

Installation from source code

After downloading and unzipping TheriakDominoMAC.zip or TheriakDominoWIN.zip the Programs folder contains all necessary files for compilation.

Note on the k-versions of GUZZLER and EXPLOT

Programs GUZZLER and EXPLOT are given in two versions:

```
guzzler.f90          kguzzler.f90
explot.f90           kexplot.f90
```

The only difference between the non-k-versions and the k-versions is that the former have fixed file names that are independent of the values you define in theriak.ini (i.e. they don't need this file for initialization). The benefit of these versions is that they can be used independently from the Theriak-Domino software see ExplotGuide.pdf. The k-versions take the file names from theriak.ini (i.e. they do need this file for initialization in the program or working directory, see installation instructions). This difference implies also a difference in compiling and linking. For example, using the gfortran compiler for Windows

For non-K-versions:

```
gfortran -o guzzler.exe guzzler.f90 platf-win.f90
gfortran -o explot.exe explot.f90 platf-win.f90
```

For K-Versions:

```
gfortran -o guzzler.exe kguzzler.f90 platf-win.f90 help.f90
gfortran -o explot.exe kexplot.f90 platf-win.f90 help.f90
```

Compiling and linking, general remarks

The programs are written in FORTRAN (f90) and must be compiled and linked as shown below. It is important to note that depending on operating system, XYZ in platf-XYZ.f90 below may be one of the following:

dec, os9, osx, unix, win.

Domino: domino.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, gmini.f90, activi.f90, prtcal.f90, fsol.f90, help.f90, platf-XYZ.f90

Thalia: thalia.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, fsol.f90, prinin.f90, activi.f90, help.f90, platf-XYZ.f90

Therbin: therbin.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, prinin.f90, gmini.f90, activi.f90, prtcal.f90, fsol.f90, help.f90, platf-XYZ.f90

Theriak: theriak.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, prinin.f90, gmini.f90, activi.f90, prtcal.f90, fsol.f90, help.f90, platf-XYZ.f90

Thermo: thermo.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, fsol.f90, activi.f90, help.f90, platf-XYZ.f90

Therter: therter.f90, dbread.f90, gcalc.f90, dasave.f90, hprogs.f90, prinin.f90, gmini.f90, activi.f90, prtcal.f90, fsol.f90, help.f90, platf-XYZ.f90

Explot: explot.f90, platf-XYZ.f90

Guzzler: guzzler.f90, platf-XYZ.f90

Makemap: makemap.f90, hprogs.f90, help.f90, platf-XYZ.f90

Plotxy: plotxy.f90, hprogs.f90, help.f90, platf-XYZ.f90

Compiling, linking and testing has been carried out with the free GNU gfortran compilers for various platforms. For other compilers the command "gfortran" must be replaced with the appropriate name. The platform file platf-osx.f90 works for most Unix-systems, but some adaptations may be necessary. Platf-win.f90 has been tested on Win2K with GNU gfortran and should work also for any other Windows version.

Compiling and linking for UNIX and Mac

1. You need an installed Fortran compiler
2. Check that the system calls in the platf-osx.f90 or platf-unix.f90 are correct for your system and compiler. If not, modify them accordingly.
3. Edit the Makefile and (if different) replace the "platf-xyz" in line 1 and "gfortran" in line 3 with the correct command for your compiler and platform.
4. type: **make all**

If any errors occur, you may have to modify some source statements or the Makefile. - good luck!

5. To run the programs from a different directory, one has to set the environment variable THERDOM
for csh add the following lines to .cshrc (or .login): (where "/usr/..." is the path to the program directory.)

```
setenv THERDOM /usr/.../Programs
setenv PATH $PATH:$THERDOM
```

for ksh add the following lines to .profile (for bash add the lines to .bash_profile)

```
export THERDOM =/ usr/.../ Programs
export PATH=$PATH:$THERDOM
```

6. start a new shell and move to the working directory

You are now ready to use THERIAK-DOMINO.

Compiling and linking for Windows

1. You need an installed Fortran compiler
2. Check that the system calls in the platf-win.f90 are correct for your system and compiler. If not, modify them accordingly.
3. Edit the Makefile and (if different) replace the "platf-xyz" in line 1 and "gfortran" in line 3 with the correct command for your compiler and platform.
4. type: **make all**

If any errors occur, you may have to modify some source statements or the Makefile. - good luck!

5. To run the programs from a different directory, one has to set the environment variable THERDOM
In the working directory, edit start.bat to define the path to the program directory, e.g:

```
set THERDOM=C:\TheriakDominoWIN\Programs\
set PATH=%THERDOM%;%path%
cmd
```

6. start the start.bat in the working directory

You are now ready to use THERIAK-DOMINO.