



Medtech32
Interbase 2009 – Backup and Restore Instructions
Technical Documentation



These Documentations contain important information for Medtech32.
Please ensure the Technical Documentations are circulated amongst all your
IT staff and/or IT service providers.
We suggest these should be filed safely for future reference.

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For further information regarding Interbase 2009 Backup and Restore, please contact the Medtech Helpdesk on 1800 148 165 → Option 1, or email ausupport@Medtechglobal.com.

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Database Maintenance Checklist

Prior to running ANY Medtech32 Version Upgrades, a SUCCESSFUL Database Maintenance MUST be performed on ALL of your databases.

It is also recommended that a Database Maintenance is run on a REGULAR basis (at least every 1-3 months depending on the database size and transactions volume) to ensure that your databases are healthy and can operate at optimum state.

WARNING: If you encounter ANY errors during Database Maintenance which prevents you from completing the Backup and Restore process, DO NOT ignore the errors and continue to use Medtech32 or continue with ANY upgrades. Please LOG the exact errors you have encountered, and contact Medtech Helpdesk for assistance.

NOTE: Database Maintenance should not be attempted during normal business hours due to the amount of time this process may take. The amount of time required to run Database Maintenance is dependent on the specification of your server, the size of ALL databases, and how long apart since the last successful Database Maintenance.

IMPORTANT NOTE

WARNING: It is HIGHLY recommended to employ ONLY qualified system engineers when performing ANY database backup and maintenance. The consequences of ruining a database backup or maintenance could possibly lead to data corruptions, and as a result – data loss and systems downtime.

If in doubt, please consult with your IT technician/service provider, or contact one of the Medtech Channel Partners listed on our web site:

<http://www.medtechglobal.com/aus/medtech-online-au/support-3.html>

Supported Operating Systems

Starting from Medtech32 Version 8.0.0, Medtech will support the following 32-Bit versions/editions of Windows while running Medtech32 on Interbase 2009.

Supported 32-Bit Server Operating Systems	Windows 2003 Standard Server (32-bit)
	Windows 2003 Enterprise Server (32-bit)
	Windows 2003 Small Business Server (Not Recommended – please refer to the "Server Deployment Considerations" section below.)
	Windows 2008 Standard Server (32-bit)
	Windows 2008 Enterprise Server (32-bit)
	Windows 2008 Small Business Server Premium Edition NOTE: Must run on 32-bit standalone server
	Windows 2008 Essential Business Server Premium Edition NOTE: Must run on 32-bit standalone server

Supported 32-Bit Workstation Operating Systems	Windows XP Professional (32-bit)
	Windows Vista Business Edition (32-bit)
	Windows Vista Ultimate Edition (32-bit)
	Windows Vista Enterprise Edition (32-bit)
	Windows 7 Professional Edition (32-bit)
	Windows 7 Ultimate Edition (32-bit)
	Windows 7 Enterprise Edition (32-bit)

WARNING: Although it might be possible to run Interbase 2009 on other versions of Windows, both Medtech and Embarcadero **WILL NOT** be able to provide support if a practice encounters problems while running on any operating systems not listed above.

NOTE: ALL instructions listed below are ONLY intended for these supported Windows versions.

Interbase 2009 Database Size Limits

Although the Interbase 2009 engine can support 64-bit files operations, it is important to remember that not all file systems support large files.

Interbase Version	File System	Size Limit
Interbase 2009 Database File Size Limit	FAT16	4GB
	FAT32	4GB
	NTFS	16TB

NOTE: If any Interbase database is over the size limit listed in the table above, the database would corrupt itself by writing over the initial database pages. It is important to make sure a database is split into multiple files (each file must not exceed the size limit) before reaching the above limit in order to avoid corruptions.

IMPORTANT: If any of your databases have reached the above size limit under the corresponding file system, please contact the Medtech Helpdesk prior to restoring the databases.

IMRPOPANT: It is HIGHLY RECOMMENDED to use **NTFS** as the ONLY file system for ALL hard drive partitions on ALL computers across your network.

Interbase 2009 File Extensions

The following table shows the official file extensions for Interbase 2009 databases and backups. The file extension requirements for databases are compulsory, and should be followed strictly.

File Type	File Extension
Database	<i>.IB</i>
Backup	<i>.IBK</i>

Database Maintenance Pre-Requisites

1. Ensure the person(s) who will be performing the database maintenance have **READ THROUGH** the instructions.

IMPORTANT: This document contain valuable information that, if not read, could seriously affect the database maintenance progress and/or possible down time of your network.

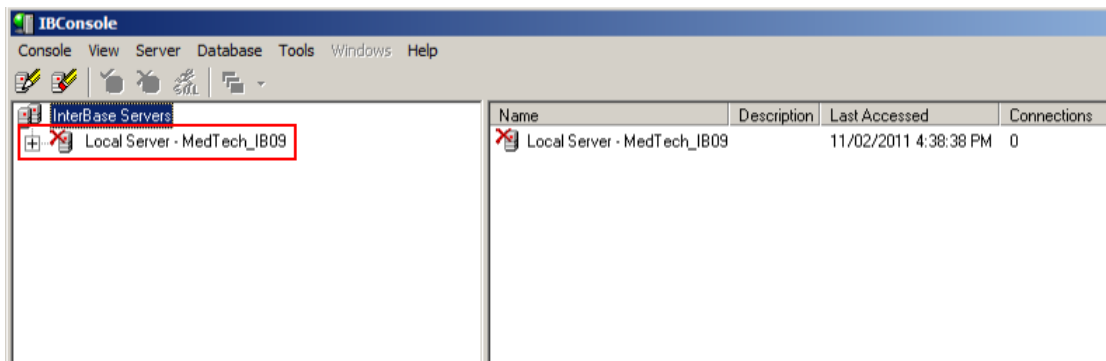
2. Ensure you are ALWAYS logged onto Windows with **ADMINISTRATIVE RIGHTS** when performing ANY installation, update, or maintenance tasks.
3. **"User Account Control" (UAC)** MUST be **DISABLED** as a policy across ALL Server and Client computers that are running on **Windows Vista or Windows 7 or Windows 2008**.
4. To avoid unnecessary problems during installation, upgrade, or maintenance, preferably you should ALWAYS log onto Windows in **"Console Mode"** – i.e. not through Remote Desktop Connection, Terminal Services, or Citrix.
5. The amount of free hard disk space required to perform database backup and maintenance on the Interbase Server should be at least **THREE times the size of ALL databases** you will be working with.
6. Ensure you have a **COMPLETE** backup of ALL databases located in the `MT32\Data` directory.
7. Ensure ALL users (including remote users) have **LOGGED OUT** of Medtech32 and ALL services (e.g. ManageMyHealth SMS Communicator), scheduled utilities (e.g. Message Transfer Utility, Auto Scan from Folder), backup or maintenance tasks (e.g. Interbase Backup Scripts) that require access to the databases have been **STOPPED**.

Step 0 – Configuring Interbase Console

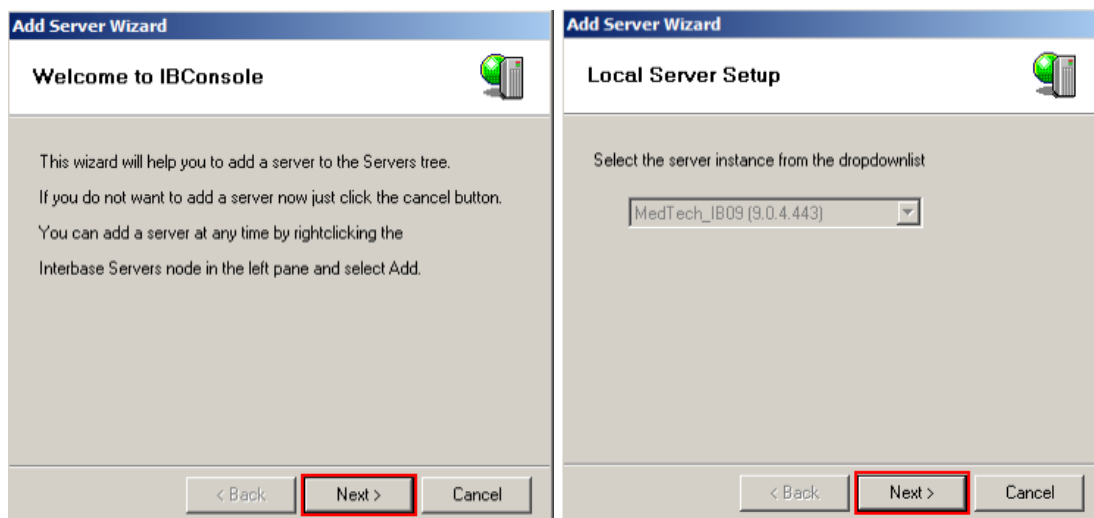
IMPORTANT NOTE

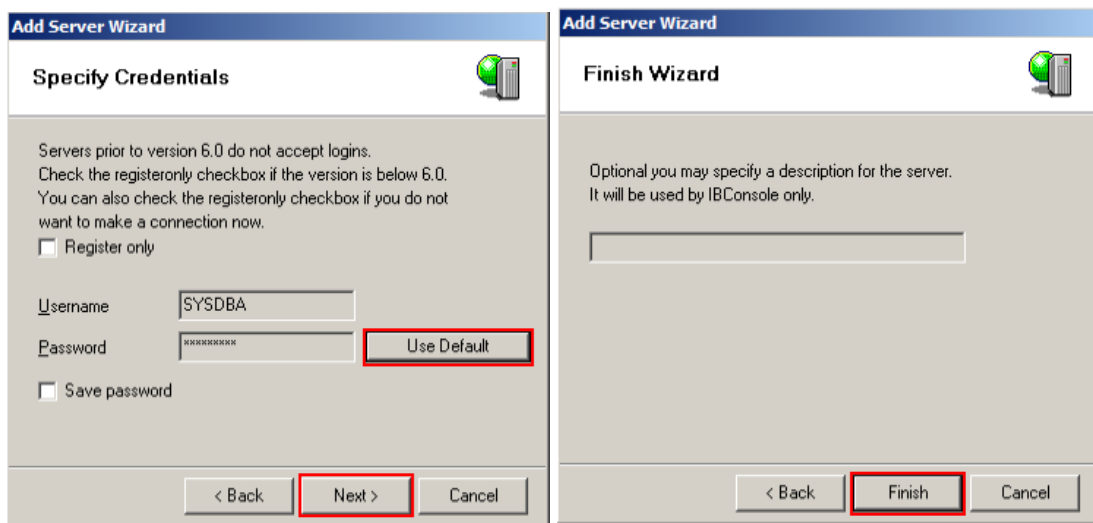
NOTE: You will only need to setup the Interbase Console once and configure each database once on the very first run.

1. On the Server, go to **Windows Start Menu ► Programs ► CodeGear InterBase 2009 [instance = MedTech_IB09] ► IBConsole** (please retry if it comes up with an error).
2. You should now log in to the Local Server (this should be found under Interbase Servers). Double click on **Local Server – MedTech_IB09**.



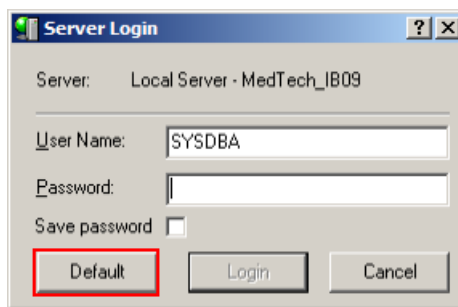
NOTE: If you do not see a Local Server listed, then you will need to register this by going to the Main Menu and select **Server ► Add**. Click through the first two screens using the button **Next**, then click on the button **Use Default** on the **Specify Credentials** screen before clicking on the button **Next** again, and finally click on the button **Finish** on the last screen.




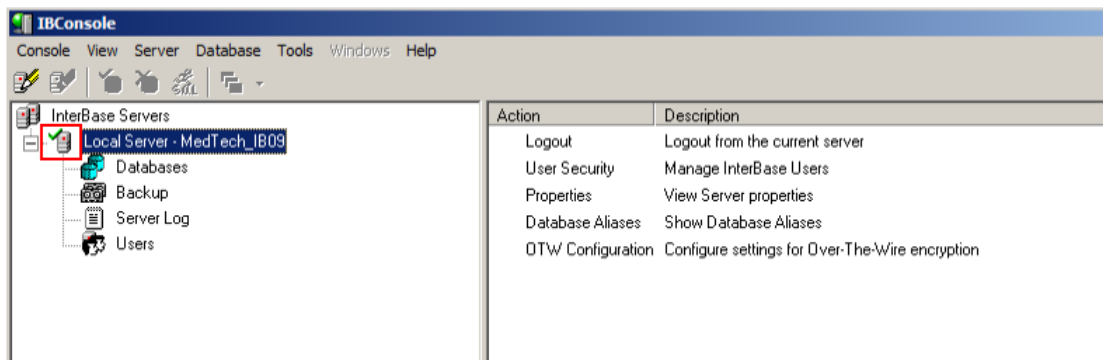


3. **Login** by clicking on the button **Default**.

NOTE: It is not necessary to fill in the User Name and Password.



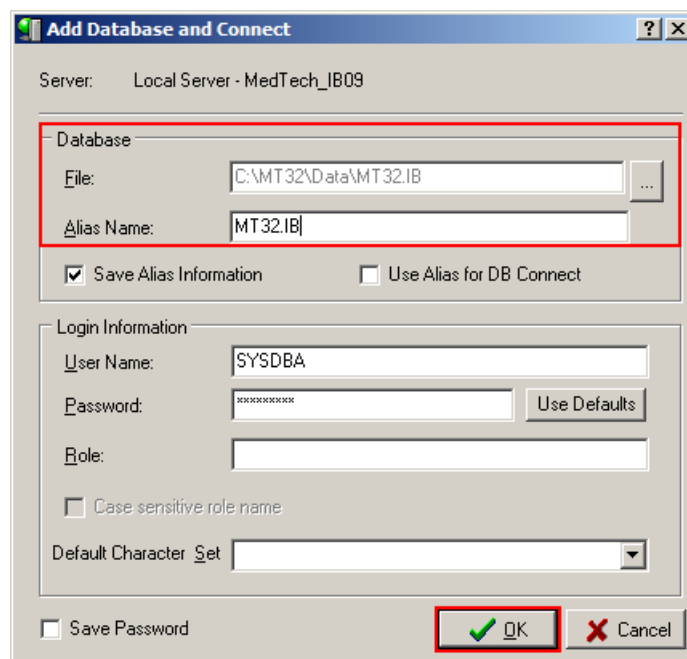
A **Green Tick**  will appear to the left of **Local Server – MedTech_IB09**.



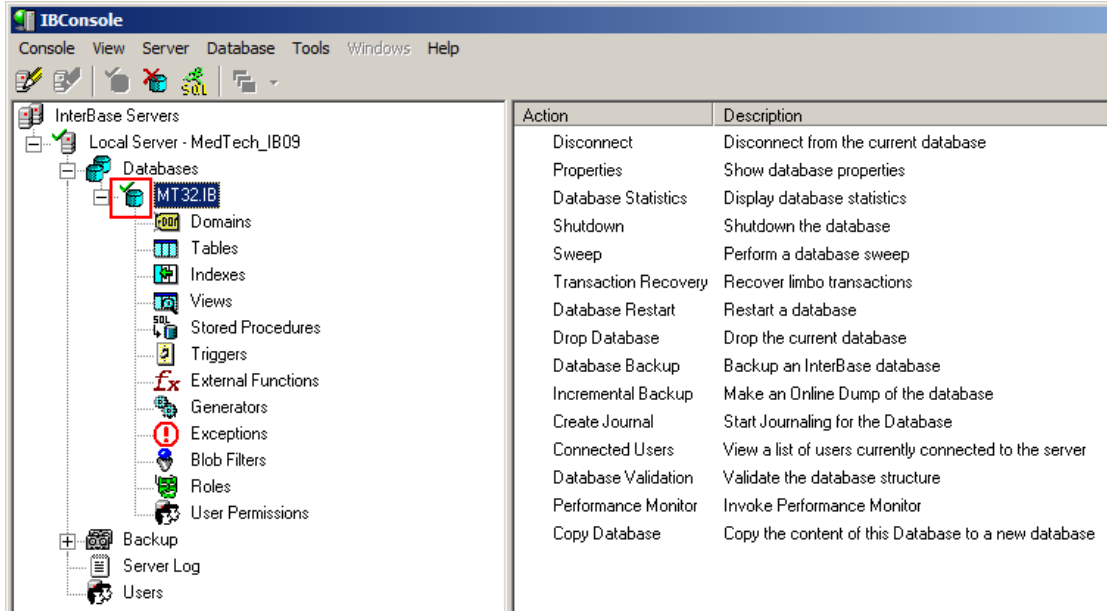
- Proceed with this step if you do not see your *MT32.IB* database listed under **Local Server – MedTech_IB09**, otherwise please jump to Step 5.

To register your *MT32.IB* database, from the Main Menu select **Database ► Add**. Browse to *MT32.IB* under the **File** section (e.g. *C:\MT32\Data\MT32.IB*), enter any "Database" **Alias Name** (e.g. *MT32.IB*), then click on the button **OK** to register the database.

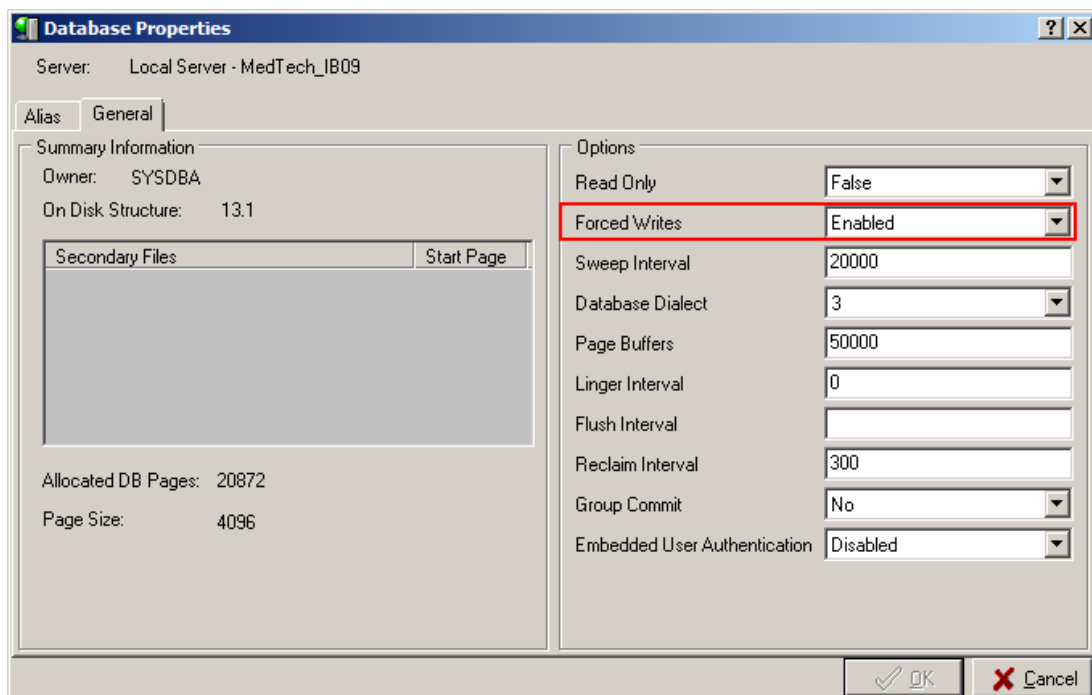
NOTE: By default, the Medtech32 databases are located under **C:\MT32\Data**. If you are uncertain where the Medtech32 databases are located, please contact your IT technician or service provider who has performed the Medtech32 installation and/or upgrade.



- Make sure you have a **Green Tick**  to the left of **MT32.IB**. If not, double click on the **MT32.IB** Database Alias such that the Green Tick will appear.

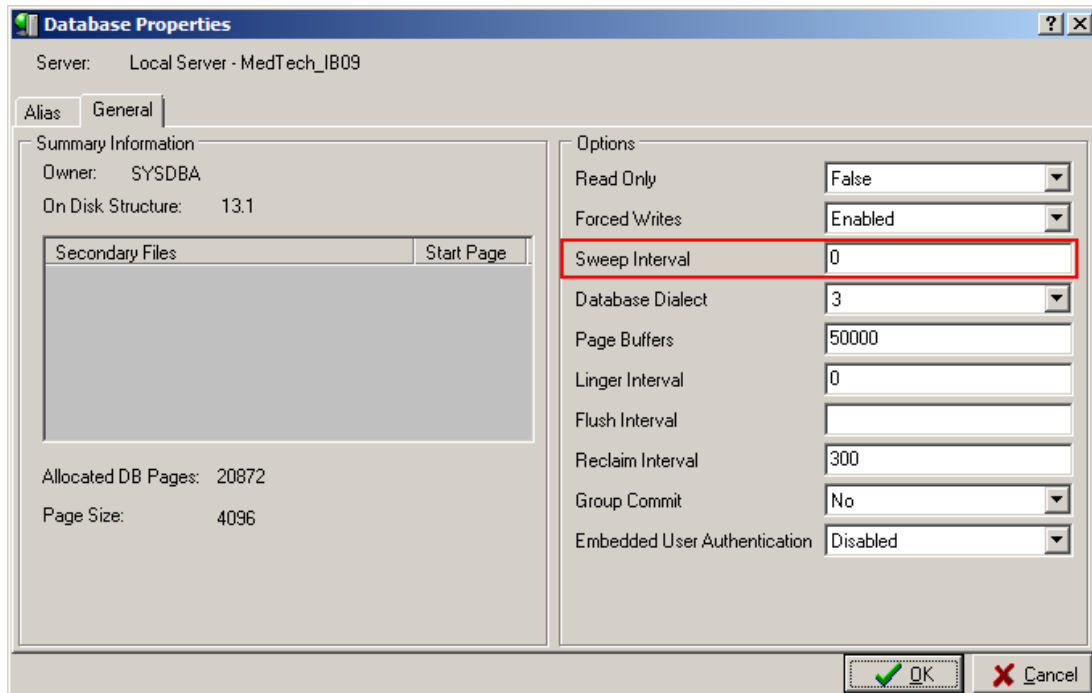


- Right click on the **MT32.IB** Database Alias and left click on **Properties**. Go to the **General** Tab and make sure the **Forced Writes** setting is set to **Enabled**. Click on the button **OK** to apply any changes.



- WARNING:** Proceed with this step IF AND ONLY IF any Briefcasing Laptops is used at your practice, otherwise please jump to Step 8.

Right click on the **MT32.IB** Database Alias and left click on **Properties**. Go to the **General** Tab and make sure the **Sweep Interval** setting is set to **0**. Click on the button **OK** to apply any changes.



IMPORTANT NOTE

WARNING: If Automatic Sweeping has been disabled on the MT32.IB database (i.e. by setting the Sweep Interval to 0), it is **HIGHLY RECOMMENDED** to manually sweep the database at least **ONCE PER DAY** in order to avoid any potential data corruptions.



NOTE: Manual Sweeping should be scheduled to run either afterhours, or at the least busiest time of the day in case of a 24/7 site. It **MUST NOT** be scheduled to run during Briefcasing check-ins and check-outs.

A new sample Sweep Script **Interbase-2009_Online_Database_Sweep.txt** can be found in the **Interbase\Interbase 2009 Backup Scripts** directory on the Medtech32 Version 8.0.0 CD.

NOTE: The new Sweep Script is designed to work in a default Medtech32 installation environment only, i.e. Medtech32 is installed in the default directory C:\MT32, and the databases are under the default path C:\MT32\Data with the default names MT32.IB and BLOB.IB. Depending on the configurations of your environment, this sample scripts might need to be edited accordingly before they will be functional, especially if you have more than one set of databases.

If in doubt, please consult with your IT technician/service provider, or contact one of the Medtech Channel Partners listed on our web site:

<http://www.medtechglobal.com/aus/medtech-online-au/support-3.html>

8. Right click on the **MT32.IB** Database Alias and left click on **Disconnect**.
The **Green Tick**  to the left of *MT32.IB* will change into a **Red Cross** .
9. **Repeat** Steps 4-8 above for the *BLOB.IB* database, **PLUS** ALL other databases you would like to perform database maintenance. This includes the *Training.IB* and *TrainBLOB.IB* databases if you would like to keep them for training/testing purposes.

Step 1 – Pre-Maintenance Backup

Before undertaking any database maintenance, it is vital for the site to have a complete backup of the *MT32\Data* directory and its contents.

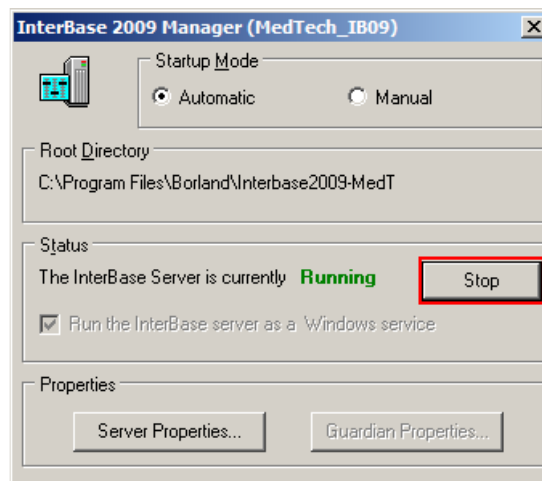
NOTE: These need to be stored away from the Interbase Server being maintained, i.e. on another machine or on external media such as CD, Tape, USB devices.

WARNING: Interbase Server **MUST** be stopped before you can backup the databases (i.e. the *MT32\Data* directory).

Backing Up Your Databases

1. Ensure ALL users (including remote users) have **LOGGED OUT** of Medtech32 and ALL scheduled utilities, backup or maintenance tasks that require access to the databases have been **STOPPED**.
2. On the Server, go to **Windows Start Menu ► Programs ► CodeGear InterBase 2009 [instance = MedTech_IB09] ► InterBase Server Manager [instance = MedTech_IB09]**, and click on the button **Stop**.

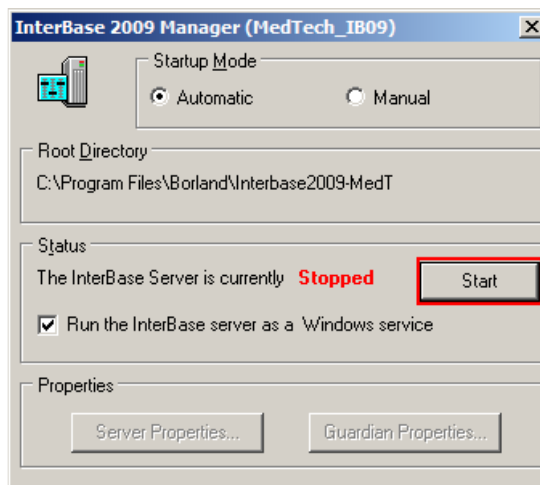
This will allow you to safely copy / backup / rename your Medtech32 databases (e.g. *MT32.IB*), without the risk of corrupting these files.



3. Browse to the **MT32\Data** directory and backup (e.g. copy and paste) ALL *.IB database files to another network/external backup media.

NOTE: By default, the Medtech32 databases are located under **C:\MT32\Data**. If you are uncertain where the Medtech32 databases are located, please contact your IT technician or service provider who has performed the Medtech32 installation and/or upgrade.

4. On the Server, go to **Windows Start Menu ► Programs ► CodeGear InterBase 2009 [instance = MedTech_IB09] ► InterBase Server Manager [instance = MedTech_IB09]**, and click on the button **Start**.



Step 2 – Collecting Patient Data Sample

Before undertaking any database maintenance, we strongly recommend printing out clinical and financial data for AT LEAST 3 patients in EACH of your current databases as a reference check to verify the database maintenance has been successful and that there are no data integrity issues.

Collect Clinical Records

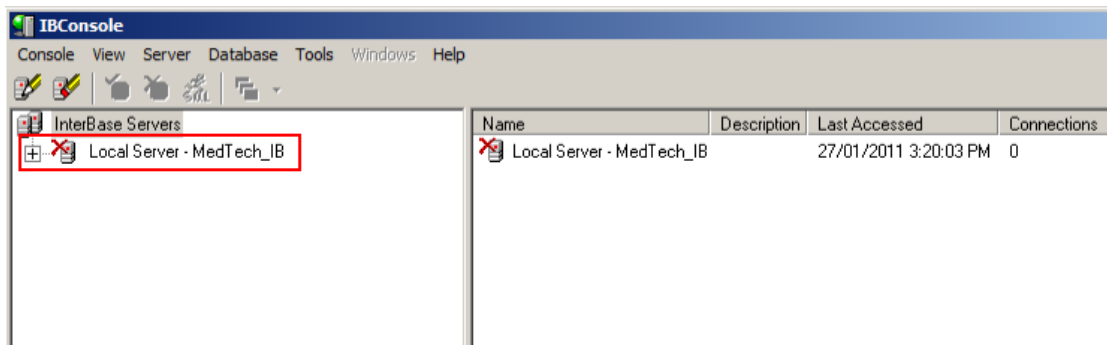
1. Log onto Medtech32 and select the correct database
2. Select a patient and bring them up onto the palette
3. Select from the Main Menu, **Report ► Patient ► Medical History**
4. Select to include the following:
 - a. Patient Demographics
 - b. Screening, Recalls and Immunisations
 - c. Medications and Classifications (Full History)
 - d. History, Medical Warnings and Daily Record
 - e. Inbox and Outbox records
5. Print this report in hard copy so that you have a paper record.
6. Repeat Steps 1-5 above for at least 2 more patients.

Collect Financial Records

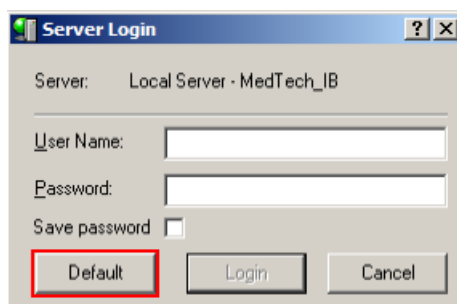
1. Log onto Medtech32 and select the correct database
2. Select a patient and bring them up onto the palette
3. Select from the Main Menu, **Module ► Accounts ► Patient Account**
4. Select the Account Tab on the Patient Account Screen
5. Right Click and choose **Print To**
6. Print this report in hard copy so that you have a paper record.
7. Repeat Steps 1-6 above for at least 2 more patients.


Step 3 – Backing Up Databases

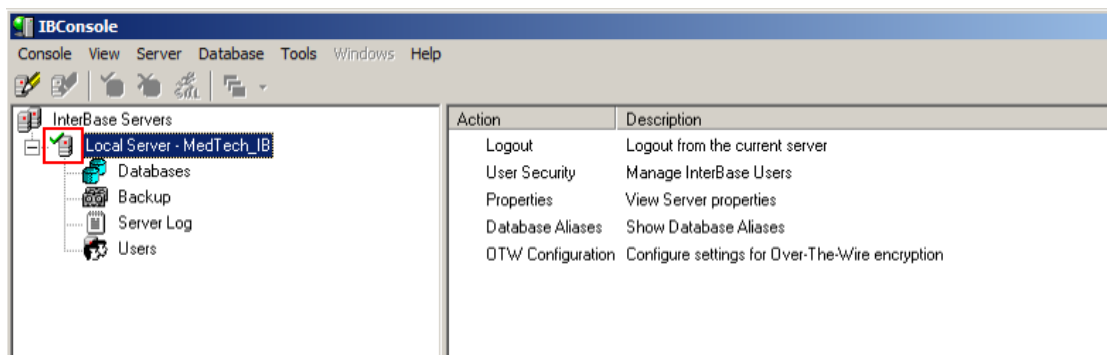
1. On the Server, go to **Windows Start Menu ► Programs ► CodeGear InterBase 2009 [instance = MedTech_IB09] ► IBConsole** (please retry if it comes up with an error).
2. You should now log in to the Local Server (this should be found under Interbase Servers). Double click on **Local Server – MedTech_IB09**.




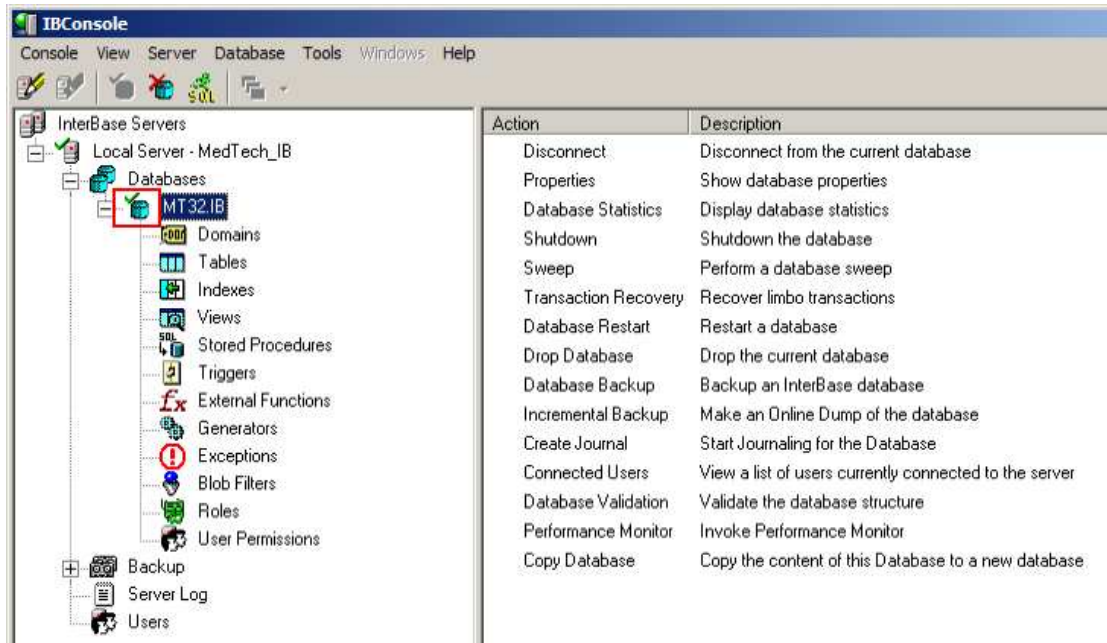
3. **Login** by clicking on the button **Default**.
NOTE: It is not necessary to fill in the User Name and Password.



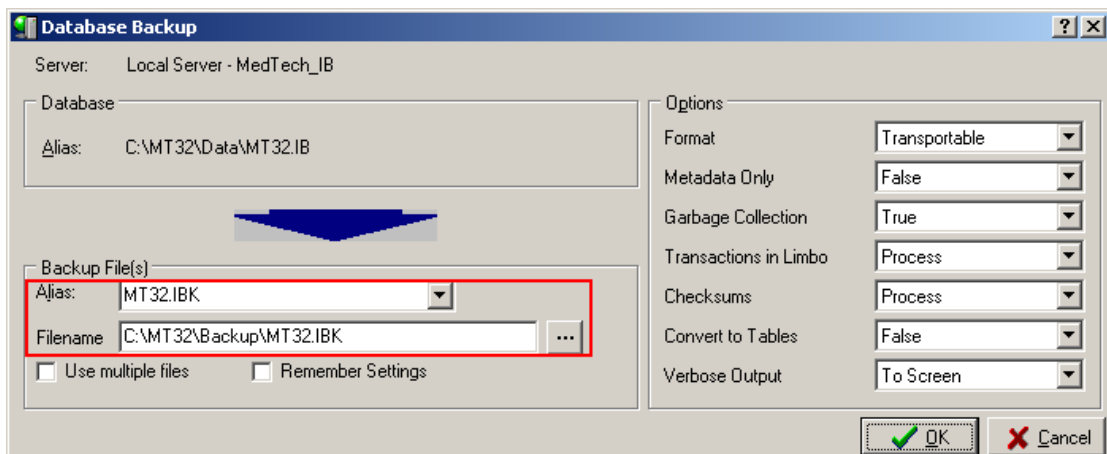
A **Green Tick**  will appear to the left of **Local Server – MedTech_IB09**.



- You should now connect to the *MT32.IB* database (under the Databases section). Double click on the **MT32.IB** Database Alias and a **Green Tick**  will appear to the left of *MT32.IB*.

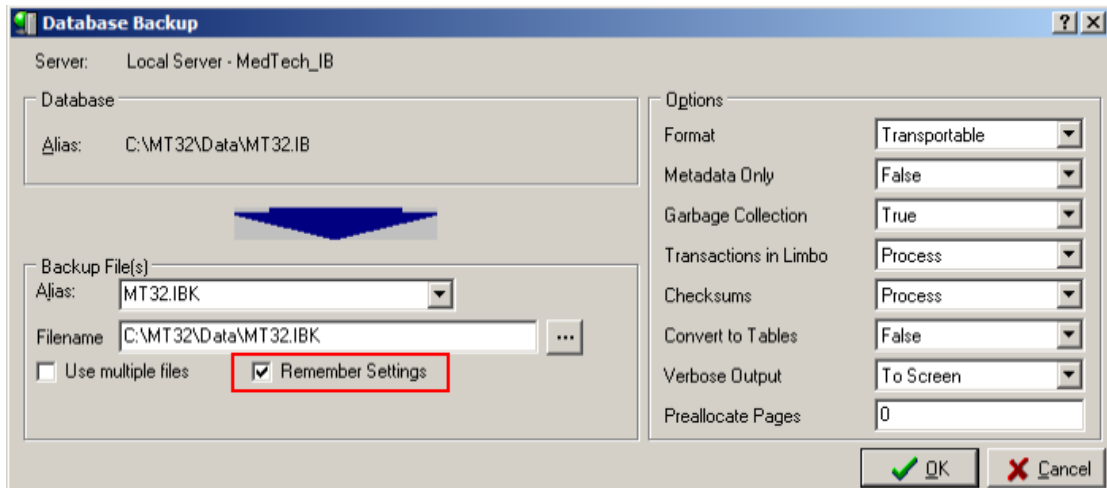


- To Backup your database, right click on the **MT32.IB** Database Alias and select **Backup/Restore ► Backup**.
- Under the **Backup File(s)** section, enter any "Backup" **Alias** (e.g. *MT32.IBK*), and specify the "Backup" **Filename** including the full path (e.g. *C:\MT32\Backup\MT32.IBK*).

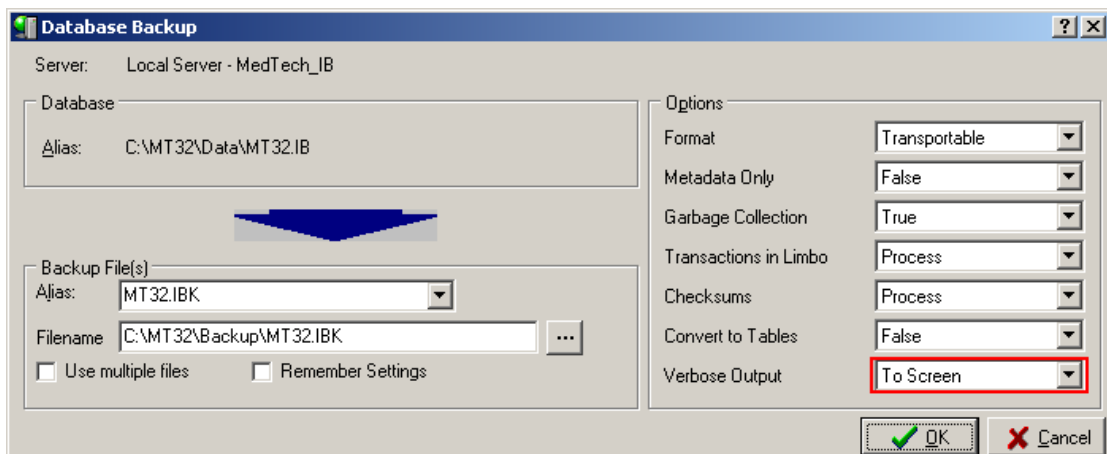


NOTE: By default, the Medtech32 database backups are located under **C:\MT32\Backup**. If you are uncertain where the Medtech32 database backups are located, please contact your IT technician or service provider who has performed the Medtech32 installation and/or upgrade.

HINT: You will only need to setup the Backup Alias once per database, as long as the **Remember Settings** checkbox is ticked when performing backup of each database for the very first time. Thereafter, you can simply select the MT32.IBK Backup Alias from the **Alias** dropdown list.

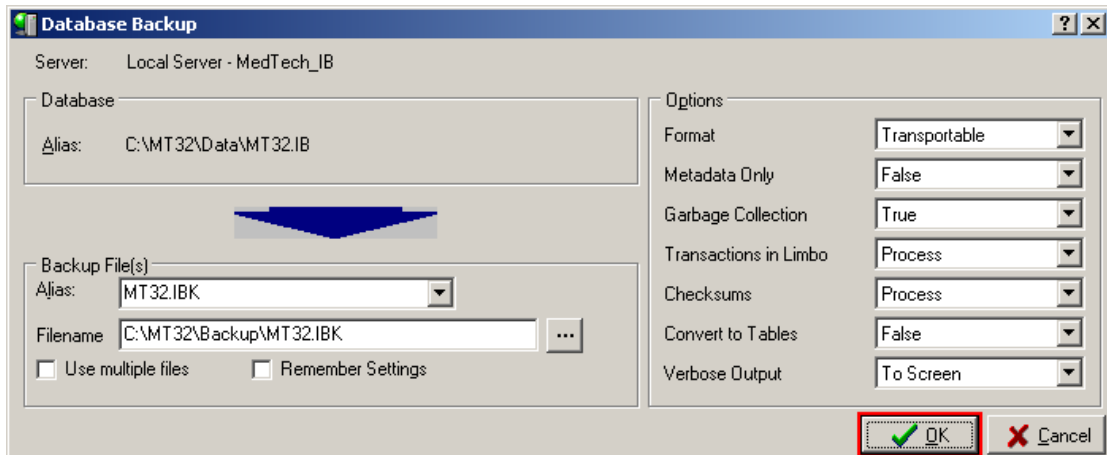


7. Under the **Options** section, set **Verbose Output** to To Screen.



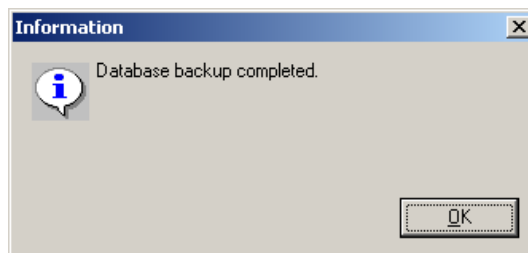
WARNING: DO NOT change any other default Options unless otherwise advised by Medtech.

- Click on the button **OK** to start the Backup.



NOTE: The time it will take to Backup the database will be dependent on the specification of your Server, as well as the size of your database.

- When Backup is completed, the following screen will be displayed. Click on the button **OK** to close the window, then click on the icon to close the Database Backup window.

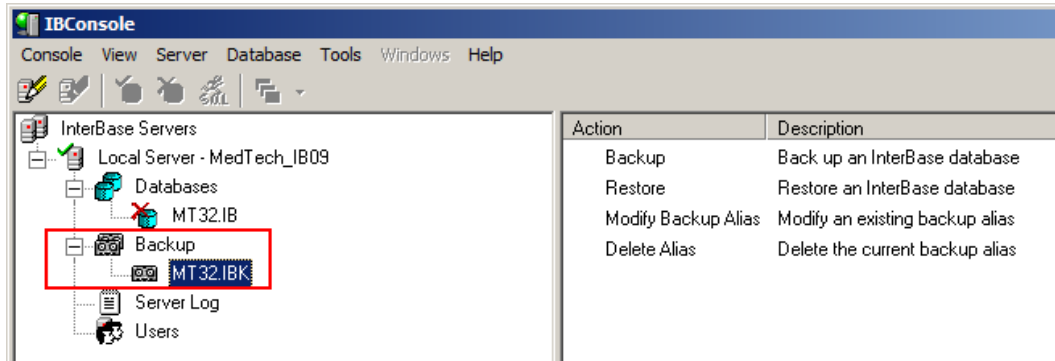


- Right click on the *MT32.IB* Database Alias and left click on **Disconnect**. The **Green Tick** to the left of *MT32.IB* will change into a **Red Cross** .

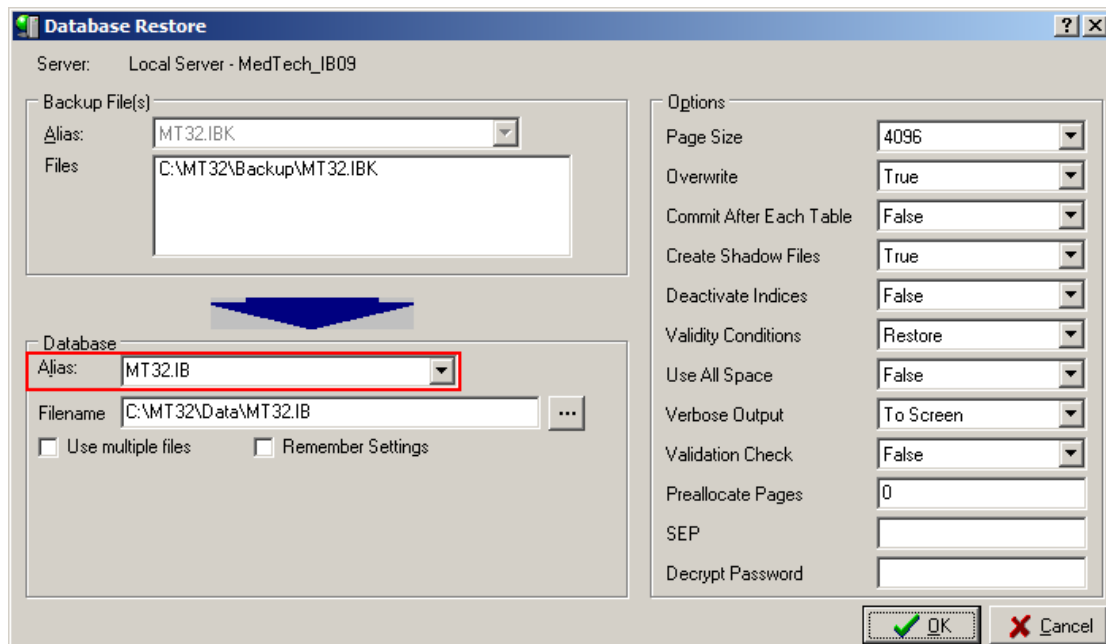
- Repeat** Steps 4-10 above for the *BLOB.IB* database, **PLUS** ALL other databases you would like to perform database maintenance. This includes the *Training.IB* and *TrainBLOB.IB* databases if you would like to keep them for training/testing purposes.

Step 4 - Restoring Databases

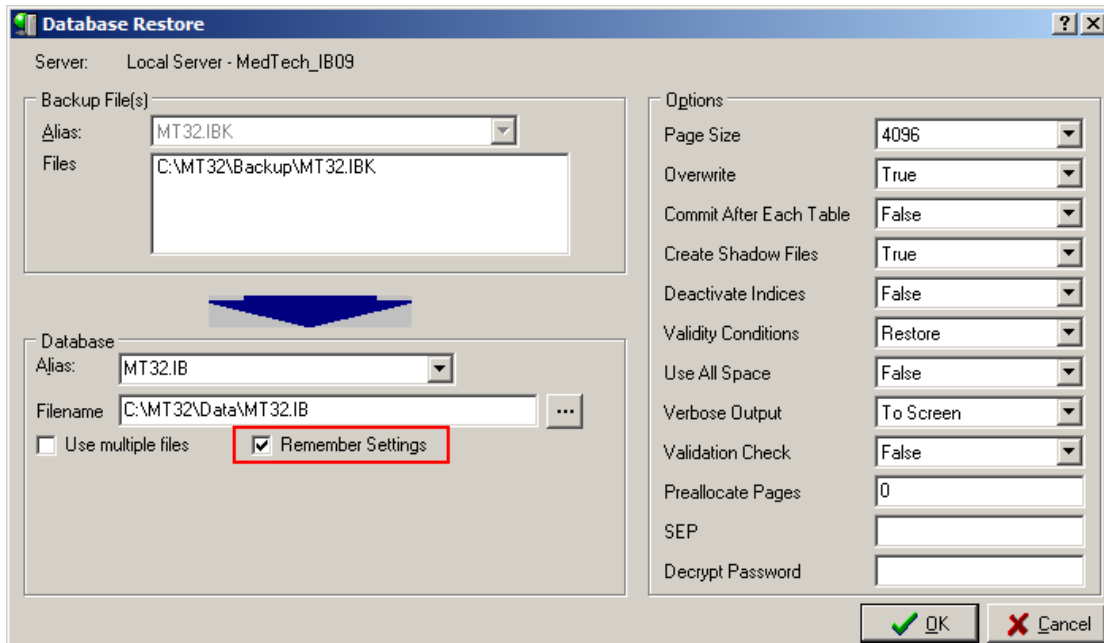
1. To Restore your database, right click on the **MT32.IBK** Backup Alias (under the Backup section) and select **Restore**.



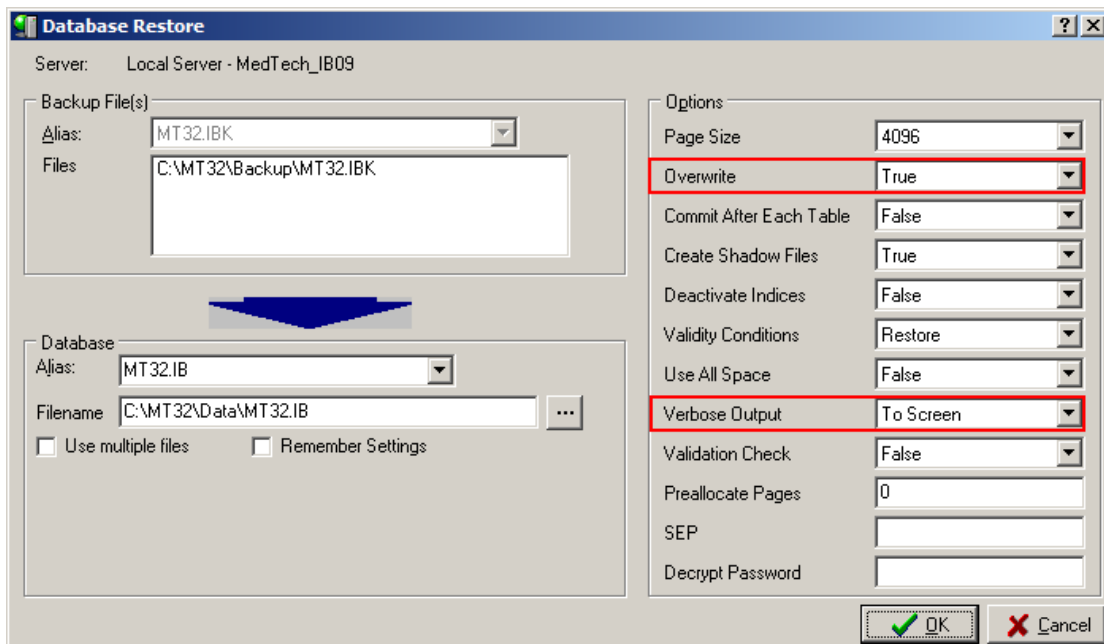
2. Under the **Database** section, set the "Database" **Alias** to MT32.IB. The "Database" **Filename** will be automatically filled in from the Backup Alias saved configurations.



HINT: You will only need to select the Database Alias once per database, as long as the **Remember Settings** checkbox is ticked when performing restore of each database for the very first time. Thereafter, both "Database" **Alias** and "Database" **Filename** will be automatically filled in from the Backup Alias saved configurations.

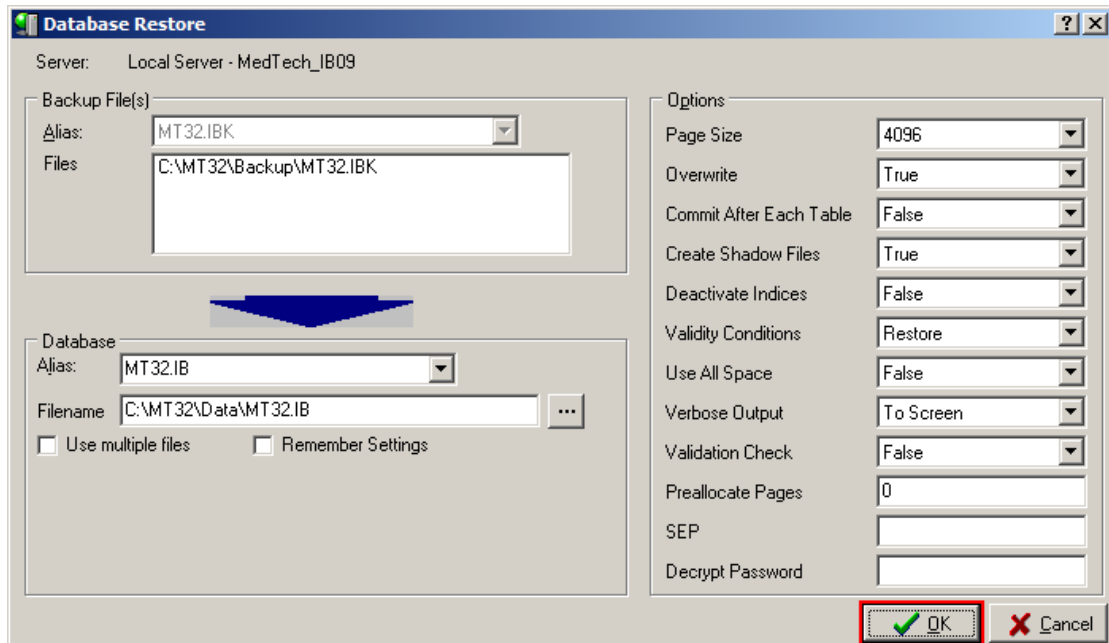


3. Under the **Options** section, set **Overwrite** to True, and set **Verbose Output** to To Screen.



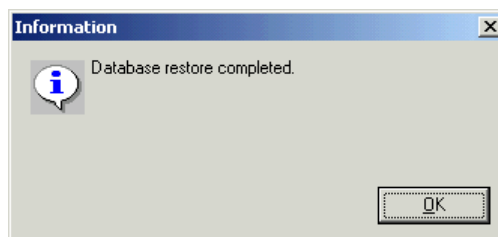
WARNING: DO NOT change any other default Options unless otherwise advised by Medtech.

- Click on the button **OK** to start the Restore.



NOTE: The time it will take to Restore the database will be dependent on the specification of your Server, as well as the size of your database. The amount of time needed to complete an Interbase Restore is usually longer than the Backup – which is normal behaviour.

- When Restore is completed, the following screen will be displayed. Click on the button **OK** to close the window, then click on the icon to close the Database Restore window.



- Repeat** Steps 1-5 above for the *BLOB.IBK* database backup, **PLUS** ALL other database backups you would like to perform database maintenance. This includes the *Training.IBK* and *TrainBLOB.IBK* database backups if you would like to keep them for training/testing purposes.

Step 5 – Validate Restored Data Integrity

NOTE: It is now important to validate that the database maintenance has been successful.

1. Log into EACH Medtech32 database and open 1 of the 3 patients you have chosen in Step 3.
2. Run the Patient Medical History Report, and print out the Patient Account screen, to check if ALL the correct fields are present and ALL the data are intact.
3. Repeat this process for the other two patients selected in Step 3.
4. If the data seems garbled or inconsistent, please contact the Medtech Helpdesk for assistance.

Should you require any assistance, please do not hesitate to contact the Medtech Helpdesk on 1800 148 165 → Option 1 or email ausupport@Medtechglobal.com