
AnalyzePC 2.5

Multidimensional Biomedical Image Display and Analysis Software

Installation of **AnalyzePC** Software from CD-ROM for Windows 95, Windows 98 and Windows NT 4.0 PCs.

The following instructions explain how to install *AnalyzePC* on a PC system from CD-ROM.

Package Contents

- CD-ROM with *AnalyzePC* software, ancillary files, and demonstration data.
- *AnalyzePC* license file disk (if provided).
- Installation Instructions (these sheets).

System Requirements

Disk Space Requirements

Section	Disk Space	Options
<i>AnalyzePC</i> Runtime	26 Mb	Mandatory
Demo Data	84 Mb	Optional
Tcl/Tk Development	3 Mb	Optional

AnalyzePC Runtime – includes Analyze programs, AVW libraries, help documentation, license management software, and other ancillary *AnalyzePC* files.

Demo Data – includes image data from a variety of imaging modalities and other ancillary image-related files (object maps, color tables, surface files, etc.).

Tcl/Tk Development – files for Tcl/Tk-based development.

System Preparation

- 1.) The disk space requirements are indicated in the table in the previous section (System Requirements). The CD-ROM distribution of *AnalyzePC* contains software for all components, so disk space requirements will need to be computed from these tables. The **InstallShield** program will compute the total disk requirements for selected combinations and report the total prior to final installation. Be certain that the system on which you will be installing this software and data has adequate free disk space.
- 2.) In the system on which *AnalyzePC* is being installed has a resident copy of a previous version of *AnalyzePC* (or a copy of the former **AnalyzeNT** package), you may wish to uninstall the previous version prior to installation of the new *AnalyzePC*. Otherwise, make sure to choose a new installation directory for this version. To uninstall previous version of *AnalyzePC*, use the Windows **Add/Remove Programs** process from the **Control Panel** items (see '**AnalyzePC Software Uninstall**' below).

Installation

AnalyzePC Software Installation

The installation of *AnalyzePC* is managed automatically by the **InstallShield** installation program. The *AnalyzePC Setup* process will lead you through a complete installation of the *AnalyzePC* software system (including optional components that are not installed in a typical installation if desired). To begin the installation process:

- 1.) Start Windows 95, Windows 98, or Windows NT 4.0 on your system.
- 2.) Close all active programs on the desktop.
- 3.) Insert the *AnalyzePC* CD into your CD-ROM drive.
- 4.) The *AnalyzePC Setup* process should automatically start. If not, click the **Start** button, click **Run**, and in the **Open** box enter the location of the **setup.exe** program on the CD (type the CD drive letter, followed by a colon (:), a backslash (\), and the word **setup**, i.e., E:\setup). Then click **OK**.
- 5.) Once the *AnalyzePC Setup* process starts, follow the instructions that appear for the installation of the *AnalyzePC* software.
- 6.) If a disk with a license file for your system was provided with your package, insert this disk when prompted for the license file disk and select **Yes** to install the license file. If a disk was not provided, select **No** and see the section on '**AnalyzePC License Installation**'.

AnalyzePC Setup Notes

During the *AnalyzePC Setup* process, the following information will need to be provided:

User Information: enter your **Name** and **Company** in the fields provided.

Choose Destination Location: the default location for installation of *AnalyzePC* is <WINDISK>\BIR, where **WINDISK** is the disk on which your Windows operating system is installed (most likely be C:\BIR). The installation location can be changed to any valid disk and directory on the system if desired. Once selected, the **BIR** directory will be created at the specified location and the installation process will continue.

Setup Type: you may choose from three different types of installation – **Typical**, **Compact**, or **Custom**.

Typical: installs the *AnalyzePC Runtime* software files and all **Demo Data** (110 Mb).

Compact: installs only the *AnalyzePC Runtime* software files (26 Mb).

Custom: permits selection of the three main components that can be installed – *AnalyzePC Runtime* files, the **Demo Data**, and **Tcl/Tk Development** files for Tcl/Tk-based development (see description above in '**System Requirements**').

Program Folder: the default program folder for installation of *AnalyzePC* is a folder called **Biomedical Imaging Resource**. The **Analyze** icon (and associated executable program referenced by this icon) will be placed in this folder. If you wish, the **Analyze** icon can be placed in any other program folder.

AnalyzePC Software Uninstall

To remove a previously installed version of *AnalyzePC*, use the Windows **Add/Remove Programs** process from the **Control Panel** menu as follows:

- 1.) Click **Start**, point to **Settings**, click **Control Panel** and then double click **Add/Remove Programs**.
- 2.) On the **Install/Uninstall** tab, click **AnalyzePC** and then click **Add/Remove**.
- 3.) Click **Yes** to **Confirm File Deletion**.

This will remove the entire *AnalyzePC* software package from your system.

Installed Software Organization

Once *AnalyzePC* has been installed on the system, the software organization in the installation directory will contain the following subdirectories and files (dependent on type of installation):

- **AVW-2.5**: the AVW libraries and development environment.
 - **COPYRIGHT**: copyright notice information for the AVW libraries.
 - **LicenseAgreement**: license agreement notice for the AVW libraries.
 - **PC_NT**: shared AVW libraries and executable binaries for PC systems.
 - **app-defaults**: default settings for AVW functions.
 - **tmp**: directory used for AVW temporary files.
- **AnalyzeAVW-2.5**: the *AnalyzePC* programs, help documents and ancillary files.
 - **BitMaps**: bitmap files used for *AnalyzePC* icons.
 - **COPYRIGHT**: copyright notice information for the *AnalyzePC* software system.
 - **HelpDocs**: HTML-based on-line help documentation for *AnalyzePC*
 - **LicenseAgreement**: license agreement notice for the *AnalyzePC* software system.
 - **app-defaults**: default settings for individual *AnalyzePC* programs.
 - **bin**: the executable *AnalyzePC* programs.
 - **lib**: functions for specific routines and widgets which support *AnalyzePC*
- **FLEXIm-6.0**: the FLEXIm license manager files for *AnalyzePC* system license administration.
- **PublishSpool**: files to support the *AnalyzePC* printing mechanism.
- **TCL-TK8.0**: interpreted language upon which *AnalyzePC* is built (public domain).
- **bin**: executable scripts for starting *AnalyzePC*.
- **ghost4.03**: an implementation of ghostscript used for printing support (public domain).
- **images**: demonstration image data.

AnalyzePC License Installation

The *AnalyzePC* software system uses the **FLEXlm** license management software system from GLOBEtrouter Software for system validation and runtime license administration. **FLEXlm** uses a client/server mechanism, with a given license server providing licenses to a specific set of clients that request a license when *AnalyzePC* is invoked. With *AnalyzePC*, the license server process and client license administration is handled local to the PC system and is automatically invoked when *AnalyzePC* is executed (no specific server daemon process needs to be started for license system administration). Prior to running *AnalyzePC*, the **FLEXlm** license file (**AnalyzePC.dat**) must be configured for the specific system on which *AnalyzePC* is installed. This license file may have already been installed from a floppy disk during the installation process. If not, the following information will provide the details necessary for editing the license file information manually.

The AnalyzePC / FLEXlm License File and License Administration

The **FLEXlm** license manager software is located in the **\$BIR/FLEXlm-6.0** directory. This directory contains a subdirectory called **licenses** within which a license file is provided, called **AnalyzePC.dat**. This license file may have been copied from a floppy disk during the installation process, in which case it will reflect the correct information for the specific system, or if not installed, an example **AnalyzePC.dat** file is provided with the following information:

```
PACKAGE ANALYZE_PACKAGE mayd 2.500 681EFE1D418E \  
    COMPONENTS="AnalyzeAVW AVWTCL AVW_CORE"  
  
INCREMENT ANALYZE_PACKAGE mayd 2.500 31-dec-98 uncounted 000000000000 \  
    HOSTID=pcid vendor_info=pcname  
INCREMENT AnalyzeMain mayd 2.500 31-dec-98 uncounted 000000000000 \  
    HOSTID=pcid vendor_info=pcname
```

The contents of this file must reflect the correct information for the specific system in order to run *AnalyzePC*. If this file has not been installed from disk during the installation process, the information to be included in this file will be provided to you either as a hardcopy document, requiring individual field editing in this file, or as an email from which this information can be cut and pasted into the file. (Note:

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The first group of information should **never** be altered, as the *AnalyzePC* software system will not function if it is changed. These lines include information about the licensed software:

```
PACKAGE ANALYZE_PACKAGE mayd 2.500 681EFE1D418E \  
    COMPONENTS="AnalyzeAVW AVWTCL AVW_CORE"
```

The last four lines specify an individual client *AnalyzePC* license:

```
INCREMENT ANALYZE_PACKAGE mayd 2.500 31-dec-98 uncounted 000000000000 \  
    HOSTID=pcid vendor_info=pcname  
INCREMENT AnalyzeMain mayd 2.500 31-dec-98 uncounted 000000000000 \  
    HOSTID=pcid vendor_info=pcname
```

In this case, the licensed system is called `pcname` and has a system id of `pcid`. The license is for a complete copy of *AnalyzePC* that will permit it to run on the system until the expiration date of `31-dec-98`. The field for the encrypted validation code is currently empty (`000000000000`). From the provided license information, the expiration date (`31-dec-98`), validation code (`000000000000`), system id (`pcid`), and system name (`pcname`) fields must be set to the specific information provided in your license information. If any of the fields do not match the information provided, the license code will not work and *AnalyzePC* will not run. Once this file has been established with correct information, *AnalyzePC* can be run on the system.

AnalyzePC Image Memory Management

The *AnalyzePC* software system uses a method of memory management for loaded volume images that places certain requirements on the amount of available disk space. In *AnalyzePC*, the volume images are directly memory mapped to a new file which is created for each volume image when it is loaded. These memory mapped copies of the original volume image files have a .mmap extension and are located in a specific directory that can be controlled by the user. By default, this directory is set to the system TEMP directory (usually C:\WINDOWS\TEMP on 95/98, C:/TEMP on NT), as it always exists and usually has sufficient space for a few loaded volume images. However, depending on the system configuration of the disks, it may be desirable to change the location for these memory mapped files based on the available disk resources. The **ANA_DIR** environment variable permits specification of this directory to hold the memory mapped files, which can be changed by setting this environment variable in the properties for the shortcut used to execute the 'Analyze.exe' program. The location of this directory should be on a disk local to the system running *AnalyzePC*.

The memory mapped files directory (also referred to as the 'workspace' directory), can also be changed while running *AnalyzePC*. With the cursor over the main *AnalyzePC* program canvas, select and hold the right mouse button, which will bring up a menu of several selections. The 'Workspace Directory' selection permits the entry of a new directory for the memory mapped files. This directory should be local to the system and should be on a disk partition with sufficient free disk space to handle the volume of loaded image data expected for all users.

Running AnalyzePC

If you have completed the installation process and followed the instructions for setting up the various *AnalyzePC* facilities, including the license installation, you are now ready to run the *AnalyzePC* program (and may do so with the provided demonstration data)

Running The AnalyzePC Program

To run the *AnalyzePC* software system, select the **Analyze** icon from the **Biomedical Imaging Resource** program group on the **Start -> Programs** menu (or from whatever program group in which you installed *AnalyzePC*). This will invoke the *AnalyzePC* program.