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# Using This Manual

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## What's In This Manual

The FLUENT Tutorial Guide contains a number of tutorials that teach you how to use FLUENT to solve different types of problems. In each tutorial, features related to problem setup and postprocessing are demonstrated.

Tutorial 1 is a detailed tutorial designed to introduce the beginner to FLUENT. This tutorial provides explicit instructions for all steps in the problem setup, solution, and postprocessing. The remaining tutorials assume that you have read or solved Tutorial 1, or that you are already familiar with FLUENT and its interface. In these tutorials, some steps will not be shown explicitly.

All of the tutorials include some postprocessing instructions, but Tutorial 23 is devoted entirely to standard postprocessing, and Tutorial 24 is devoted to turbomachinery-specific postprocessing.

## Where to Find the Files Used in the Tutorials

Each of the tutorials uses an existing mesh file. (Tutorials for mesh generation are provided with the mesh generator documentation.) You will find the appropriate mesh file (and any other relevant files used in the tutorial) on the FLUENT documentation CD. The “Preparation” step of each tutorial will tell you where to find the necessary files. (Note that Tutorials 23, 24, and 25 use existing case and data files.)

Some of the more complex tutorials may require a significant amount of computational time. If you want to look at the results immediately, without waiting for the calculation to finish, you can find the case and data files associated with the tutorial on the documentation CD (in the same directory where you found the mesh file).

## How To Use This Manual

Depending on your familiarity with computational fluid dynamics and Fluent Inc. software, you can use this tutorial guide in a variety of ways.

### For the Beginner

If you are a beginning user of FLUENT you should first read and solve Tutorial 1, in order to familiarize yourself with the interface and with basic setup and solution procedures.

You may then want to try a tutorial that demonstrates features that you are going to use in your application. For example, if you are planning to solve a problem using the non-premixed combustion model, you should look at Tutorial 14.

You may want to refer to other tutorials for instructions on using specific features, such as custom field functions, grid scaling, and so on, even if the problem solved in the tutorial is not of particular interest to you. To learn about postprocessing, you can look at Tutorial 23, which is devoted entirely to postprocessing (although the other tutorials all contain some postprocessing as well). For turbomachinery-specific postprocessing, see Tutorial 24.



### For the Experienced User

If you are an experienced FLUENT user, you can read and/or solve the tutorial(s) that demonstrate features that you are going to use in your application. For example, if you are planning to solve a problem using the non-premixed combustion model, you should look at Tutorial 14.

You may want to refer to other tutorials for instructions on using specific features, such as custom field functions, grid scaling, and so on, even if the problem solved in the tutorial is not of particular interest to you. To learn about postprocessing, you can look at Tutorial 23, which is devoted entirely to postprocessing (although the other tutorials all contain some postprocessing as well). For turbomachinery-specific postprocessing, see Tutorial 24.

## Typographical Conventions Used In This Manual

Several typographical conventions are used in the text of the tutorials to facilitate your learning process.

- An informational icon (  ) marks an important note.
- An warning icon (  ) marks a warning.
- Different type styles are used to indicate graphical user interface menu items and text interface menu items (e.g., **Zone Surface** panel, `surface/zone-surface` command).
- The text interface type style is also used when illustrating exactly what appears on the screen or exactly what you must type in the text window or in a panel.
- Instructions for performing each step in a tutorial will appear in standard type. Additional information about a step in a tutorial appears in italicized type.

- A mini flow chart is used to indicate the menu selections that lead you to a specific command or panel. For example,

**Define** → Boundary Conditions...

indicates that the **Boundary Conditions...** menu item can be selected from the **Define** pull-down menu.

The words surrounded by boxes invoke menus (or submenus) and the arrows point from a specific menu toward the item you should select from that menu.

