Running the DEAFrontier Software

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Once the DEAFrontier software is loaded, it will be available until you quit Excel.

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Before you run the DEAFrontier software

If you are using Excel 2010, you can skip this section.

Before you load the DEAFrontierFree software, the Excel program must be open/loaded first. And then the Solver Parameters dialog box must at least be displayed once in your Excel session.

Otherwise, an error (shown in Figure 1) may occur when you run the software under Excel 97, 2000 or 2003 and the Excel 2007 may not be responding.

This error message means that the Excel Solver is not found by the DEAFrontier software. (Under Excel 97, 2000 or 2003, if the DEAFrontier software is installed in the directory where the Excel Solver is installed, you may not need to load the Excel Solver first.)
Running the DEAFrontier Software

Excel Macro Security
Excel 97, 2000 or 2003
Please also set the Macro Security to Medium Level in the Excel. This can be done by selecting the Tools/Options menu item as shown in the following

In the Option menu item, click the Macro Security button and then select the “Medium” option.
Running the DEAFrontier Software

Excel 2007 & 2010

You need to do this in the Trust Center. You may check (1) enable all macros and (2) Trust access to the VBA project object model. You may also need to add the subdirectory where the DEAFrontier software is located as “Trusted Locations”.

![Security settings](image)

![Trust Center settings](image)
Running the DEAFrontier Software

Install/Load Excel Solver in Excel 97, 2000 and 2003 (XP)

You may use the following steps. (Close the DEAFrontier if it is already opened using the “Quit” menu item.)

**Step 1:** Open Excel, and then load Solver parameters dialog box by using the Tools/Solver menu item.

![Solver Parameters](image)

**Step 2:** Click Close to close the Solver parameters dialog box. Now, the Solver has been loaded.

*If Solver does not exist in the Tools menu, you need to select Tools/Add-Ins, and check the Solver box, as shown in Figure 2. (If Solver does not show in the Add-Ins, you need to install the Solver first.)*
Running the DEAFrontier Software

Install/Load Excel Solver in Excel 2007 & 2010

1. Click the **Microsoft Office Button** in Excel 2007 or **File** in 2010, and then click **Excel Options**.
2. Click **Add-Ins**, and then in the **Manage** box, select **Excel Add-ins**.
3. Click **Go**.
4. In the **Add-Ins available** box, select the **Solver Add-in** check box, and then click **OK**.

   If you get prompted that the Solver Add-in is not currently installed on your computer, click **Yes** to install it.

5. After you load the Solver Add-in, the **Solver** command is available in the **Analysis** group on the **Data** tab.
Running the DEAFrontier Software

Under Excel 2010, you will see

Please make sure that the Excel Solver works properly. One can download a test file at http://www.deafrontier.com/deasupport/)
Running the **DEAFrontier Software**

**Run the DEAFrontier Software**

If you are using (standard Excel Solver) Excel 97, 2000, 2003 and XP, open “DEAFrontierFree_SolverPlatform.xla”.

If you are using (standard Excel Solver) Excel 2007 or 2010, open “DEAFrontierFree.xlam”.

If you want to use OpenSolver ([www.opensolver.org](http://www.opensolver.org)) with DEAFrontier, open “DEAFrontierFree_OpenSolver.xlam”. *(Note: This DEAFrontier version only works under Excel 2007/2010. Note also that Excel Solver must also be loaded at the Excel Data Tab.)*

**If you are using Solver Platform or any premium Solver products** under any Excel versions, open “DEAFrontierFree_SolverPlatform.xla”, regardless of the Excel versions.

**Under Excel 97, 2000, 2003, or 2007, the user may need to**

- **Step 1:** open the Excel
- **Step 2:** load the Excel Solver
- **Step 3:** load the DEAFrontier software

**Under Excel 97, 2003 & XP,** you will see a new Menu item “DEA” at the end of Excel Menu. Now, the software is ready to run. *(Please see the Format for Data Sheet for proper setup of data sets.)*

**For Excel 2007 & 2010:** to locate the DEA Menu, select the Add-Ins tab and navigate to the DEA menu option.
Running the **DEAFrontier Software**

**Using DEAFrontier with OpenSolver**

DEAFrontier in this case uses the COIN-OR CBC optimization engine via the OpenSolver Excel Add-in. This version works under Excel 2007 or 2010 with the standard Excel Solver installed.

The full version of DEAFrontier can solve large-sized DEA problems without the need for Solver Platform as long as OpenSolver can handle it.

Please visit [www.opensolver.org](http://www.opensolver.org) to download the OpenSolver software. Follow its instructions to install OpenSolver. **OpenSolver must be loaded before opening the DEAFrontier software.** Namely, before you open DEAFrontier software, you should see OpenSolver (and Solver) under Excel’s Data Tab. It is recommended that you click the “Solve” or “QuickSolve” before opening the DEAFrontier software.

![OpenSolver Interface](image)

*It is also recommended that you store DEAFrontier software in the same subdirectory as OpenSolver.*