



User guide

CAT4

PART 1

INSTALLATION AND CONFIGURATION

Version 4.0

June 2015

Company Contacts

Sydney (Head Office)

Pen CS

Level 1, 35 Moore St
LEICHHARDT NSW 2040

Phone: +61 2 9506 3200

Fax: +61 2 9566 1182

Email: enquiries@pencs.com.au

Web: www.pencs.com.au

Melbourne Office

Pen CS

Level 6, 3 Bowen Cres
MELBOURNE VIC 3004

Phone: +61 3 9866 8477

Fax: +61 3 9866 5699

Document Contact

Contact: Matthias Merzenich
Document Manager

Phone: 1800 762 993

Email: matthias.merzenich@pencs.com.au

Document Control

Version	Date	Modified By	Description
2.4	16/02/2009	Christine Chidgey	Initial Document for Installation and Configuration instructions. The CAT4 User Guide has been split into 2 parts – this is Part 1.
2.4.1	26/03/2009	Christine Chidgey	Updates for changes to login screen and license key information configuration of Billing Software – available for MD users with Pracsoft3
2.5	28/05/2009	Christine Chidgey	No changes this release
2.5.1	23/06/2009	Christine Chidgey	Updates for new logos on screens
2.5.2	20/07/2009	Christine Chidgey	Add Zedmed compatibility
2.6	12/10/2009	Christine Chidgey	No changes this release
2.7	30/11/2009	Christine Chidgey	No changes this release
2.8	09/02/2010	Christine Chidgey	Update document template. No changes this release.
2.9	17/05/2010	Christine Chidgey	Updates to System Requirements: .NET 2.0 SP2 Increased memory is required for very large database 'Send Data To' email function requires a mail client to be installed
2.9.3	17/08/2010	Christine Chidgey	Updates to Best Practice configuration and preferences – a password is now required to be set
2.10	06/09/2010	Christine Chidgey	Best Practice billing configuration
2.11	04/01/2011	Christine Chidgey	Add practiX compatibility Disclaimer added on login to new update
2.12	27/07/2011	Christine Chidgey	Add Communicare compatibility Add Medinet compatibility
3.1	02/11/2011	Christine Chidgey	CAT4 v3 requires pre-requisite of Microsoft .NET Framework 3.5 SP1 Update install link and associated screen shots
3.4	12/06/2012	Christine Chidgey	Add Best Practice and Pracsoft compatibility Add MedTech32 configuration
3.4.3	11/09/2012	Christine Chidgey	Best Practice preferences now provide alternative BP Database access configuration

3.6	11/06/2013	Christine Chidgey	Minor text revisions
3.10	14/02/2014	Christine Chidgey	Updates to system requirements data storage
3.12	24/06/2014	Christine Chidgey	Add Mediflex billing compatibility
3.13	19/02/2015	Matthias Merzenich	Updated Medtech version required
4.06	09/06/2015	Matthias Merzenich	Updated requirements for CAT4 Updated screenshots/logos Added Zedmed requirements

Contents

1	INTRODUCTION	6
1.1	USER GUIDE	6
1.2	NOTES ABOUT THIS USER GUIDE	7
1.3	DEFINITIONS, ACRONYMS AND ABBREVIATIONS	7
1.4	RELATED DOCUMENTS	8
2	SYSTEM REQUIREMENTS	9
2.1	OPERATING SYSTEM	9
2.2	MINIMUM AND RECOMMENDED REQUIREMENTS	9
2.3	INSTALL URL	10
2.4	CLINICAL DESKTOP SYSTEM COMPATIBILITY	10
2.5	BILLING SYSTEM COMPATIBILITY	11
2.6	BEST PRACTICE REQUIREMENTS	12
2.7	GENIE REQUIREMENTS	13
2.8	ZEDMED REQUIREMENTS	14
2.9	PRACTIX REQUIREMENTS	14
2.10	COMMUNICARE REQUIREMENTS	15
2.11	MEDINET REQUIREMENTS	15
2.12	MEDTECH32 REQUIREMENTS	15
3	INSTALLATION	16
3.1	INSTALLING TO A DESKTOP PC	19
3.2	INSTALLING TO TERMINAL SERVICES OR CITRIX	19
3.3	USING CLINICAL AUDIT OFFLINE	19
4	CONFIGURATION	20
4.1	SETTING YOUR PREFERENCES	21
4.1.1	<i>Choosing your Clinical Desktop System</i>	23
4.1.2	<i>Choosing a preferred Data Extract Directory</i>	28
4.1.3	<i>Choosing and configuring your Billing System</i>	29
5	CAT4 USER INTERFACE	31
5.1	NAVIGATING THE CAT4 USER INTERFACE	31
6	COLLECTING DATA SETS	32
6.1	WHAT DATA IS COLLECTED	33
6.2	HOW IS THE DATA STORED	33
6.3	EXISTING DATA SET COMPATIBILITY WITH CHANGES TO CAT4	33
7	DATA FILTERING AND DATA SET ANALYSIS	33

1 Introduction

The Clinical Audit Tool 4 (CAT4) analyses clinical information from GP Clinical Desktop Systems. It translates data into real statistical and graphical information that is easy to understand and action. This allows practitioners to assess and improve the quality and completeness of patient information. The benefit to the practice is to assist with its ongoing accreditation and provide opportunities to grow practice income. The emphasis of the tool is to help practice staff to take specific action to improve patient coverage in chronic disease management and prevention.

Other benefits of CAT4 are many and include:

- targeting patients with particular needs
- targeting patients with specific health risk profiles
- improved compliance with statistical data collections
- extracting data to meet the needs of others
- meeting reporting requirements

1.1 User Guide

The purpose of this document is to provide instructions on how to install and use the functionality provided by CAT4.

The manual is split into 2 parts:

- Part 1: Installation and Configuration, including information on collect data sets (This document)
- Part 2: Functionality

1.2 Notes about this User Guide

This User Guide describes the use of the Pen CS Clinical Audit Tool with reference to the following clinical systems:

- MedicalDirector Clinical by MedicalDirector
- Best Practice the clinical desktop system by Best Practice Software
- Genie the clinical desktop system by Genie Solutions
- Zedmed the clinical desktop system by Zedmed Medical Software Solutions
- practiX the clinical desktop system by iSoft
- Communicare the clinical desktop system by Communicare Systems
- Medinet the clinical desktop system by Abaki
- Medtech the clinical desktop system by Medtech Global
- PCHIS the information system used by the Northern Territory Health Service
- MMEx the web-based eHealth platform produced by ISA Healthcare Solutions

The range of clinical Desktop Systems able to interoperate with the Pen CS Clinical Audit Tool is expanding all the time, additions will be made to this User Guide as this functionality becomes available. Not all reports/functions will be available for all clinical Desktop Systems as the level of data that can be extracted is not the same for all systems.

1.3 Definitions, acronyms and abbreviations

Term	Description
ACR	Microalbumin Creatinine Ratio
APCC	Australian Primary Care Collaboratives
ATSI	Aboriginal Torres Strait Islander
BP	Blood Pressure
CAT4	Clinical Audit Tool
DoHA	Department of Health and Ageing
DVA	Department Veteran Affairs
MD	Medical Director
NEHTA	National E-Health Transition Authority
NPCC	National Primary Care Collaboratives
NPI	National Performance Indicators
NVDPA	National Vascular Disease Prevention Alliance
Pen CS	Pen Computer Systems
PCEHR	Personally Controlled eHealth Record
QAIHC	Queensland Aboriginal and Islander Health Council
QRG	Quick Reference Guide
RACGP	Royal Australian College of General Practitioners
SHS	Shared Health Summary as part of PCEHR
SIP	Service Incentive Payment
RACGP	Royal Australian College of General Practitioners

1.4 Related Documents

CAT4 – User Guide Part 2 – Functionality

This User Guide provides instructions on how to use install and configure CAT4.

This guide is available from

<http://help.pencs.com.au/CAT.htm>

2 SYSTEM REQUIREMENTS

The minimum and recommended system requirements to be able to run the Clinical Audit Tool 4 are provided in this section.

2.1 Operating System

Clinical Audit runs under the following environments (maintained to latest Microsoft patch levels):

- Microsoft Windows Vista (Business/Enterprise/Ultimate) X64 SP1
- Microsoft Windows 7 (Professional/Business/Ultimate) X64
- Microsoft Windows 8/8.1 (Standard/Professional/Enterprise) X64
- Microsoft Windows Server 2003 (SP2/R2) X64
- Microsoft Windows Server 2008 (Standard/R2) X64
- Microsoft Windows Server 2012 (All Editions)

Note: CAT4 will usually work on X86 versions of Windows, however X64 is recommended as X86 is usually limited to 4GB memory.

2.2 Minimum and Recommended Requirements

Server

	Minimum Requirements	Recommended Requirements
Operating System	Microsoft Windows Server 2003 (SP2/R2) X64	Microsoft Windows Server 2008 (Standard/R2) X64
Processor	Intel Pentium 4 single core	Quad Core CPU
RAM	4 GB	8 GB or more
Hard Disk	20G	250 GB
Microsoft .NET Framework	CAT4 requires the Microsoft .NET Framework version 4 to be installed prior to installing PCS Clinical Audit. This will be installed automatically if required when installing CAT or can be downloaded separately from the Microsoft website.	
Other Requirements	If you will be using the CAT4 'Send Data To' email function you will need to have a mail client installed on the PC you are sending from.	
	CAT4 uses an authentication mechanism that requires a persistent internet connection. It is recommended that you have a broadband internet connection to operate CAT4.	
	To install CAT4 it is preferable to use Internet Explorer version 9 or later	

Workstation

	Minimum Requirements	Recommended Requirements
Operating System	Microsoft Windows Vista (Business/Enterprise/Ultimate) X86 SP1	Microsoft Windows 7 (Professional/Business/Ultimate) X64 or later
Processor	Intel Celeron single core	Quad Core CPU
RAM	2 GB	8 GB or more
Hard Disk	20 GB	250 GB
Microsoft .NET Framework	CAT4 requires the Microsoft .NET Framework version 4 to be installed prior to installing PCS Clinical Audit. This will be installed automatically if required when installing CAT or can be downloaded separately from the Microsoft website.	
Other Requirements	If you will be using the CAT4 'Send Data To' email function you will need to have a mail client installed on the PC you are sending from	
	PCS Clinical Audit uses an authentication mechanism that requires a persistent internet connection. It is recommended that you have a broadband internet connection to operate CAT4.	
	CAT4 it is preferable to use Internet Explorer version 9 or later	
	CAT4 uses a lot of memory and the provided minimum requirements will not be sufficient for larger practices with more than 5000 patients. We strongly recommend a 64 bit operating system and as much RAM as possible.	

2.3 Install URL

To install PEN CS Clinical Audit you must use Internet Explorer version 9 or later. Clinical Audit can be installed by going to the following URL

<http://install.pencs.com.au/ClickOnce/CAT4/publish.htm>

2.4 Clinical Desktop System Compatibility

Clinical Audit is compatible with the following clinical application and versions. As new versions are released, PEN CS Clinical Audit will be validated and, if required, updated to maintain compatibility.

- Medical Director - Clinical Audit is compatible with Medical Director Versions 3.
- Best Practice - Clinical Audit is compatible with Best Practice version 1.6.0.395 and later.
- Genie - Clinical Audit is compatible with Genie Version 7.5.3 and later.
- Zedmed - Clinical Audit is compatible with Zedmed Version 11 and later.
- *practiX* - Clinical Audit is compatible with *practiX* Version 1.36 build 2 and later.

- Communicare - Clinical Audit is compatible with Communicare Version 11.2 and later.
- *Medinet* - Clinical Audit is compatible with Medinet Version released July 2011 and later.
- *MedTech32* - Clinical Audit is compatible with MedTech32 Version 9.2 and later.
- MMEEx - Clinical Audit is compatible with MMEEx from version 15.06.02.01

2.5 Billing System Compatibility

Billing is compatible when the clinical and billing systems are provided by the same vendor and the data extract for the clinical system is version 1_5 or above. Currently the following billing is supported:

- MD2 or MD3 and Pracsoft OR Mediflex OR Zedmed
- BP and BP Management OR Pracsoft 3 OR Mediflex OR Zedmed
- Zedmed and Pracsoft OR Mediflex OR Zedmed
- practiX
- Communicare
- MedTech32
- MMEEx

2.6 Best Practice Requirements

Best Practice Software data extract requires one of the following options be configured:

- 1) A database browser password is configured. This password is set in Best Practice and must be entered in the Clinical Audit Tool 4 Preferences.
- 2) From v1.8.2.580 an alternative to setting up the Database Browser Password is to simply tick the 'External data access' **Clinical, Billing and Appointments** checkboxes and then in your CAT4 Best Practice preferences leave the password blank.

In Best Practice:

Select Setup > Configuration from the top menu bar.



Image 1: BP Configuration

- Select the 'Database' option from the left hand tool bar

Option 1: Set the database browser password

- Click the 'Database browser' button
 - Enter and confirm a password of your choice
 - If a password has previously been configured you will be required to enter the current password as well
- NOTE: If a password has been configured and you do not know what it is you will need to contact Best Practice Support for assistance to reset the password.

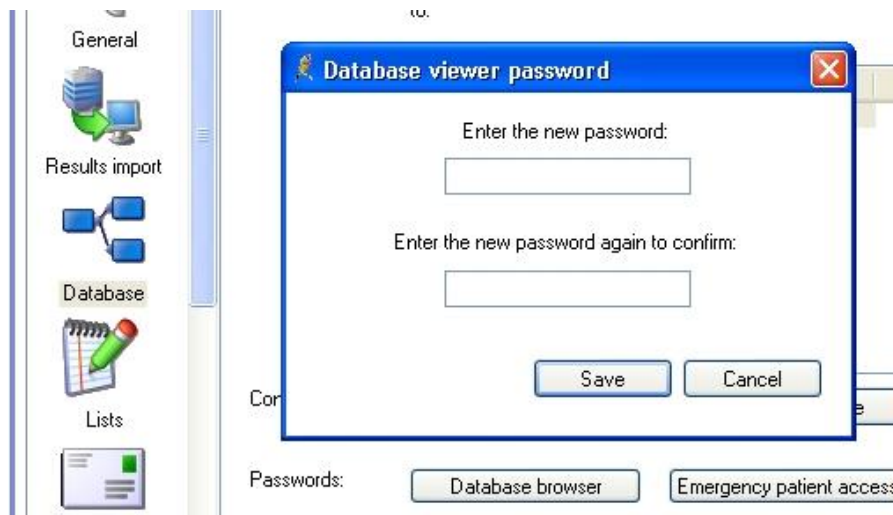


Image 2: BP Database Browser Password

Option 2: Tick ALL the 'External data access' checkboxes and Save

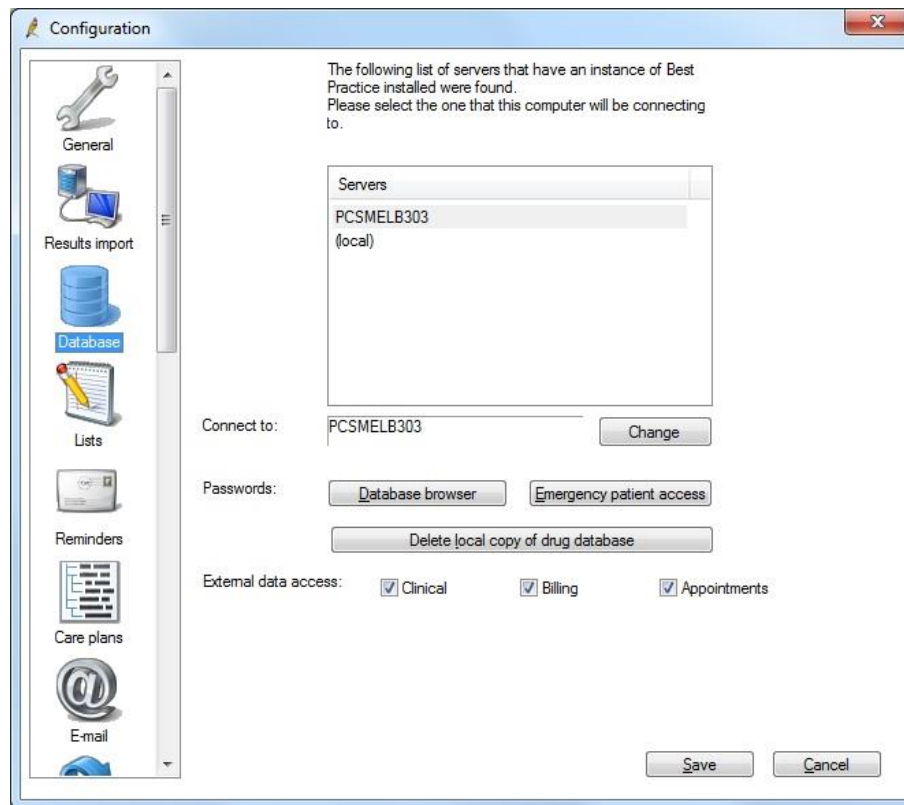


Image 3: BP External Data Access

In Clinical Audit:

- Option 1: Enter the browser password you have set up in the CAT4 Best Practice Preferences.
- Option 2: Leave the password field empty in the CAT4 Best Practice Preferences.

Refer to the section in this document 'Setting Your Preferences'.

2.7 Genie Requirements

The Genie software application provides a new Reports menu option that performs the data extraction for Clinical Audit. The data extraction process is described in the Genie Mappings document available from <http://help.pencs.com.au/Cat.htm>.

2.8 Zedmed Requirements

Zedmed provides an executable file (PenDataExtract.exe) that must exist in your local Zedmed installation directory in order for Clinical Audit to be able to collect data. The local Zedmed installation directory is usually C:\Zedmed or C:\Patients.

If this file is not installed you will receive the following error message when you click the Clinical Audit 'Collect' button.

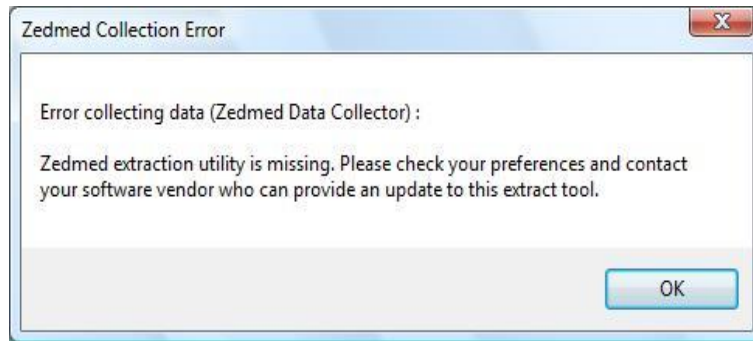


Image 4: Zedmed Error

If you receive this message you can download the executable file from <http://help.pencs.com.au/cat.htm> > click on the CAT4 Zedmed extractor link. Updates to the extractor are available from this link.

Pathology results received in HL7 format will be viewable from the Summary Views panel Measurements tab and will be extracted for CAT4. To enable CAT4 to extract this data it needs to access the Blobs folder. This folder is used by Zedmed to store HL7 based data after importing. The default location is c:\zedmeddata\blobs but this can vary depending on your installation – to verify the location you can check **CRS_App_Server.ini** (which may be in a folder called ZedmedServer) which should have an entry called **BLOBFilePath=C:\ZedmedData\Blobs**

2.9 practiX Requirements

The practiX software application requires practiX Support to upgrade the practiX application to provide the Custom PENEXTRACT Administration option. The data extraction process is described in the practiX Mappings document available from <http://help.pencs.com.au/Cat.htm>.



Image 5: PratiX Configuration

2.10 Communicare Requirements

Communicare provides an executable file (cccatExport.exe) that must exist in your local Communicare installation directory in order for Clinical Audit to be able to collect data. The local Communicare installation directory is usually C:\Program Files\Communicare.

If this file is not installed you will receive the following error message when you click the Clinical Audit 'Collect' button.

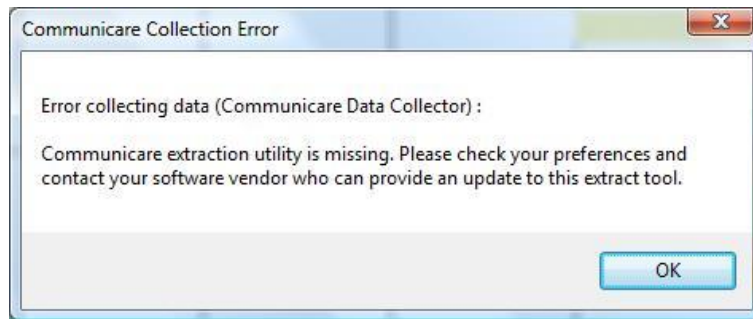


Image 6: Communicare Collection Error

If you receive this message contact Communicare for assistance.

2.11 Medinet Requirements

The Medinet software application provides a new Reports menu option that performs the data extraction for Clinical Audit. The data extraction process is described in the Medinet Mappings document available from <http://help.pencs.com.au/Cat.htm>

2.12 MedTech32 Requirements

MedTech32 provides an executable file (MT2PenCAT4.exe) that must exist in a special MedTech32 CAT4 extractor installation directory in order for Clinical Audit to be able to collect data. The installation directory is usually C:\Program Files\Medtech Global Limited\MT2PENCAT4.

If this file is not installed you will receive the an error message when you click the Clinical Audit 'Collect' button advising the file is missing.

If you receive this message contact MedTech32 for assistance.

3 INSTALLATION

The Clinical Audit Tool 4 is available using Microsoft Click-Once technology and can be installed by using **Internet Explorer** with the following URL

<http://install.pencs.com.au/ClickOnce/CAT4/publish.htm>

Note: Click-Once technology is not compatible with the Firefox browser

Click the 'Install' button

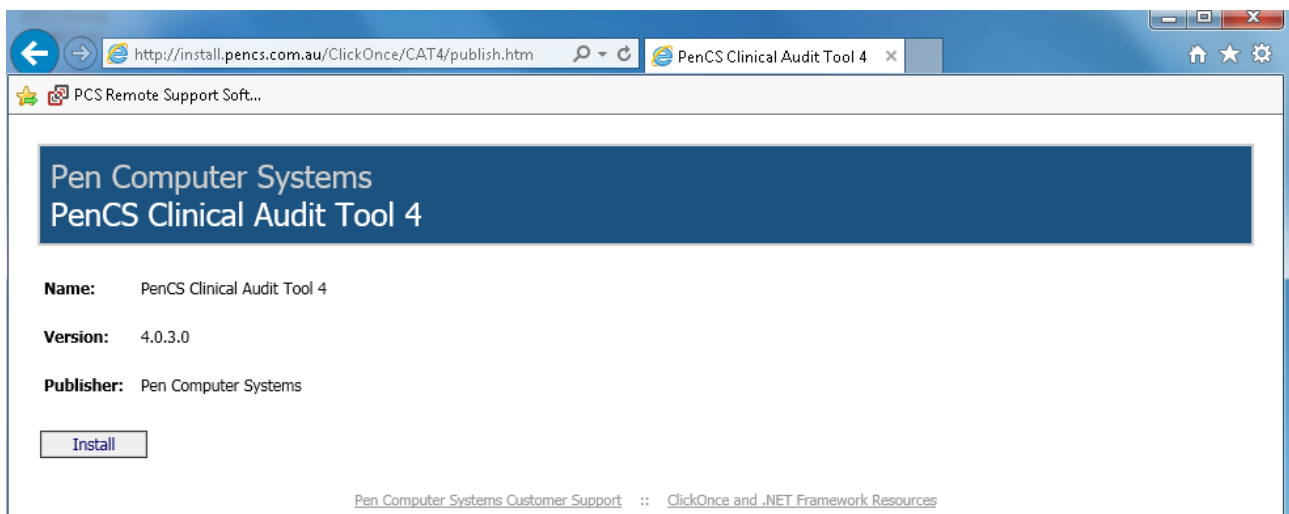


Image 7: CAT Installation

The application will be launched.

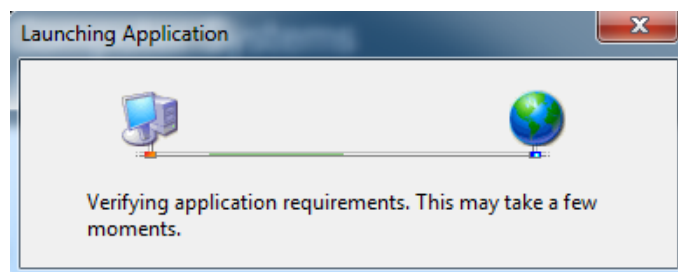


Image 8: Launching CAT4 Installation

A dialog box will display showing you the progress of the install.

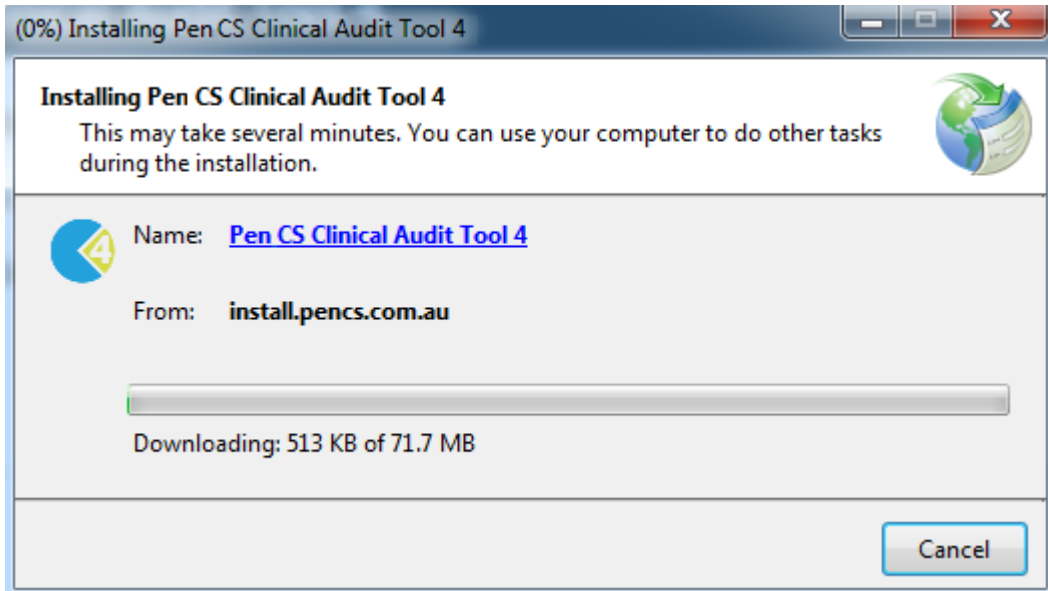


Image 9: CAT4 Installer

Once the install has completed the Clinical Audit Tool 4 Login screen will appear.

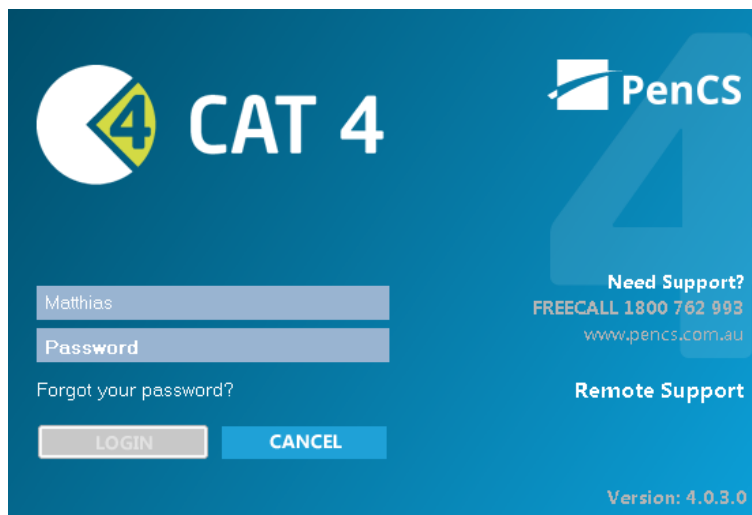


Image 10: CAT4 Logon Screen

Username and **Password** – enter the details provided to you. You can also reset your password by using the 'Forgot your password' link. This requires you to have registered with a valid email address. Please see part 2 – Functionality for details.

Click 'OK'. The first time you login the Default Data Directory dialog box below will pop up.

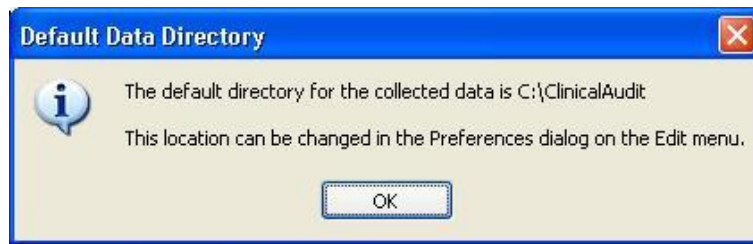


Image 11: CAT4 Default Data Directory

This lets you know that the folder 'C:\ClinicalAudit' on your PC will be used to store the 'snap-shots' of your data for analysis by the Clinical Audit Tool 4. If you prefer to store them somewhere else you can change this by selecting Edit > Preferences on the 'Clinical Audit' tab. Setting your preferences is explained in the next section: 'Setting Your Preferences'.

Click 'Ok'

Each time you install a new update of Clinical Audit a Disclaimer dialogue box will be displayed.

Tick that you accept the disclaimer (the 'OK' button will become active)

Click 'OK' to continue or 'Cancel'

Each time you install a new release of Clinical Audit a Release Notes dialogue box will be displayed.

Click 'OK' to continue

3.1 Installing on a Desktop PC

Clinical Audit needs to be installed under each profile (login) that will be using it on the PC. That is, if multiple people log on to the one PC and they each want to use Clinical Audit the installation needs to be repeated for each login. The application generally only installs once but 'activates' itself for the other logins on additional installs.

3.2 Installing to Terminal Services or Citrix

The only differences to the preceding installation instructions are the following:

1. Clinical Audit needs to be installed on the SERVER
 - Log on as the user via a Terminal Services or Citrix session and you will automatically be on the server. Follow the installation instructions in the preceding section.
2. Clinical Audit needs to be installed under each profile (login) that will be using it. That is, if multiple people will be using it, the installation needs to be repeated for each login. The application generally only installs once but 'activates' itself for the other logins on additional installs.
 - Log on as each user that will be using CAT4 and repeat the install instructions.

NOTE: If access privileges are an issue, then you will need to elevate the user's privileges to install and then restore them afterwards. This is a Microsoft configuration.

3.3 Using Clinical Audit Offline

You must install and login initially to Clinical Audit while connected to the Internet so your login details can be validated. You can then use CAT4 without being connected to the Internet for a period of one month. When you are connected to the Internet CAT4 is able to verify your registration credentials are still valid and check to see if there are any application updates available for download.

If you use CAT4 for a long period of time without connecting to the Internet then your credentials will eventually expire. You will need to connect again and go to the CAT4 installation URL to download an update.

Note: If you have a Desktop Shortcut to CAT4 and it does not work offline you simply need to delete and recreate it.

4 CONFIGURATION

Once the CAT4 software has been installed it is available from your Programs List.

Click Start > All Programs > Pen CS > PEN CS Clinical Audit 4

Enter your Account name and Authorisation key and click 'OK'.

Once you have logged in the screen below will display. From the dashboard you can choose which view of CAT4 you want to open – the CAT 4 icon on top will load the full suite of reports.



Image 12: CAT4 Dashboard

You will see the population figure is initially 0 because you have not yet collected data from your clinical desktop system.

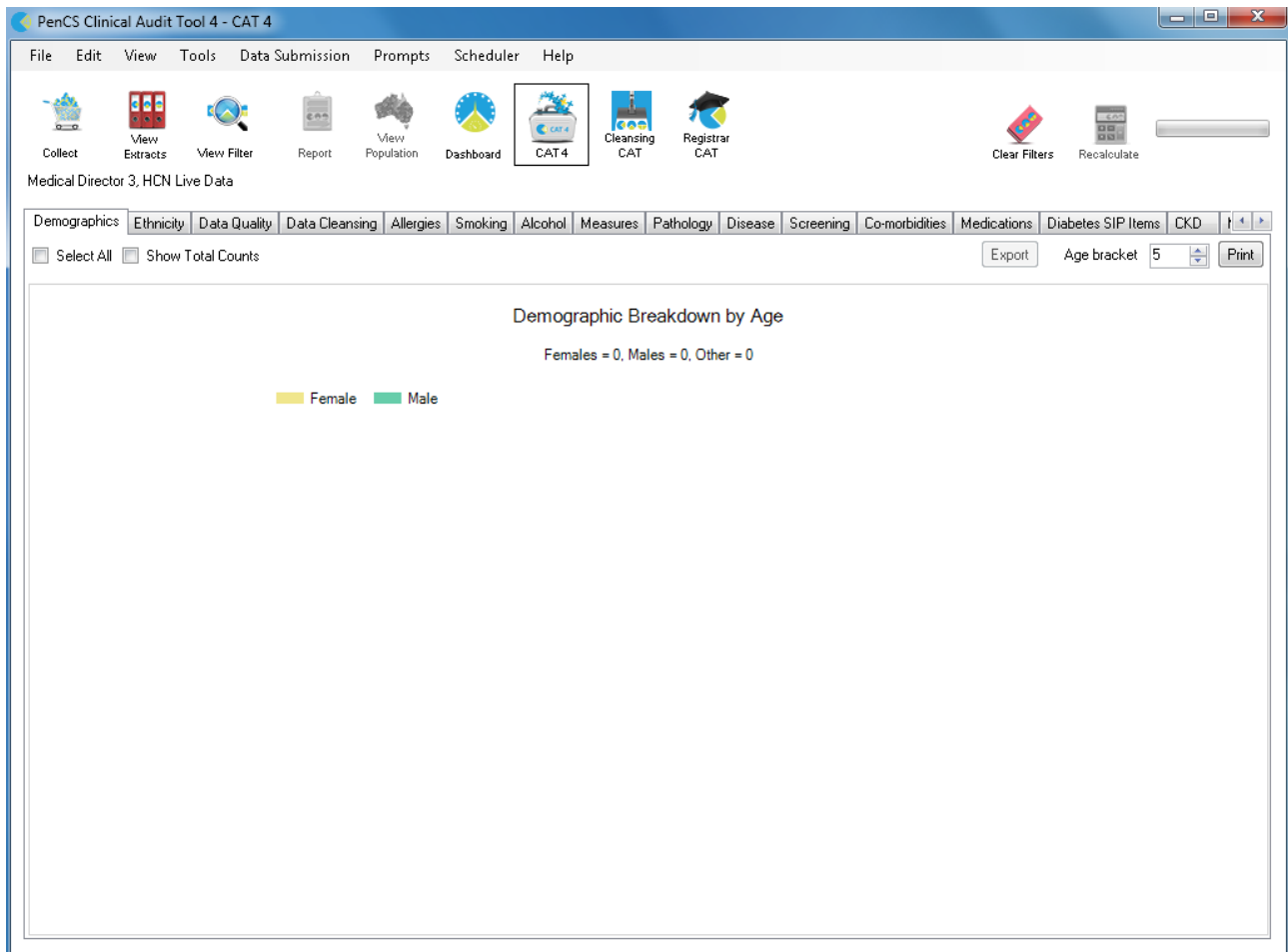


Image 13: CAT4 Before Data Loading

4.1 Setting Your Preferences

Your Preferences are set by selecting Edit > Preferences from the top menu.

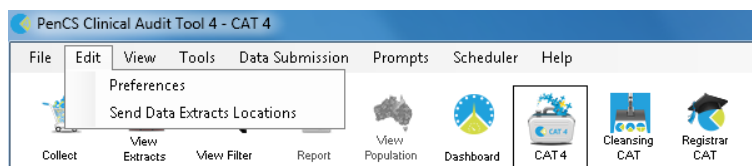


Image 14: CAT4 Preferences

The Preferences Dialog box will be displayed.

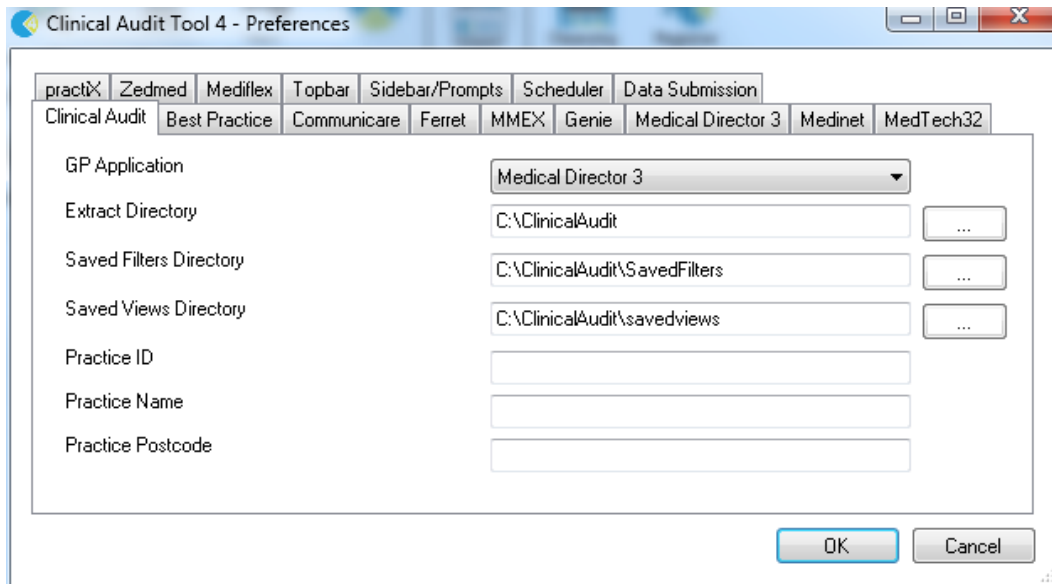


Image 15: CAT4 Preferences Menu

GP Application

From the drop down list select the Clinical Desktop System you wish to collect from. Then click the tab for that Clinical Desktop System to enter further values.

Extract Directory

This folder is used to store the ‘snap-shots’ of your data for analysis by the Clinical Audit Tool 4. By default the data will be stored in the folder ‘C:\ClinicalAudit’ on your PC. PenCS recommends to store the data on a shared drive that is included in your regular backup. You can change this by clicking the ‘Browse’ button and choosing another Data Folder Location. Click ‘OK’ when you have selected a new location. Click ‘OK’ to save this location and close the Dialog box.

Saved Filters Directory

This folder is uses to store your saved filter criteria. Saved filters can be reloaded and run at a later time. Details are provided in the ‘PEN CS Clinical Audit User Guide Part 2’.

Saved Views Directory

This folder is uses to store your saved views. Saved views can be reloaded and run at a later time. They can be created through the My CAT Wizard from the dashboard. Details are provided in the ‘My CAT Wizard Quick Reference Guide’.

Practice Name, ID Number and Postcode

Fill in the values for these fields with your practice details. At a future time these values will be used if your practice decides to participate in projects that send consented, de-identified patient clinical data to your Division or other data repository. The postcode is used to establish the public holidays for your state which are used in the after hours report.

4.1.1 Choosing your Clinical Desktop System

Once you have selected your Clinical Desktop System from the 'Clinical Audit' tab, click the corresponding tab for that Clinical Desktop System to enter further configuration options.

Eg. GP Application 'Medical Director' selected, now click the corresponding tab

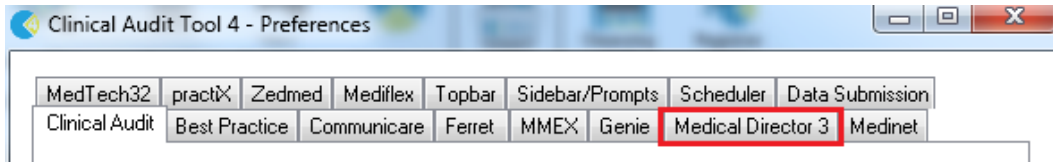
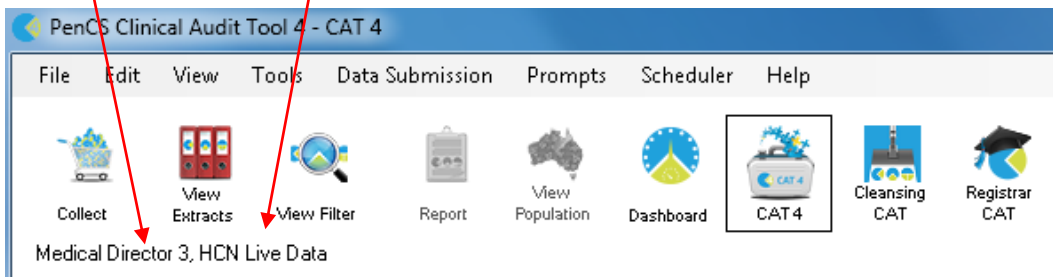


Image 16: CAT4 Select Clinical System

The options available for each system are explained in the following pages. Values will be defaulted where possible. Once you have selected and configured your Clinical Desktop system the details will be displayed above the row of tabs.

Clinical Desktop System Database Location



There are a number of clinical systems that can work with third party billing systems. The billing system can be configured on the respective tab of the clinical system to match the setup at the clinic. If no billing system is configured, CAT4 will not display any MBS item reports. This is explained further in the section 4.1.3.

Medical Director 3

Select your Database Configuration from the drop-down list. These will match the configurations you have available through the 'HCN Maintenance' icon on your desktop.

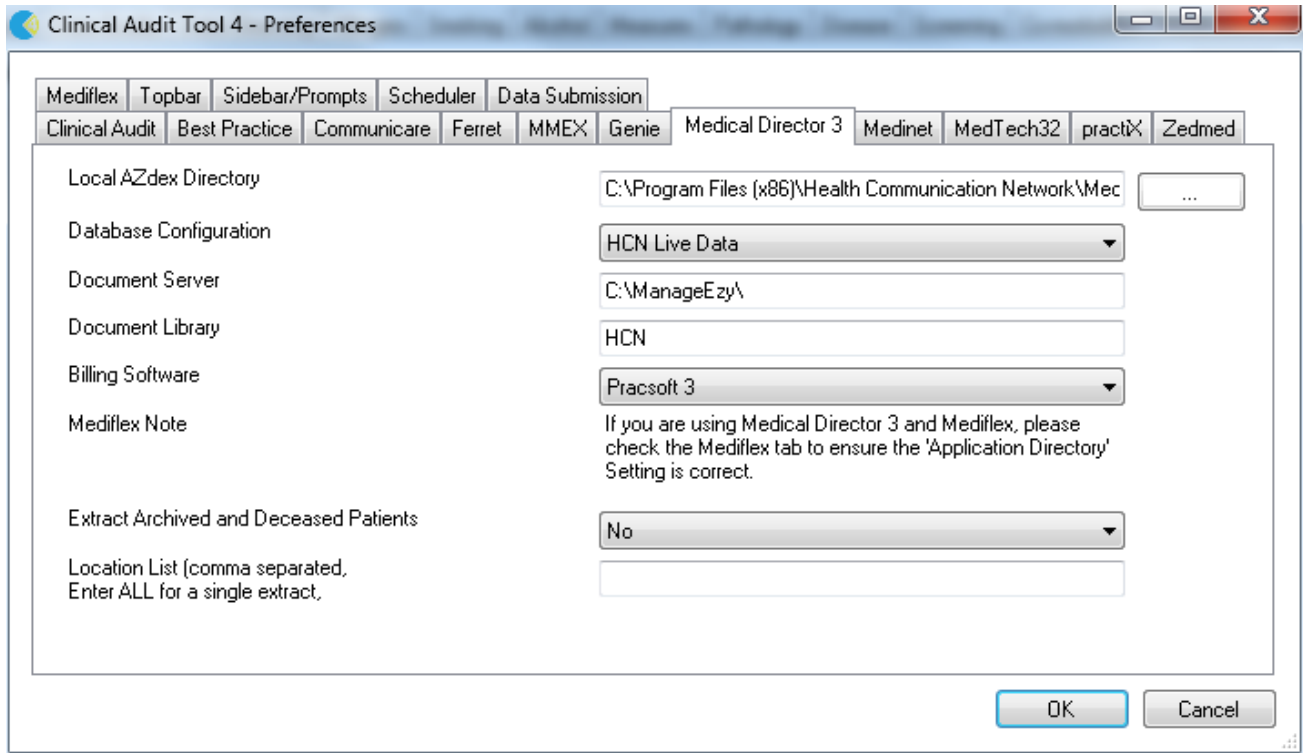


Image 17: CAT4 Medical Director 3 Configuration

Best Practice

Select either 'Live Data' or 'Sample Data' from the drop down list.

In Best Practice you need to have allowed database access using one of the following options (refer Section 2:10 Best Practice Requirements):

Option 1: Configuring a BP Database Browser password -> Enter that password in the preferences

Option 2: Ticking the 'External data access' Clinical checkbox -> Leave the password preference field empty

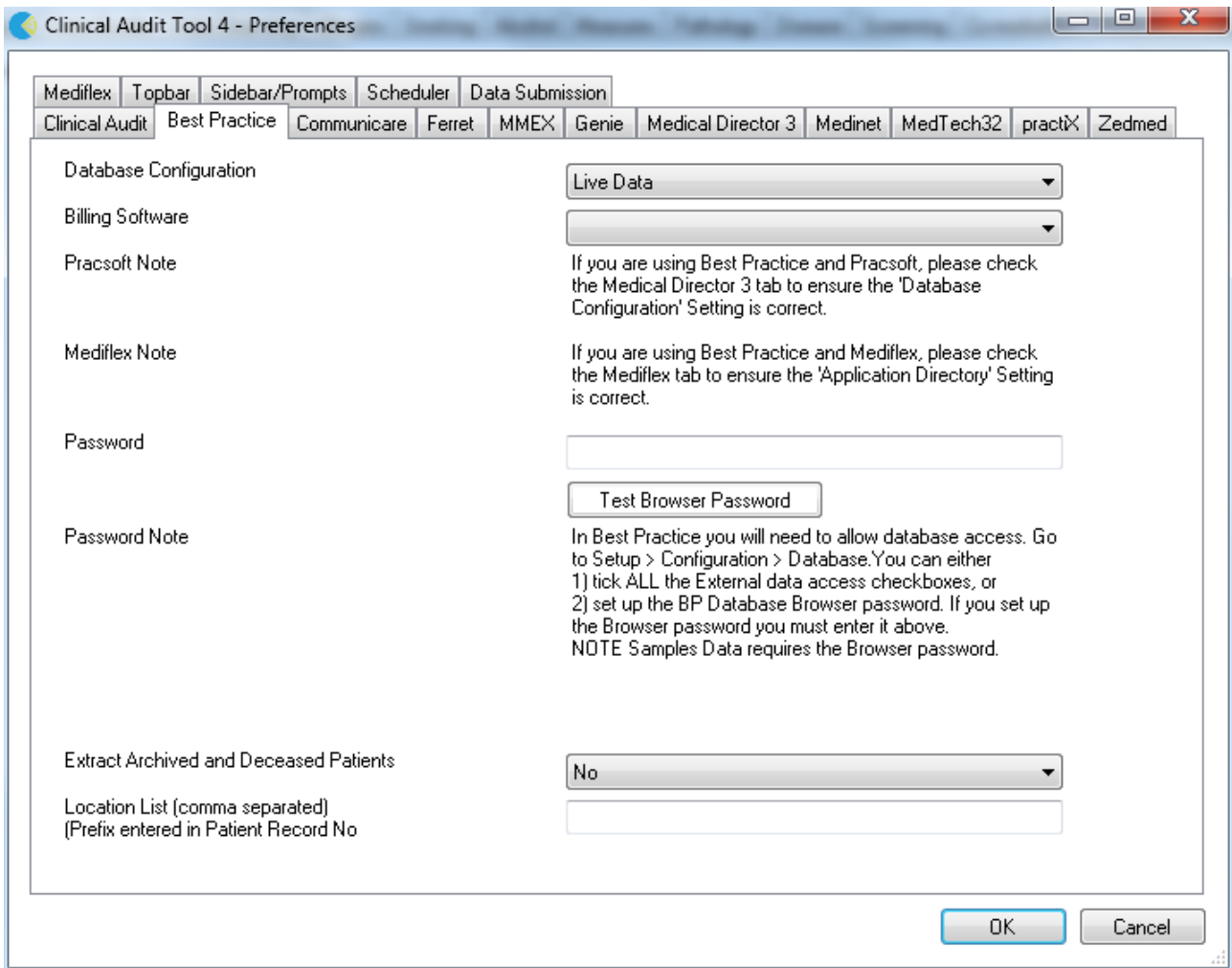


Image 18: CAT4 BP Configuration

Genie

There is no further set up for Genie.

The Genie software application itself provides a new Reports menu option that performs the data extraction for Clinical Audit. This is described in the Genie Mappings document available from <http://help.pencs.com.au/CAT.htm>.

The Genie preference tab summarises the steps you should follow.

Ensure the **Extract Directory** on the 'Clinical Audit' tab matches the extract folder chosen in Genie.

Zedmed

The Zedmed and Zedmed data directory should have populated with your install locations, if the locations are not correct you can change the folder to match your settings. We recommend to leave the default settings unless you are experiencing problems with the data collection. To enable CAT4 to extract pathology results it needs to access the Blobs folder. This folder is used by Zedmed to store HL7 based data. The default location is c:\zedmeddata\blobs but this can vary depending on your installation – to verify the location you can check `CRS_App_Server.ini` (which may be in a folder called ZedmedServer) which should have an entry called `BLOBFilePath=C:\ZedmedData\Blobs\`

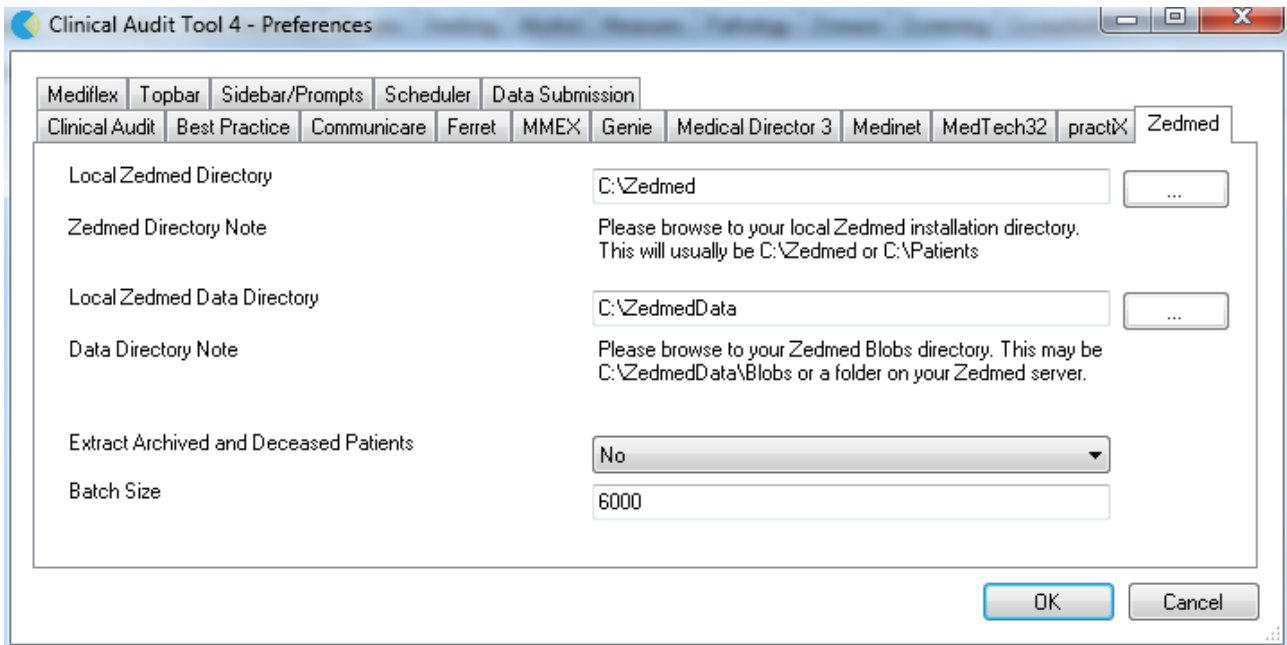


Image 19: CAT4 Zedmed Configuration

practiX

There is no further set up for practiX.

The practiX software application itself provides a new Administration menu option that performs the data extraction for Clinical Audit. This is described in the practiX Mappings document available from <http://help.pencs.com.au/Cat.htm>. The practiX preference tab summarises the steps you should follow.

Ensure the **Extract Directory** on the 'Clinical Audit' tab matches the extract folder determined by practiX.

Communicare

Browse to the local Communicare installation directory.

Enter your Communicare login details to allow automatic login to the exporter.

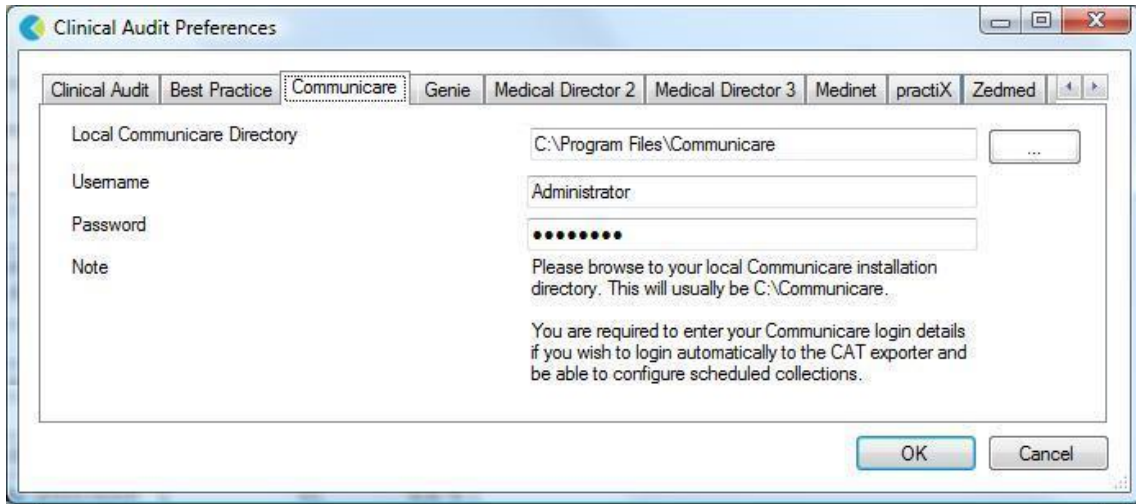


Image 20: CAT4 Communicare Configuration

Medinet

There is no further set up for Medinet.

The Medinet software application itself provides a new Resources menu option that performs the data extraction for Clinical Audit. This is described in the Medinet Mappings document available from <http://help.pencs.com.au/Cat.htm>.

The Medinet preference tab summarises the steps you should follow.

Ensure the **Extract Directory** on the 'Clinical Audit' tab matches the extract folder determined by practiX.

MedTech32

Select either 'Live Data' or 'Sample Data' from the drop down list.

Browse to the MedTech32 CAT4 extractor installation directory.

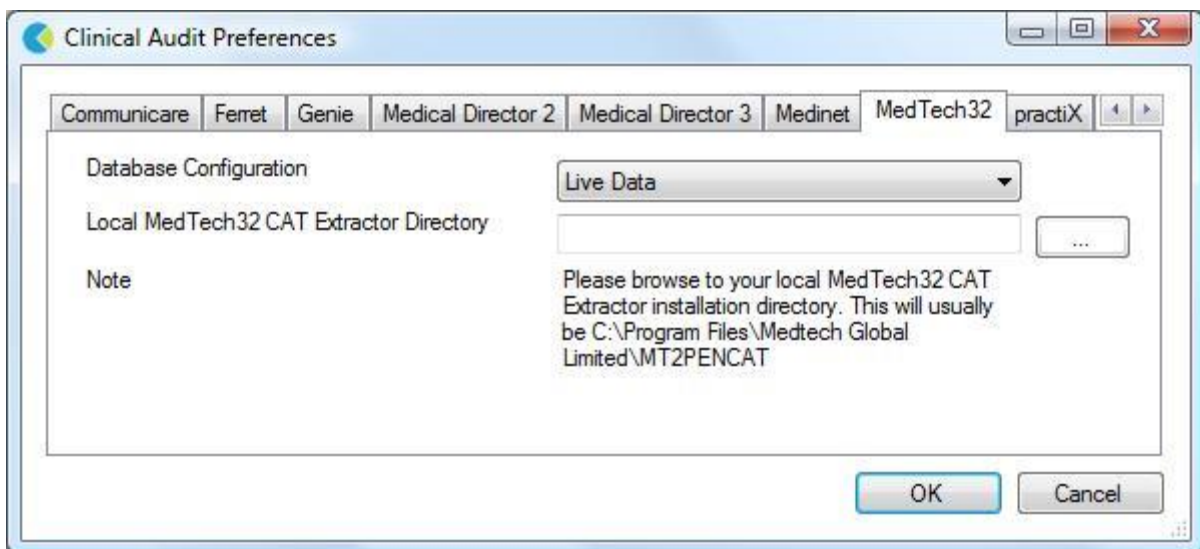


Image 21: CAT4 Medinet Configuration

4.1.2 Choosing a preferred Data Extract Directory

If there are more than one CAT4 user in the practice then choose a **network drive** that is accessible to all. We recommend to use a network or shared drive that is included in your routine backups even if there is only one CAT4 user. If there are more than one user ensure that the selected location is accessible to all users.

Use the 'Edit > Preferences' option to set the same 'Extract Directory' for each user.

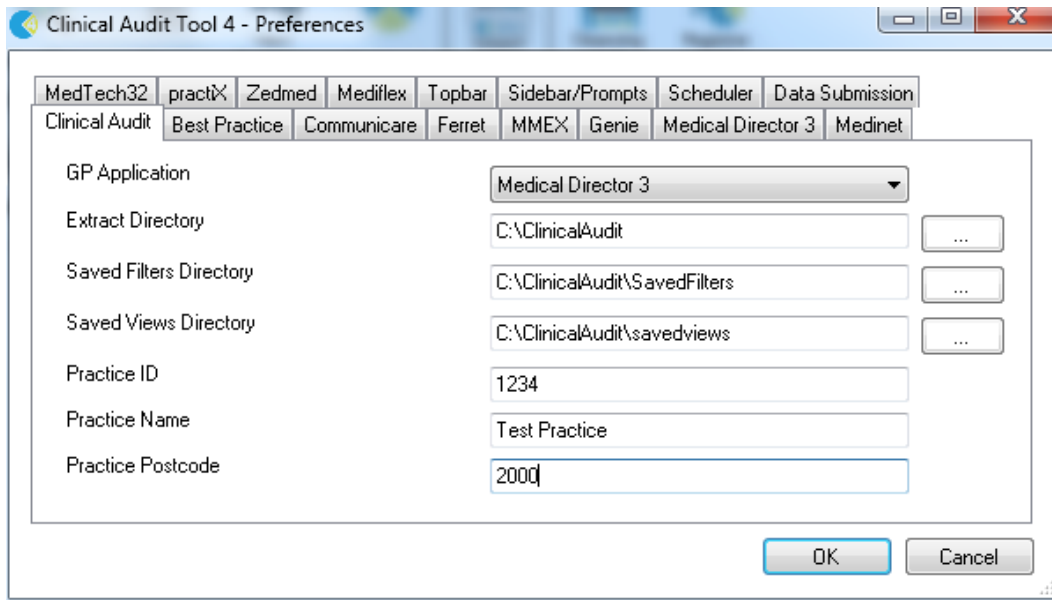


Image 22: CAT4 Extract Folder



More than 1 user can work with the same snapshot at the same time.

Genie/practiX users will need to make sure this folder matches the folder they select from the Genie/practiX application when they do the extract. This is described in the Appendices section of this manual.

4.1.3 Choosing and configuring your Billing System

The following billing is supported:

- MD3 and Pracsoft OR Best Practice OR Mediflex OR Zedmed
- BP and BP Management OR Pracsoft OR Mediflex OR Zedmed
- practiX
- Communicare
- Zedmed
- MedTech32
- MMEx

MD and BP users will need to configure their preferences for their Billing Software.

MedicalDirector 3

Go to the Medical Director 3 tab. Choose your billing system from the Billing Software drop-down list

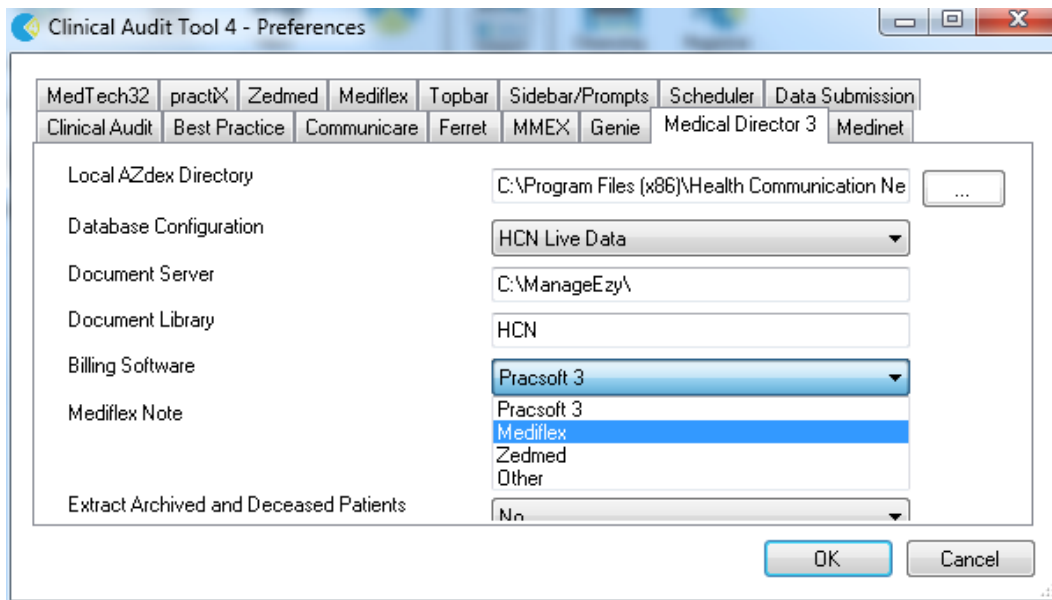


Image 23: CAT4 MD3 Billing System

BestPractice

Go to the BestPractice tab. Choose your billing system from the Billing Software drop-down list

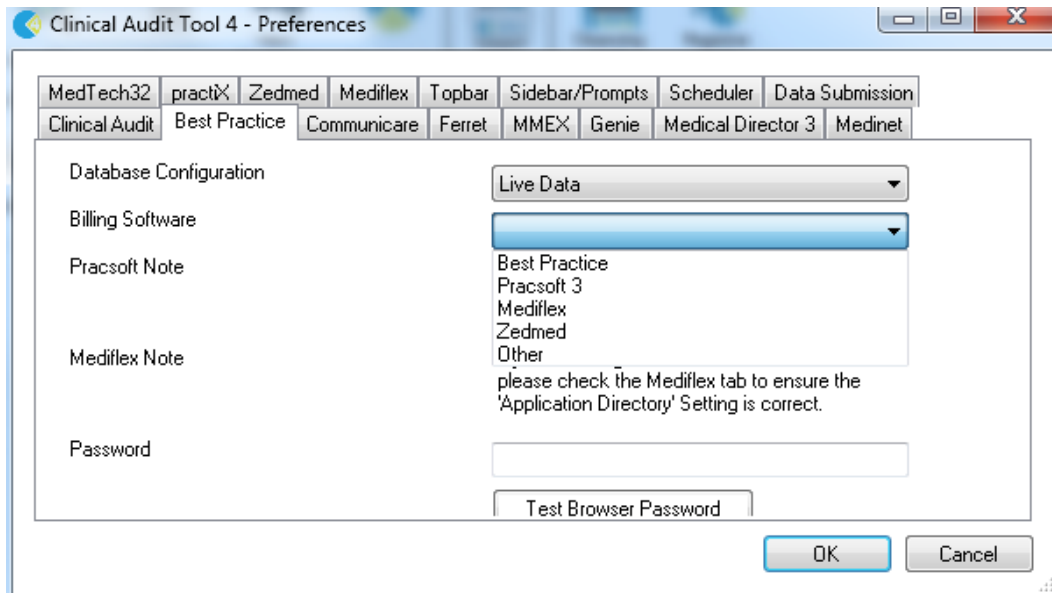


Image 24: CAT4 BP Billing System

Mediflex users

From the Mediflex tab: Configure the 'Application Directory' to point to the Mediflex folder which will usually be VMF\Programs

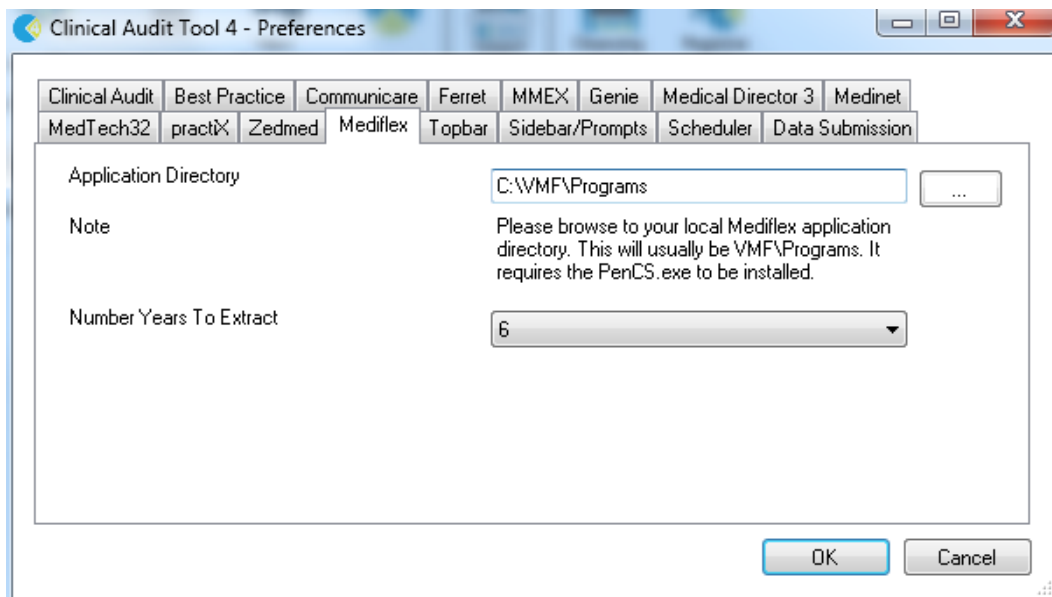


Image 25: CAT4 Mediflex Configuration

5 CAT4 USER INTERFACE

Once the CAT4 software has been installed it is available from your Programs List.

- Click Start > All Programs > Pen CS > PEN CS Clinical Audit
- Enter your Account name and Authorisation key and click 'OK'.

Please refer to the PEN CS Clinical Audit Tool 4 User Guide Part 2 – Functionality for a detailed description of the user interface.

5.1 Navigating the CAT4 User Interface

Click the 'View Extracts' and the 'View Filter' buttons to display all the areas of the CAT4 user interface.

The screen is divided into 3 sections:

- Data **Snap-shots** (or Extracts) collected for analysis (Left Hand Panel)
- Data **Filters** (Top Right Panel)
- Data **Reports** (Bottom Right Panel)

It is handy to be able to hide the data collection and data filter areas of the screen in order to make best use of your screen space to view the data results. You can toggle between the View/Hide modes at any time. Once you have logged in the screen below will display.

You will see the population figure is initially 0 because you have not yet collected data from your clinical desktop system or loaded an existing extract file.

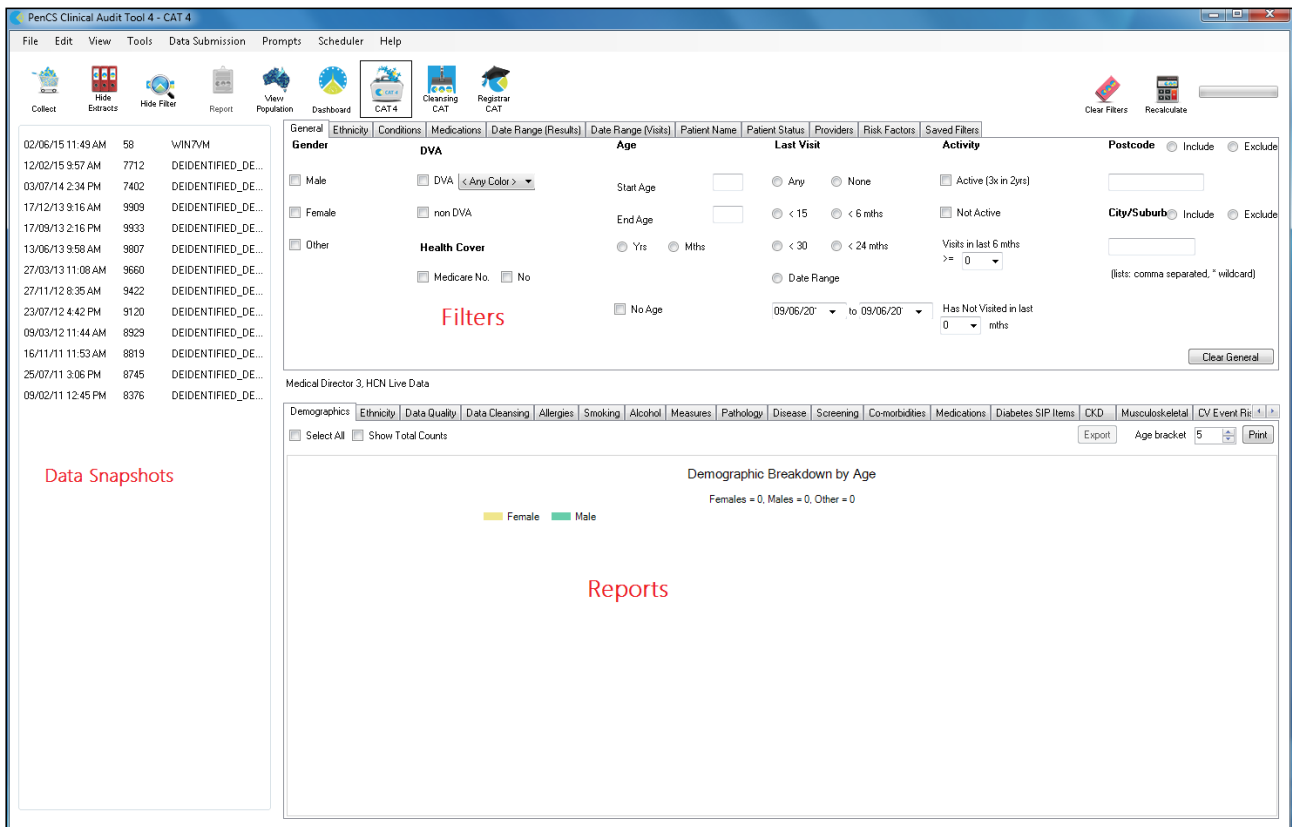


Image 26: CAT4 UI

6 COLLECTING DATA SETS

NOTE:

Before you start collecting data sets ensure you have set up your preferences to point to the correct clinical desktop system for your practice. (See 'Setting Your Preferences' for details about how to do this.)

A data set is collected by clicking the 'Collect' button at the top left of the screen.

Once you click the 'Collect' button you will see the 'status bar' in the top right hand corner of the screen flashing while the data is retrieved from the clinical desktop system.

- **Genie, practiX, Medinet, Medtech and MME**x users please note that the data collection is performed from within your clinical application. Clicking the CAT4 'Collect' button at the top left of the screen will provide you with the summary steps on how this is done for your system. Step by step details are provided in the Appendices section of the 'PEN CS Clinical Audit Tool 4 User Guide Part 2'.
- **Zedmed** users please note that to enable CAT4 to extract this data it needs to access the Blobs folder. This folder is used by Zedmed to store HL7 based data. The default location is c:\zedmeddata\blobs but this can vary depending on your installation – to verify the location you can check CRS_App_Server.ini (which may be in a folder called ZedmedServer) which should have an entry called BLOBFilePath=C:\ZedmedData\Blobs\

The data set collected is saved in your preferred data folder (see 'Setting Your Preferences' for more information).

When the data retrieval has completed you will see an entry in the left hand column. The data is stored as a 'snap-shot' on your PC. You can use this 'snap-shot' for analysis at any time in the future.

Tip: To refresh the list of 'snap-shots' toggle the 'hide/view Extracts' button.

Each entry displays the date/time of collection, the number of records retrieved and the machine name on which the collection was done.

12/06/2008 12:56 PM	11776	PENMLB_01
10/06/2008 12:40 PM	11776	PENMLB_01

You can collect as many data sets as you wish over time. Each data set will be listed as an entry in the left hand column.

To analyse a specific data set click on the entry for that data set. It will become highlighted and you will see the 'status bar' in the top right hand corner of the screen flashing while the data is reloaded from the 'snap-shot' into Clinical Audit.

6.1 What data is collected

Data is only collected for **patients who are active in your Clinical system**. Data for patients who are deceased or have been made inactive is not collected unless it is required for reporting and the practice has set this option on (available MD/BP/Zedmed only and done by default in Communicare and MMEx).

This means when you are analysing your data using CAT4 you are only seeing patients who are currently marked as active in your Clinical system. You may find patients in CAT4 that you know are no longer active at your practice. If you inactivate them in your Clinical system they will be excluded from future data collections.

6.2 How is the data stored

The collection process creates 2 xml data files which are encrypted and saved as a .dat file to the data folder as dictated by your system preferences. One file is pure Clinical data and has no identifiable patient information. This is called the DATA file. This file can be made available in its xml file form by using the 'Deidentify Dataset' tool. The second file is the LINK file and contains all patient identifiable data. The LINK file is only used when you want to re-identify a list of patients that make up a segment of a graph. This file is never made available.

6.3 Existing data set compatibility with changes to CAT4

Updates to the CAT4 data set allow new filters and reports to be added. Older CAT4 extracts will not contain the required data needed to utilise these functions. You may still load older CAT4 extracts and analyse them as before, however functionality which requires data not included in these extracts will not be available and be greyed out in the interface.

7 DATA FILTERING AND DATA SET ANALYSIS

These sections are included in the 'PEN CS Clinical Audit Tool 4 User Guide Part 2 – Functionality' available at help.pencs.com.au/cat.htm