

Fluent Products Installation Guide

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certified
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Revision Information

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Chapter 1: Installation on Unix/Linux Operating Systems

This chapter explains the steps necessary to install and configure our products for various UNIX/Linux platforms. For a complete list of software products, hardware platforms, operating systems, and current hardware requirements, check the Fluent User Services Center website at www.fluentusers.com.

Access FAQs and Installation/Systems Support at www.fluent.com/support/installation/.

A typical release and recommended order of installing the software includes:

1. Product installation
2. Documentation installation.
3. Product configuration.
4. Installation of associated third-party software.
5. License installation and configuration (Refer to the *License Installation Guide for FLUENT*).

Throughout the rest of this document:

path refers to the directory where you have chosen to place the release.

arch refers to the platform architecture specific to your hardware and operating system. A list of platform architectures is shown in *Table 1.1, "Installable Platforms (will vary between products)"*.

/cdrom refers to the directory where your CD-ROM is mounted.

1.1. Mounting the CD-ROM

Fluent CD-ROMs are recorded using the ISO-9660 Rock Ridge format. This format supports long file names. If your CD-ROM drive is not mounted or does not support this format, you may have to remount the device. Refer to your man pages on mount commands or for sample mount commands, please refer to the Fluent FAQ, Mounting the CD-ROM, at www.fluent.com/support/installation/unixfaqs/.

1.2. Product Installation

The list of supported platforms will vary between software products. Use this table as a guide to determine the correct platform architecture to install for your product. The product platform that you choose to install will include the platform architecture within the name of the installer file.

Table 1.1 Installable Platforms (will vary between products)

Platform	Processor	Op System	Precision	platform architecture
HP	Itanium	HP-UX	64-bit	hpux11_ia64
HP	PA-RISC	HP-UX	32-bit	hpux11
HP	PA-RISC	HP-UX	64-bit	hpux11_64
HP	Alpha	Tru64 Unix	64-bit	alpha
IBM	Power 4/5	AIX 5	32-bit	aix51
IBM	Power 4/5	AIX 5	64-bit	aix51_64
Linux	IA-32 / Athlon	Red Hat EL, SLES	32-bit	lnx86
Linux	Itanium	Red Hat, SuSE	64-bit	lnia64
Linux	Opteron	SuSE	64-bit	lnamd64
SGI	MIPS4	IRIX 6.5	32-bit	irix65_mips4
SGI	MIPS4	IRIX 6.5	32-bit	irix65_mips4_64
Sun	Ultra	Solaris	32-bit	ultra
Sun	Ultra	Solaris	64-bit	ultra_64

The installer will provide a selection list of supported platforms for each software product. You will be able to specify which platform(s) to install and the installation location. You should install all ANSYS, Inc. products in the same directory. The installation requires write permissions in this directory. A `Fluent.Inc` directory will be created under this location.

Installation program names vary between software products. Run the appropriate installer that is provided on the CD.

1. `cd /cdrom`
2. Install the software:
 - `Product_install_platform_version.sh`

If the product CD contains this installer, enter:

```
sh Product_install_platform_version.sh
```

- fluent_all

If the product CD contains this installer, enter:

```
fluent_install
```

- cd_install

If the product CD contains this installer, enter:

```
sh cd_install.sh
```

1.3. Product Configuration

1.3.1. Configure Your Environment for FLUENT Software

In order to run our software, you need to add `path/Fluent.Inc/bin` to your search path. You can do this in the C shell and its derivatives by entering:

```
set path = (path/Fluent.Inc/bin $path)
```

or in the Bourne, Korn shell, or bash by entering:

```
PATH=path/Fluent.Inc/bin:$PATH
export PATH
```

We recommend adding these statements to your `$HOME/.cshrc` (C shell), `$HOME/.profile` (Bourne/Korn shell), or `$HOME/.bashrc` (.bash shell) file for regular use.

1.3.2. FlowLab Configuration

To maintain a good working environment in a cluster of networked computers, it is recommended that a `FLOWLAB.ini` file be created for each user before using the FlowLab software. `FLOWLAB.ini` should contain three variables that point to the location of template files included with the software and the user's work directory:

```
FLOWLAB_TEMPLATE_DIR <InstallArea>/flowlabv.v/templates
FLOWLAB_WORK_DIR <HOME>/<TemporaryWorkArea>
FLOWLAB_SAVE_DIR <HOME>/<SaveWorkArea>
```

where:

`v.v` is the software version
<HOME> is each user's working directory
<InstallArea> is the path to the installation location of the FlowLab software
<TemporaryWorkArea> is a directory in which FlowLab creates files while the session is running
<SaveWorkArea> is a directory for persistent storage of session

Each variable must be placed on a separate line in the `FLOWLAB.ini` file.

When FlowLab starts, it will search for `FLOWLAB.ini` in:

1. HOME – if a user's HOME environment variable is set.

If `FLOWLAB.ini` cannot be located, the FlowLab software program will prompt the user for the location of the templates and a FlowLab working directory. This information will be stored in the `FLOWLAB.ini` file which will be written to the HOME location or the user's login account if the HOME environment variable does not exist.

1.4. Third-Party Software Installation Requirements

Some product packages may include third-party software tools that can be used in conjunction with a product, such as a post-processor. These products will include a separate installation guide in printed or media form.

Chapter 2: Installation on Microsoft Windows Systems

This chapter explains the steps necessary to install and configure our products on Windows systems. For a complete list of software products, hardware platforms, operating systems, and current hardware requirements, check the Fluent User Services Center website at www.fluentusers.com.

Access FAQs and Installation/Systems Support at www.fluent.com/support/installation/.

The list of supported platforms will vary between software products. Use this table as a guide to determine the correct platform architecture to install for your product. The product platform that you choose to install will include the platform architecture name within the installer name.

Table 2.1 Installable Platforms (will vary between products)

Platform	Processor	Op System	Precision	platform architecture
Windows	Intel/AMD	HP-UX Windows XP 2003, 2000	32-bit	ntx86
Windows	Intel/AMD	HP-UX Windows XP, CCS	64-bit	win64

A typical release and recommended order of installing the software includes:

1. Product installation
2. Documentation installation
3. Product configuration
4. Installation of associated third-party software
5. License installation and configuration (Refer to the *License Installation Guide for FLUENT*)

2.1. Product Installation

Installation program names vary between software products. Run the appropriate installer that is provided on the CD.

1. Browse the CD contents.
2. Install the software:
 - *Product_install-ntx86-version.exe*

If the product CD contains this installer, double-click:

```
Product_install-ntx86-version.exe
```

- *setup.exe*

If the product CD contains this installer in the product folder, double-click:

```
setup.exe
```

Follow the prompts of the installation program. You may change the default destination directory; however, we recommend that you use the default directory, `Fluent.Inc`. Do not install the software to a folder that contains blank spaces in the name, such as `Program Files`.

3. Run the Client License Setup wizard. If your installer includes this option and you are installing the product on a client system, select this option to configure the license for the client system.

You will need your license server name and port number. The installer will use this information to create a license file that is written to the *installation_location/license* folder. Contact your Systems Administrator for this information.

If your system is being used as both the license server and the client, you must configure the license server first using Fluent's FSLM 10.8 License Software. Please refer to the *License Installation Guide for FLUENT* provided with the FSLM 10.8 software.

2.2. Product Configuration

2.2.1. Configure Your Environment for Fluent Software

This is required to run any program from a command prompt window. GAMBIT (versions earlier than 2.2), FIDAP, POLYFLOW, and parallel codes must be run from a command prompt.

Select **Programs>Fluent Inc Products>product name>Set Environment**

2.2.2. FLUENT Parallel Configuration

For details on configuring FLUENT 6 parallel, see FLUENT PARALLEL on the web at: www.fluent.com/support/installation/winfaq.

2.2.3. FlowLab Configuration

To maintain a good working environment in a cluster of networked computers, it is recommended that a `flowlab.ini` file be created for each user before using the FlowLab software. `flowlab.ini` should contain three variables that point to the location of template files included with the software and the user's work directory:

```
FLOWLAB_TEMPLATE_DIR drive:\<Install_location>\flowlab1.1\templates
FLOWLAB_WORK_DIR drive:\<my_home>\<TemporaryWorkArea>
FLOWLAB_SAVE_DIR drive:\<my_home>\<SaveWorkArea>
```

where:

drive : is the name of the hard drive
 <my_home> is each user's working directory
 <install_location> is the path to the installation location of the FlowLab software
 <TemporaryWorkArea> is a directory in which FlowLab creates files while the session is running
 <SaveWorkArea> is a directory for persistent storage of session

Each variable should be placed on a separate line in the `flowlab.ini` file.

When FlowLab starts, it will search for `flowlab.ini` in the following order:

1. HOME – if a user's HOME environment variable is set.
2. A working directory that may have been created for each user login account defined in Windows Profiles.

If `flowlab.ini` cannot be located, the FlowLab software program will prompt the user for the location of the templates and a FlowLab working directory. This information will be stored in the `flowlab.ini` file which will be written to the HOME location or the user's login account if the HOME environment variable does not exist.

2.3. Third-Party Software Installation Requirements

Some product packages may include third-party software tools that can be used in conjunction with a product, such as a post-processor. These products will include a separate installation guide in printed or media form.

2.3.1. Install Exceed Xserver

Install Exceed for GAMBIT, FLOWLAB, or FIDAP. Administrator privileges are required. Instructions are included on the media or download notes.

Chapter 3: Documentation

The documentation is available in several formats.

- HTML, which can be viewed with your standard browser (e.g., Internet Explorer or Netscape Communicator).
- Adobe Acrobat PDF, which can be used for both viewing and printing files with Adobe Acrobat Reader.

You may view the HTML files directly from the CD by pointing your browser to the `index.htm` file found under the `product/help` directory.

3.1. Documentation Installation

You must install the documentation in order for online help to be available from the product. You must specify the same installation location as the software product.

3.1.1. Unix Documentation Installation

Installation program names vary between software products. Run the appropriate installer that is provided on the CD.

1. `cd /cdrom`
2. Install the software:
 - `Product-Doc_install-unix-version.sh`

If the Documentation CD contains this installer, enter:

```
sh Product-Doc_install-unix-version.sh
```

- `install`

If the Documentation CD contains this installer, enter:

```
install
```

3.1.2. Windows Documentation Installation

Installation program names vary between software products. Run the appropriate installer that is provided on the CD.

1. Browse the CD contents.
2. Install the software:
 - *Product-Doc_install-ntx86-version.exe*

If the Documentation CD contains this installer, double-click:

Product-Doc_install-ntx86-version.exe

- setup.exe installer

If the Documentation CD contains `setup.exe` in the product folder, double-click:

`setup.exe`

Chapter 4: Tutorials and Solution Files

ANSYS, Inc. provides files (solution, mesh, case, and data) used for sample sessions, examples, or tutorials.

The files are usually included as part of the installation of the Documentation CD or are directly accessible from the product's Documentation CD. The location of the files is described in the sample sessions provided in the *Users Guide*, *Tutorial Guide*, or other documentation provided with a product.

All files are also available from the Fluent User Services Center website www.fluentusers.com under each product's documentation section.

Chapter 5: Licensing

All ANSYS, Inc. products are license controlled. A license file or a license server must be accessible before the software will run. Please refer to the *FLUENT Licensing Guide* for complete instructions.

