Step 4: Set Product Environment Variable	62

Setting Up Floating License on Linux and Solaris	62
Step1: License Server Setup	62
Step 2: Client Setup	62
Licensing Tools	63
License Manager	63
Product Selector	64
Using Product Selector	64
View License Description and Part Number	64
Check License Availability	65
Select Product License	65
Change Default Startup License	65
Advanced Licensing Configuration Options	66
Accessing Licenses through a Firewall	66
Creating Options File	67
License Environment Variables	67
Multiple Server Configurations	71
Remote and Distributed Simulation Licenses	71
Remote Simulation Licenses	71
Distributed Simulation Licenses	71
Distributed Computing N-pack Simulation License	71
Quad-pack Simulation License (GoldenGate Only)	72
License Retry	72
Licensing FAQs	73
Troubleshooting License Problems	78
Prerequisites	78
Where to Access the FlexNet utilities for Command Line Use	78
How to Reference License Server	79
Product specific license settings	79

Troubleshooting Flow and Process	79
Step 1: Verify license server machine is running, FlexNet daemon versions, license server communications	80
Step 2: Verify client is able to access license server	82
License Path specified for the Agilent EEsof application	82
Communications problem from client machine to remote server (Remote Server Only)	83
Step 3: Verify pool and accessibility of available licenses	83
The pool of available licenses has the correct features, license version number, expiration date ...	84
Multiple end user license server only: The license pool has licenses available (for example, someone else has checked out a license that is needed)	85
Remote server only: License server has one or more node-locked licenses	87
FlexNet Communications Problems	88

- [Licensing Overview](#)
- [Licensing Attributes](#)
- [License Version Compatibility](#)
- [Licensing Behavior](#)
- [Setting Up Licenses on Windows](#)
- [Setting Up Licenses on Linux and Solaris](#)
- [Licensing Tools](#)
- [Advanced Licensing Configuration Options](#)
- [Licensing FAQs](#)
- [Troubleshooting License Problems](#)

Licensing Overview

Licensing governs the usage of a product. This section provides an overview of Agilent EEsof Licensing. It covers different types of supported licenses, information on how to recognize your license type, description of a typical license file (.lic extension), supported platforms for License Servers and license architecture that governs the licensing behaviour.

Contents

- [License Types](#)
- [Understand Your License File](#)
- [Licensing Architecture](#)
- [License Server Supported Platforms](#)

License Types

Keysight EEsof licensing scheme supports only counted licenses that are either **node-locked** or **floating**.

NOTE

For details on License File structure and syntax, refer to [Understand Your License File](#) section.

Contents

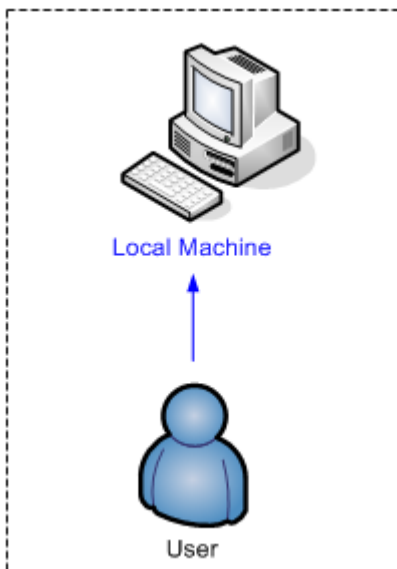
- [Node-locked Licenses](#)
- [Floating Licenses](#)
- [Recognize License Type](#)

Node-locked Licenses

Node-locked License

A **node-locked license** permits the software to run on only one machine. Both license server manager (*lmgrd*) and **vendor daemon** (*agileesofd*) run on the local machine for which the license is issued.

Figure: Nodelocked License Setup

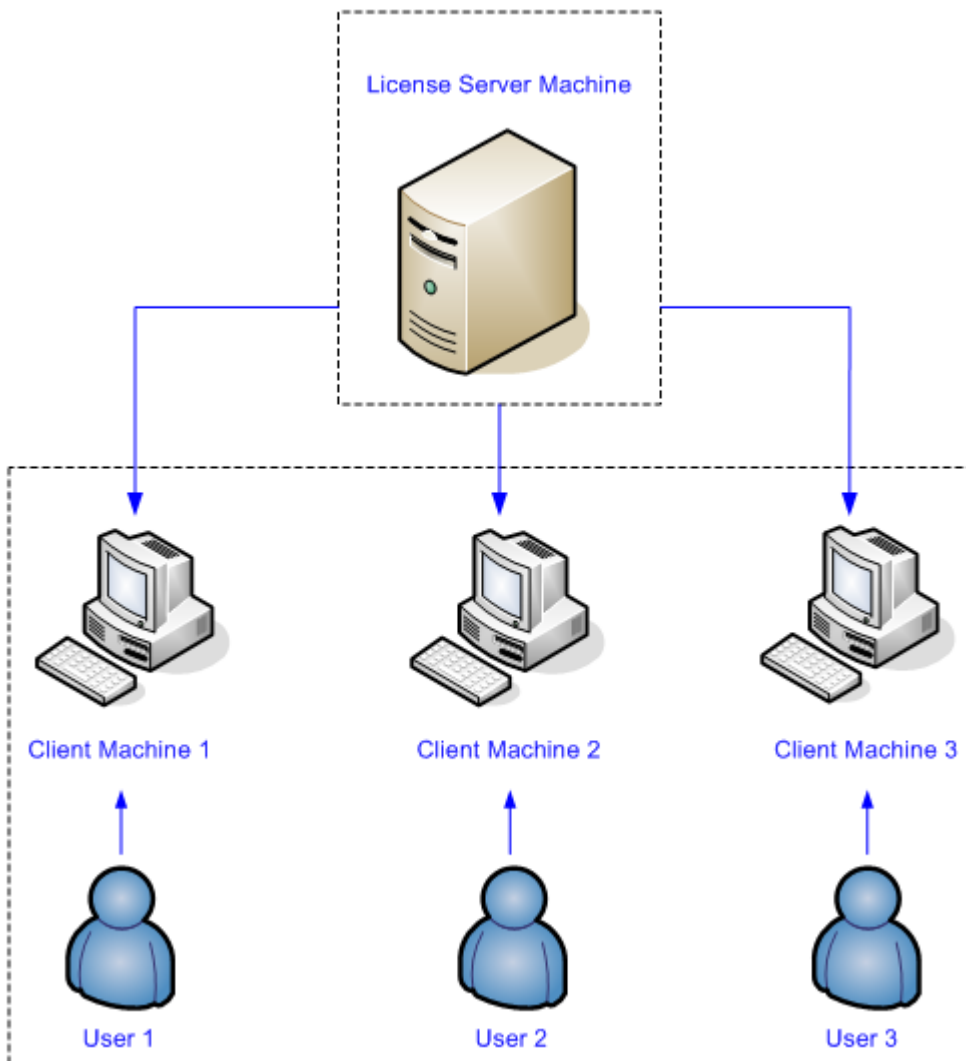


Floating Licenses

Floating Licenses

In case of a **floating (network) license**, the Agilent EEsof software application is installed on one or more client machines and uses the environment variable `<PRODUCT>_LICENSE_FILE` to point to the license server. Both license server manager (*lmgrd*) and vendor daemon (*agileesofd*) run on the license server system.

Figure: Floating License Setup



Recognize License Type

You can determine the license type to be node-locked or floating by looking at the `INCREMENT` lines in your license file.

Node-locked License

The `INCREMENT` line corresponding to a **node-locked license** embeds the **CPU ID** of the **license server** machine or the FlexNet ID of the dongle in the `HOSTID=` part of the statement.

Example 1: Node-locked license tied to a CPU ID

```

SERVER this_host D8D385997F8A
VENDOR agileesofd

INCREMENT b_core agileesofd 3.0 14-sep-2013 1
VENDOR_STRING="D8D385997F8AP=#1,
7,8,13,14,25,27,66,67,105,110,116,131,132,156D=#W2200BP,ADS_Core;e_core :
MUFNCUI WQDZPFX QTBMCYE SW2TFGC OWKGNHJ UIB" HOSTID=d8d385997f8a
ISSUER=LICENSEID=1598592 START=19-Sep-2012
SIGN="033F C701 6926 5CB6 5505 F6EC D5EE E3FE F302 A765 9201 008B E71B FE5B
2308 EE8F D5C0 9374 AE0F 2F68 24CD"

```

As shown above, presence of HOSTID=d8d385997f8a indicates that codeword b_core is tied to a CPU of the ID d8d385997f8a.

Example 2: Node-locked license tied to a USB dongle

```

SERVER this_host FLEXID=10-0BEB CD44
VENDOR agileesofd

INCREMENT b_core agileesofd 3.0 14-sep-2013 1
VENDOR_STRING="10-0BEB CD44P=#1,7,8,13,14,25,27,66,67,105,110,116,131,132,156
D=#W2200BP,ADS_Core;e_core :
MUFNCUI WQDZPFX QTBMCYE SW2TFGC OWKGNHJ UIB" HOSTID=FLEXID=10-0BEB CD44
ISSUER=LICENSEID=1598593 START=19-Sep-2012
SIGN="002F CADB 63C8 0FCE DF16 BBA4 4AAB A335 B54F F121 3A02 79A9 D9A9 A701
F727 AAF8 791E 0615 BD0B D95F 87C5"

```

As shown above, presence of HOSTID=FLEXID=10-0BEB CD44 indicates that codeword b_core is tied to a dongle of the ID 10-0BEB CD44.

Floating License

An INCREMENT line that does have the HOSTID= identifier embedded in it indicates the license to be a **floating (network) license**.

Example 1: Floating license tied to a CPU ID

```

SERVER delly 001EC940F06A 27001
VENDOR agileesofd
INCREMENT b_cct_layout_momentum agileesofd 3.0 07-feb-2014 10 \
    VENDOR_STRING="001EC940F06AP=#1,2,3,4,7,8,9,10,11,13,14,18,19,20,22,23,24,25,26,2
7,55,62,63,65,66,67,68,105,106,107,108,109,110,111,115,116,131,132,133,135,154,155,15
6,1001007D=#W2214BT,ADS_Core+Layout+CircuitSim+MomentumG2;e_core,e_phys_layout,
e_sim_envelope,e_sim_harmonic,e_sim_momentum,e_sim_trans_conv \
    : CNRHDNH JB1CQEZ RXYAGCK RXFTSLT KBJMBHA JIYPOUK DFYPRWE \
    QGY1OEZ QGAUHJL U" START=10-aug-2012 SIGN="0118 C5B9 0443 57BB \
    CE05 08DB 0539 D627 D41B C8BC 8C00 5000 EA38 3BF4 B1A5 9E8D \
    06F3 E837 63C4 4B05 31DE"

```

As shown above, no HOSTID in the INCREMENT line indicates that codeword `b_cct_layout_momentum` is a floating license.

Understand Your License File

The license file contain codewords that allow you to use specific features of an Agilent EEsof product.

Contents

- [License File Structure](#)
- [License File Syntax](#)

License File Structure

A license file contains two major sections - License Summary Header and License Codewords.

License Summary Header

License summary header provides an overview of all the codewords included in the license file and setup instructions.

Sample License Summary Section

```

#####
#                               SUPPORT                               #
#####
#
#
# If you have questions regarding this license file, please contact
# EEsof Business Support Center: 800-507-6274 or eesof_bsc@agilent.com
#
#
# To understand or download Agilent EEsof licensing technology please visit
# http://www.keysight.com/find/eesof-flexnet-downloads
#
# To download Agilent EEsof Software please visit
# http://edadocs.software.keysight.com/display/downloads/Downloads

```

```

#
#
# If you are unable to set up your license file then please contact
# EEs of Technical Support:  US - 800-473-3763 or eesof-usa_support@agilent.com
#                               Asia - eesof-asia_support@agilent.com
#                               Australia:  1800-629-485
#                               China:       800-810-0189
#                               Hong Kong:   800-938-693
#                               India:       1800-11-2626
#                               Malaysia:    1800-888-848
#                               Singapore:   1800-375 8100
#                               Taiwan:      0800-047-866
#                               Thailand:    1800-375-8100
#                               Korea:       080-769-0800
#                               Europe - 1-800-473-EESOF (1-800-473-3673) or eesof-
#                               europe_support@agilent.com
#                               Japan - 81 (426) 60-8416 or eesof-japan_support@agilent.
#                               com
#
# or visit: http://www.keysight.com/find/eesof-support
#
#
# THIS LICENSE HAS BEEN GENERATED FOR HOSTID 68B599F512D7
#
#####
#                               LICENSE SUMMARY
#
# All "LICENSE pjc_XXX" lines are for EEs of license functionality only - Please
# ignore
#####
#
# This is a list of options contained in this license file
#
#License
#Description
#Expiration  Qty Version Hostid
#
#W2250BT-1F3          3 months node-locked license ADS Inclusive
#Bundle              05-JAN-2013  1  2.8      68B599F512D7
#LICENSE NAME b_inclusive
#
#
#####
#                               LEGAL
#####
# The Use of this license file is acceptance of Agilent EEs of Licensing usage terms
# and conditions.
#
#####
#                               INSTRUCTIONS
#####
#
# License Setup for 2011+ version software:
#
# Windows Platforms:
# 1) Place this file on machine where file is intended:  For MAC address tied
# licenses, ensure this file is placed on the machine whose MAC address agrees with

```

```

#         the one appearing in the SERVER line of this file.  For dongle tied license,
ensure this file is placed on the machine where the dongle is inserted.
# 2)         If this is a dongle tied license, insert your Agilent supplied USB
dongle
# 3)         Start your Agilent EEsof product.  A license wizard will start to
guide you through the license setup.
#
#
# Linux/UNIX
# 1) Define {PRODUCT}_LICENSE_FILE in your license client environment where
PRODUCT=ADS, EMPRO, ICCAP, GENESYS, SYSTEMVUE, or GOLDENGATE
# 2) Place this file on the license server machine where file is intended:  For
MAC address tied licenses, it is the machine whose MAC address
#         agrees with the one appearing in the SERVER line of this file.  For dongle
tied license, it is the machine where the dongle is inserted.
#         (No dongle support for Linux 64bit systems)
# 3) Acquire FLEXnet v11.9 bits from either $HPEESOF_DIR/EEsof_License_Tools or
from:
#
http://www.keysight.com/find/eesof-flexnet-downloads
# 4A) IF License server not previously installed: From FLEXnet folder, run .
/lmgrd .c <Path-To-License-File> -l <Path-To-Flex-Output-File>
# 4B) IF License server previously installed: From FLEXnet folder, run ./lmutil
lmreread .c <Path-To-License-File>
#
#
# LICENSE PATH INFORMATION
#
# Windows:  No environment variable needed.  License wizard sets this up
automatically.  Value is entered into Windows Registry.  Do not explicitly
# define License path environment variable.
#
# Linux/Unix: Define {PRODUCT}_LICENSE_FILE in your license client environment where
PRODUCT=ADS, EMPRO, ICCAP, or GOLDENGATE.
#         Example:  ADS_LICENSE_FILE for Advanced Design System.
#
#
# License Setup for ADS Pre-2011 software AND NO 2011 installed
# Windows Platform:
#
# 1) If the EEsof License Tools Installer have been previous installed, skip
to step 5
# 2) Download Agilent EEsof License Tools Installer from www.keysight.com/find
/eesof-flexnet-downloads to temporarily place on local disk
# 3) Run as Administrator eesof_license_tools_installer_<date>.exe (this
installs EEsof License Tools)
# 4) Change directories to installation bin folder EEsof License Tools.  For
example, C:\Program Files\agilent\EEsof_License_Tools\bin
# 5) Find the executable "aglmwizard.exe" and Run As Administrator.
# 6) Follow the steps in the license server to setup local license server.
# 7) In Windows System Properties, define AGILEESOFD_LICENSE_FILE to
@<machine-where-this-license-file-is-installed>
#
# Linux/UNIX
# 1) Define AGILEESOFD_LICENSE_FILE in your license client environment
# 2) Place this file on the license server machine where file is intended:  For
MAC address tied licenses, it is the machine whose MAC address

```

```

#       agrees with the one appearing in the SERVER line of this file.  For dongle
#       tied license, it is the machine where the dongle is inserted.
#       3) Acquire FLEXnet v11.9 bits from either $HPPEESOF_DIR/EEsof_License_Tools or
#       from: http://www.keysight.com/find/eesof-flexnet-downloads
#       4A) IF License server not previously installed: From FLEXnet folder, run .
#           /lmgrd .c <Path-To-License-File> -l <Path-To-Flex-Output-File>
#       4B) IF License server previously installed: From FLEXnet folder, run ./lmutil
#           lmreread .c <Path-To-License-File>
#
#
#####LICENSE KEYS START HERE#####
#
SERVER this_host 68B599F512D7
VENDOR agileesofd
#
INCREMENT b_inclusive agileesofd 2.8 05-jan-2013 uncounted \
    VENDOR_STRING="68B599F512D7P=#1,
    2,3,4,7,8,9,10,11,13,14,15,18,19,20,22,23,24,25,26,27,29,30,31,32,33,34,35,36,39,40,4
    1,42,43,44,45,46,47,48,53,55,62,63,65,66,67,68,69,105,106,107,108,109,110,111,113,115
    ,
    116,121,122,123,124,126,128,131,132,133,135,138,141,142,144,145,146,149,154,155,156,1
    57,186,202,204,205,206,207,208,209,210,211,213,214,215,219,221,223,226,313D=#W2250BP,
    ADS_Inclusive;e_core,e_phys_layout,e_sim_harmonic,e_link_rfic,e_sim_trans_conv,
    e_sim_momentum,e_sim_sys,e_sim_verilog_ams,e_sim_envelope,e_sim_verilog_a,
    e_sim_rf_arch,e_mdl_wireless_mature,e_mdl_wireless_int,e_sim_fem \
    : IUIWQDZ PFXBHLF QXEZRXF KWEYDLF NGPHEBQ KRWZQGY EXT" HOSTID=68b599f512d7
ISSUER=LICENSEID=2760699 START=05-Oct-2012 SIGN="00A5 8C36 20E9 88BA 9FF6 00DB 888A
E1F7 07D9 773B 1403 F314 4106 0152 C58C 47EA 2D5C 9B31 26B7 C5B5 B325"
INCREMENT pjc_b_inclusive agileesofd 2.8 05-jan-2013 uncounted VENDOR_STRING="
68B599F512D7 : XBQKRWZ QGYEXTU IWQDZPB 1ZWGMDD WXYUGSH FUWXJEZ RXFKWEY DLFNGPH E"
HOSTID=68b599f512d7 ISSUER=LICENSEID=2760699 START=05-Oct-2012 SIGN="030D 8488 9159
BB01 1621 A72A 4939 D3E0 502D D4DE 3E01 2069 E5BC 28DE D8C2 0265 EAA6 E18F 49C6 F7D7
3C86"

#
#####LICENSE END#####

```

License Codewords

License codewords follow FlexNet format and contains the server, vendor, and increment lines.

Sample License Codewords Section

```
# sample license file
SERVER this_host D8D385997F8A
VENDOR agileesofd

INCREMENT b_core agileesofd 3.0 14-sep-2013 1 VENDOR_STRING="D8D385997F8AP=#1,
7,8,13,14,25,27,66,67,105,110,116,131,132,156D=#W2200BP,ADS_Core;e_core : MUFNCUI
WQDZPFX QTBMCYE SW2TFGC OWKGNHJ UIB" HOSTID=d8d385997f8a ISSUER=LICENSEID=1598592
START=19-Sep-2012 SIGN="033F C701 6926 5CB6 5505 F6EC D5EE E3FE F302 A765 9201 008B
E71B FE5B 2308 EE8F D5C0 9374 AE0F 2F68 24CD"

INCREMENT pjc_b_core agileesofd 3.0 14-sep-2013 1 VENDOR_STRING="D8D385997F8A :
RQHSXF2 AQCOVRN H1FUYNQ LMDYFPG SHFUWXJ EZRXYAU EQEFZHA" HOSTID=d8d385997f8a
ISSUER=LICENSEID=1598592 START=19-Sep-2012 SIGN="031A EA80 70C0 60D1 CAC4 B206 DD99
C63F DB63 9DB8 E901 B4E8 F500 45F4 25F1 0B27 ODD1 6919 3CEC 119F FD6F"
```

License File Syntax

This section provides a brief overview of the syntax of the statements included in the License Codewords section of the license file. For further details, refer to the License File Syntax in [FlexNet Publisher's License Administration Guide](#).

The License Codewords section, usually contains three pieces of information: the `SERVER` line, the `VENDOR` line, and all the `INCREMENT` lines representing the licensed codewords.

SERVER Line Syntax

Agilent supports both single server and redundant servers, as per [FlexNet](#) standard configurations. In case of single server, the `SERVER` line syntax is:

```
SERVER this_host <hostid> [port]
```

In case of redundant servers, the `SERVER` line syntax is:

```
SERVER <hostname1> <hostid1> <port>
SERVER <hostname2> <hostid2> <port>
SERVER <hostname3> <hostid3> <port>
```

where,

- `hostname1`, `hostname2`, `hostname3` are the system host names or IP address. String returned by the `hostname` or `uname -n` command on UNIX; or by the `ipconfig /all` command on Windows. Note that redundant servers should all have the same OS, that is, you cannot have one server on Solaris, and another on Linux.
- `hostid`, `hostid1`, `hostid2`, `hostid2` are usually the string returned by the `lmhostid` command. This is specified in the issued license file by Agilent EEsof.

- Port is the TCP/IP port number to use. This is an optional field for single server configuration, but is a required field for redundant server configuration. A valid number is any unused port number between 0 and 64000. On UNIX, choose a port number greater than 1024, because anything less than or equal to 1024 are reserved. If no TCP/IP port number is specified, one of the default ports in the range of 27000 through 27009 is used.

NOTE

this_host is the generic host name for the computer for which the node-locked license is issued, and can be used as is without replacing it with the real computer host name in that case.

VENDOR Line Syntax

The `VENDOR` line specifies the `vendor daemon` information. The `VENDOR` line syntax is:

```
VENDOR agileesofd [<path_to_agileesofd> agileesofd ] [[OPTIONS=] <options_file_path>
agileesofd.opt] [[PORT=] port]
```

Example 1

```
VENDOR agileesofd
```

Example 2

```
VENDOR agileesofd C:\Program Files\Agilent\EEsof_License_Tools\bin\agileesofd C:\Program
Files\Agilent\EEsof_License_Tools\bin\licenses\agileesofd.opt PORT=5346
```

where,

- `agileesofd` is the name of Agilent EEsof vendor daemon.
- `C:\Program Files\Agilent\EEsof_License_Tools\bin\agileesofd` is the full path-name to the vendor daemon executable.
- `C:\Program Files\Agilent\EEsof_License_Tools\bin\licenses\agileesofd.opt` is the full path-name to the FlexNet options file.
- 5346 is the specified TCP/IP port number for the vendor daemon.

INCREMENT Line Syntax

The `INCREMENT` line specifies information about a licensed codeword. Codeword name, vendor daemon name, license version, license expiration date, license count, and vendor string are some of the important information included. The `INCREMENT` line syntax is:

```
INCREMENT <feature> agileesofd <license_version> <license_expiry_date> <license_count>
VENDOR_STRING=<agilent_eesof_vendor_string> [HOSTID=<hostid>] START=<license_start_date>
SIGN=<encoded signature to authenticate this INCREMENT line>
```

Example

```
INCREMENT b_core agileesofd 3.0 06-feb-2013 1 \
VENDOR_STRING="D8D385997F8AP=#1,7,8,13,14,25,27,66,67,105,110,116,131,132,
156D=#W2200BP,ADS_Core;e_core : \
MUFNCUI WQDZPFX QTBMCYE SW2TFGC OWKGNHJ UIB" HOSTID=d8d385997f8a ISSUER=LICENSEID=159
8592 \
START=19-Sep-2012 SIGN="033F C701 6926 5CB6 5505 F6EC D5EE E3FE F302 A765 9201 008B
E71B FE5B 2308 EE8F D5C0 9374 AE0F 2F68 24CD"
```

where,

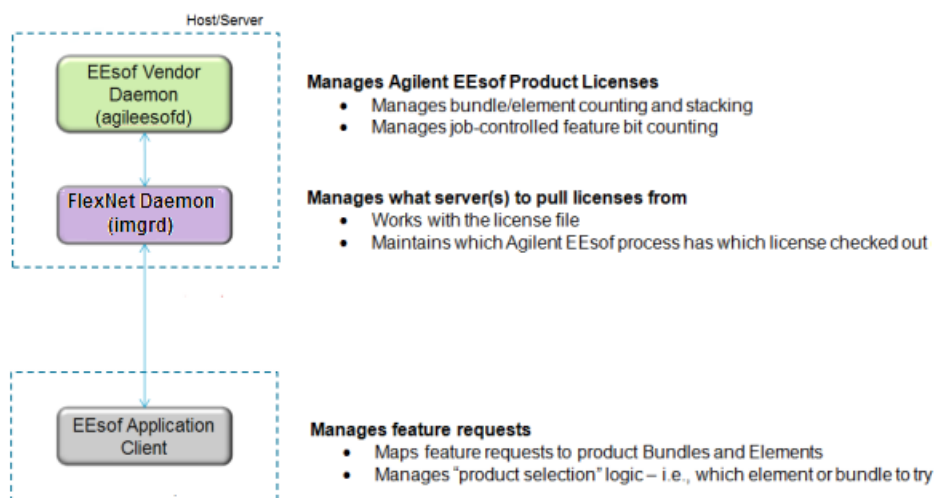
- `b_core` is the name of the feature being licensed.
- `agileesofd` is the name of Agilent EEsof vendor daemon.
- `3.0` is the license version.
- `06-feb-2013` is the expiration date of license.
- `1` is the number of license(s).

Licensing Architecture

Agilent EEsof licensing architecture comprises of three components to manage the licensing scheme:

- Agilent EEsof Vendor Daemon (*agileesofd*) to manage product licenses
- FlexNet Daemon (*lmgrd*) to manage servers
- Agilent EEsof Application Client to manage feature requests.

Figure: Agilent EEsof Licensing Architecture



License Server Supported Platforms

The following table lists the supported platforms (Windows, Linux, and Solaris) for License Servers.

EEsof License Version	Windows XP	Windows 7 Enterprise	Windows 8 Enterprise	RedHat Linux RHEL4	RedHat Linux RHEL5	RedHat Linux RHEL6	SuSe Linux SLES10	SuSe Linux SLES11	Solaris 10
32/64 bit	32/64	32/64	32/64	64	64	64	64	64	64
2012.08									
2013.01									
2013.05									
2013.09									
2014.01									

Legend	Description
	Supported
	Unsupported

Licensing Attributes

Agilent EEsof **Licensing Behavior** is administered by the following attributes:

- **User-Display-Host (UDH)**
- **License Security**
- **License Counting**
- **Job Control**

User-Display-Host (UDH)

All Agilent EEsof licenses are counted, with User-Display-Host as the base of forming the license checkout identify. Each unique User-Display-Host consumes one count of a license. Additional licenses are required if user, display or host is changed. For example, the following cases would cause an additional count of license to be checked out:

- A second user logs on the same host. This is because `user` is changed.
- The user moves to another terminal and launches another session of the product. This is because display is changed.

License Security

All Agilent EEsof licenses are secured by codewords, which are tied to a **CPU ID** or a **USB Dongle**.

- **CPU ID**: Specifies the unique ID of a computer. It uses the physical address (hostid) of your computer.
- **USB Dongle**: Uses the dongle ID (or the FlexNet ID) of your USB dongle.

Our licensing scheme supports counted node-locked licenses and floating licenses.

- **Node-locked License**: A node-locked license can be used on a specific computer to which the license is tied. It allows an Agilent EEsof Product to be used on a single computer with a single display by a single user. The user, license, and computer must physically co-locate.
- **Floating (Network) License**: A floating (network) license can be shared among multiple users across a computer network. Floating license support is provided for a single and multiple servers (including distributed product servers, peak servers, and redundant servers). With a floating license, an individual **feature** contained in a **bundle** or **element** can be run locally or remotely by a single user.

Agilent's Licensing, on a best effort basis, supports remote access via Windows Remote Desktop, VNC, Citrix, and Exceed. A floating license is required for remote access. This functionality is not supported with a node-locked license.

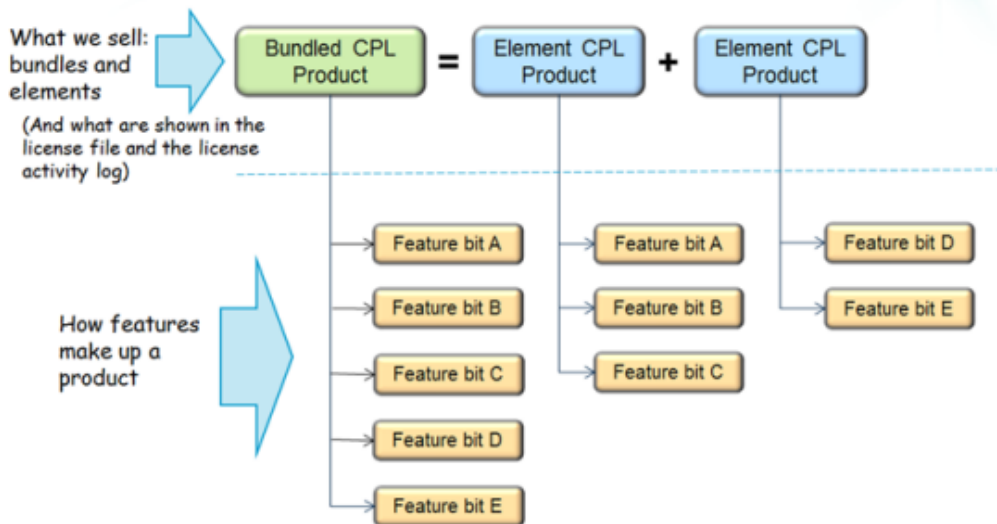
Example

A user starts an ADS session on Computer A. One core bundle with simulator license is checked out. If the same user tries to launch another ADS session using Remote Desktop, an additional license will be checked-out because the host has changed.

License Counting

Agilent EEsof licensing supports only counted licenses. The count associated with a license specifies the maximum concurrent use of that license. Each Agilent EEsof license comes in the form of a bundle or an element, which in turn contains one or more features.

Figure: Bundles and Elements Composition



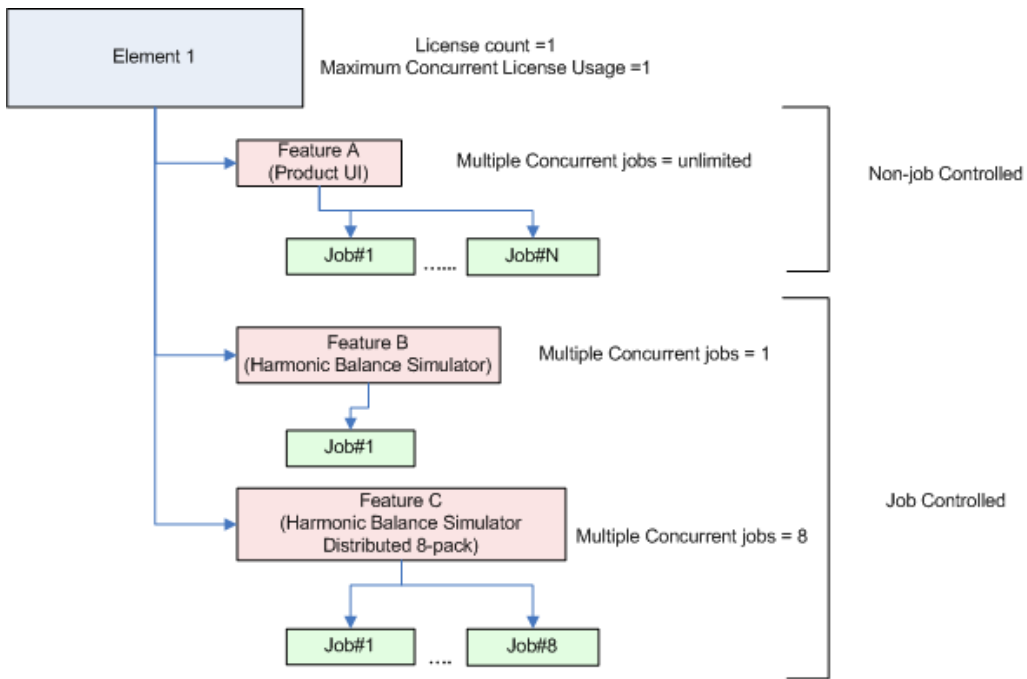
When a license count limit is reached, that license is no longer available for additional use.

Job Control

Some features contained in a bundle or an element, are job controlled. Job control limits the concurrent use of a feature. Simulators and models are typically job controlled features. Most job controlled features have a job-control limit of one—Harmonic Balance simulator, Momentum simulator, LTE wireless library are examples of this class—and some have greater than one limit to support parallel computing—Momentum turbo, 8-pack transient/convolution, quad-pack GoldenGate simulation are some of the examples of this type.

In Contrast to job controlled features, non job-controlled features entitle a single UDH to share one count of the license unlimited times. Environment GUI features are typically of this type.

Figure: Job Control of Features



License Version Compatibility

This section provides information on Agilent EEsof Licensing version Compatibility with various Product releases including FlexNet Version Compatibility information.

Contents

- [License Codeword Version Compatibility](#)
- [FlexNet Version Compatibility](#)

License Codeword Version Compatibility

Each Agilent software release comes with a base license codeword version requirement. The base license codeword version is the minimum number that enables a release to run. There is also an upper limit of the codeword version each software release enforces - currently this upper limit is set for additional two versions beyond the base version. The software cannot run if the codeword version exceeds that upper limit.

NOTE

When you mix in both the codeword versions compatible for a given product release version as well as the codeword versions exceeding the upper limit for that same product release version, that product release version would take longer time to obtain a license due to the additional requests made to FlexNet server until a compatible license version is found. To avoid such a license checkout performance degradation, we strongly recommend you to separate out compatible set of licenses from those exceeding the upper limit for a given product release version, and put the two sets onto separate license servers.

Following chart summarizes the license codeword versions compatible to each Agilent EEsof software releases.

ADS	2015.09	2015.01	2014.01	2013.06	2012.08	2011.10	2011.05	2011.01	2009 U1	2009	2008	2006 A
License Codeword Version	v3.2 , >=2015xx	v3.2 , >=2015xx	v3.1 , v3. >=2015xx	v3.0 , v3. 1, 2, >=2015xx	v3.0 , v3. 1, 2, >=2015xx	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.8 , v2. 9, v3.0	v2.8 , v2. 9, v3.0	v2.7 , v2. 8, v2.9	v2.6 , v2. 7, v2.8
Licens Codeword Version for	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1							

ADS	2015.09	2015.01	2014.01	2013.06	2012.08			2011.10	2011.05	2011.01		2009	2009	2008		2006
												U1				A
ADS Therm Analys (Gradi																
EMPro	2015.09	2015.01	2013.07		2012.09	2011.12	2011.07	2011.04	2011.02				2010.07	2009	2008.1	2008
License Codeword Version	v3.2 , >=2015xx	v3.2 , v3. >=2015xx	v3.1 , v3. >=2015xx		v3.0 , v3. 1, v3.2	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1				v2.8 , v2. 9, v3.0	v2.7 , v2. 8, v2.9	v2.6 , v2. 7, v2.8	v2.6 , v2. 7, v2.8
GoldenGate	2015.10	2015.01	2013.10		2012.10			2011.10	2011.02			4.4.	4.3.		4.2.	4.1.
	(5.0. x)	(4.9. x)	(4.8.0)		(4.7. x)			(4.6. x)	(4.5. x)			x	x		x	x
License Codeword Version	v3.2 , >=2015xx	v3.2 , v3. >=2015xx	v3.1 , v3. >=2015xx		v3.0 , v3. 1, v3.2			v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1			v2.8 , v2. 9, v3.0	v2.8 , v2. 9, v3.0		v2.6 , v2. 7, v2.8	v2.6 , v2. 7, v2.8
SystemVue	2015.01	2013.08	2013.01	2012.06				2011.10	2011.03	2010.07	2010.01	2009.08	2008.12			
License Codeword Version	v3.2 , >=2015xx	v3.1 , v3. >=2015xx	v3.0 , v3. 1, v3.2	v3.0 , v3. 1, v3.2				v2.9 , v3. 0, v3.1	v2.9 , v3. 0, v3.1	v2.8 , v2. 9, v3.0	v2.8 , v2. 9, v3.0	v2.8 , v2. 9, v3.0	v2.7 , v2. 8, v2.9			
Genesys			2014.03						2012.01		2010.05	2009.04	2008.07	2008.01	2007.0	
Licens Codew Versio for new Produc Struct i.e.			v3.1 , v3. 2, v3.3					v2.9 , v3. 0, v3.1			v2.8 , v2. 9, v3.0	v2.8 , v2. 9, v3.0				

ADS	2015.09	2015.01	2014.01	2013.06	2012.08	2011.10	2011.05	2011.01	2009 U1	2009	2008	2006 A	
W132> /BT or W2362 /ET													
License Codeword Version for old Product Structure, i.e. W14xxL, W15xxL, W16xxL		<u>v3.1</u>					<u>v2.8</u>		<u>v2.8</u>	<u>v2.8</u>	<u>v2.7</u>	<u>v2.7</u>	<u>v2.7</u>
		, v3.					, v2.		, v2.	, v2.	, v2.	, v2.	, v2.
		2 , v3.3					9, v3. 0, v3.1		9, v3.0	9, v3.0	8, v2.9	8, v2.9	8, v2.9
IC- CAP	2015.05	2014.04	2013.01				2012.01	2011.04	2010.08	2009 U1	2009	2008	
License Codeword Version	<u>v3.2</u>	<u>v3.1</u>	<u>v3.0</u>				<u>v2.9</u>	<u>v2.9</u>	<u>v2.8</u>	<u>v2.8</u>	<u>v2.8</u>	<u>v2.7</u>	
	, >=20152, xx	, v3. v3.3	, v3. 1, v3.2				, v3. 0, v3.1	, v3. 0, v3.1	, v2. 9, v3.0	, v2. 9, v3.0	, v2. 9, v3.0	, v2. 8, v2.9	
WaferPro Express	2015.01	2014.04											
License Codeword Version	<u>v3.2</u>	<u>v3.1</u>											
	, >=20152, xx	, v3. v3.3											
MBP	2015.05	2014.04	2013.01	2012.07									
License Codeword Version	<u>v3.2</u>	<u>v3.1</u>	<u>v3.0</u>	<u>v3.0</u>									
	, >=20152, xx	, v3. v3.3	, v3. 1, v3.2	, v3. 1, v3.2									
MQA	2015.0	2014.0	2013.0	2012.0									

<Product> <Version> → Product Release

License Server/Client Mismatch

Warning! The licensing software version running on your license server is not current. Running out-of-date licensing software can result in unpredictable and unreliable licensing behavior.

It is strongly advised that you upgrade your license server to the latest Agilent EEsof licensing software which can be obtained from the link below, or contact your CAD admin for further assistance.

[Agilent EEsof Licensing Software Downloads](#)

Version on server **27001@bewilder.soco.agilent.com** → Server with Software Mismatch

	Detected	Supported
lmgrd	11.9.1	11.9.1 (or later)
agileesofd	2012.08	2013.01 (or later)

Close

FlexNet Version Licensing Tools Version

Refer to [FlexNet Publisher's License Administration Guide](#) for further details.

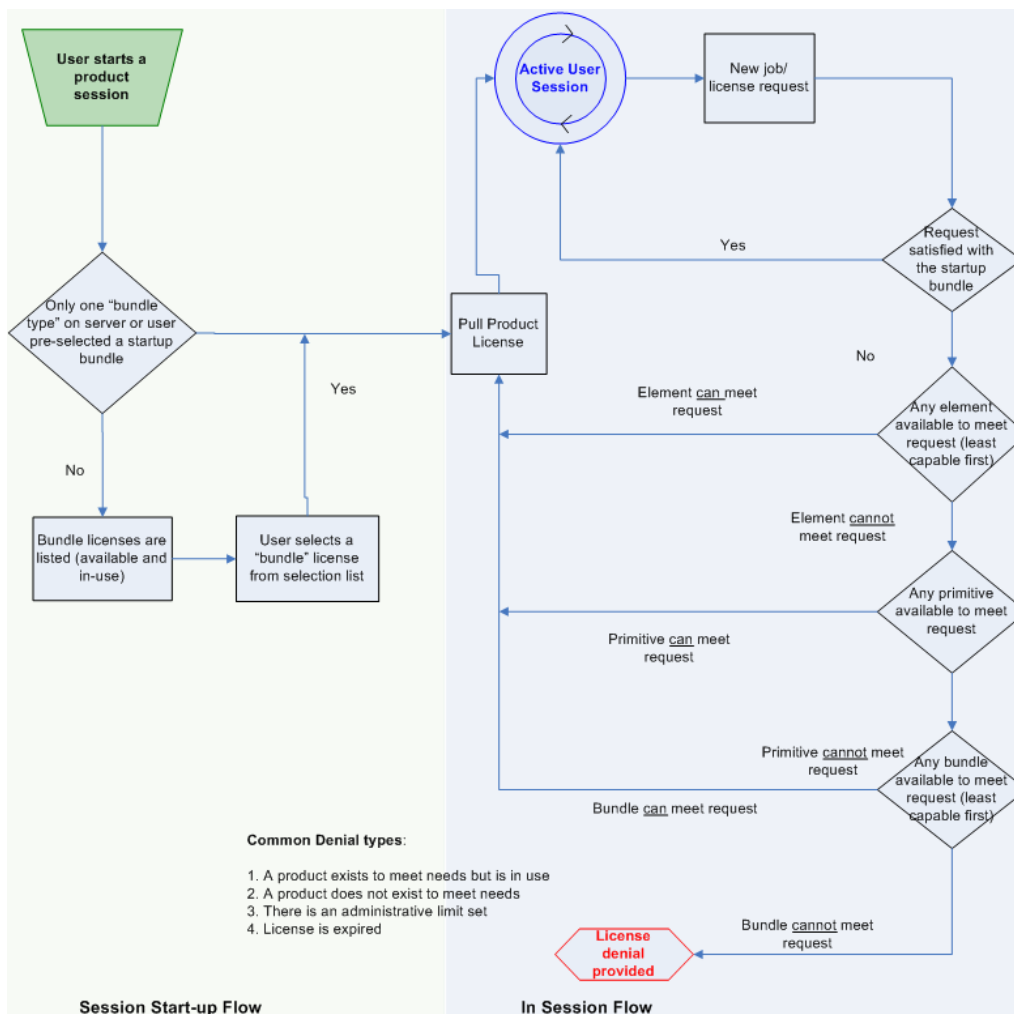
Licensing Behavior

This section outlines the Agilent EEsof licensing search behavior at the start-up of a product session, as well as during an active session.

NOTE

Licensing **Hot Swapping** is not supported by Agilent EEsof Licensing scheme.

Figure: EEsof Licensing Behavior



Session Start-up Flow

While initiating an Agilent EEsof product session, if only one type of a **bundle** license is available on the license server, it is checked out and the software session starts immediately. However, if there are multiple bundle types to choose from, the **Product Selector** window is displayed, which allows the user to choose the most appropriate license to start with. You can preselect a license as the default for future sessions. To do so, in the **Product Selector** dialog box, select the

license and check **Always try to start with this selection** option. Once checked, new start-up will automatically attempt to check-out the preselected license without displaying **Product Selector** in subsequent sessions. If the pre-selected license is denied, and more than one license is available to start the software, then **Product Selector** dialog box will be displayed once again.

For more details on **Product Selector**, refer to the [Product Selector](#) section.

NOTE

CAD administrators can assign a startup bundle for a user and/or suppress the **Product Selector** from appearing by using the following environment variables:

- <PRODUCT>_PRODSEL_AUTOSTART
- <PRODUCT>_PRODSEL_PREVIOUS

Refer to [License Environment Variables](#) section for more details.

Active or In-Session Flow

Once the start-up license is checked out, all subsequent license requests follow the logic depicted in the diagram above. In a nutshell, the start-up license is always attempted first; if fails, [Elements](#), Primitives, and Bundles are attempted in that order; also, within each group, the least capable is attempted before the more capable ones.

NOTE

FlexNet provides additional controls, such as EXCLUDE, MAXIMUM, for the CAD Administrators to limit the license usage. For details, refer to the [FlexNet Publisher's License Administration Guide](#).

Setting Up Licenses on Windows

This section describes how to set up a [node-locked license](#) or a [floating \(network\) license](#) on Windows.

NOTE

Both node-locked and floating licenses require [license server](#) to get installed and started. For a node-locked license, license server and the client machine are the same machine (that is, your local machine). For a floating license, these can be separate machines.

- [Node-locked License](#)
- [Floating \(Network\) License](#)

Setting Up Nodelocked License on Windows

On Windows, the [License Setup Wizard](#) offers the easiest way to set up your [node-locked license](#). We strongly recommend you to use the **License Setup Wizard**, especially when you have multiple Agilent EEsof products installed on one computer. For more information, refer to [Quick Install-Windows](#). This section describes how to set up a node-locked license manually, should you decide not to use the **License Setup Wizard**.

NOTE

Do not perform manual setup steps with the **License Setup Wizard**. Choose one method or the other. **License Setup Wizard** may not be able to replace what you set up manually due to Administrator Privilege differences.

The following instructions assume that you have already installed [Agilent EEsof Licensing Tools](#) in *C:\Program Files\Agilent\EEsof_License_Tools* folder. In case you have not yet installed the tools, run the Agilent EEsof Licensing Tools installer on the machine to which the license is tied to.

CAUTION

Make sure to save the license file on the same machine where you install the Agilent software.

License tied to a CPU ID

The following 3-step process shows how to manually set up a counted license that is tied to a [CPU ID](#).

Step 1: Start License Server Managers

Start the FlexNet license server managers (*lmgrd* and *agileesofd*) on the computer to which the license is tied as follows:

1. Open the MS-DOS command prompt and change directory to the following path: *C:\Program Files\Agilent\EEsof_License_Tools\bin*.

- Specify the full path and location of the license file and the license log file, respectively, by typing the following command:

```
lmgrd.exe -c <license file path> -l <license log file path>
```

where,

- <license file path> specifies one or more full path-names to the license file(s).
- <license log file path> is the full path-name to the debug log file.

NOTE

The spaces in path-names requires double quotes around the path-names.

Example

```
lmgrd.exe -c "C:\Program Files\Agilent\EEsof_License_Tools\licenses\license.lic" -l "C:\Users\Public\my_server_log.txt"
```

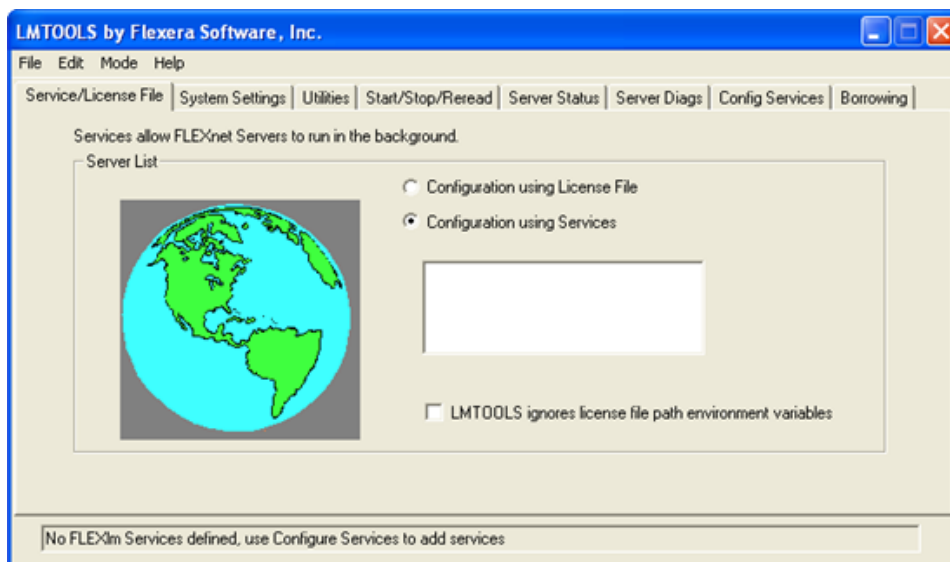
Step 2: Create Windows Service

To automate the restart of the license server managers upon PC reboot, configure a Windows Service as follows:

NOTE

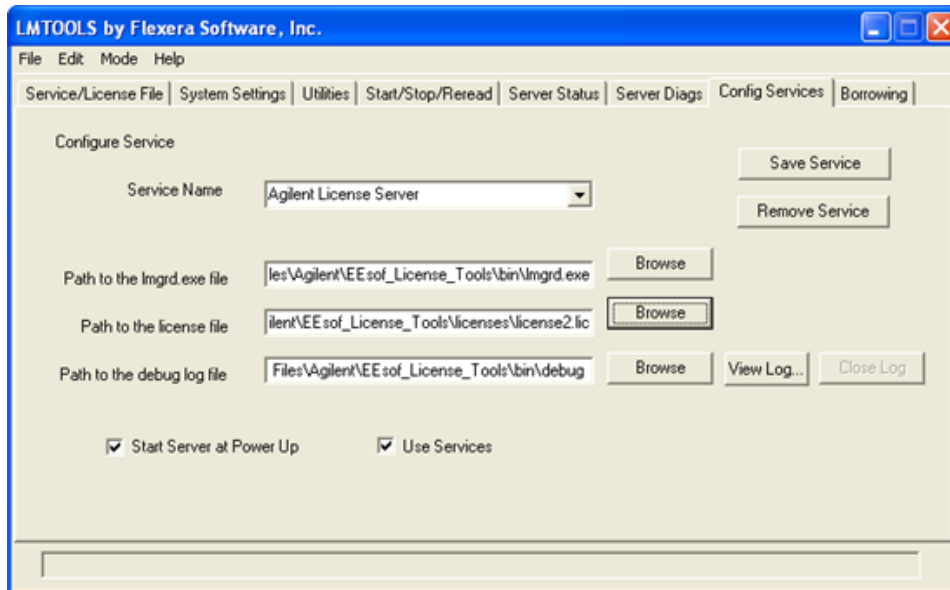
You must have Administrator Privileges to configure a Windows Service. The service will run under the Local System account.

- Run the **lmttools.exe** from *C:\Program Files\Agilent\EEsof_License_Tools\bin*. The **lmttools** utility window is displayed.
- In the **Service/License File** tab, select the **Configuration using Services** option.



- Click the **Config Services** tab and enter the following details:
 - Service Name:** Type the service name (for example, `EEsof EDA License Server`).
 - Path to the lmgrd.exe file:** Click **Browse** and specify the path to the `lmgrd.exe` file on the license server (for example, `C:\Program Files\Agilent\EEsof_License_Tools\bin\lmgrd.exe`).

- c. **Path to the license file:** Click **Browse** and specify the path to the license file on license server (for example, *C:\Program Files\Agilent\EEsof_License_Tools\licenses\license.lic*).
If you have multiple license files for serving multiple Agilent EEsof products, you should include them all.
 - d. **Path to the debug log file:** Click **Browse** and specify the path to the debug log file on license server (for example, *C:\Users\Public\my_server_log.txt*).
4. Select the **Use Services** option.
 5. Select the **Start Server at Power Up** option.
 6. Click **Save Service**. The following figure shows the configured services in the **lmtools** window.



7. To verify that the service is created, click the **Start/Stop/Reread** tab and observe that your service shows up in the **FlexNet license services installed on this computer** list.

NOTE

To verify if the license managers are running, click again on the **Config Services** tab later and click **View Log**. A log window appears that confirms whether *lmgrd* and *agileesofd* are up and running.

Step 3: Set Product Environment Variable

Set the environment variable `<PRODUCT>_LICENSE_FILE` to point the machine running the license server managers (*lmgrd* and *agileesofd*).

1. Select **Start > Control Panel > System**. Click **Advanced system settings**. The **System Properties** dialog box appears and the **Advanced** tab is selected by default).
2. Click **Environment Variables**.
3. In the **Environment Variables** dialog box, add the product specific environment variable `<PRODUCT>_LICENSE_FILE` as a new system variable. For example, for SystemVue, it is **SYSTEMVUE_LICENSE_FILE**, for ADS, it is **ADS_LICENSE_FILE**, for EMPro, it is **EMPRO_LICENSE_FILE** and so on. For details, refer to [License Environment Variables](#) section.

4. In the **New System Variable** dialog box, set the value to be the same as what you specified in the --c argument when you start *lmgrd*. To use the example illustrated in **Step 1**, second bullet, this value would be *C:\Program Files\Agilent\EEsof_License_Tools\licenses\license.lic*.
5. Repeat 3 and 4 for each Agilent EEsof product you have installed on your computer.

License tied to USB Dongle

The following 4-step process shows how to manually set up a counted license that is tied to a **USB dongle**.

NOTE

You can move a dongle between systems after performing this license setup process for each computer you intend to run Agilent EEsof product(s) using the dongle license(s). If multiple dongles are swapped from one computer to another, be sure to include all the licenses associated with those dongles during the setup process.

Step 1: Attach Dongle

Make sure that the dongle is securely attached to the USB port of your computer. Some systems may require up-to a few minutes to detect the dongle, therefore, make sure to keep sufficient time before the next step.

Step 2: Install USB Dongle Drivers

The USB Dongle drivers (**FlexNet ID Dongle Device Drivers**) need to be installed once on each computer that is intended to run Agilent EEsof product(s) with dongle license(s). The supported USB dongle is Wibu Key (aka FLEXid 10) dongle.

The USB dongle drivers can be found under the license installation tree. To install the drivers, run the **FLEXid_Dongle_Driver_Installer.exe** from *C:\Program Files\Agilent\EEsof_License_Tools\bin* (assuming default installation has been used). You may be required to restart your local machine after the installation is complete.

NOTE

If you currently do not have a Wibu Key dongle, contact Agilent EEsof Business Support.

Step 3: Start License Server Manager and Create Windows Service

Follow the steps 1 and 2 described in the **License tied to CPU ID** section.

Step 4: Set Product Environment Variable

Follow the step 3 described in the **License tied to CPU ID** section.

Setting Up Floating License on Windows

Setting up floating licenses on Windows is a two-step process where both server-side setup and client-side setup are needed.

Step 1: License Server Setup

Repeat the following steps for each **license server** you have.

- For licenses tied to a **CPU ID**, follow the steps 1 and 2 described in the **Setting up Node-locked License on Windows** section.
- For licenses tied to a USB Dongle, follow steps 1 through 3 described in the **Setting up Node-locked License on Windows** section.

Step 2: Client Setup

Once the license is configured successfully for all the license servers, configure each client computer to point to the network license server. **License Setup Wizard** offers the easiest method to get this done. Alternatively, you can perform this step manually by following step 3 of **Setting up Node-locked License on Windows** section. Make sure to specify the network license server in the format of `port@host.domain`.

Example

`27001@myServer.myCompany.com`

CAUTION

In case a license server is down or is running slow, it is recommended to remove it from the server list using the **License Setup Wizard** to avoid any performance degradation caused by the dead/slow servers.

Setting Up Licenses on Linux and Solaris

This section describes how to set up a node-locked license or a floating (network) license on Linux and Solaris.

NOTE

Both node-locked and floating licenses require [license server](#) to get installed and started. For a node-locked license, license server and the client machine are the same machine (that is, your local machine). For a floating license, these can be separate machines.

- [Node-locked License](#)
- [Floating \(Network\) License](#)

Setting Up Nodelocked License on Linux and Solaris

This section describes how to set up a node-locked license on Linux and Solaris.

NOTE

Agilent EEsof products no longer run on the Solaris platform; however we still support Solaris as the [license server](#) system.

The given instructions assume that you have already installed [Agilent EEsof Licensing Tools](#) either in the EEsof product installation tree, or in a dedicated location. The former happens automatically when you install Agilent EEsof product on the Linux platform; the latter happens when you separately download the Agilent EEsof Licensing Tools from Agilent download website and install the package to a dedicated location. In the former case, you can find all the licensing tools and binaries under `<PRODUCT_INSTALL_DIR>/Licensing/<license tools version>/linux_x86_[32|64]/bin` directory. In the latter case, you can find all the licensing tools and binaries in the `<LIC_INSTALL_DIR>/bin` directory. For convenience, `<LIC_PATH>` is used in the rest of this chapter to represent the directory where the licensing libraries and executables are located.

CAUTION

Make sure to save the license file on the same machine where you install the Agilent software.

License tied to CPU ID

The following 3-step process shows how to manually set up a counted license that is tied to a [CPU ID](#).

Step 1: Start License Server Managers (*lmgrd* and *agileesofd*)

Start the license server managers (*lmgrd* and *agileesofd*) on the machine to which the license is tied as follows:

1. Change the directory to the `<LIC_PATH>`
2. Run the following command to start `lmgrd`:


```
./lmgrd -c <license file path> -l <license log file path>
```

 where,

- <license file path> specifies one or more full path-names to the license file(s).
- <license log file path> is the full path-name to the debug log file.

Step 2: Automate FlexNet License Server Startup

To automate the License Server managers' startup upon system reboot, add something similar to the following sample script in the system boot services directory or */etc/rc.d/init.d*.

```
#!/bin/sh
#
# Sample FlexNet startup script for restarting EEsof License Server
#
### BEGIN INIT INFO
# Provides: eesof license server
# Required-Start: $network
# Required-Stop:
# Default-Start: 3 4 5
# Default-Stop:
# Description: Start EEsof License Server
### END INIT INFO
PATH=/bin:/usr/bin
export PATH
#
# Under the following example licensing invoking line, change /opt/ADS to the path
of your license installation directory
#
su licadmin -c "/opt/ADS/Licensing/2013.01/linux_x86_64/lmgrd -c /opt/ADS/Licenses
/license.lic -l /opt/ADS/Licenses/ads_server_log.txt"
echo "Starting Agilent EEsof FlexNet license daemon....."
sleep 5
```

NOTE

All the references to */opt/ADS/...* shown above should be replaced with the actual path of <LIC_PATH>.

Once you implement your version of the FlexNet startup script using the above sample, follow the steps below to complete the automation:

1. Change to the system boot services directory: */etc/rc.d/init.d*
2. Create a startup script in the system boot services directory: *EEsof_lmgrd_restart*
3. Insert your FlexNet startup script into this script.
4. Set the permissions for this script, as shown:

```
chmod 755 EEsof_lmgrd_restart
chown root EEsof_lmgrd_restart
chgrp sys EEsof_lmgrd_restart
```

5. For license servers, run the command: */sbin/chkconfig --add EEsof_lmgrd_restart*

Step 3: Set Product Environment Variable

Set the product specific environment variable `<PRODUCT>_LICENSE_FILE` to point to the machine running the license server managers (*lmgrd* and *agileesofd*). For example, for ADS, it is ***ADS_LICENSE_FILE***, for GoldenGate, it is ***GOLDENGATE_LICENSE_FILE*** and so on. For details, refer to [License Environment Variables](#) section.

This environment variable can be set in the user login startup file such as *.cshrc* (for C shell) or *.profile* (for Bourne shell) in the ***\$HOME*** directory. Alternatively, these variables can be set using command-line as well.

csh, tcsh, cshrc command for setting `<PRODUCT>_LICENSE_FILE`

```
setenv <PRODUCT>_LICENSE_FILE <license file pathname>
```

Example Product=ADS

```
setenv ADS_LICENSE_FILE $HOME/Agilent/Licenses/license.lic
```

ksh, bash command for setting `<PRODUCT>_LICENSE_FILE`

```
export <PRODUCT>_LICENSE_FILE=<license file pathname>
```

Example Product=GoldenGate

```
export GOLDENGATE_LICENSE_FILE=$HOME/Agilent/Licenses/license.lic
```

Repeat this step for each Agilent EEsof product you have installed on your Linux computer.

NOTE

To use multiple Agilent EEsof Products at the same time, setup the license by merging license files for each product and starting up the License Server Managers as described in [step 1](#).

License tied to USB Dongle

Dongles are only supported for the Linux platform; they are not supported on the Solaris platform. For the Linux platform, the following 4-step process shows how to manually set up a counted license tied to a USB dongle.

NOTE

You can move a dongle between systems after performing this license setup process for each computer you intend to run Agilent EEsof product(s) using the dongle license(s). If multiple dongles are swapped from one computer to another, make sure to include all the licenses associated with those dongles during the setup process.

Step 1: Attach Dongle

Make sure that the dongle is securely attached to the USB port of your computer. Some systems may require up-to a few minutes to detect the dongle, therefore, make sure to keep sufficient time before the next step.

NOTE

You can move a dongle between systems by placing a copy of its associated license file on each system and moving the USB dongle from one system to another. Each system must have the license (s) setup for use.

Step 2: Install USB Dongle Drivers

The USB Dongle drivers need to be installed once on each computer that is intended to run Agilent EEsof product(s) with dongle license(s). By default, the USB dongle drivers are bundled with the product installation files. They are available in the `dongle_sup` directory once you **untar** the installation image.

To install these drivers on your local machine, follow these steps with the appropriate drivers from the table below:

1. Disconnect the USB dongle from your local machine.
2. Change directory to `dongle_sup` under the directory you want to **untar** the installation image to.
3. Use the Red Hat Package Manager (RPM) to install the drivers. For example, to install 64-bit Flex-10 Wibu dongle driver, execute the following command:

```
rpm -i WkRt-Lin64-6.0.501-1.x86_64.rpm
```

The following table shows all available dongle drivers being packaged in the installation image.

Operating System	Device Manufacturer	FLEXID	Driver Installation File
Red Hat® Linux 32-bit	Aladdin Knowledge Systems	9	aksusbd-redhat-1.8.1-3.i386.rpm
Red Hat® Linux 32-bit	Wibu Systems AG	10	WkRt-Lin-6.0.501-1.i386.rpm
Red Hat® Linux 64-bit	Aladdin Knowledge Systems	9	aksusbd-redhat-1.14-3.i386.rpm
Red Hat® Linux 64-bit	Wibu Systems AG	10	WkRt-Lin64-6.0.501-1.x86_64.rpm
SUSE® Linux 32-bit	Aladdin Knowledge Systems	9	aksusbd-suse-1.8.1-3.i386.rpm
SUSE® Linux 32-bit	Wibu Systems AG	10	WkRt-Lin-6.0.501-1.i386.rpm
SUSE® Linux 64-bit	Aladdin Knowledge Systems	9	aksusbd-suse-1.14-3.i386.rpm
SUSE® Linux 64-bit	Wibu Systems AG	10	WkRt-Lin64-6.0.501-1.x86_64.rpm

4. Connect the USB dongle again to your local machine.
5. Open command prompt, change directory to `<LIC_PATH>`, and type these commands to check if the FlexNet ID of the USB dongle is correct.

```
lmutil lmhostid -flexid
```

Step 3: Start License Server Manager and Automate License Server Manager Restart

Follow the steps 1 and 2 described in [License tied to CPU ID](#) section.

Step 4: Set Product Environment Variable

Follow the step 3 described in [License tied to CPU ID](#) section.

Setting Up Floating License on Linux and Solaris

Setting up floating license on Linux or Solaris is a two-step process where both server-side setup and client-side setup are needed.

Step1: License Server Setup

Repeat the following steps for each [license server](#) you have.

- For licenses tied to a [CPU ID](#) , follow the steps 1 and 2 described in [Setting up Node-locked Licenses on Linux and Solaris](#) section.
- For licenses tied to a USB Dongle, follow steps 1 through 3 described in [Setting up Node-locked Licenses on Linux and Solaris](#) section.

Step 2: Client Setup

Once the license is configured successfully for all the license servers, configure each client computer to point to the network license server. **License Setup Wizard** offers the easiest method to get this done Alternatively, you can perform this step manually by following step 3 of [Setting up Node-locked License on Linux and Solaris](#) section. Make sure to specify the network license server in the format of `port@host.domain`.

Example

`27001@myServer.myCompany.com`

CAUTION

In case a license server is down or is running slow, it is recommended to remove it from the server list using the **License Setup Wizard** to avoid any performance degradation caused by the dead/slow servers.

Licensing Tools

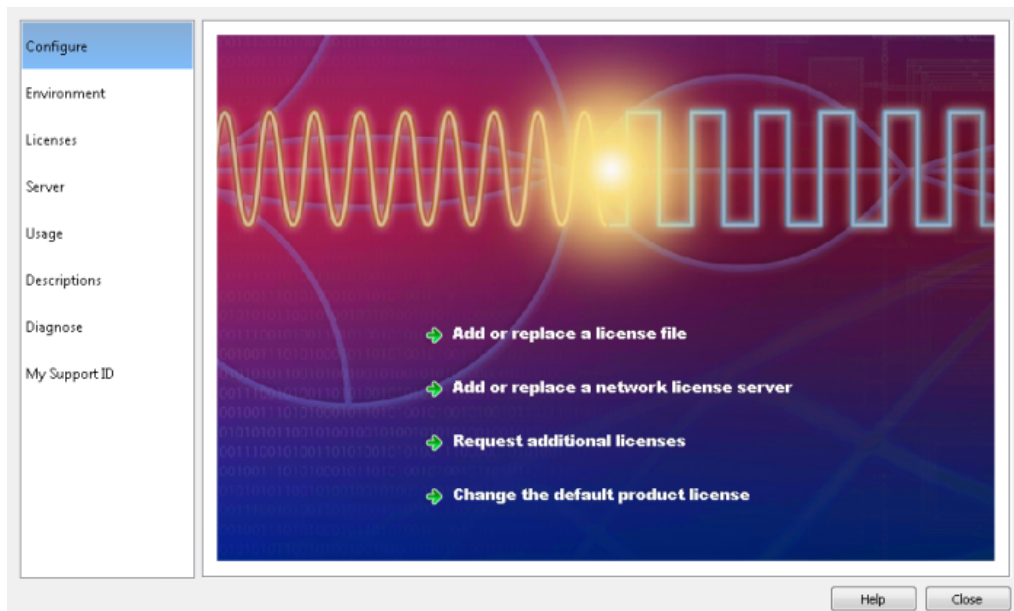
Agilent EEsof Licensing comes with several tools to help you manage EEsof licenses:

- **License Manager**
- **Product Selector**
- **License Setup Wizard** (Refer to Product GUI for more details on License Setup Wizard.)

License Manager

The **License Manager** has been introduced in all the Product releases starting October 2012. It is a one-stop shop for all licensing tools.

Figure: License Manager (Example: ADS)



It provides an interface to:

- Configure Licenses, such as add or replace a license file, add or replace a network license server, request for additional licenses, and change the default product startup license.
- Show Environment Variables related to licensing. Your computer host name, IP address, FlexNet version are some of the examples.
- Identify all the license features found in your license setup. Codeword version, number of features used, expiration date are presented as well.
- List all the license servers set up in your configuration.
- Provide information about bundles and elements that are available or in use. You can sort the usage by the codewords or by Users.
- Describe what capabilities are enabled by each license in your licensing pool.

- Perform a real-time and systematic license setup trouble-shooting and produce a detail report on the health of the configuration.
- Retrieve your Agilent Support ID to sign in to our technical support website for technical assistance.

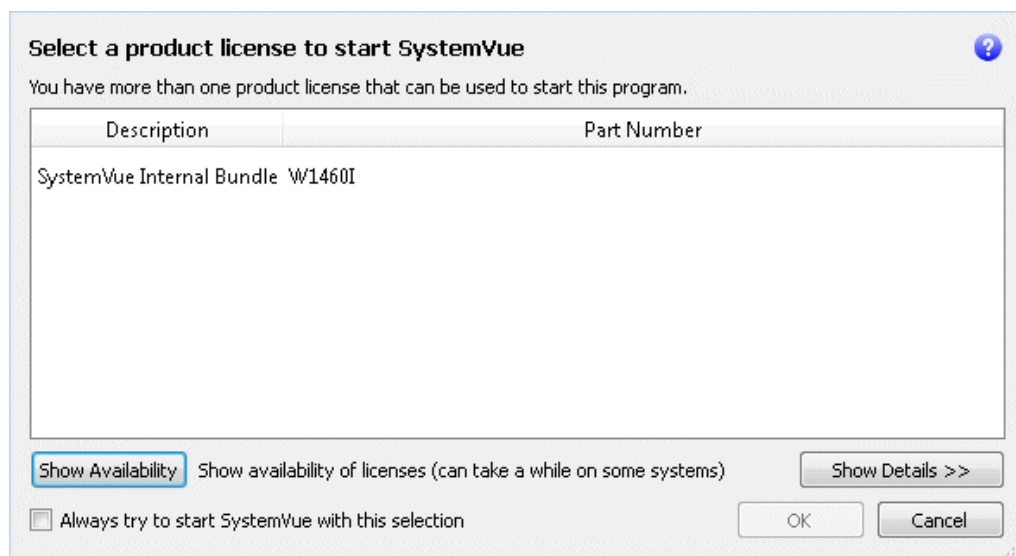
The **License Manager** can be accessed from the Product **Main Window** as follows:

Tools > License Manager.

Product Selector

The **Product Selector** displays a list of licenses that can be used to start an Agilent EEsof software. The **Product Selector** dialog box only appears if multiple licenses are available to start and Agilent EEsof software. It does not appear if there is only one license present, or if you have already preselected a startup license previously and that license is available. You can select a license from the list, as illustrated.

Figure: Product=SystemVue Product Selector for Example



Using Product Selector

You can use **Product Selector** to perform the following tasks:



- **View License Description and Part Number**
- **Check License Availability**
- **Select Product License**
- **Change Default Startup License**

View License Description and Part Number

The **Product Selector** window displays all the licenses that can start the software of interest like ADS.

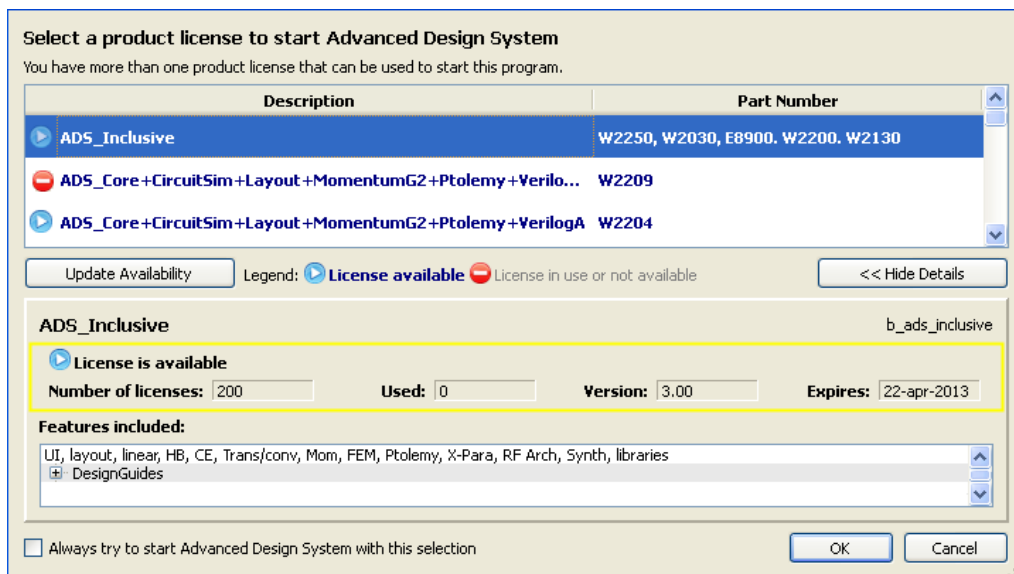
Check License Availability

To check if the selected license is available on the server, click **Show Availability**. The availability of each license is displayed with the following convention:

 denotes that the license is available for use, while  shows that the license is unavailable. Unavailable licenses cannot be selected.

To view the details of the available license, select the license and click **Show Details**. The bottom pane appears and displays the following information: number of licenses, licenses used, license version, and license expiry date, .., and so on.

Figure: Product=ADS Product Selector for Example



Select Product License

You can select an available license in **Product Selector** to start the software. Only one license can be selected at a given time.

You can assign pre-selected license as a default choice for future sessions. This license is used automatically whenever a new session invoked. To pre-select a startup license, select the pre-selected license and check **Always try to start with this selection**. Once checked, in subsequent sessions, software startup will automatically attempt to check out the pre-selected license without displaying **Product Selector**. If the pre-selected license is denied and more than one license are available to start the session, then the **Product Selector** dialog box will be displayed once again.

Change Default Startup License

You can change the default startup license by using the **License Manager**. Launch the **License Manager** tool and select **Change the default product license**. Upon which the **Product Selector** is displayed. Either uncheck the **Always try to start with this selection** option to reset the default to None, or simply select another license as the new default.

Advanced Licensing Configuration Options

This section provides information on various advanced licensing configuration options:

- [Accessing Licenses through a Firewall](#)
- [Creating Options File](#)
- [License Environment Variables](#)
- [Multiple Server Configurations](#)
- [Remote and Distributed Simulation Licenses](#)

Accessing Licenses through a Firewall

You can access (checkout) FlexNet licenses through a firewall (or router) as per your license agreement. To enable license checkout, configure your firewall to allow TCP/IP communication through the TCP ports used by the license manager daemon (*lmgrd*) or vendor daemon (*agileesofd*).

Step 1. Specify TCP Port Numbers

Specify a TCP port number for *lmgrd* on the `SERVER` line and for *agileesofd* on the `VENDOR` lines. Be sure to stop and restart the license servers after you modify the port numbers.

Example

```
SERVER myserver 00809AC7123F8 27000
VENDOR agileesofd c:\apps\flexnet\vendors\agileesofd port=1705
```

Step 2. Configure Firewall

Configure your firewall (or router) to allow TCP communication through the TCP ports you specified in Step 1.

Step 3. Set Environment Variable

At the client-side, set the `<PRODUCT>_LICENSE_FILE` environment variable to the port number assigned to the license server, as shown:

```
<PRODUCT>_LICENSE_FILE=27000@myserver.myDomain
```

After you set the environment variable, clients outside of the firewall will be able to access licenses from your server.

NOTE

Some clients may timeout before they can connect to a license server through a firewall setup on Windows. The default timeout period is 0.1 second. If you need a longer timeout period, you can modify FlexNet environment variable `FLEXLM_TIMEOUT` to a larger value. Refer to [FlexNet Publisher's License Administrator Guide](#) for details

Creating Options File

An **Options** file allows administrators to control the following licensing parameters of FlexNet:

- Restricts and/or reserves the use of features based on user, hostname, or display name.
- Controls the level of information logged about license usage.

NOTE

- You can create an **Options** file using any text editor.
- Ideally, you should keep this file in the same directory as your license file.

For details on how to create an Options file, refer to the [FlexNet Publisher's License Administration Guide](#).

License Environment Variables

This section describes the environment variables specific to Agilent EEsof licensing scheme. At most two locations are used to resolve these environment variables, and in the order shown below:

1. System Environment for the user
2. Unified License Configuration Location:

Operating System	Key Name
Windows XP/7	HKEY_CURRENT_USER\Software\Agilent\EEsof License Configuration
Unix	\$HOME/.eesoflic

Variable Name	Description
<PRODUCT>_LICENSE_FILE	<p>Specifies the list of license files/servers to search when a license is requested by a given Agilent EEsof Software. Each Agilent EEsof software has a dedicated variable to serve this purpose:</p> <ul style="list-style-type: none"> • ADS_LICENSE_FILE • ICCAP_LICENSE_FILE • EMPRO_LICENSE_FILE • GENESYS_LICENSE_FILE • SYSTEMVUE_LICENSE_FILE • GOLDENGATE_LICENSE_FILE

Variable Name	Description
	<ul style="list-style-type: none"> • AMA_LICENSE_FILE • MBP_LICENSE_FILE • MQA_LICENSE_FILE • WAFERPRO_LICENSE_FILE <p>It is automatically set by the License Setup Wizard. The license file path must not contain any special characters like , @ and semicolon(:) on Window or a colon(:) on Linux.</p> <p>These are used as separator characters.</p> <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>NOTE It is recommended to use the License Manager to set the <PRODUCT>_LICENSE_FILE variable. If the <PRODUCT>_LICENSE_FILE variable is set to a new license file (or if the contents of a license file are changed), then the license server managers (lmgrd and agileeosfd) must be restarted for the change to take effect. This will be done automatically by the License Manager. If the license server managers are not restarted, then the EEs of software may not be able to checkout a license. For information on starting the license server managers, refer to Setting Up Licenses on Windows or Setting Up Licenses on Linux and Solaris.</p> </div>
EESOF_INSTALL_SKIP_LICSETUP	<p>This environmental variable gives the CAD administrators the ability to turn off the License Setup Wizard invocation at the end of Agilent EEs of product installation process.</p> <p>Set this variable to on or 1 to turn off the wizard invocation.</p>
<PRODUCT>_PRODSEL_PREVIOUS	<p>Product Selector automatically records the name of the license selected to start the software session in this variable. This variable</p>

Variable Name	Description
	<p>can be used in conjunction with <PRODUCT>_PRODSEL_AUTOSTART variable to pre-select a license as the default startup license; when the pre-selected license is available at the startup of the next software session, the Product Selector dialog box does not get displayed.</p> <p>Each Agilent EEsof software has a dedicated variable to serve this purpose:</p> <ul style="list-style-type: none"> • ADS_PRODSEL_PREVIOUS • IC-CAP_PRODSEL_PREVIOUS • EMPro_PRODSEL_PREVIOUS • SystemVue_PRODSEL_PREVIOUS • Genesys_PRODSEL_PREVIOUS • GoldenGate_PRODSEL_PREVIOUS • AMA_PRODSEL_PREVIOUS • MBP_PRODSEL_PREVIOUS • MQA_PRODSEL_PREVIOUS
<PRODUCT>_PRODSEL_AUTOSTART	<p>It automatically records the state of the check-box "Always try to start with this selection."</p> <p>It is set to TRUE when check-box is checked. This variable can be used in conjunction with <PRODUCT>_PRODSEL_PREVIOUS variable to pre-select a license as the default startup license. When this variable is set to a value other than 0 or FALSE, the value recorded in <PRODUCT>_PRODSEL_PREVIOUS is used automatically when a new software session is started. In case, where there is only one license in the licensing pool qualified to start the new session, this variable has no effect; in all the other cases, if no <PRODUCT>_PRODSEL_PREVIOUS is specified or if the new session cannot be started with the specified license, the Production Selector dialog will be displayed.</p> <p>Each Agilent EEsof software has a dedicated variable to serve this purpose:</p>

Variable Name	Description
	<ul style="list-style-type: none"> • ADS_PRODSEL_AUTO • IC-CAP_PRODSEL_AUTO • EMPro_PROSEL_AUTO • SystemVue_PRODSEL_AUTO • Genesys_PRODSEL_AUTO • GoldenGate_PRODSEL_AUTO • AMA_PRODSEL_AUTO • MBP_PRODSEL_AUTO • MQA_PRODSEL_AUTO
AGILEESOFD_DEBUG_MODE	<p>Turns on the debug mode in vendor daemon by setting this variable to full.</p> <p>Since this variable is only read at server startup, you need to stop and restart the license server managers to allow this setting to take effect.</p> <p>Alternatively, you can turn on vendor daemon without having to stop and restart the license server managers. To do so, follow these steps:</p> <ol style="list-style-type: none"> 1. <code>cd <LIC_PATH></code> 2. <code>aglmutil -c @myServer.myDomain <cr></code> 3. <code>ads_schematic <cr></code> 4. <code>-vdump <cr></code>
HPEESOF_DEBUG_MODE	<p>Controls the client-side licensing debug mode. Any value other than OFF turns on the client-level debugging. Debug messages are written to <code>stderr</code> unless <code>AGLM_DEBUG_LOG</code> is set.</p> <p>This value should be set before you start the Agilent EEsof software of interest.</p>
AGLM_DEBUG_LOG	<p>Sets the name of the client-side licensing debug log file. This should be used in conjunction with <code>HPEESOF_DEBUG_MODE</code> variable.</p>
AGLMERR	<p>Suppresses licensing related error and warning messages. The value of this variable is a list of keywords. When any of the keywords appear in the contents of the</p>

Variable Name	Description
	licensing message, that message is suppressed i.e. that message is not displayed. For example, if a user wants to suppress the license expiration warning message that gets displayed at the software startup time everyday during the first 30-day period before the license is about to expire, include the keyword “expiring” as a value in this variable.

Multiple Server Configurations

Agilent EEsof licensing scheme supports all the popular server configurations supported by FlexNet. This includes the redundant servers as well as the multiple servers. Refer to the [FlexNet Publisher's License Administration Guide](#) for details.

Remote and Distributed Simulation Licenses

Agilent EEsof supports remote and distributed simulations for Circuit and Momentum Simulators. Remote simulation requires a floating license in the licensing pool; the distributed simulations, usually run remotely, requires special distributed licenses.

Remote Simulation Licenses

Where supported by the product, a floating simulation license is used to run a single simulation on a remote machine.

For more details on Remote Simulations for:

- ADS Circuit Remote Simulation, see [Circuit Remote Simulation](#)
- ADS Transient, Convolution Simulation, see [Transient and Convolution Simulation](#)
- ADS Momentum Remote Simulation, see [Using the Job Manager](#)
- GG Circuit Remote Simulation, see [Remote Simulation](#)

Distributed Simulation Licenses

Distributed simulation allows you to run multiple simulation jobs in parallel usually on multiple machines remotely. Simulation Manager is used to launch distributed simulations for Transient, Convolution, S-Parameters and Channel Simulators along with Batch Simulators in ADS and circuit Simulators in GoldenGate (GG). Job Manager is used to run distributed simulations for Momentum in ADS and GG.

Following types of Distributed Simulation licenses are offered:

- [Distributed Computing N-pack Simulation License](#)
- [Quad-pack Simulation License \(GoldenGate Only\)](#)

Distributed Computing N-pack Simulation License

Where supported, Agilent EEsof offers distributed N-pack (or Turbo) licenses to support a cost-effective method to accelerate simulation sweeps, where N is the number of concurrent parallel jobs supported (typically, N = 8). This is a reserve license up-front model in which simulation controller reserves simulation licenses up-front and only launches as many simulation jobs as granted.

A distributed N-pack license supports N parallel simulation jobs which perform a sweep of multiple parameters on a single circuit (like frequency, power, temperature, a variable, Monte Carlo, or corner analysis).

A standard simulation license is checked out first before an N-pack distributed license. The standard license acts as a controller. If you require more than N sweep points to be simulated, multiple count of N-pack licenses can be stacked to accommodate greater parallelism.

A distributed computing N-pack license is limited to the same simulation type (that is, Momentum, Transient, and so on).

A distributed computing N-pack license feature bits are bundled together and cannot be shared between users or different circuits.

In case of a Distributed Computing N-pack Simulation license, the N-pack license is checked out at the initiation of a distributed simulation (if available) and is released only once the sweep jobs are complete. As jobs are completed the license is still reserved to complete additional jobs, if needed on the existing sweep. This guarantees that the sweep is complete and also guarantees a reasonable rate of job acceleration. For example, you have only one count of 8-pack distributed license in the licensing pool and you want to distribute the sweep to 12 jobs. In this case, 8 jobs will start in parallel and as each job finishes, the remaining jobs (4) will start automatically using the same 8-pack license.

In case, when no N-pack license is available, Momentum uses the standard license obtained and run simulations using all the sweeps are completed sequentially. On the other hand, in case of transient, convolution and channel simulator, multiple jobs are launched as per request and each job pulls the standard simulation license.

For more details on distributed simulation on:

- ADS Circuit Distributed Simulation, see [Distributed Simulation Using Simulation Manager](#)
- ADS EM Simulation, see [Using the Job Manager](#)

Quad-pack Simulation License (GoldenGate Only)

Quad-pack Simulation Licenses support 4 simultaneous simulation jobs of multiple types (transient, harmonic balance, circuit envelope tied to the license) which can be used to sweep multiple parameters of one or more circuits. The Quad-pack Simulation licenses do not require standard simulation licenses to be pulled first. This is a first-come, first serve licensing model, with all jobs launched at the same time having equal opportunity to have the licenses granted.

In contrast to Distributed Computing N-pack Simulation license, when a user requests for, say, 20 jobs, but only two counts of the quad-pack licenses are available. In that case, all 20 jobs are launched at once, but only 8 are granted with the quad-pack licenses and able to perform the simulations; the other 12 jobs wait until quad-pack license is released by the first 8 jobs, and each will start its simulation once granted with the license.

For more details on Distributed Simulations in case of GG, refer to [GG Circuit Distributed Simulation](#)

License Retry

All simulations launched remotely have the license auto-retry set for one-hour by default. Within that period, the previously failed license checkout request is attempted again in every 2 minutes, until either the license is granted, or the retry period times out.

Licensing FAQs

The following table lists the Frequently Asked Questions (FAQs) on Licensing.

Question	Answer
<p>Where can I find different licensing tools such as <code>lmgrd</code>, <code>lmutil</code>, etc.?</p>	<p>Windows: <code>C:\Program Files\Agilent\EEsof_License_Tools\bin</code> folder</p> <p>Linux (32-bit): <code><PRODUCT_INSTALL_DIR>/Licensing /<license tools version>/linux_x86_32/</code> directory</p> <p>Linux (64-bit): <code><PRODUCT_INSTALL_DIR>/Licensing /<license tools version>/linux_x86_32_64/</code> directory</p> <p>On the Linux and Solaris platform, if you choose to install licensing tools to a dedicated location outside of any Agilent EEsof product installation tree, then you can find all the licensing tools and binaries in <code><LIC_INSTALL_DIR>/bin/</code> directory.</p>
<p>Where should I copy my license file?</p>	<p>On the Windows platform, Agilent recommends you to copy your license file to <code>C:\Program Files\Agilent\License\EEsof</code> folder.</p>
<p>Can I change the port number in my license file?</p>	<p>You should not modify your local node-locked license file. If you do want to use a specific port number for all of your license files, then you need to modify them all to have the same port number, in order for the License Setup Wizard to recognize them and process them properly. Refer to Accessing Licenses through a Firewall section in the Advanced Licensing Configuration chapter.</p>
<p>Can I access the license activity log file?</p>	<p>For the local node-locked license set up by the License Setup Wizard, you can find out the location of the license activity log by either of the following method:</p> <ol style="list-style-type: none"> 1. Start the License Setup Wizard and click Details. Click on the link shown for the license log file opens the log file in a text editor. 2. Start the License Manager, and go to the “Environment” tab. The entry for <code>AGILEESOFD_SERVER_LOGFILE</code> contains the clickable link that opens up the log file in a text editor.

Question	Answer
	For the floating license set up on the network license server, consult your CAD Admin to find out where the log file is located.
I am using valid Combo License but I still get "License Denial" message.	The license checkout denials could be recorded in the license activity log when you use a combo license file that contains both version 2.8 and 3.0 licenses. You can ignore these messages as they don't have any impact on using the product.
Why do I need to set environment variable <PRODUCT>_LICENSE_FILE?	<PRODUCT>_LICENSE_FILE is used by each Agilent EEsof product to identify the licensing configuration for that product. Refer to License Environment Variables section in the Advanced Licensing Configuration chapter for more details.
Why am I getting "License Denial" message?	Occasionally you may receive a license denial message unexpectedly. When that happens, you should check to see if there are any "run-away" EEsof processes that need to be killed, because those run-away eesof processes might be holding on to the license.
Why should I turn off FLEXLM_TIMEOUT?	FLEXLM_TIMEOUT has uncertain effect on the License Setup Wizard, and should be turned off or set to a reasonable value. A timeout equivalent to less than a minute-during the License Setup Wizard session is recommended.
Do I need to explicitly specify TCP/IP port?	Not specifying the TCP/IP port for the license server during license setup may lead to unexpected behavior and /or license checkout failure on the Windows platform. Therefore, it is highly recommended to always explicitly specify the TCP/IP port associated with each license server.
What license version do I need?	Check Product Release Notes first. Refer to License Version to Software Release Compatibility Table for details on license version to use.
What do I do to clean my existing license setup?	

Question	Answer
	<p>When you suspect that your license setup is outdated or behaving weirdly, a quick way to clean up your existing license setup and force a reload and recreation of the license servers and service on the Windows platform is the following:</p> <ul style="list-style-type: none"> • Start the License Setup Wizard. • Choose "I want to add or replace my license file" and click "Clear" followed by "Next" to clear your previous license file setup. • Choose "I want to add or replace my license server" and click "Clear" followed by "Next" to clear your previous license server setup. <p>If your existing license setup is still not cleaned up completely, run <code>lmtools</code> located in the <code><LIC_PATH></code> folder to clear the Windows Service related to Agilent EEs of licensing: "EEs of EDA License Server", which can be found in the "Start/Stop/Reread" tab.</p>
<p>How do I determine if I am using the latest agileesofd vendor daemon?</p>	<p>To determine the <i>agileesofd</i> vendor daemon, you must check the following:</p> <ul style="list-style-type: none"> • The startup information for the version string (<code>agileesofd</code>)EESOF 2014.01 (XXX), shown in the example below. • Compare the date stamp with what is installed. It must be dated 01/28/2014. <pre data-bbox="833 1460 1430 2101"> 12:04:48 (lmgrd) ----- 12:04:48 (lmgrd) Please Note: 12:04:48 (lmgrd) 12:04:48 (lmgrd) This log is intended for debug purposes only. 12:04:48 (lmgrd) In order to capture accurate license 12:04:48 (lmgrd) usage data into an organized repository, 12:04:48 (lmgrd) please enable report logging. Use Flexera Software, Inc.'s 12:04:48 (lmgrd) software license administration solution, 12:04:48 (lmgrd) FLEXnet Manager, </pre>

Question	Answer
	<pre> to readily gain visibility 12:04:48 (lmgrd) into license usage data and to create 12:04:48 (lmgrd) insightful reports on critical information like 12:04:48 (lmgrd) license availability and usage. FLEXnet Manager 12:04:48 (lmgrd) can be fully automated to run these reports on 12:04:48 (lmgrd) schedule and can be used to track license 12:04:48 (lmgrd) servers and usage across a heterogeneous 12:04:48 (lmgrd) network of servers including Windows NT, Linux 12:04:48 (lmgrd) and UNIX. Contact Flexera Software, Inc. at 12:04:48 (lmgrd) www. flexerasoftware.com for more details on how to 12:04:48 (lmgrd) obtain an evaluation copy of FLEXnet Manager 12:04:48 (lmgrd) for your enterprise. 12:04:48 (lmgrd) 12:04:48 (lmgrd) ----- ----- 12:04:48 (lmgrd) 12:04:48 (lmgrd) 12:04:48 (lmgrd) pid 15608 12:04:48 (lmgrd) Detecting other license server manager (lmgrd) processes... 12:04:49 (lmgrd) Done rereading 12:04:49 (lmgrd) FLEXnet Licensing (v11.9.1.0 build 89952 x64_n6) started on CNU2022LK9 (IBM PC) (10/12 /2012) 12:04:49 (lmgrd) Copyright (c) 1988- 2010 Flexera Software, Inc. All Rights Reserved. 12:04:49 (lmgrd) US Patents 5,390,297 and 5,671,412. 12:04:49 (lmgrd) World Wide Web: http://www.flexerasoftware.com 12:04:49 (lmgrd) License file(s): b_core_elements.lic 12:04:49 (lmgrd) lmgrd tcp-port 27000 12:04:49 (lmgrd) Starting vendor daemons ... 12:04:49 (lmgrd) Started agileesofd </pre>

Question	Answer
	<pre>(pid 14976) 12:04:49 (agileesofd) Server started on CNU2022LK9 for: b_iccap_inclusive 12:04:49 (agileesofd) pjc_b_iccap_inclusive e_iccap_core_env pjc_e_iccap_core_env 12:04:49 (agileesofd) e_iccap_analysis e_iccap_bsim3 pjc_e_iccap_bsim4 12:04:49 (agileesofd) pjc_e_iccap_analysis pjc_e_iccap_bsim3 12:04:49 (agileesofd) EXTERNAL FILTERS are OFF 12:04:49 (lmgrd) agileesofd using TCP-port 57901 12:04:49 (agileesofd) EESOF 2013 (01/25/2013) 12:04:50 (agileesofd) TCP_NODELAY NOT enabled</pre>
<p>How do I Find Flex ID of Hardware Key?</p>	<p>You need the nodelocked ID of your hardware security key to get licenses from Agilent EEsof. It might also be useful to access this information when you place a call to Technical Support. There are two ways to check this:</p> <ul style="list-style-type: none"> • Before you install the hardware key on your PC, you can read the ID directly from the key. • If you have installed the hardware key on your PC, and have also already installed your licenses and the FLEXnet software, enter the following command to check the nodelocked ID: <pre>lmutil lmhostid -flexid</pre> • Start Tools > License Manager and Select Environment Tab

Troubleshooting License Problems

This section discusses a troubleshooting flow to diagnose license failures. The most important thing to understand is that licensing works with a server machine and client machine. A third party tool, FlexNet Publisher by Flexera software makes it possible. The server machine (that runs **license server**) offers licenses held in a pool. The client machine (that runs the Agilent EEsof application) communicates with and requests licenses from the license server machine. It should be noted that the license server and the license client can be the same machine.

License problems can be categorized into the following:

- One or more problems with the license server setup
- One or more problems with the license client setup
- A combination of first two types
- A communication problem between license server and license client

Prerequisites

FlexNet utilities, run from the command line, are a fundamental tool used in the license troubleshooting process. Further, many of the FlexNet utility commands make reference to the license server machine (and this is regardless if the license server is a local machine or remote one). Given this, to perform the troubleshooting process, one needs to know:

- [Where to access the FlexNet utilities for command line use](#)
- [How to reference license server](#)
- [Product specific license settings](#)

Where to Access the FlexNet utilities for Command Line Use

Windows

1. Invoke **License Manager** from Agilent EEsof Software's Main Windows' Tools menu.
2. Select the **Environment** tab.
3. In the **Environment** tab, look for the variable, `HP_EESOF_LIC_DIR`. Make note of this path (for example, `C:\Program Files\agilent\EEsof_License_Tools`)
4. Open up a command prompt window
5. Change directories as follows:
6. `cd <Path from step 3>\bin`

Linux

1. Assuming that you have installed 2012.xx version of an Agilent EEsof product onto `<PRODUCT_INSTALL_DIR>`, you can find FlexNet utilities under `<PRODUCT_INSTALL_DIR>/Licensing/2012.08/linux_x86[32|64]/bin` directory.

2. Alternatively, if you have installed Agilent EEsof Licensing package onto a dedicated directory, <LIC_INSTALL_DIR>, you can find FlexNet utilities under <LIC_INSTALL_DIR>/bin directory.

Solaris

Assuming that you have installed Agilent EEsof Licensing package onto a dedicated directory, <LIC_INSTALL_DIR>, you can find FlexNet utilities under <LIC_INSTALL_DIR>/bin directory.

How to Reference License Server

For debugging use of FlexNet with Agilent EEsof Products, port@license-server-machine is typically used. This is a generic representation for the license server.

- Port is a TCP port number that is optionally assigned for the license server.
- License-server-name is the name of the license server machine. This can be a remote machine or local machine. However, it should be noted that this can also be the IP address of the machine.

Examples

@MyLocalPC

27001@RemoteLicenseServer.myDomain

@192.168.0.102

Product specific license settings

The steps that follow will reference <Product>_LICENSE_FILE. <Product>_LICENSE_FILE can be one of the following depending upon which Agilent EEsof product you are using:

- ADS_LICENSE_FILE
- EMPRO_LICENSE_FILE
- ICCAP_LICENSE_FILE
- GENESYS_LICENSE_FILE
- SYSTEMVUE_LICENSE_FILE
- GOLDENGATE_LICENSE_FILE
- MBP_LICENSE_FILE
- MQA_LICENSE_FILE
- AMA_LICENSE_FILE
- WAFERPRO_LICENSE_FILE

Troubleshooting Flow and Process

This section covers the suggested troubleshooting flow as follows:

Step 1: Verify license server machine is running, FlexNet daemon versions, license server communications

Step 2: Verify client is able to access license server machine

Step 3: Verify pool and accessibility of available licenses

NOTE

- If your Agilent-EEsof application is unable to start, start with [Step 1](#).
- If your Agilent-EEsof application is able to run but you have a license problem during application runtime, start with [Step 3](#).

Step 1: Verify license server machine is running, FlexNet daemon versions, license server communications

Run the following FlexNet lmutility:

```
lmutil lmstat -c <port>@<license-server-machine>
```

```
C:\Program Files\Agilent\EEsof_License_Tools\bin>lmutil lmstat -c 27001@jujube
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Mon 4/16/2012 15:44

[Detecting lmgrd processes...]
License server status: 27001@jujube
  License file(s) on jujube: /hfs/d1/local/ADS2011_10/EEsof_License_Tools/linux_x86/./master.lic:
    jujube: license server UP (MASTER) v11.9
Vendor daemon status (on jujube):
agileesofd: UP v11.9
```

In the above, a status query is performed on license server 27001@jujube (jujube is the name of the license server machine). The following information is obtained:

1. License file for server is located on the license server machine at `/hfs/d1/local/ADS2011_10/EEsof_License_Tools/master.lic`.
2. `lmgrd` is UP meaning that it is running.
3. `agileesofd` is UP meaning that it is running.
4. Version number for both `lmgrd` and `agileesofd` is `v11.9.1` each.

As part of initial troubleshooting, you must ensure that the path to license file is correct, `lmgrd` and `agileesofd` are both UP, the version numbers for `lmgrd` and `agileesofd` are both `v11.9.1` for each. To use this troubleshooting flow, go through the list of conditions in the given sequence. Jump to different subsequent conditions as guided.

CONDITION 1: Running `lmutil lmstat -c <port>@<license-server>` displays something as following:

```
C:\Documents and Settings\mrubin>lmutil lmstat -c @myserver
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 21:11

[Detecting lmgrd processes...]
Error getting status: License server machine is down or not responding. (-96,7:1
1001 "Comm. error")
C:\Documents and Settings\mrubin>
```

If the path to license file is not shown and information about `lmgrd` and `agileesofd` is not given, then one or more of the following possible problems may exist. If the above message is not seen or presented differently or license path is given with `lmgrd` and `agileesofd` being UP, move to the next [condition](#).

1. USB dongle not plugged in: If license server uses a license file that is tied to a USB dongle, check to see if dongle is plugged in appropriately.

2. USB dongle driver not installed: If license server uses a license file that is tied to a USB dongle, check that the dongle driver is installed by running FlexNet command: `lmutil lmhostid --flexid`. If "missing dongle driver" is reported, follow the [Dongle License Installation](#) instruction to install it.
3. Wrong License Server Name is used in command: Ensure that you have the correct name of the license server. Depending upon your DNS configuration in place, it may be necessary to provide fully qualified domain name (for example, `@computername.companydomainname.com`) or the IP Address of the license server machine (for example, `@130.29.167.44`). If using a local license server, the local machine name may be replaced with `localhost` (for example, `lmutil lmstat -c @localhost`).
4. Network connectivity (Remote license servers): Ping remote license server to ensure it is on the network. Not getting a ping respond could mean the machine is physically disconnected from the network or turned off.
5. License server not running: There could be several causes for this. However, before investigating further, for Windows machine, it is advisable to restart the machine where **License Setup Wizard** was run.
 - a. Check process on the license server for presence of *lmgrd* and *agileesofd*. If any of them is missing, follow the [Install License Server](#) instructions to start the same.
 - b. Examine license file and ensure CPU ID in the installed license file matches with CPU ID of the machine. Run the FlexNet command: `lmutil lmhostid` to acquire the CPU ID of machine so that the CPU ID in the license file can be matched up with the CPU ID of the machine.
6. Only one *agileesofd* process may be running at a time on a license server machine. Check processes on the machine for presence of already running instance of *agileesofd*. This could be due to multiple services (Windows or Linux) previously set up on the same machine. If this applies, explore the services on the machine to ensure that only one exists for Agilent EEs of software.
 - a. Running on unsupported platform: License servers are supported on the supported operating systems for our products. Ensure that the license server is on a [supported operating system](#). It must be noted that Virtual machines (for example, VMWare, Windows virtual machine) and Linux distributions other than Red Hat Enterprise Linux or Novell SuSE are not supported (for example, Ubuntu, Fedora).
 - b. License Path problem:
 - a. On Windows: Run **License Setup Wizard**: Verify if the wizard show that the correct license file is being pointed to.
 - b. On Linux: Check if license file specified in *lmgrd* invocation been moved or deleted or the correct file is used in *lmgrd* command.
 - c. FlexNet communications blocked: See [special section](#) on dealing with blocked FlexNet communications.

CONDITION 2: Running `lmutil lmstat -c <port>@<license-server>` reports *lmgrd* being UP, *agileesofd* being UP but does not report that both *lmgrd* and *agileesofd* versions are v11.9.1, as follows:

```
C:\Program Files\Agilent\EEs of License Tools\bin>lmutil lmstat -c 27001@maple.wlv.agilent.com
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 21:33

[Detecting lmgrd processes...]
License server status: 27001@maple
  License file(s) on maple: /hfs/d1/local/ADS2009U1/licenses/bin/linux_x86_64/../../../../master.lic:
    maple: license server UP (MASTER) v11.6
Vendor daemon status (on maple):
agileesofd: UP v11.6
C:\Program Files\Agilent\EEs of License Tools\bin>
```

If `lmgrd` and `agileesofd` are reported UP with version `v11.9.1`, move to the next **condition**.

The FlexNet `lmgrd` and `agileesofd` daemons have to be upgraded to FlexNet `v11.9.1` for both `lmgrd` and `agileesofd` on the license server machine. The bits can be acquired at <http://www.keysight.com/find/eesof-flexnet-downloads>.

CONDITION 3: Running `lmutil lmstat -c <port>@<license-server>` reports `lmgrd` being UP, `agileesofd` being UP, `lmgrd` and `agileesofd` versions are `v11.9.1`, but reports the wrong path and/or license file:

1. Determine the correct location of the license file.
2. On Windows: Re-run **License Setup Wizard** to re-configure for correct license file.
On Linux: Stop and re-start license server with correct license file.

Step 2: Verify client is able to access license server

At this stage in the debugging process, the license server is presumed to be working correctly and focus is shifted to the client side. To remind again, both server and client can be the same machine. These are the items to check on the license client machine:

1. **License Path specified for the Agilent EEsof application**
2. **Remote server only: Communications problem from client machine to remote server**

License Path specified for the Agilent EEsof application

The Agilent EEsof software application obtains licenses from the license server machines that are specified in the license path. Each Agilent EEsof application has a dedicated variable for holding the license path information. This variable is written to the Windows registry on Windows or entered into one's environment on Linux. It takes on the format of `<PRODUCT>_LICENSE_FILE`.

NOTE

`<PRODUCT>_LICENSE_FILE` can be one of the following depending upon which product you are using:

- `ADS_LICENSE_FILE`
- `EMPRO_LICENSE_FILE`
- `ICCAP_LICENSE_FILE`
- `GENESYS_LICENSE_FILE`
- `SYSTEMVUE_LICENSE_FILE`
- `GOLDENGATE_LICENSE_FILE`
- `MBP_LICENSE_FILE`
- `MQA_LICENSE_FILE`
- `AMA_LICENSE_FILE`
- `WAFERPRO_LICENSE_FILE`

On Windows

1. Invoke **License Manager** from Agilent EEsof Software, **Main Window > Tools** menu.
2. Select the **Environment** tab.
3. In the **Environment** tab, look for the variable with the name resembling `<PRODUCT>_LICENSE_FILE` format.

Verify if `<PRODUCT>_LICENSE_FILE` either points to the correct remote license server (for example, `port@license-server-machine` or `@license-server-machine`), or the path is correct pointing to the correct local license file on the machine? If not, run **License Setup Wizard** to correct this.

NOTE

`<PRODUCT>_LICENSE_FILE` is not explicitly defined in the **Windows System Properties**. This was done for earlier versions of the software but should not be done with the current version. Doing so will interfere with **License Setup Wizard**.

On Linux

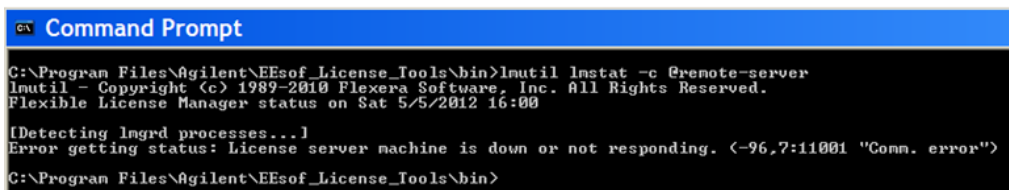
Find out what `<PRODUCT>_LICENSE_FILE` is set to by `echo $ADS_LICENSE_FILE` command for example.

Verify if `<PRODUCT>_LICENSE_FILE` either points to the correct remote license server (for example, `port@license-server-machine` or `@license-server-machine`), or the path is correct pointing to the correct local license file on the machine. On Linux, special care is needed because this variable may have been declared somewhere in the environment startup files such as `.adsrc`, `.eesofpvmprofile`, or `.flexlmrc`.

Communications problem from client machine to remote server (Remote Server Only)

This only needs to be checked if license server is a remote machine or if **lmutil lmstat** was not previously run as described in the section [Verify license server machine is running, FlexNet daemon versions, license server communications](#).

Run `lmutil lmstat -c port@license-server-machine` or `lmutil lmstat -c @license-server-machine`. If the following output is seen,



```

C:\Program Files\Agilent\EEsof_License_Tools\bin>lmutil lmstat -c @remote-server
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 16:00
[Detecting lmgrd processes...]
Error getting status: License server machine is down or not responding. (-96,7:11001 "Conn. error")
C:\Program Files\Agilent\EEsof_License_Tools\bin>

```

AND it has been verified that the remote license server is running, then FlexNet communications are blocked: See [special section](#) on dealing with blocked FLEXnet communications.

Step 3: Verify pool and accessibility of available licenses

In this stage of the troubleshooting flow, the license server is presumed to be running with correct **lmgrd** and **agileesofd** version `v11.9`, and the License path has been correctly set. However, license denials are preventing the access to software or access to features of the software. The following items are checked in this section:

1. [The pool of available licenses has the correct features, license version number, expiration date.](#)

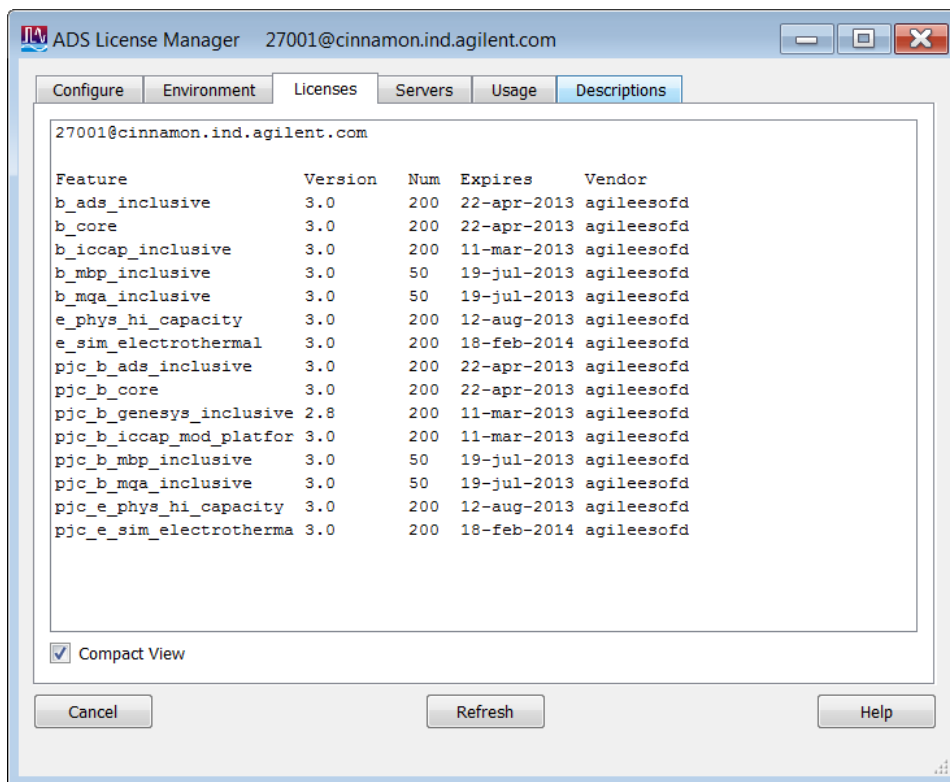
2. **Multiple end user license server only:** The pool of available licenses has licenses available (for example, someone else might have checked out a license that is needed).
3. **Remote server only:** License file does not have floating licenses.

The pool of available licenses has the correct features, license version number, expiration date

This section checks the licenses in the license pool for correct features, correct license version number, and unexpired licenses. Wrong features, wrong license versions, and expired licenses can result in license denials.

On Windows

1. Invoke **License Manager** from Agilent EEsof Software **Main Windows > Tools** menu.
2. Select the **Licenses** tab. Example below has Product=ADS.



On Linux

Execute FlexNet utility to get to this information:

```
lmutil lmstat -c <port>@<license-server> -i
```

```

jujube 30: lmutil lmstat -c 27001@trident.scs -i
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 16:31

NOTE: lmstat -i does not give information from the server,
      but only reads the license file. For this reason,
      lmstat -a is recommended instead.

Feature                Version    # licenses    Expires        Vendor
-----                -
b_ads_inclusive        3.0       200           13-sep-2013   agileesofd
b_empro_fem_fdt_comp   3.0       200           13-sep-2013   agileesofd
b_genesys_inclusive    3.0       200           13-sep-2013   agileesofd
b_gg_inclusive         3.0       200           13-sep-2013   agileesofd
b_iccap_inclusive      3.0       100           13-sep-2013   agileesofd
b_sv_internal          3.0       100           13-sep-2013   agileesofd
e_sim_cct_accel        3.0       100           24-sep-2013   agileesofd
gg_qpdkv              3.0       200           13-sep-2013   agileesofd
p_sim_momentum        3.0       200           21-oct-2013   agileesofd
pjc_b_ads_inclusive    3.0       200           13-sep-2013   agileesofd
pjc_b_empro_fem_fdt_co 3.0       200           13-sep-2013   agileesofd
pjc_b_genesys_inclusive 3.0       200           13-sep-2013   agileesofd
pjc_b_gg_inclusive     3.0       200           13-sep-2013   agileesofd
pjc_b_iccap_inclusive  3.0       100           13-sep-2013   agileesofd
pjc_b_sv_internal      3.0       100           13-sep-2013   agileesofd
pjc_e_sim_cct_accel    3.0       100           24-sep-2013   agileesofd
pjc_p_sim_momentum    3.0       200           21-oct-2013   agileesofd
jujube 31:

```

In the above platform illustrations (Windows, Linux), a query is performed on license servers 27001@cinnamon.ind and 27001@trident.scs, respectively (where, cinnamon.ind and trident.scs are the name of the license server machines). The following information is obtained:

1. A listing of the features the license pool offers.
2. All features are version 3.0 licenses.
3. There are 200 licenses for each feature.
4. Licenses expire on September 13, 2012.
5. Features are those belonging to agileesofd vendor daemon.

Given the above, the following items should be confirmed:

1.
 - a. **Features** - Do the features appearing agree with what you believe are the features you own?
 - b. **Version number** - Ensure that the version number of software you are running or trying to run correlates to its associated license version number:

Software Version	License Version
2012 and 2 versions back	3.0
2011 and 2 versions back	2.9
2010 and 2 versions back	2.8

For example, if you are trying to run ADS 2012.08 on your machine but point to a license server with v2.9 codewords, a license denial will occur.

- c. **Number of Licenses** - Are the number of licenses 1 or greater for needed licenses?
- d. **License Expiration** - Are the licenses current and not expired?

Multiple end user license server only: The license pool has licenses available (for example, someone else has checked out a license that is needed)

This section covers problems where licenses needed are in the license pool but are in use by other users. Skip this, if you are the only user of the license server.

On Windows

1. Invoke **License Manager** from Agilent EEsof Software **Main Windows > Tools** menu.
2. Select the **Usage** tab. Example below has Product=ADS.

Licenses / Users	Available	In Use
b_ads_inclusive	188	12
b_core	196	4
b_iccap_inclusive	200	0
b_mbp_inclusive	50	0
b_mqa_inclusive	50	0
e_phys_hi_capacity	200	0
e_sim_electrothermal	200	0
pjc_b_ads_inclusive	194	6
pjc_b_core	200	0
pjc_b_genesys_inclusive	200	0
pjc_b_iccap_mod_platform	200	0
pjc_b_mbp_inclusive	50	0
pjc_b_mqa_inclusive	50	0
pjc_e_phys_hi_capacity	200	0
pjc_e_sim_electrothermal	200	0

On Linux

Execute FlexNet utility to get to this information:

```
lmutil lmstat -c <port>@<license-server> -a
```

```

jujube 32: lnmutil lnmstat -c 27001@trident.scs -a
lnmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 16:32

License server status: 27001@trident.scs.agilent.com
License file(s) on trident.scs.agilent.com: /a/new/scs/shinner/di/build/flexlm/Licenses/trident.scs.agilent.com/agil
eesofd.lic:

trident.scs.agilent.com: license server UP (MASTER) v11.9

Vendor daemon status (on trident.scs.agilent.com):

agileesofd: UP v11.9
Feature usage info:

Users of b_ads_inclusive: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of b_empro_fem_fdt_comp: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of b_genesys_inclusive: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of b_gg_inclusive: <Total of 200 licenses issued; Total of 9 licenses in use>
  "b_gg_inclusive" v3.0, vendor: agileesofd
  floating license
    amnoury linbic 130.27.97.191:0 (v3.0) (trident.scs.agilent.com/27001 2136), start Wed 5/2 3:39
    hafisher uuuzela 130.29.167.47:0 (v2.9) (trident.scs.agilent.com/27001 15460), start Tue 4/24 17:14
    dargollo argollo-xp64 2CE9495XCT (v2.9) (trident.scs.agilent.com/27001 1806), start Mon 4/23 12:35
    dovebber linbic 130.27.97.191:0 (v3.0) (trident.scs.agilent.com/27001 1907), start Mon 4/23 12:35
    Fkusidlo lnx10 127.0.0.2:0 (v2.9) (trident.scs.agilent.com/27001 5468), start Thu 5/3 22:34
    must mike 141.121.51.16:0 (v3.0) (trident.scs.agilent.com/27001 14242), start Wed 5/2 15:44
    nuereney piranha 127.0.0.1:18.0 (v2.8) (trident.scs.agilent.com/27001 7950), start Thu 5/3 10:17
    pranshar brushfire 130.27.97.83:0 (v3.0) (trident.scs.agilent.com/27001 11814), start Fri 5/4 14:26
    sankasar trident 130.27.97.72:0 (v3.0) (trident.scs.agilent.com/27001 3911), start Wed 4/25 13:22

Users of b_iccap_inclusive: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of b_sv_internal: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of e_sin_cct_accel: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of gg_qpdkv: <Total of 200 licenses issued; Total of 1 license in use>
  "gg_qpdkv" v3.0, vendor: agileesofd
  floating license
    kedhawan cashew 146.223.124.242:0 (v2.9) (trident.scs.agilent.com/27001 4184), start Mon 4/30 23:02

Users of p_sin_momentun: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of pjc_b_ads_inclusive: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of pjc_b_empro_fem_fdt_comp: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of pjc_b_genesys_inclusive: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of pjc_b_gg_inclusive: <Total of 200 licenses issued; Total of 0 licenses in use>
Users of pjc_b_iccap_inclusive: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of pjc_b_sv_internal: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of pjc_e_sin_cct_accel: <Total of 100 licenses issued; Total of 0 licenses in use>
Users of pjc_p_sin_momentun: <Total of 200 licenses issued; Total of 0 licenses in use>

```

In the above platform dependent illustrations (Windows, Linux), a query is performed on license server a query is performed on license servers 27001@cinnamon.ind and 27001@trident.scs, respectively (where, cinnamon.ind and trident.scs are the name of the license server machines). The following information is obtained:

1. A listing of the features in the pool.
2. The users using the features.
3. For each feature, the total number of licenses per feature versus how many licenses in use.

Given the above, a determination should be made if the license that is needed is in use by other users.

Remote server only: License server has one or more node-locked licenses

In some instances, the license server is working, the client setup is correct, licenses are available for use (not in use by others), licenses version show correct version and are not expired, but a license still cannot be checked out. This can be caused by accidental installation of a node-locked license file tied to the CPU ID of the machine intended to be the network (floating) license server. To verify this, the following steps are performed:

1. Perform procedure described in **MULTIPLE END USER LICENSE SERVER ONLY: The pool of available licenses has licenses available** step to get a listing of licenses on server.

Licenses / Users	Available	In Use
b_ads_inclusive	200	0
b_empro_fem_fdttd_comp	200	0
b_genesys_inclusive	200	0
b_gg_inclusive	191	9
b_iccap_inclusive	100	0
b_sv_internal	100	0
e_sim_cct_accel	100	0
gg_qpdkv	199	1
p_sim_momentum	200	0
pjc_b_ads_inclusive	200	0
pjc_b_empro_fem_fdttd_comp	200	0
pjc_b_genesys_inclusive	200	0
pjc_b_gg_inclusive	200	0
pjc_b_iccap_inclusive	100	0
pjc_b_sv_internal	100	0
pjc_e_sim_cct_accel	100	0
pjc_p_sim_momentum	200	0

- Alternatively, run the FlexNet Utility, `lmutil lmdiag -c @license-server <feature-name to be checked>`

```
C:\Program Files\Agilent\EEsof_License_Tools\bin>lmutil lmdiag -c 27001@trident.scs b_ads_inclusive
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
FLEXnet diagnostics on Sat 5/5/2012 23:08

-----
License file: 27001@trident.scs
-----
"b_ads_inclusive" v3.0, vendor: agilesofd
License server: trident.scs.agilent.com
floating license starts: 1-Jan-1990, expires: 13-Sep-2013

This license can be checked out
-----
C:\Program Files\Agilent\EEsof_License_Tools\bin>
```

In case of node-locked licenses, you will see in the last line, "This license cannot be checked out". In the example above, it shows `b_ads_inclusive` can be checked out, inferring a correct network license file has been installed.

FlexNet Communications Problems

NOTE

This section should not be consulted unless it has been ascertained that the license server, local or remote, is running.

FlexNet communications can be blocked and/or interfered with by third party programs. This section addresses how to resolve these issues. FlexNet communication blockage and/or interference is most typically caused due to firewalls, and less often, with antivirus software, which is covered here. However, it can also be caused from VPN tunnel programs and /or other third party programs. Blockage/interference from those programs is beyond the scope of this.

Since, firewall and antivirus software is a typical cause for FlexNet communication problems, this should be investigated first. The quickest way to make this determination is to temporarily disable firewall and antivirus software.

NOTE

Ensure that disabling any security software (for example, firewall, antivirus) is done in such a manner that it does not cause harm to your system. Agilent cannot be held responsible for the harm caused. It is also recommended that you work with local IT support professional.

The test is performed by methodically running `lmutil lmstat -c @license-server` across different permutations of disabling firewall and antivirus software. When `lmstat` reports license path, `lmgrd` and `agilesofd` vendor daemons UP after a firewall or antivirus disablement. This is a positive test result. `lmstat` result shown when no communications blockage:

```
C:\Program Files\Agilent\EEsof_License_Tools\bin>lmutil lstat -c 27001@trident.scs
lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
Flexible License Manager status on Sat 5/5/2012 23:43

[Detecting lmgrd processes...]
License server status: 27001@trident.scs.agilent.com
License file(s) on trident.scs.agilent.com: /a/new/scs/shinner/d1/build/flexla/Licenses/trident.scs.agilent.com/agil
eesofd.lic:
trident.scs.agilent.com: license server UP (MASTER) v11.9
Vendor daemon status (on trident.scs.agilent.com):
agileesofd: UP v11.9
```

Below is an example test matrix. It is recommended to start with Firewall disabling first.

	Client Firewall	Server Firewall	Client Antivirus	Server Antivirus
Test 1	off	on	on	on
Test 2	on	off	on	on
Test 3	off	off	on	on
Test 4	off	off	off	on
Test 5	off	off	off	off

If both firewall and antivirus, on server and client machines, are simultaneously disabled (in other words, all security software on license client and server turned off) and `lmstat` does not give a positive result, then some third party software might be causing the issue. Request your IT professional to check the same.

If after running the above tests, an interfering firewall and/or antivirus is determined; exceptions must be made into these tools so that the FlexNet software functions properly. The steps to do this are covered here. However, due to the wide variation in firewall and antivirus user interfaces and use models, only generic instructions are provided.

1. Edit the current license file on license server machine. A port number should be added for both the license manager daemon `lmgrd` and the `agileesofd` vendor daemon. These are shown below.

```
SERVER this_host B8AC6F80C09D 27005
VENDOR agileesofd PORT=5346
#
INCREMENT b_hb_layout_momentum agileesofd 2.9 31-mar-2013 1
VENDOR_STRING&hellip;..
```

Stop and re-start license server so that these changes can take effect.

2. Firewall and Antivirus exclusions:

- a. Firewall: Specify TCP port numbers 27005 and 5346 to be allowed through firewall for both License server and License client machines

- b. Firewall and/or Antivirus: Configure following executables as exclusions:

C:\Program Files\Agilent\EEsof_License_Tools\bin\agileesofd.exe

C:\Program Files\agilent\EEsof_License_Files\bin\lmgrd.exe