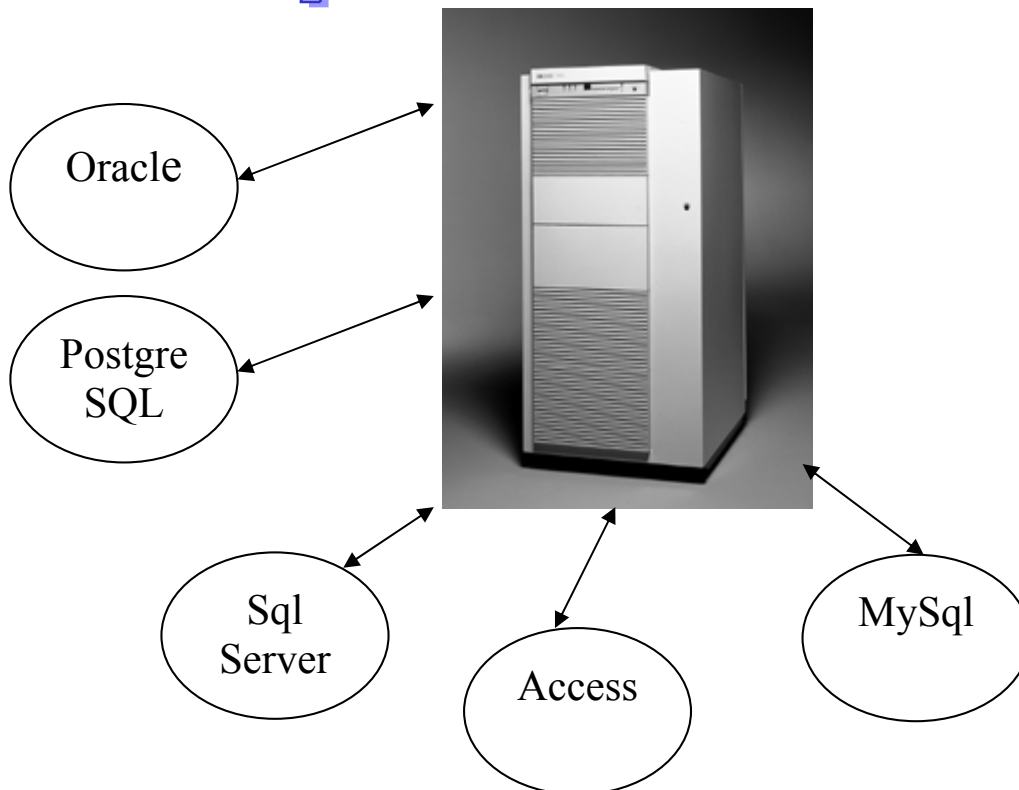




Remote Data Access

Access your SQL databases from your HPe3000
Using

SqlLink3000



SqlLink3000 from GUI Innovations Limited builds on our base of TCP/IP and migration tools. SqlLink3000 has 2 constituents, a multi-threaded data server that runs on your PC server, and a library of callable routines that run on your HPe3000 (the client).

- SqlLink3000 uses Microsoft Active Data Objects (ADO).
- Runs on a 'windows' system to connect to the database (Preferably NT, 2000 or XP).
- Connects to any SQL database for which you have ADO or ODBC drivers.
- Implemented on the HPe3000 as a set of routines in an XL

The calls and their functions are:-

- SqlConnect - Connect to the remote data server, and open your database.
- SqlClose - close your database and disconnect from your remote data server.
- SqlExec - execute a Sql command, i.e. Insert, Update, Delete
- SqlRead - initiate a read operation on a table, a view, or linked tables.
- SqlGetNext - retrieves the next record from your database
- SqlGetStringField - retrieve a string field from your record
- SqlGetIntegerField - retrieve a numeric field from your record
- SqlGetDecimalField - retrieve a decimal numeric field from your record.

Along with the demo package is a COBOL program which illustrates 3 separate type of query, and insert an update and a delete.

SqlLink300 gives you...

- Full read/write access to your SQL databases.
- Read from 'views'
- Execute stored procedures
- Simple to use
- Fast and efficient!
- Includes SqlQuery

Multiple Connections.

SqlLink3000 supports connections to multiple databases at the same time, and multiple connections to the same database at the same time.

The results from running the supplied sample program are:-

```
GUI Innovations SqlLink3000
=====
```

```
Please enter the IP address of the 'Server' where
SqlLink3000 is running..213.122.63.64
```

```
Option 1) Query Like Report
```

```
        2) Formatted Report
```

```
        3) Grouped query
```

```
Enter your option... 2
```

Product	Price	In Stock
=====	=====	=====
Alice Mutton	39.00	0
Aniseed Syrup	10.00	13
Boston Crab Meat	18.40	123
Camembert Pierrot	34.00	19
Carnarvon Tigers	62.50	42
.....		
Vegie-spread	43.90	24
Wimmers gute Semmelknodel	33.25	22
Zaanse koeken	9.50	36

```
Start time: 12:01:42:40
```

```
End time  : 12:01:43:20
```

```
78 records reported
```

```
:
```

Elapsed time of .8 seconds to retrieve and display the records.

The sample 'grouped query' returns:-

```
GUI Innovations SqlLink3000
=====
```

```
Please enter the IP address of the 'Server' where
SqlLink3000 is running..213.122.63.64
```

```
Option 1) Query Like Report
```

```
        2) Formatted Report
```

```
        3) Grouped query
```

```
Enter your option... 3
```

```
...
```

```
Company:      Vins et alcools Chevalier
```

```
Date:         01/09/1994
```

```
Total Value: 440
```

```
No Of Orders: 3
```

```
Company:      Hanari Carnes
```

```
Date:         24/08/1994
```

```
Total Value: 1444.8
```

No Of Orders: 3

Start time: 12:03:50:30
End time : 12:04:00:50

823 records reported
:

Connecting to your database

- MS Access.
SETVAR SQL_CONNECT
"Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\program files\SqlLink3000\db\GUI SALES.mdb"
- MS Sql Server
SETVAR SQL_CONNECT "driver={SQL Server};server=pentium450;uid=sa;pwd=;database=northwind"
- Oracle
SETVAR SQL_CONNECT "provider=MSDAORA;user id=system;data source=guiordb;password=manager;"
- ODBC
SETVAR SQL_CONNECT
"PROVIDER=MSDASQL;DSN=SE_System"

SqlQuery allows you to access your databases from the HPe3000 without writing code. Simply connect to the database and issue SQL statements.

```
: SQLQUERY  
GUI Innovations Sql Query3000  
=====  
Copyright GUI Innovations Limited - 2002
```

```
SQL>IP 192. 192. 192. 46  
SQL>CO Provider=Microsoft. Jet. OLEDB. 4. 0; Data Source=C:\program  
files\Sql Link3000\db\GUI SALES. mdb  
SQL>Connected to database!  
Sql >SELECT ORDER_ID, (QUANTITY * UNIT_PRICE) AS TOTVAL FROM  
ORDER_DETAILS WHERE (QUANTITY * UNIT_PRICE) > 10000
```

```
ORDER_ID =10353  
TOTVAL =10540
```

```
ORDER_ID =10417  
TOTVAL =10540
```

```
ORDER_ID =10424  
TOTVAL =10329. 2
```

ORDER_ID =10865
TOTVAL =15810

ORDER_ID =10889
TOTVAL =10540

ORDER_ID =10981
TOTVAL =15810

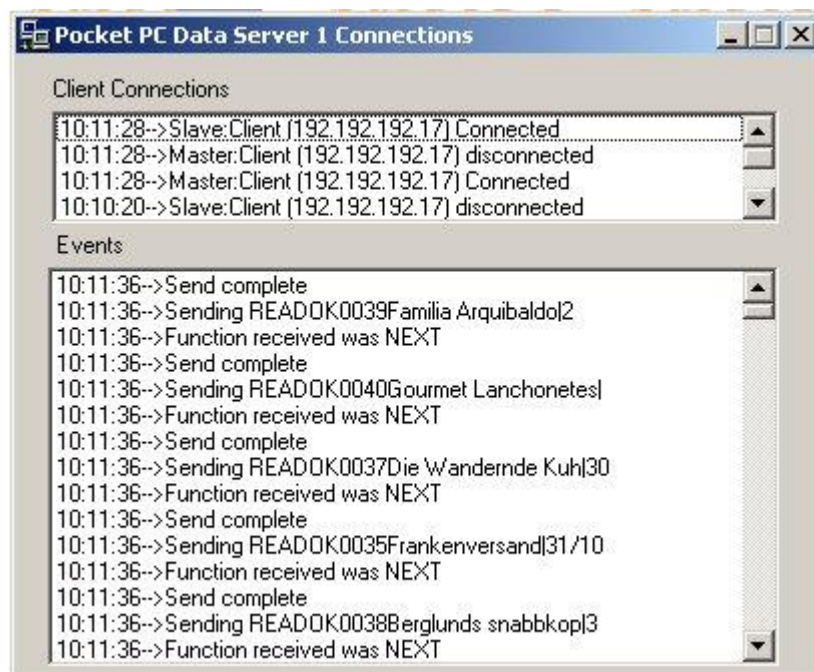
6 records reported

Start time: 19:03:59:70
End time : 19:04:01:80

Sql >E
:

SqlLink3000 - The remote PC server component.

SqlLink3000 runs on the PC. It can be started with a -L option (C:\SqlLink\SqlLink3000.exe -L), which will log what it is doing. This will inevitably slow the program down. The program will 'sit' in the system tray. Double-click the icon to restore the screen. Right-clicking the icon will allow the options of Restore and End.



SqlLink3000 running with logging on



SqlLink3000 running with logging turned off

SqlLink3000 shows the number of connections it is currently serving, and clients connecting and disconnecting. With logging turned on, you get details of all transactions as they are happening. If you cannot read the full line of the log, simply double-click on the line, and it will display in full.

SqlLink3000 is multi-threaded. Each requestor talks to its own socket. Hovering over the icon in the system tray, will show you the number of connections.

The default listener port for SqlLink3000 is 9875. This can be overridden by a run time parameter, e.g.

```
C:\SqlLink\SqlLink3000.exe -P1234
```

will make SqlLink3000 listen on port 1234. If you change the port on SqlLink3000, SqlQuery needs to know, so simply RUN SQLQUERY;PARAM=1234 in the above case.

SqlLink3000 has been tested against SqlServer, Oracle, Access, PostgreSQL and MySql, but will run against any database for which there are ADO drivers.

More details and evaluation copies are available from:-

www.gui-innovations.com,
www.gainsborough.com or
www.omnisolutions.com

Please report any suggestions for improvements or problems to guisqlink@gui-innovations.com

Thank You