



## MOSEK Installation Guide

*Release 8.1.0.24*

MOSEK ApS

2017



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## INTRODUCTION

This guide describes how to install the **MOSEK** Optimization Suite.

In general **MOSEK** Optimization Suite must be installed on any computer where **MOSEK** is used and this is called a *client installation*. In addition if a *floating license* is employed then a license token server must be set up, either on the client computer or on another computer. Note that trial licenses and academic licenses are NOT floating licenses.



## CONTACT INFORMATION

|                 |                              |  |
|-----------------|------------------------------|--|
| Phone           | +45 7174 9373                |  |
| Website         | mosek.com                    |  |
| Email           |                              |  |
|                 | sales@mosek.com              | Sales, pricing, and licensing                |
|                 | support@mosek.com            | Technical support, questions and bug reports |
|                 | info@mosek.com               | Everything else.                             |
| Mailing Address |                              |  |
|                 | MOSEK ApS                    |  |
|                 | Fruebjergvej 3               |  |
|                 | Symbion Science Park, Box 16 |  |
|                 | 2100 Copenhagen O            |  |
|                 | Denmark                      |  |

You can get in touch with **MOSEK** using popular social media as well:

|                     |   |
|---------------------|---|
| <b>Blogger</b>      | <a href="http://blog.mosek.com/">http://blog.mosek.com/</a>   |
| <b>Google Group</b> | <a href="https://groups.google.com/forum/#!forum/mosek">https://groups.google.com/forum/#!forum/mosek</a> |
| <b>Twitter</b>      | <a href="https://twitter.com/mosektw">https://twitter.com/mosektw</a>                                     |
| <b>Google+</b>      | <a href="https://plus.google.com/+Mosek/posts">https://plus.google.com/+Mosek/posts</a>                   |
| <b>Linkedin</b>     | <a href="https://www.linkedin.com/company/mosek-aps">https://www.linkedin.com/company/mosek-aps</a>       |

In particular **Twitter** is used for news, updates and release announcements.





## LICENSE AGREEMENT

Before using the **MOSEK** software, please read the license agreement available in the distribution at <MSKHOME>/mosek/8/mosek-eula.pdf or on the **MOSEK** website <https://mosek.com/sales/license-agreement>.

**MOSEK** uses some third-party open-source libraries. Their license details follows.

### *zlib*

**MOSEK** includes the *zlib* library obtained from the *zlib* website. The license agreement for *zlib* is shown in Listing 3.1.

Listing 3.1: *zlib* license.

```
zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.7, May 2nd, 2012

Copyright (C) 1995-2012 Jean-loup Gailly and Mark Adler

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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
```

### *fplib*

**MOSEK** includes the floating point formatting library developed by David M. Gay obtained from the *netlib* website. The license agreement for *fplib* is shown in Listing 3.2.

Listing 3.2: *fplib* license.

```
/*
*
```

```
* 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.  
*  
*****/
```

## INSTALLATION

### 4.1 Downloading and setting up

#### 4.1.1 Anaconda Python setup

If **MOSEK** is only used from Python, then it is recommended to employ the Anaconda distribution of Python and the **MOSEK** Anaconda package. Particularly, on Windows this simplifies the installation process. The Anaconda distribution of Python is available at <https://www.continuum.io/downloads>.

After installing the Anaconda Python Distribution please visit <https://anaconda.org/MOSEK/mosek> for **MOSEK** specific installation instructions.

#### 4.1.2 General setup

##### Linux

1. Download the Linux 64bit x86 **MOSEK** Optimization Suite distribution from <https://mosek.com/resources/downloads/> and unpack it into a chosen directory.

2. Optionally add the path

```
<MSKHOME>/mosek/8/tools/platform/linux64x86/bin
```

to the OS variable PATH, where <MSKHOME> is the directory where **MOSEK** was installed.

##### Mac OS

1. Download the MAC OS 64bit x86 **MOSEK** Optimization Suite distribution from <https://mosek.com/resources/downloads/> and unpack it into a chosen directory.

2. Run the command

```
python <MSKHOME>/mosek/8/tools/platform/os64x86/bin/install.py
```

where <MSKHOME> is the directory where **MOSEK** was installed. This will set up the appropriate shared objects required when using **MOSEK**.

3. Optionally add the path

```
<MSKHOME>/mosek/8/tools/platform/os64x86/bin
```

to the OS variable PATH.

## Windows, MSI installer

1. Make the right choice between the 32bit and 64bit versions. For instance if you plan to use **MOSEK** with 32bit Python or MATLAB the 32bit version of **MOSEK** should be selected. In general it is recommend to use the 64bit version though.
2. Download the Windows 32bit x86 or Windows 64bit x86 **MOSEK** Optimization Suite MSI installer from <https://mosek.com/resources/downloads/>.
3. Run the installer to complete the installation.
4. Optionally add the path

`<MSKHOME>\mosek\8\tools\platform\<PLATFORM>\bin`

to the OS variable PATH, where `<MSKHOME>` is the directory where **MOSEK** was installed and `<PLATFORM>` is win64x86 or win32x86 depending on the version of **MOSEK** installed.

## Windows, Manual installation

1. Make the right choice between the 32bit and 64bit versions. For instance if you plan to use **MOSEK** with 32bit Python or MATLAB the 32bit version of **MOSEK** should be selected. In general it is recommend to use the 64bit version though.
2. Download the Windows 32bit x86 or Windows 64bit x86 **MOSEK** Optimization Suite distribution from <https://mosek.com/resources/downloads/> and unpack it into a chosen directory.
3. Optionally add the path

`<MSKHOME>\mosek\8\tools\platform\<PLATFORM>\bin`

to the OS variable PATH, where `<MSKHOME>` is the directory where **MOSEK** was installed and `<PLATFORM>` is win64x86 or win32x86 depending on the version of **MOSEK** installed.

## 4.2 Setting up the License

### Token server setup

If you are using a floating license with a token server then follow the instructions in the [Licensing Guide](#). This step is NOT required for trial and personal academic licenses in particular.

### Client setup

**MOSEK** requires a valid license in order to be used. In practice the license is contained in a file called

```
mosek.lic
```

On Windows save the license file to

```
%USERPROFILE%\mosek\mosek.lic
```

On all Unix like operating systems including Mac OS save the license file to

```
$HOME/mosek/mosek.lic
```

If the folder `mosek` in the home directory does not exists, then it should be created. The license can be tested with the program `msktestlic`. For further information about the license system, and other non-standard ways of setting up the license, please consult the [License Guide](#).

## 4.3 Finishing up

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**Important:**

- See the [Licensing Guide](#) if you need more advanced help setting up the license.
  - For most languages and interfaces some additional steps are required. Please follow the instructions in the relevant interface documentation available from <https://mosek.com/resources/doc>.
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