

## **QUICK-START INSTRUCTIONS FOR INSTALLING AND RUNNING AMPL & SOLVERS**

### Windows systems

To install: Download the distribution zipfile, `ampl_mswin32.zip` for the 32-bit version or `ampl_mswin64.zip` for the 64-bit version. Double-click the zipfile icon, or apply an unzip utility, to extract the folder named `ampl_mswin32` or `ampl_mswin64` from the zipfile. This will be your AMPL folder; optionally you may rename it and you may move it to any convenient location on your computer.

To run in an integrated application: Inside your AMPL folder, double-click the `amplide` folder icon to open that folder, and then double-click the `amplide.exe` file (with the black cat's-head icon) to start the AMPL IDE application. A small "AMPL IDE" window will appear while the program is being loaded, and then the full IDE application window will open. To get started, choose Help Contents from the Help menu at the top of the application window.

To run using a simple command-line interface: Double-click "`sw.exe`" in your AMPL folder, and type "`ampl`" at the prompt in the window that appears. Then you will see an "`ampl:`" prompt and can proceed to type AMPL commands. AMPL model and data statements will refer to files that you have saved in your AMPL folder; use any plain-text editor to create and edit these files.

To optimize using either interface: Be sure to choose a solver, by giving a command of the form "`option solver xxx;`" with `xxx` replaced by the name of a solver that you have been instructed to use.

### Linux systems

To install: Download the distribution zipfile, `ampl_linux-intel32.zip` for the 32-bit version or `ampl_linux-intel64.zip` for the 64-bit version. Then "`unzip`" this file, using a Linux `unzip` command or the decompression option of the `zip` command, to extract the folder named `ampl_linux-intel32` or `ampl_linux-intel64` from the zipfile. This will be your AMPL folder; optionally you may rename it and you may move it to any convenient location on your computer.

To run in an integrated application: Inside your AMPL directory, you will find a directory named `amplide`. Use the `cd` command to make `amplide` your current directory, and then start AMPL IDE with the command `./amplide`. A small "AMPL IDE" window will appear while the program is being loaded, and then the full IDE application window will open. To get started, choose Help Contents from the Help menu at the top of the application window.

To run using a simple command-line interface: In a command window, use the `cd` command to go to your AMPL directory, and type "`./ampl`" at the system prompt. Then you will see an "`ampl:`" prompt and can proceed to type AMPL commands. AMPL model and data statements will refer to files that you have saved in your AMPL folder; use any plain-text editor to create and edit these files.

To optimize using either interface: Be sure to choose a solver, by giving a command of the form "`option solver xxx;`" with `xxx` replaced by the name of a solver that you have been instructed to use.

### MacOS systems

To install: Download the distribution zipfile, `ampl_macosx64.zip`. Double-click this file's icon to extract its contents. When the extraction is complete you will see a folder named `ampl_macosx64`.

This will be your AMPL folder; optionally you may rename it and you may move it to any convenient location on your computer.

To run in an integrated application: In your AMPL folder, double-click the Amplide file (with the black cat's-head icon) to start the AMPL IDE application. A small "AMPL IDE" window will appear while the program is being loaded, and then the full IDE application window will open. To get started using AMPL IDE, choose Help Contents from the Help menu at the top of the application window.

IF YOU GET A MESSAGE that the amplide program "can't be opened" because it "was not downloaded from the Mac App Store" or it "is from an unidentified developer," then you will need to tell MacOS that the program is from a trusted source, by following these steps: (1) Control-click or right-click the amplide icon. (2) Select Open from the top of contextual menu that appears. This step will only be necessary the first time that you open the AMPL IDE. After that you can open it in the usual way, by double-clicking the amplide application icon.

SPECIAL NOTE for users of MacOS 10.12 Sierra: As a side-effect of a new security feature introduced with this version, you may see an error message beginning "The IDE cannot find the AMPL executable." To fix this problem, quit the IDE application and then follow these steps: (1) In your amplide.macosx64 folder, find the Amplide file (with THE cat's head icon). (2) Drag the Amplide file to your desktop. (3) Drag the Amplide file back into the amplide.macosx64 folder. Then double-click the file icon to start the AMPL IDE again.

To run using a simple command-line interface: Click on the magnifying glass at the top right of your screen, enter "terminal" in the Spotlight window, and click on the Terminal icon to open a Mac Terminal window. Use "cd" to go to your AMPL folder; for example if your AMPL folder is ampl\_macosx64 on your desktop, type "cd Desktop/ampl\_macosx64". Then type ./ampl; you will see an ampl: prompt and can proceed to type AMPL commands. AMPL model and data statements will refer to files that you have saved in your AMPL folder; use any plain-text editor to create and edit these files.

To optimize using either interface: Be sure to choose a solver, by giving a command of the form "option solver xxx;" with xxx replaced by the name of a solver that you have been instructed to use.

#### Note for Linux and MacOS users

In order to be able to run the solvers, you will have to change the \$PATH environment variable. You can do so by editing the \$HOME/.profile file. You can do this by opening a terminal and running the command

```
nano $HOME/.profile
```

An editor will now appear on the .profile file. Add the following line:

```
export PATH=$PATH:$HOME/AMPL_directory
```

which tells your operating system to (also) look for a program in the \$HOME/AMPL\_directory, and save the file. After the editing, just run the command

```
source $HOME/.profile
```

which tells the operating system to take into account those changes. This procedure needs to be done only once. Every terminal you open after this will be aware of these changes. After that, you'll be able to open a terminal and run AMPL without all this.