

Using IBConsole to Backup/Restore the MLDB Database Database Application Note #3

Overview

IBConsole is a database management tool included with the Interbase Server installation. This Database Application Note will present the basic information to backup and restore the MultiLoggerDB database. The **Interbase Operations Guide** includes more detailed information on the use of IBConsole.

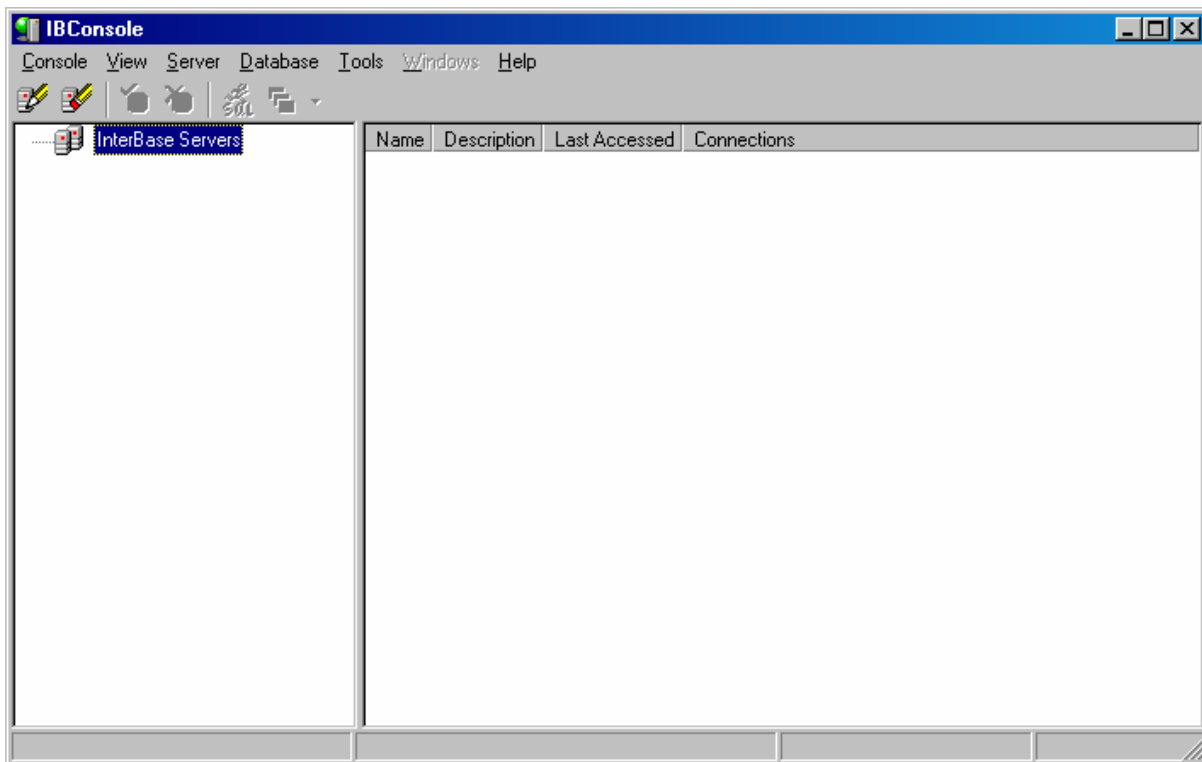
IBConsole is installed using the **Interbase Server** install option on the MultiLoggerDB CD. Consult the **MultiLoggerDB User's Guide** for more details on the installation of Interbase Server.

Note: Typically the Database Module is used to perform backup and restore of the MultiLoggerDB database, however there may be exceptions when use of IBConsole is warranted, such as exceptions or other problems with loading the Database Module, or where MultiLoggerDB is not installed on the server, or if the more flexible backup and restore functionality of IBConsole is required.

Database Configuration

The IBConsole.exe shortcut will normally be found in the Interbase 6.0 Open Edition group in your Programs menu. Double-click to launch IBConsole.

When IBConsole is first started an empty configuration will show.



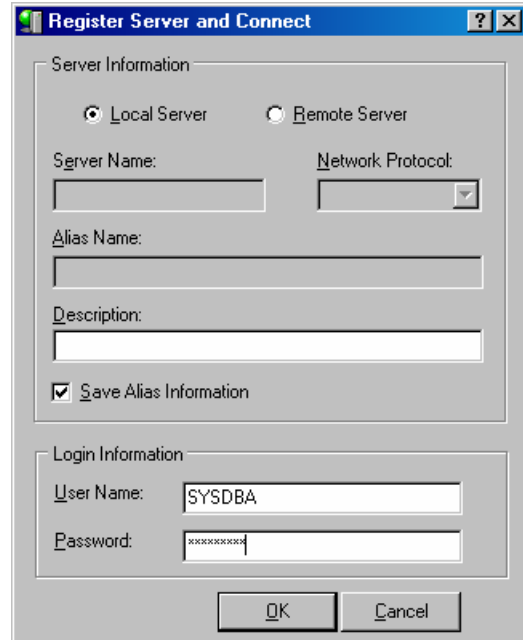
Note: If the database configuration was previously completed then skip ahead to **Backup Configuration**.

The first step is to configure the server connections, local or remote connections to the server are supported. Double-click on the **Interbase Servers** item in the tree shown on the left side of the form. This will display the **Register Server and Connect** form.

Usually **IBConsole** is operated on the machine hosting the Interbase database so the default selection of **Local Server** is typically used.

If the database is hosted on a remote machine then select **Remote Server**, enter the **Server Name** in DNS or IP format and select the **Network Protocol** (usually TCP/IP).

Note: One exception is where numerous sessions either with IBConsole or the MultiLoggerDB components, i.e. the Database Console and/or Insite will be hosted simultaneously on the machine which also hosts the database. In this case it is preferable to use **Remote Server**, a **Server Name** of **localhost**, an appropriate **Network Protocol** (usually TCP/IP) and an **Alias Name** to identify the server in the configuration.



The dialog box titled "Register Server and Connect" has two sections: "Server Information" and "Login Information".

Server Information:

- Radio buttons for "Local Server" (selected) and "Remote Server".
- Text field for "Server Name" and a dropdown for "Network Protocol".
- Text field for "Alias Name".
- Text field for "Description".
- Checked checkbox for "Save Alias Information".

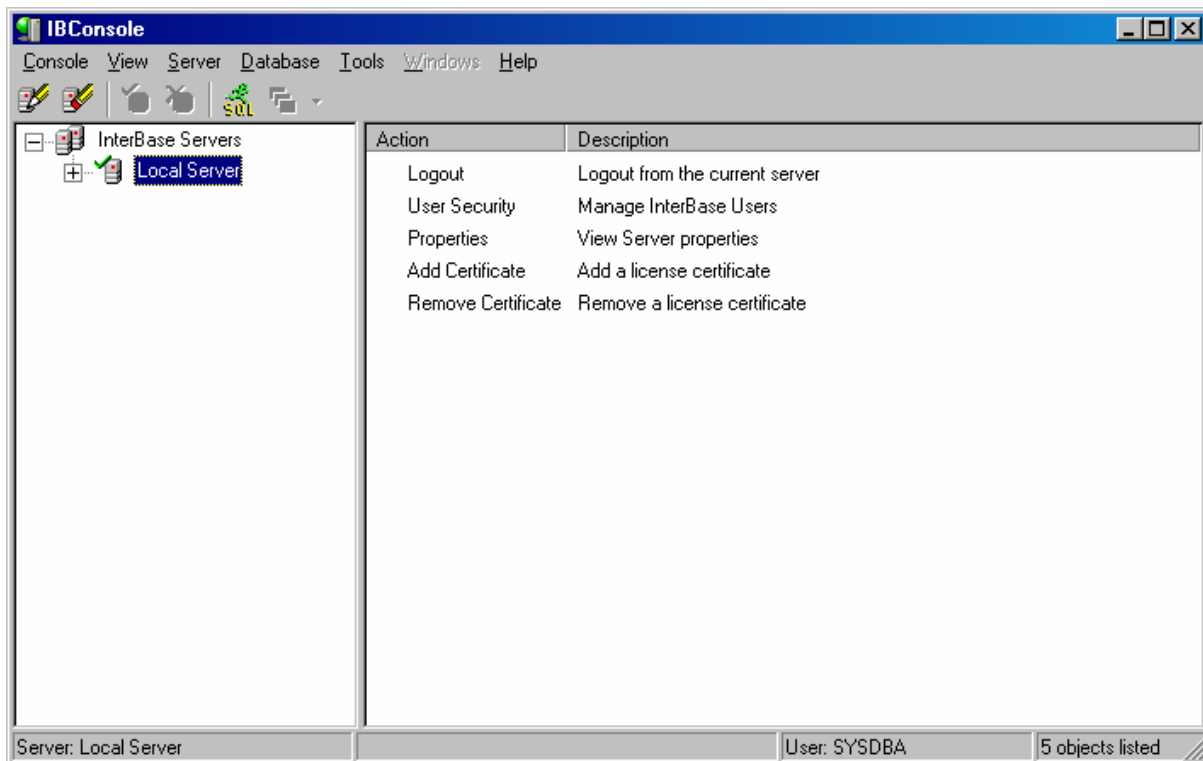
Login Information:

- Text field for "User Name" containing "SYSDBA".
- Text field for "Password" containing "*****".

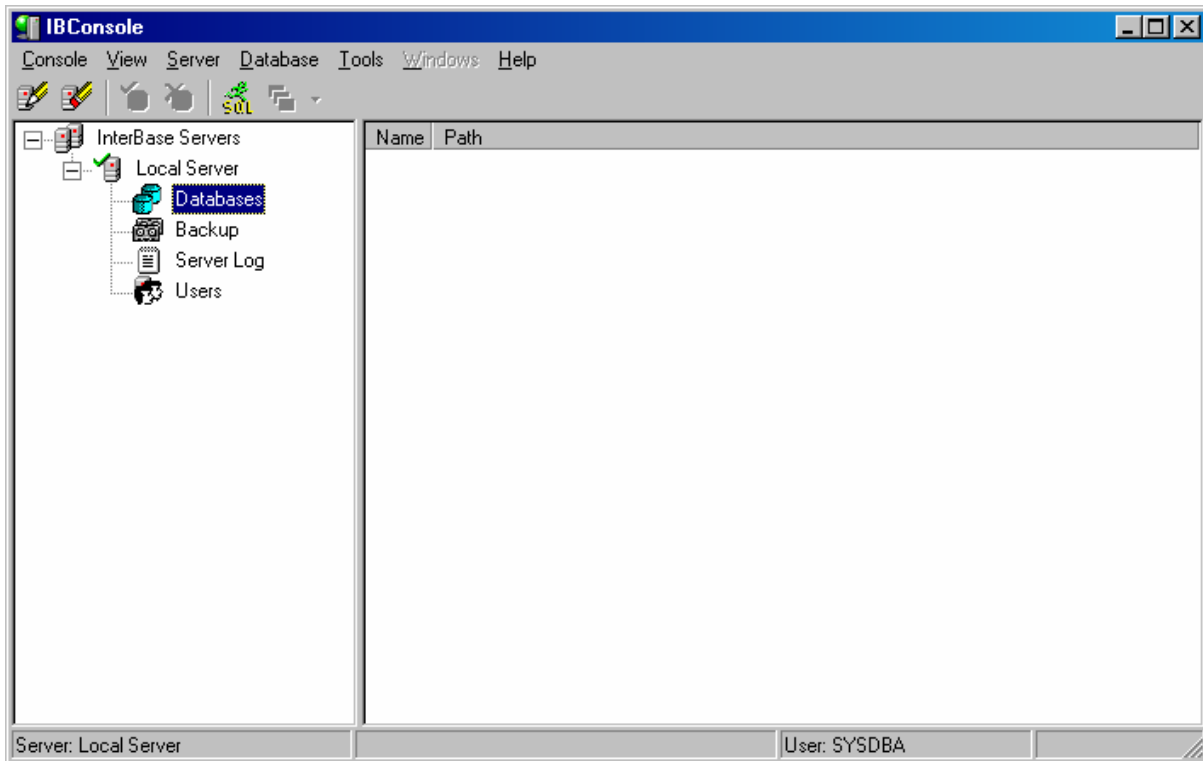
Buttons for "OK" and "Cancel" are at the bottom right.

Enter the **User Name** (default administrator User Name is shown, SYSDBA) and password. Press **OK** to connect to the server using the configuration options shown.

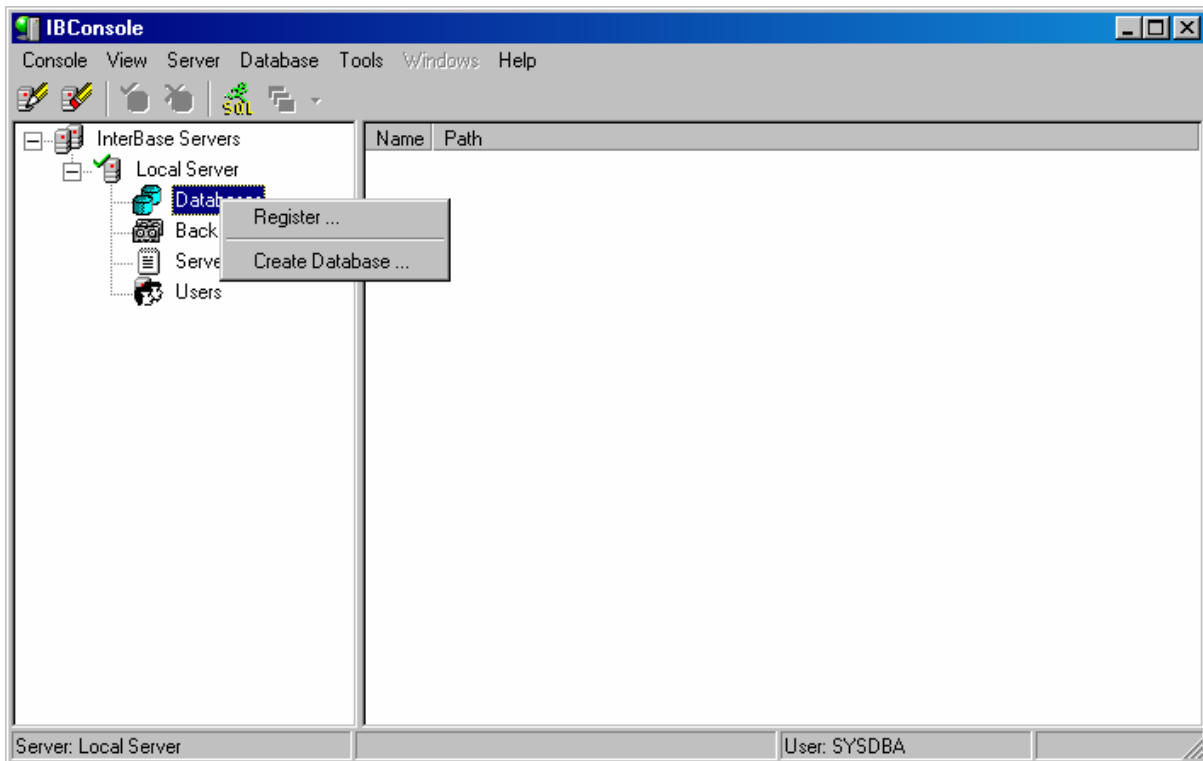
If the connection was successful the configuration in IBConsole will update.



Double-click on **Local Server** to expand the connection options, shown below.



Right-click on **Databases** to display the database registration menu.



Select **Register** to display the **Register Database and Connect** form.

The actual database file must be specified using this form. Press the file open button to the right of the Database File edit to browse and select the GDB file. When MultiLoggerDB is installed an empty GDB file named MULTILOGGER.GDB is copied to your **\Program Files\MultiLogger** directory, normally this file is copied or renamed to match your project, it is NOT recommended to use the MULTILOGGER.GDB as is.

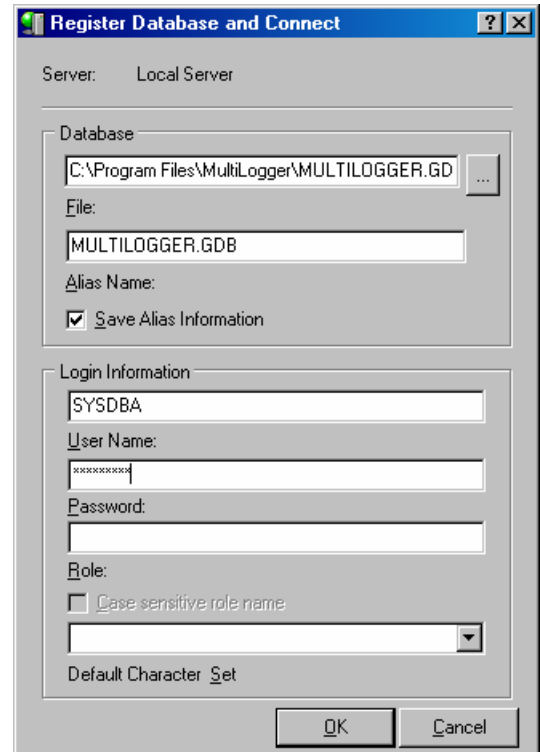
NOTE: When using Remote server connections the file browse button will be disabled, you must manually type in the path and name of the MultiLoggerDB GDB file.

Make sure **Save Alias Information** is checked.

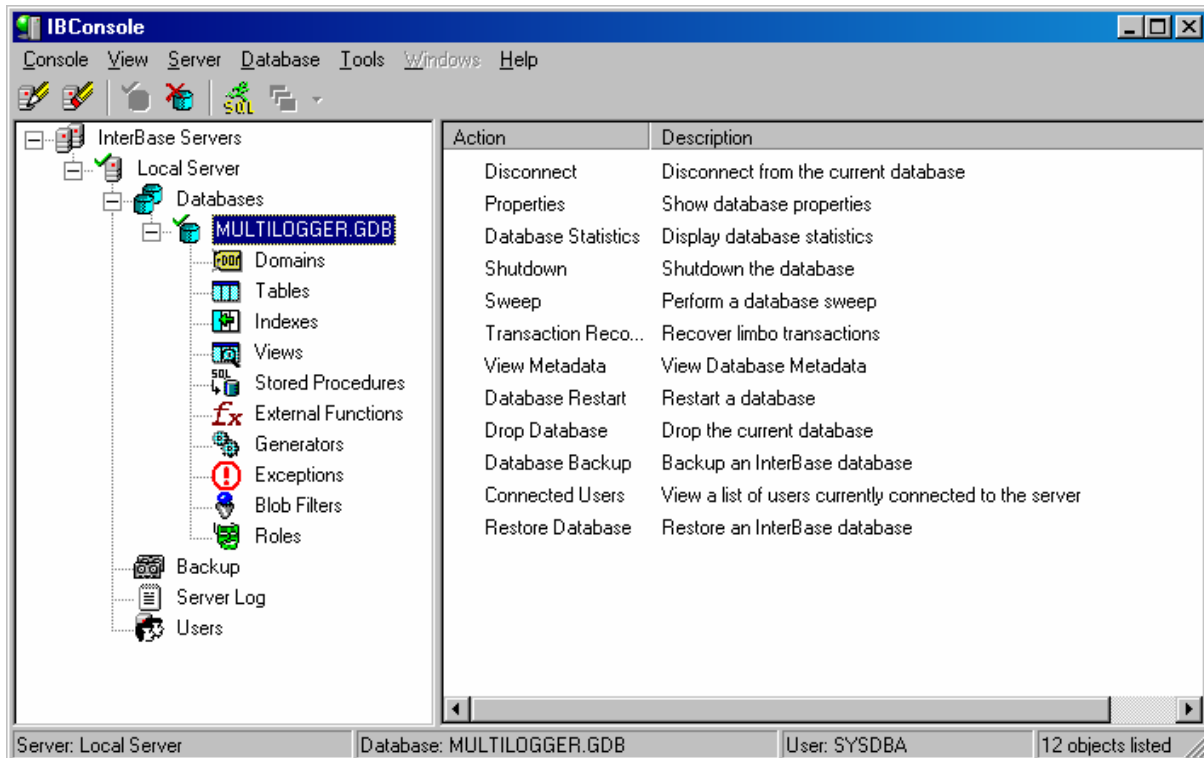
Enter the **User Name** for the database server and the **Password** in the fields on the form.

Other options can be left at their defaults.

Click OK to connect to the specified database.

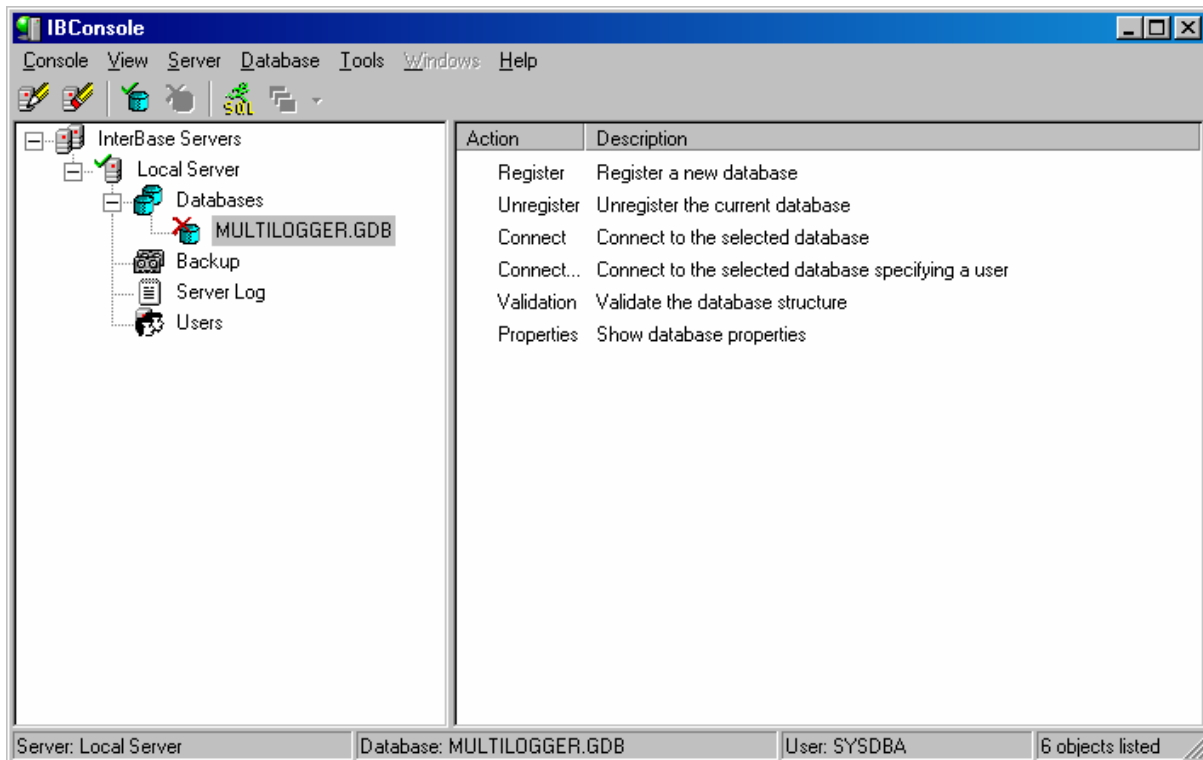


If the connection was successful then the configuration in IBConsole will update.

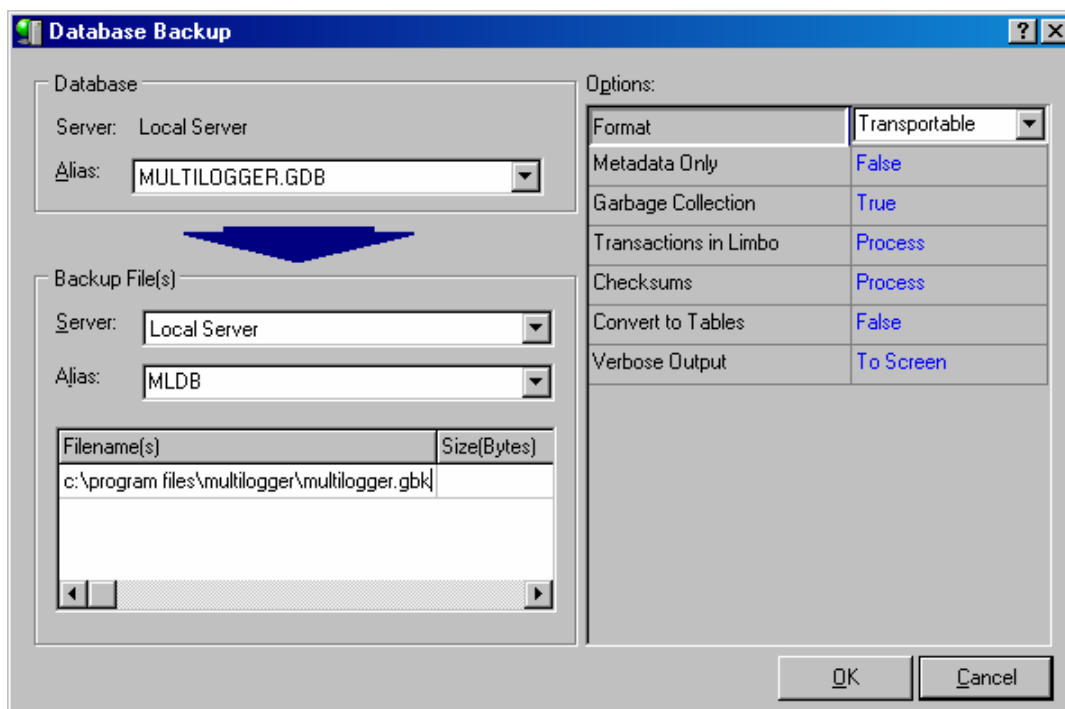


Backup Configuration

First you will need to disconnect from the database. Select the menu item **Database | Disconnect**, you should see the database configuration update with an X through the database.



Now select the menu item **Database | Maintenance | Backup/Restore | Backup**, this will invoke the Database Backup form.



You will need to configure the following options:

Alias – The name of the database shown in the database configuration, the example shows MultiLogger.GDB, your configuration should be different to match your database name.

Server – Select **Local Server** or **Remote Server** to match your configuration.

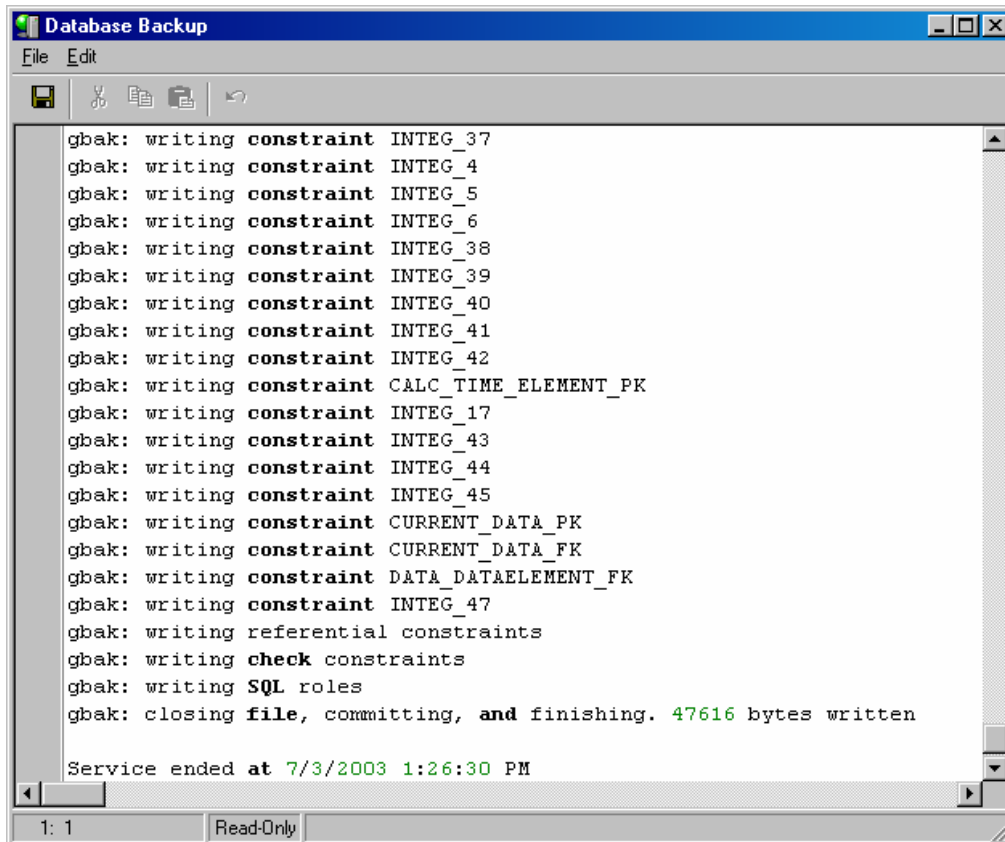
Alias – Enter a name to refer to this particular backup, use a different name from your database name.

File names – Type in the edit the name of the backup file, remember to use the **.GBK** extension which denotes the Interbase Backup format. Be sure to use the appropriate path, usually backups are kept in the **\Program Files\MultiLogger** directory (although you may want to create a sub-directory called Backups to store these files).

All of the defaults selected for the options shown on the right should be used. For more detailed explanation regarding the backup options please see chapter 7 of the **Interbase Operations Guide**, which you received by purchasing Interbase Server.

Note: The option **Metadata Only** is very useful for creating an empty backup copy of the database, the GBK will contain only the database structure such as tables and stored procedures, but without any data. This is useful for re-creating an empty copy of the database in the event that an empty MULTILOGGER.GDB cannot be found, such as you will need when creating a new database project.

After completing the configuration press **OK** to initiate the backup. The Database Backup status form will display, note any errors shown. When the service completes the database navigator will display (after closing the status form by clicking in the upper right corner of the form).



```
Database Backup
File Edit
gbak: writing constraint INTEG_37
gbak: writing constraint INTEG_4
gbak: writing constraint INTEG_5
gbak: writing constraint INTEG_6
gbak: writing constraint INTEG_38
gbak: writing constraint INTEG_39
gbak: writing constraint INTEG_40
gbak: writing constraint INTEG_41
gbak: writing constraint INTEG_42
gbak: writing constraint CALC_TIME_ELEMENT_PK
gbak: writing constraint INTEG_17
gbak: writing constraint INTEG_43
gbak: writing constraint INTEG_44
gbak: writing constraint INTEG_45
gbak: writing constraint CURRENT_DATA_PK
gbak: writing constraint CURRENT_DATA_FK
gbak: writing constraint DATA_DATAELEMENT_FK
gbak: writing constraint INTEG_47
gbak: writing referential constraints
gbak: writing check constraints
gbak: writing SQL roles
gbak: closing file, committing, and finishing. 47616 bytes written
Service ended at 7/3/2003 1:26:30 PM
1: 1 Read-Only
```

Restore Configuration

To restore the database from a backup file select the menu item **Database | Maintenance | Backup/Restore | Backup**. This will display the Database Restore form.

Options:	
Page Size (Bytes)	8192
Overwrite	True
Commit After Each Table	False
Create Shadow Files	True
Deactivate Indices	False
Validity Conditions	Restore
Use All Space	False
Verbose Output	To Screen

You will need to configure the following options:

Alias – Select **File...** to display a file dialog to browse to and select the database backup file, with .GBK extension. After selecting the file and closing the file browse dialog the **Filename(s)** edit will update with the selected backup file.

Database | Server – Select the server type.

Database | Alias – Select the Alias or the name of the database you will be restoring with the backup file. The drop-down list should contain a list of all the databases shown in the database configuration. Select the appropriate Alias. The **Database | Filename(s)** should update with the respective path and name to match the Alias you selected.

Two of the options on the right will need to be configured:

Page Size (Bytes) - Generally for best performance select 8192.

Overwrite – Set to **True**, otherwise you will not be able to overwrite the database file with the backup file.

Leave all other options at their default settings.

For more detailed explanation regarding the restore options please see chapter 7 of the **Interbase Operations Guide**, which you received by purchasing Interbase Server.

