SQL Info Pack

for new or existing PATGuard users who are considering SQL database formats for their PAT records

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1. Introduction

With the introduction of the PATGuard Elite SQL program, Seaward were the first company to offer a corporate database format for PAT records. This new format enables very large databases to be created, with fast response times to database queries as well as simultaneous shared access and other features associated with database management platforms such as integration with other data.
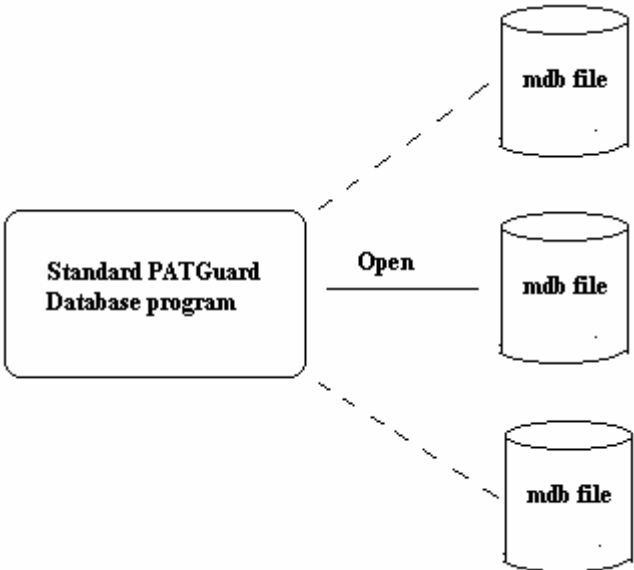
2. Database Formats

The most important difference between all other PATGuard database programs (including previous versions) is that the database is contained in a single file (mdb) while for PATGuard Elite SQL the program links to third party program which controls and manages databases.

Both formats allow for multiple databases. That is for PATGuard programs that use mdb files, new database files can be created and for PATGuard Elite SQL multiple databases can be created through the third party program.
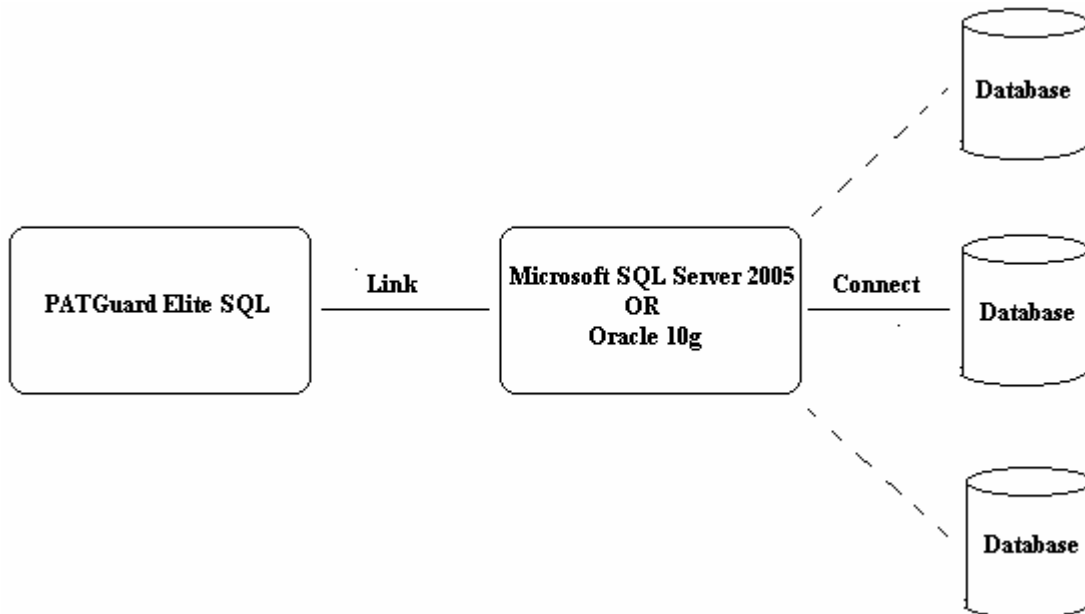
The following table compares features between the two database formats:

	Mdb files	SQL databases
Multiple individual databases	Yes	Yes
Simultaneous shared database access	No	Yes
Query response times	Dependent*	Very Fast
Database Integration	No	Yes
Data mining	No	Yes

* Dependent on PC resource and Database size. Larger the database – the slower it will become.

Standard PATGuard database schematic

PATGuard Elite SQL database schematic

PATGuard Elite SQL will link to the following database programs:

- Microsoft SQL Server 2005
- Oracle 10g

Each of these programs is available in a number of Editions:

Microsoft SQL Server 2005

    Enterprise Edition
    Developer Edition
    Standard Edition
    Workgroup Edition
    Compact Edition
    Express Edition
    Express Edition with Advanced Services

Oracle 10g

    Enterprise Edition
    Standard Edition
    Standard Edition One
    Oracle Personal Edition
    Express Edition

PATGuard Elite SQL is designed to work with all the above editions. Each edition will have different modules and features for setting up and managing databases.

Seaward recommends Microsoft SQL Server 2005 for PATGuard Elite SQL.
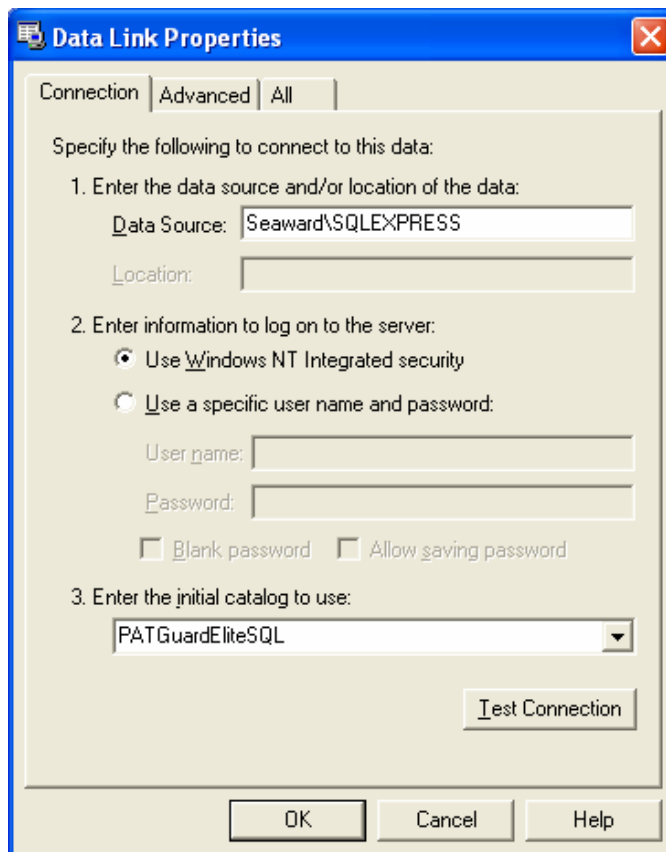
3. Simple Database Setup

Microsoft SQL Server 2005 Express is the basic edition that is freely available from Microsoft.

A copy of this program is available on the PATGuard 2 CD or available from the download link from the Start menu program group after PATGuard 2 has been installed (download link also available with the Evaluation program). Here is the link:

http://www.microsoft.com/downloads/details.aspx?FamilyID=220549b5-0b07-4448-8848-dcc397514b41&DisplayLang=en

Install both PATGuard Elite SQL and Microsoft SQL Server 2005 Express Edition on the same PC.

When both installations are complete start PATGuard Elite SQL and select **New** from the **File** dropdown to display the Data Link Properties window below:
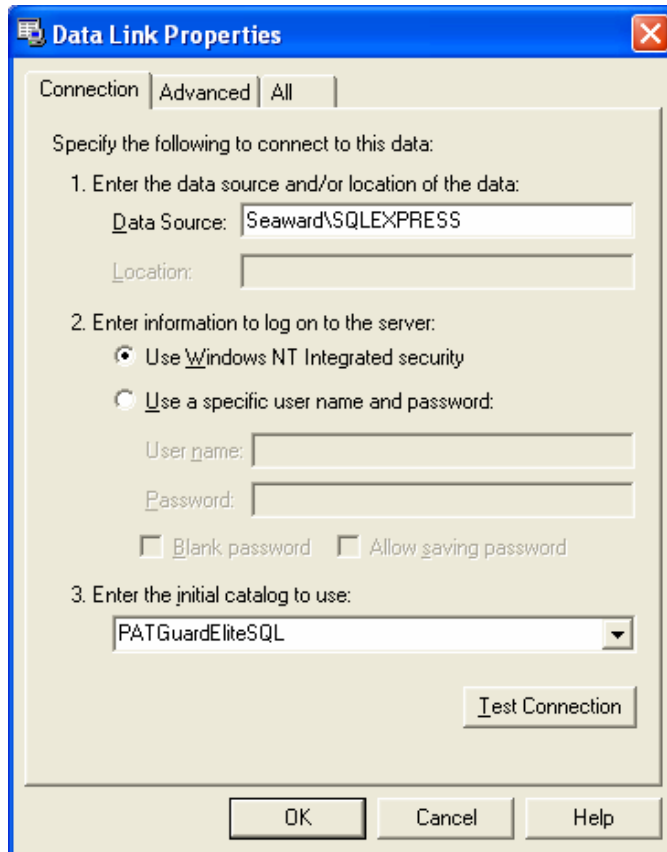

Ensure the **Data Source** is correct (<PC or Server name>\SQLEXPRESS by default).

Enter an appropriate database name into **3. Enter the initial catalog to use:** then select **OK.**

This will create a new (blank) database that can be used to build up your PAT records.

PATGuard always attempts to link to the last opened database when starting up, so that the data link will connect to this database automatically.

If more databases are created using the procedure above, then to switch from one database to another select **Open** from the **File** dropdown to display the Data Link Properties window below:
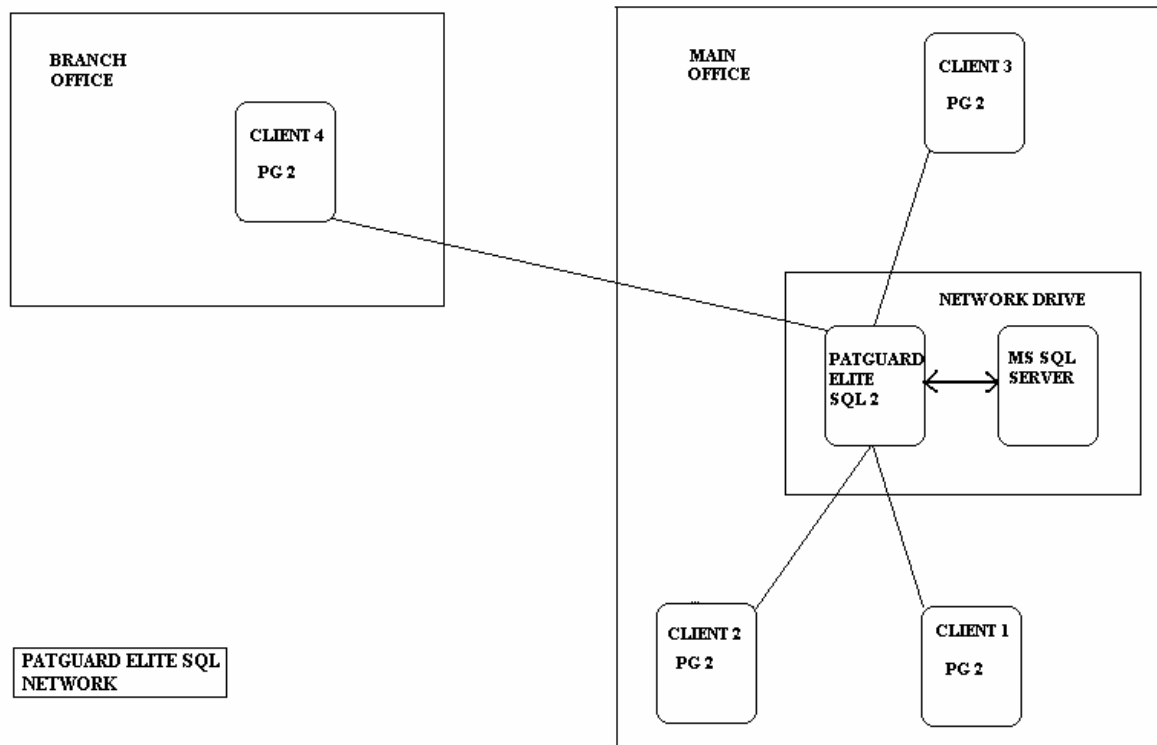

Ensure the **Data Source** is correct (<PC or Server name>\SQLEXPRESS by default) then select that relevant database from the drop down, then select **OK.**

4. Network Setup

Virtually all SQL databases are on servers as the data is shared across the computer network.

Installing Microsoft SQL Server 2005 or Oracle 10g across a network requires expertise which can best be provided by your IT dept or consultants and as these programs are from other software vendors this is beyond the scope of this document.

Below is a simple schematic of a network setup.

This shows the main installation of PATGuard Elite SQL is on a network drive with 4 Client installations. As network licences are PATGuard are 'floating' the single default licence can be used at any of the 4 Clients, but only one Client will have access to the program at any one time.

Additional Network licences are available – so that if 3 were purchased, then all 4 Clients could have access to PATGuard Elite SQL at the same time. And as this is the SQL database format they can all access the same database simultaneously.

5. Corporate PATGuard System

Using the full range of PATGuard software an advanced system can be created that will speed up the test result gathering back to the database and enable close management of tester usage.

This system consists of:

PATGuard Elite SQL installed on a computer network.

PATGuard Work About running on PDAs with email and bluetooth capability.

PATGuard Time Manager installed on one PC.

The test results can be generated by PrimeTest 300 (or 350) and Europa (or Supernova) testers. These are downloaded (via bluetooth) on site to the PATGuard
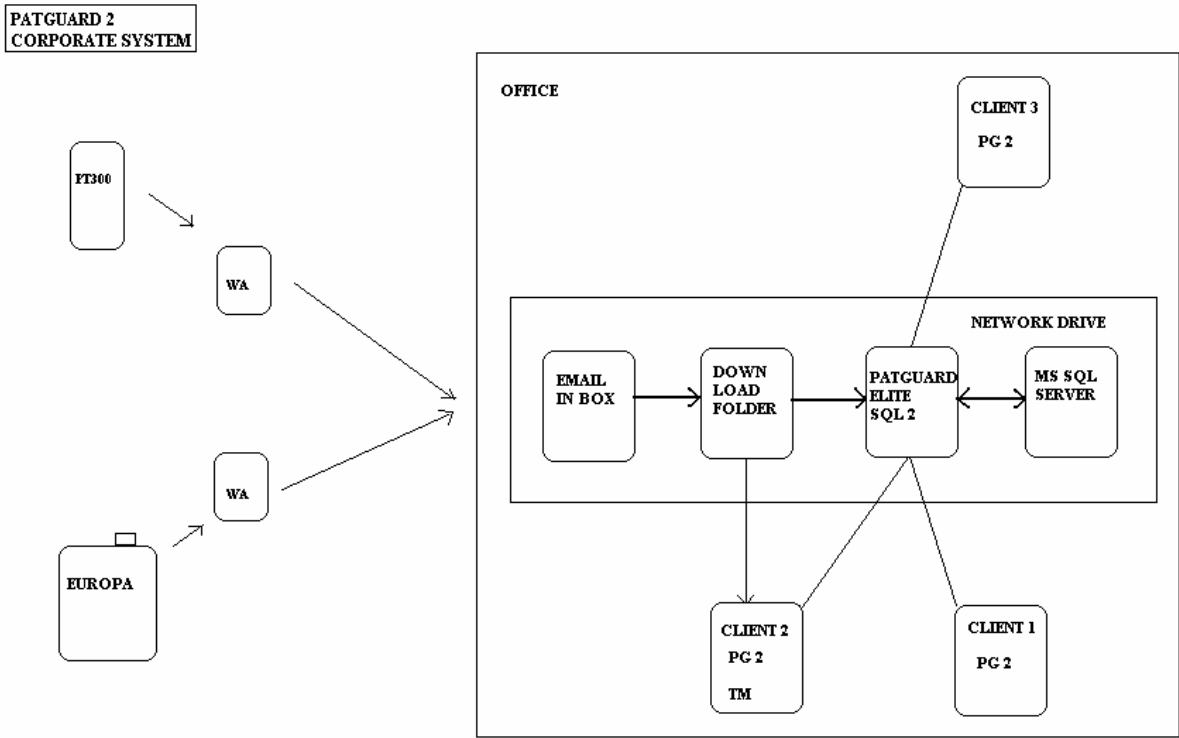
Work About program running on the PDA. Europa (or Supernova) testers require a Bluetooth serial adaptor.

The download sss file is sent back to the office via email.

A special email in box could be set up for this purpose. The files are detached into designated folders.

These files are an important back of the tester's memory. The files are then opened in the correct order in PATGuard Elite SQL at any Client machine. The files are not altered by this action. These files are also available to PATGuard Time Manager to review tester usage.

Upload of PAT records is also possible with this system. It's simply the reverse data flow.

6. Importing previous PAT Records

We use the Briefcase feature within PATGuard to copy PAT records that were created by other PATGuard programs.

In essence we create Briefcase files from the original (mdb) database and open these files in the new SQL database.

Pat Files
PATGuard database programs have the ability to save a copy of a section of the database as a Briefcase file for other PATGuard database programs to open.

<u>Creating a pat file</u>
Select a Client, Site or Location. The item selected and all lower level items will be copied. Right mouse click will display the context menu. Choose **Send to** then **File** to launch the **Save As...** dialog box. Select the path and enter a File name where the file is to be saved. Briefcase files have a **File Type** of *.**pat**. Select **Save** to create the file.

<u>Opening a pat file</u>
From the **File** drop down select **Open...** Select the path of the file you wish to open. Select the correct **File of type**. For Briefcase files this will be *****.pat**. Select the appropriate file then select **Open**. As the data is processed messages may appear if there is a conflict between existing data and the new data.

7. Frequently Asked Questions

Q1. Is PATGuard Elite SQL ready to run after installing ?

No, PATGuard Elite SQL requires a third party program like Microsoft SQL Server or Oracle 10g to provide a link to its database.

Q2. Can I upgrade from my current PATGuard program to PATGuard Elite SQL ?

No, because the database formats are completely different, there is no Upgrade option with this program.

Q3. Can I install PATGuard Elite SQL on a network ?

Yes, this program has all the features of PATGuard Elite except it uses a different database format. Only one 'floating' licence is supplied with the program.

Q4. Are Additional Network Licences available ?

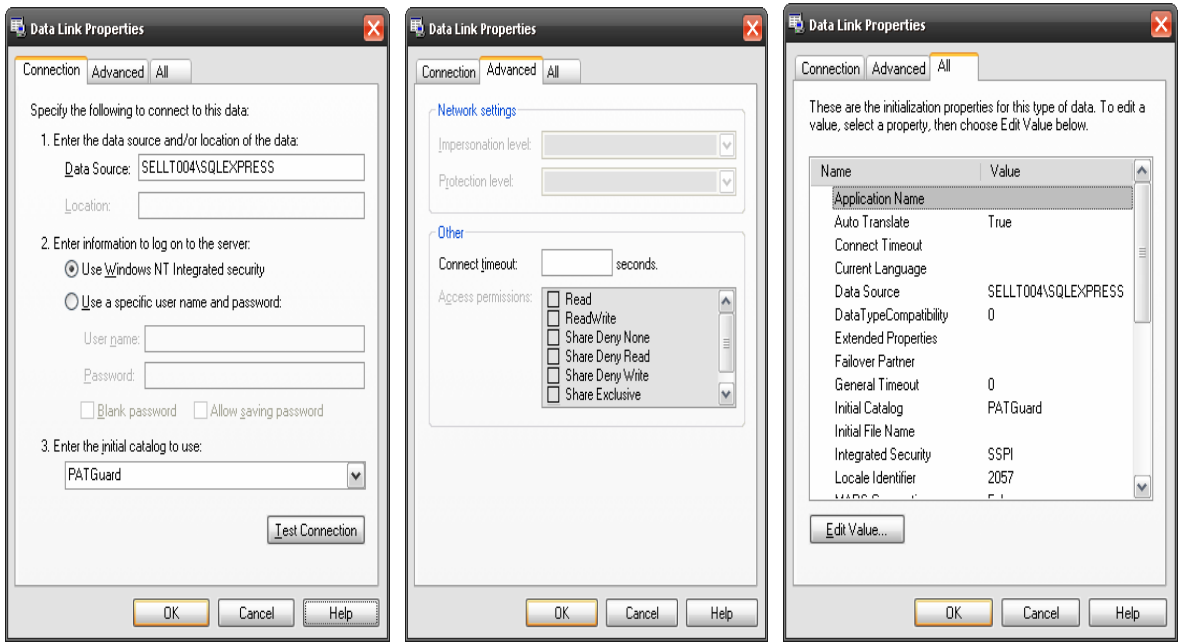Yes, you can purchase as many Additional Network Licences as you require.

Q5. Are Additional PC Licences available ?

No, because SQL databases are normally shared across a network and Additional Network Licences allows other PCs access there is no need for Additional PC Licences.

Q6. Can other PATGuard databases be opened in PATGuard Elite SQL ?

No, the databases have different formats. PAT records from other PATGuard databases can be copied into PATGuard Elite SQL using briefcase files.

Appendix: Data Link Properties Window

Use the **Connection** tab to specify how to connect to your data using an OLE DB provider.

The **Connection** tab of the **Data Link Properties** dialog box is provider-specific and displays only the connection properties required by the selected OLE DB provider. Connection properties allow you to specify where your data is located and how to connect to the data. For more information, refer to the documentation for each specific OLE DB provider.

The following table describes most connection options.

Option	Description
Data Source	Type the name of the data source you want to access—typically a server name.
Location	Type the location of the data source you want to access—typically a database name.
Use Windows NT Integrated security	Click to use an authentication service to identify yourself. To use this feature, your OLE DB provider must support an authentication service. The OLE DB Provider for SQL Server is an example. You also must have permissions in the data source to use the authentication service.

Use a specific user name and password	Click to use a supplied user name and password to authenticate your logon information to the data source.
User name	Type the User ID to use for authentication when you log on to the data source.
Password	Type the password to use for authentication when you log on to the data source.
Blank password	Enables the specified provider to return a blank password in the connection string.
Allow saving password	Allows the password to be saved with the connection string. Whether the password is included in the connection string depends on the functionality of the calling application. **Note** If saved, the password is returned and saved unmasked and unencrypted.
Enter the initial catalog to use	Type the catalog that you want to access upon connection.
Test Connection	Click to attempt a connection to the specified data source. If the connection fails, ensure that the settings are correct. For example, spelling errors and case sensitivity can cause failed connections.

Note For more Data Link connection information, see the Data Link API Reference.