

#### **Overview and Technical Notes**

**PedCath** is a Congenital Cardiac Catheterization Reporting Tool. It was designed to allow user generated comprehensive reports following a catheterization procedure in order to record the actions performed, findings made and to communicate this information with other medical personnel. Users may recall any cath report saved since the first cath was entered.

The **PedCath** database structure begins at the patient level. Each patient record can be associated with an unlimited number of cath records. Each cath record can be associated with up to three diagrams, eight sets of hemodynamic data, comments, diagnostic codes, billing codes, images and documents. In addition to being saved in the database, the report can be printed or saved as a PDF, HTML or ASCII file. Optional XML and HL7 file formats as well as FTP protocols are available.

**PedCath** is a workstation based ("fat-client") application. The application is installed on each local machine from which you wish to access the **PedCath** data. **PedCath** is licensed as either single-user or multi-user. This refers to the number of concurrent users that may access **PedCath** at any one time. The data is in relational dBase format and each table is a unique file (\*.dbf). Most tables have corresponding index files (\*.nsx) and some have one or more memo files (\*.smt). In addition to the database files, there are diagram files (\*.pcx), image files (various image formats) and report files (various document formats). These files may reside in a directory located anywhere on the network where the local workstations have read/write privileges, or on a stand-alone PC. The amount of data required by each cath depends on the number of documents, diagrams, and images included in the cath report and, to a lesser extent, the amount of data entered by the user. Typically, each additional cath report is smaller than 500KB (excluding Image Manager items).

#### **PedCath Hardware Requirements**

#### **Operating System**

**PedCath** will operate on any 32-bit version of Windows, which includes Windows 95, 98, 2000, Windows NT 4.0, Windows XP, and Windows 7. While there are no operating system issues with Windows 95, we have found that Win95 machines, in a hospital setting, may not have the resources required to run modern applications like **PedCath** Enterprise.

#### Video

**PedCath** is designed to work best at a screen resolution of 1024x768 or more but it will function well at 800x600. Screen resolutions less than 800x600 are not supported.

#### Hardware

**Minimum specifications:** will always vary with the computer configuration, network, and other applications that may be running concurrently.

**Recommended specification:** 1 GHz or better processor, Windows 2000, XP or Windows 7 with 256M or more ram.

\* PedCath does not support Japanese, Chinese or Cyrillic character sets under Windows 98.

#### **Installing PedCath**

PedCath requires separate installation of program and data files.

#### **Updating Data Files**

If you have been using **PedCath**<sup>3</sup> or an earlier version of **PedCath7**, your existing data will need to be converted to the current format. Use the instructions provided with your installation CD if you are upgrading existing data.

#### **Installing Data Files for New Users**

Empty **PedCath** data files are provided for new users on the installation CD in the "BlankData" folder. If you are going to use the program on more than one computer, the data will need to be accessible to each workstation. This usually means setting up a data folder on a server.

## New users install the empty PedCath data files by opening the "BlankData" folder on the CD-ROM and double-clicking PC7\_Net.exe. This will create a folder called "PC7\_NET."

The default location for the PC7\_NET folder will be on the C: drive, which is correct for installation on a single computer. For network installations, this folder will need to be installed on the network server. For example, if the network drive is mapped as "S:", the location for installation of the PC7\_NET directory should be changed from C: to S:.

The "PC7\_Net" folder contains about 11Mb of data when first installed. Subsequent cath reports require relatively little hard disk space. Each completed cath report typically adds 250K to 500K. If you are assigning disk space to the **PedCath** data folder, 100Mb should be sufficient to store well more than one hundred cath reports.

Each workstation running the program will need to access **PedCath**'s common data files. These files, the diagrammatic atlas and other shared files are typically placed on a server. Each user must have read-write privileges to this "PC7\_Net" folder on the server.

If you plan to install **PedCath** on only one computer, the data files can be placed on your local hard disk. Data can be moved to a server later, if you add additional computers.

#### Installing PedCath Program Files (local workstations)

You will need about 24 MB of space on each workstation for the software. This amount is in addition to what is required in the network folder.

To install **PedCath** on an individual workstation, you will need to run the install program. We provide a CD-ROM that contains the installation program. If the computer supports autorun, the installation program will begin when the CD is inserted.

In addition, we can provide a single-file executable that will install the program on the local machine when run from that machine. Some hospitals have placed this program in a subdirectory of the **PedCath** network folder and emailed links to individual users. Users click the link and the program is installed on their computer. Some anti-virus software will interfere with this method.

#### Installing PedCath Updates (local workstations)

**PedCath** updates are available to all users with current support on the web at **www.PedCath.com**. Network administrators may choose to allow users to update directly from the web, or distribute \*.P7U update packets without users directly accessing the internet.

#### **Running PedCath** for the First Time

#### Locating the data folder

The first time you run **PedCath**, you will be asked to locate the network data folder. Click OK, then select the location of the "PC7\_Net" folder. If you do not know the location of the data directory, ask your network administrator.

Notice the red light next to the 'file found' box. **PedCath** will check the directory you select. When the light turns green (as shown by yellow arrow, opposite), you know the proper data files have been found.

#### Locate Data Folder c:\PC7\_SAMP Go Data Folder: File Reference CORNERS Show files of type: Database Files (\* dbf ¥ Data In Files Found datafeed CATHDB.DBF DEFPRO.DBF DOCUMENT.DBF DataPanel BILLCODE DE db-loas DBUpdate document export GLOBALOP.DBF HEMOSETS.DBF image library patient ATDB.DBF ACTURES.DBF PROSTAFF.DBF . -Ωk Cancel







#### **First Login**

After the **PedCath** installation is complete and the data path is selected, log in as an administrator with the initials *SSS*.

The SSS password will be Taussig or pedcath.

#### Adding PedCath users

You will need to add personnel before adding new caths.

From the menu bar, select Tools-Options-Administrator-Personnel and click the Edit Personnel button.

(Note: you can also edit personnel by choosing View-Personnel from the menu bar)

Assuming you will have administrative privileges, click the

Add New button and enter your own information in the screen provided. Make a note of the initials **PedCath** is going to use for your log in. You may change these if desired. Click OK and make sure to give yourself **Administrative** privileges. Exit and close the program.

#### **Initial Passwords**

**PedCath** is now set up to run with two administrative users, you and the original SSS administrator.

Log in to the program once more, but this time use your own initials.

#### Initial Password for all new users will be

TAUSSĪC

#### After logging in the first time, the password must be changed.

#### **Removing PedCath users**

After logging in with your own initials and changing your password, go once again to the tools menu and select "Options…" There, select the "Administrator" tab and then select "Personnel" from the list on the left and click the "Edit Personnel" button. To remove a personnel member, select their name within the list and click the *Make Inactive* button.

#### Prior to Using PedCath for Cath Reporting

**PedCath** is initially configured with one administrative user. Additional personnel may be added by anyone with administrative privileges. If you are entering a large number of personnel at one time, note that only the display, initials, and permissions settings are required for each user and other information can be entered at a later time.

Note: After setting up your users and at least one administrator, it is a good idea to remove the SSS Administrator from the active list.

#### **Other Administrative Options**

It is important for the cath lab director to review the *Options* settings. There are several clinical and administrative settings that should be confirmed before entering actual case data.

#### **PedCath** Technical Overview

#### Introduction

**PedCath 7** is a "networkable" desktop application. You must install **PedCath** on each computer on which you want to use it, and each running instance of **PedCath** must have read/write access to the Data Folder. The Data Folder contains the **PedCath** database files and other files (such as diagrams, images, and documents) that are linked to cath records. The Data Folder may also contain export and import files, **PedCath** update files, patient and stock diagram templates, document templates and various configuration files.

#### **Requirements**

#### Local Computer

#### Minimum Specifications

Pentium III 500 MHz or equivalent processor 64 MB RAM Windows 98, NT 4.0, 2000, XP or Windows 7 operating system 16 MB video adapter memory, 800 x 600 resolution 30 MB available hard disk space

#### **Recommended Specifications**

Pentium III 1 GHz or equivalent processor 128 MB RAM Windows 2000 Professional SP4, XP Professional SP2 or Windows 7 operating system 32 MB video adapter memory, 1024 x 768 resolution 100 MB available hard disk space

#### File Permissions

Each instance of **PedCath** must have read/write access to the Local Program Folder (see Appendix A). Each instance must also have read/write permissions to the Data Folder and, if you have a Direct Data Import Utility, to the Import Folder. This means that each **PedCath** user must have read/write permission to all these folders on each computer on which he/she uses **PedCath**.

#### **Registry Permissions**

Each instance of **PedCath** must also have read/write permission to the following Windows registry keys:

- HKEY\_CURRENT\_USER\Software\PedCath
- HKEY\_LOCAL\_MACHINE\Software\PedCath

#### Data Folder

The **PedCath** data folder is nothing more than a directory with subdirectories and files in it. **PedCath** does not use a database server. **PedCath** uses standard Windows file sharing to allow multiple installations to access the same data. Therefore, the data folder can be anywhere on the network, as long as each instance of **PedCath** has read/write access to it.

When **PedCath** is first installed, the Data Folder will be about 14 MB in size. The size each record can vary widely, depending on the number and size of diagrams, images, documents, import files and export files. A typical record is less than 100 KB, and a typical institution will add fewer than 500 records per year. If storage space is a concern, you should check the size of the Data Folder periodically for the first month or two after installation to get an idea of how quickly it grows in size.

#### Installing PedCath

**PedCath** is a desktop application and therefore you must manually install it on every computer on which you want it to run. There are two methods for installing **PedCath**: from the CD or from the network.

#### Installing from the CD

To install from the CD simply log in to the computer and insert the CD. The setup program should start automatically. If the system does not support autorun, then navigate to the CD and manually start **setup.exe**.

#### Installing from the Network

Included on your CD is a single-file setup application that you can run from the network, called **pc7\_setup.exe**. This file is located in the **Support\SingleEx**\ folder. Copy this file to a place on the network that you'll be able to access from each computer where you want to install PedCath. Someone must still run this file on each computer, but this saves you having to move the CD around and enables some other options. At institutions where users are able to install software, you can simply send a link via email. Or, if you have remote desktop capabilities, this method will allow you to install **PedCath** from a remote computer.

#### **Updating PedCath**

The installation procedure described above is only necessary the first time **PedCath** is installed on a particular machine. Subsequent updates to **PedCath** can be installed by any **PedCath** user via the **PedCath** Update Wizard, which is installed in the Local Program Folder (see Appendix A) when you install the main **PedCath** application. The Update Wizard uses **PedCath** update files (\*.p7u) to perform the update. The Update Wizard can automatically download and use the latest update file from the Web, or it can use a file on the local machine or the network. Occasionally it's required to install an update wizard/update file package (\*.exe) if a new version of the Update Wizard is required to install the p7u file.

There are major and minor releases of **PedCath**. A major release will have a larger second number in the version number string: version 7.6.x is the next major release after version 7.5.x. All computers in the hospital must be running the same major release. So, for example, if all computers are running version 7.5.8 and someone updates one computer to version 7.6.0, then all the other instances of **PedCath** will be forced to update before they can access the data. All minor updates are optional. So, for example, someone may update an instance of **PedCath** 7.5.5 to version 7.5.8 without affecting any other instance of **PedCath** in any way.

#### Users and Security

**PedCath 7** requires all users to log in with a username and password. There are several different permission levels (see Appendix B). Only Administrators may add and edit other user records. **PedCath** ships with a single Administrator account:

#### Username: SSS Password: 'taussig' or 'pedcath' (without quotes)

You can safely delete this user account once you've added a new Administrator. Typically, usernames are the users' initials. When a user is initially added, his or her password is set to 'taussig'. An administrator may reset another user's password. This will set it to 'taussig'. Anytime someone logs in with 'taussig' as his or her password, **PedCath** will force him or her to change it to something different. Neither usernames nor passwords are case sensitive.

We recommend that you make at least one regular user of **PedCath** who is somewhat computer-savvy an Administrator. At many institutions, all attending physicians and perhaps some fellows are Administrators.

#### Maintenance

We designed **PedCath** so that normal users are able to update and maintain it. Once **PedCath** is installed and running, any reasonably capable Administrator should be able to handle updates and maintenance. There is a simple Administrative Console application that's accessible via the Windows Start Menu or by running the executable directly from within the **PedCath** program folder. We recommend that you schedule regular maintenance using the feature in the Administrative Console.

#### Summary

- **PedCath** must be installed on each local computer where you want it to run. You can install it from the CD or from the network.

- Each instance of **PedCath** must have read/write privileges to:

- The Data Folder
- The Program Folder
- Two keys in the Windows Registry
- The Import Folder (if applicable)
- The Export Folder (if applicable)

- The initial user is 'SSS' with password 'taussig' or 'pedcath'.

- A new user's initial password is always 'taussig'. Resetting a user's password sets it to 'taussig'.

- Users with Administrator privileges can update and maintain PedCath.

See Also

PedCath 7 User's Manual – Using PedCath

### **Appendix A: Glossary**

#### **Administrative Console**

A program that allows a **PedCath** Administrator to perform various administrative tasks without having to open **PedCath**. The Administrative Console is installed with **PedCath**, in the Program Folder and is accessible via the Windows start menu.

#### **Data Export**

PedCath can export data in a variety of formats, manually and/or automatically.

#### **Data Folder**

This is the folder that contains all the **PedCath** database files. It also contains image files, document files and various other files that are part of the PedCath data and/or are necessary for **PedCath** to operate properly. The Data Folder can reside anywhere on the network, as long as each running instance of **PedCath** has read/write access to it.

#### **Data Import**

**PedCath** has the ability to import data from most major hemodynamic monitoring system in use today. Please contact Scientific Software Solutions, Inc. for more information if you do not already have Data Import features enabled.

#### Direct Data Import Utility (see Data Import)

#### **Export Folder**

This is a folder where **PedCath** will save Patient Reports if the automatic export feature is enabled. **PedCath** will need write permission to this folder.

#### **Import Folder**

This is the folder where **PedCath** will expect to find files exported from your cath lab after the case. Usually, this is a permanent location on the network, but it can be any physical medium used for transporting data if necessary. **PedCath** must have read access to this folder, and will perform best if it also has write access to it.

#### **Local Program Folder**

This the folder into which **PedCath** is installed on a local machine. **PedCath** needs to read and write to this folder during normal operation.

#### Program Folder (see Local Program Folder)

#### **Update Wizard**

An application that users can use to update **PedCath** to the latest version over the Internet or to any version by using a **PedCath** update file (\*.p7u). The Update Wizard is installed with **PedCath**, in the Program Folder and is accessible via the Windows start menu.

#### **Appendix B: Permission Levels**

Action	Admin	Full (Edit All)	Edit Case Data	Edit Patient Data	View Only
Enter PedCath 7	Х	Х	X	Х	Х
Add, Edit Patient	Х	X	X	Х	
Delete Patient	Х	Х			
Add, Edit Cath Record	Х	Х	X		
Delete Cath Record	Х	X			
Add Personnel	Х	Х			
Edit Personnel Display, Initials	Х				
Edit Other Personnel Data	Х	Х	Х	Х	
Delete Personnel	Х				
General (Local) Options	Х	Х	X	Х	Х
User Options	Х	Х	X	Х	Х
Global Options	Х	Х	X		
Administrator Options	Х				
Add, Edit, Delete Documents	Х	Х	X	Х	
Edit Cath Personnel List	Х	Х	X		
Add, Edit, Delete Hemodynamic Data	Х	X			
Add, Edit, Delete Diagrams	Х	Х			
Add, Delete Diagnoses	Х	Х			
Add, Edit, Delete Images	Х	X			
Add, Edit, Delete Comments	Х	X			
Import Cath Data	Х	X			

#### **System Restore**

It is critical that you have a regular system in place for backing up all of the data files, heart diagrams and image files associated with **PedCath** on a regular basis.

We recommend backing up the entire PC7\_NET folder to an off-site location on a monthly basis. A monthly backup is a good way to prevent a large amount of data loss although more frequent backups would be ideal.

# Make sure you have a backup system in place NOW!!!