DAIME Installation Manual
for Version 2.1
Chapter 1

System Requirements

A computer system should meet these requirements for running DAIME:

- Personal computer (PC) with Intel Pentium or equivalent processor. Although DAIME currently uses only one processor core, a system with >1 processor cores is more responsive during time-consuming image analysis calculations.

- Operating system: Microsoft Windows 2000 / XP / Vista / 7 (32- or 64-bit), or Ubuntu Linux 14.04 LTS (32-bit). At the moment there is no MacOS version of DAIME. However, Mac users may consider running DAIME under MS Windows (on Intel-based Macs) or under a virtualized Windows or Linux installation.

- At least 512 MB of memory (RAM); this is the absolute minimum! Analyses of large image batches and interactive 3D visualization require at least 1 GB RAM. Recommended: 2 GB RAM or more.

- A graphics card for hardware-accelerated 2D and 3D graphics with OpenGL. OpenGL 1.2 is needed for starting DAIME and for non-graphics intensive image analysis tasks. Today, virtually all desktop PCs and notebooks meet this condition. However, the more advanced 3D visualization features require hardware support for OpenGL 2.0 (or a newer 2.x version). OpenGL 3.x or newer is not supported, but most OpenGL drivers automatically switch to 2.x compatibility mode. Recommended: A recent graphics card with at least 256 MB of video RAM (512 MB video RAM or more is needed for 3D visualization of large z-stacks). DAIME has been tested with NVIDIA and AMD graphics cards and original graphics drivers. Intel onboard graphics chips are also supported, but older onboard chips may not provide all 3D rendering features.

- A large screen. The pixel resolution should be at least 1024 x 768 pixels. Recommended: 22" (or larger) TFT color display.

**DAIME uses the OpenGL graphics library for rendering 2D and 3D graphics. Therefore, a current OpenGL driver is required. This driver is specific for the graphics card and operating system. It must be installed before DAIME can be used. Most graphics cards are delivered with drivers for Windows. Most recent Linux distributions install the correct OpenGL driver automatically if a supported graphics card is found during the installation of the Linux operating system.**
Chapter 2

Installation of DAIME on Microsoft Windows operating systems

The installation of DAIME for Windows 2000 / XP / Vista / 7 is straightforward:

1. If an older version of DAIME is installed on your computer: Use the Uninstall feature to remove the older version. Please note: Uninstalling does not remove your DAIME license key.

2. Download the current version of DAIME for Windows from www.microbial-ecology.net/daime. The name of the file is setup_daime_2_1.exe. Copy this file to the local hard disk of your computer.

3. Double-click at the downloaded file, then follow the on-screen instructions to install DAIME.

4. Note: A printable PDF of the User Manual is included and will be installed automatically, too.

ℹ️ Use the Uninstall option to remove DAIME 2.1 for Windows from your system.
Chapter 3

Installation of DAIME on Linux operating systems

We offer a pre-compiled binary of DAIME for Ubuntu Linux 14.04 LTS (64 bit).

⚠️ We do absolutely not guarantee that the pre-compiled DAIME binary runs (or that all features are available) on every Ubuntu-based Linux system or any other Linux distribution. We cannot provide support to make the pre-compiled DAIME binary run on a particular Linux system.

Installation of the pre-compiled DAIME binary:

1. Download the file daime_2_1_linux.tar.gz and save it on your hard disk into a new, empty folder.
2. Open a command shell (terminal), and switch to the folder that contains the downloaded file. Now enter the command:
   \[ \text{tar zxf daime_2_1_linux.tar.gz} \]
3. This will unpack the DAIME binary as well as some additional files.
4. Now make sure that the executable flag is set for both files, daime and daime.sh. If in doubt, enter the following commands:
   \[ \text{chmod a+x daime} \]
   \[ \text{chmod a+x daime.sh} \]
   (if your system administration policy requires other permission settings, modify these commands accordingly)
5. Now enter the following command to start DAIME:
   \[ ./daime \]
6. Alternatively, the program can be started by entering:
   \[ ./daime.sh \]
7. If you get an error reading “Segmentation fault”, or some message about “glibc” or “dlopen”, the DAIME binary does not work on your system. If a message complains that shared libraries are missing, try to figure out if these libraries can be installed on your Linux system (e.g., use the package manager of your Linux distribution).
8. If the binary works on your system: From now on, DAIME can be started from a command shell by going into the folder, which contains the binary, and entering ./daime.sh (or just ./daime). You can also include the DAIME folder in your search path or create a launcher on your desktop that will start DAIME when clicked.