DBConnect

1 Welcome to DBConnect

1.1 Introduction

Welcome to DBConnect. This utility is a part of the PhonePad system, and is used to tell PhonePad how and where to connect to your PhonePad database. The database can be located on a local drive, a network drive or on a remote server.

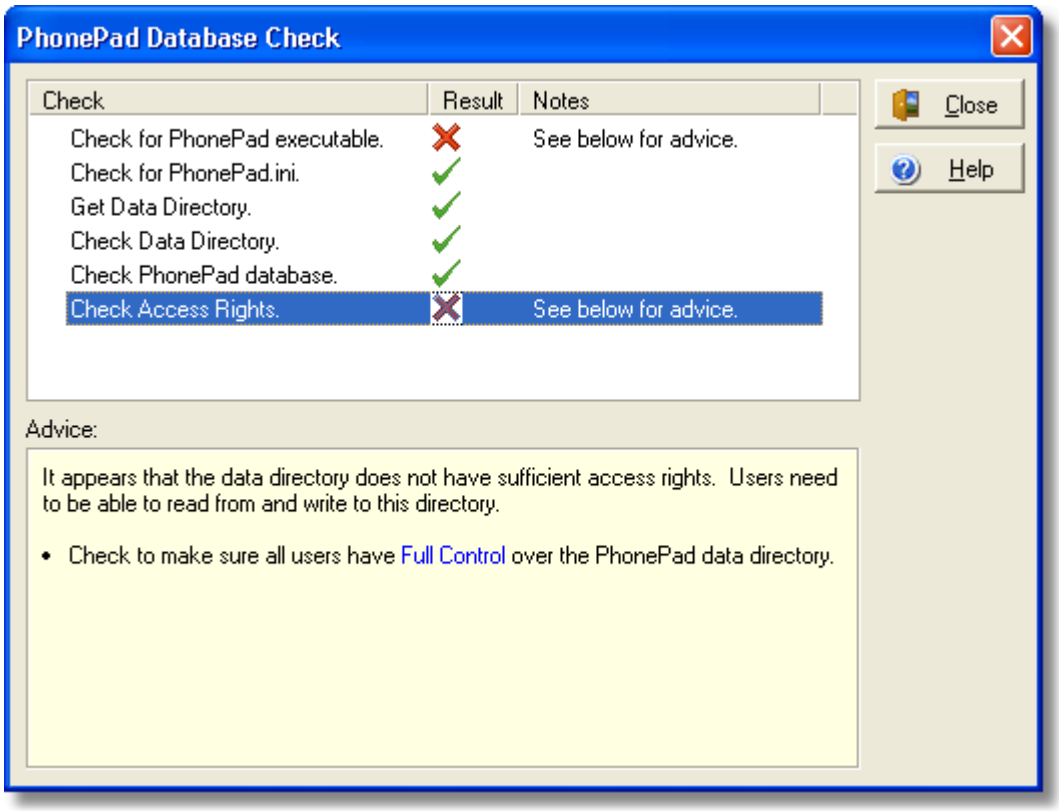
DBUpdate automatically sets up the database location when it creates it. DBConnect allows you to setup PhonePad for remote connect across a LAN, WAN or the Internet.

Setting up PhonePad for Local Mode

Setting up PhonePad for Remote Mode

1.2 Checking the PhonePad Database

The PhonePad Database Check window checks to make sure that PhonePad has been setup correctly for Local mode operation.



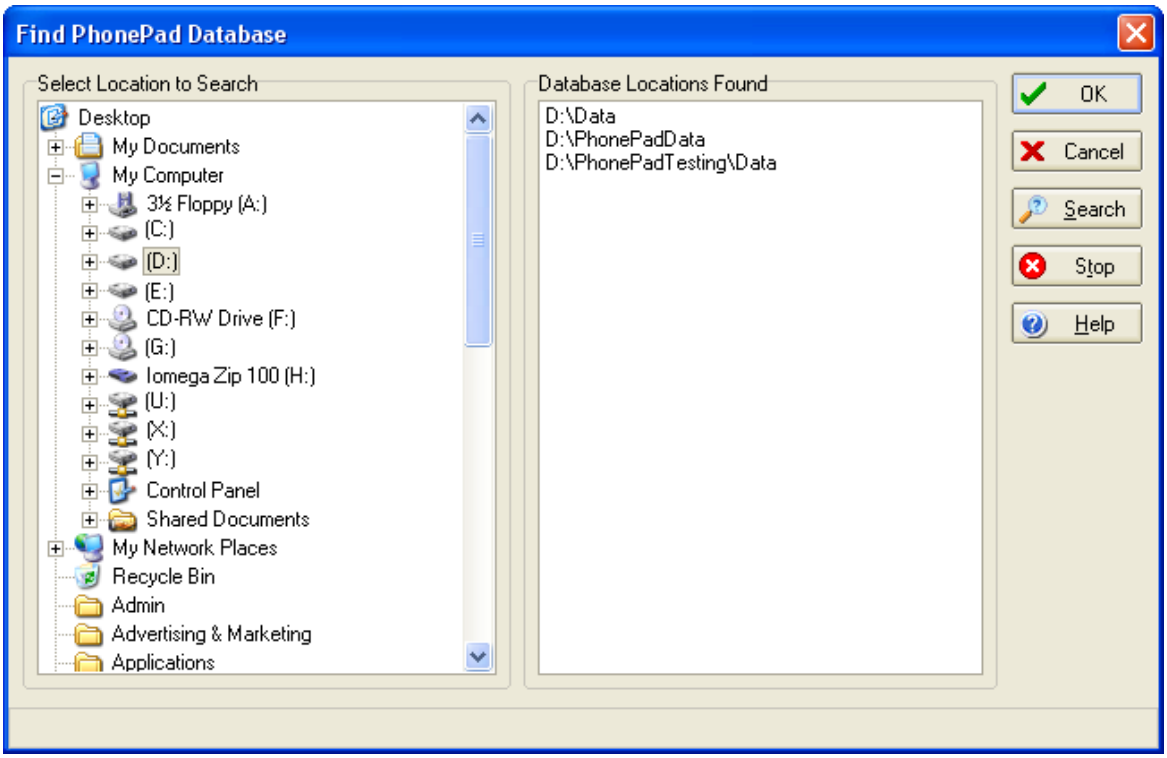
A number of checks are performed. Each of these checks are displayed in a list along with the results.

✓	Indicates the check was successful.
✗	Indicates the check failed.

If the Notes field displays "See below for advice", click on the line and advice will be displayed in the Advice box.

1.3 Finding the PhonePad Database

If you are unable to locate the PhonePad database, or are not sure where it resides, use the *Find PhonePad Database* feature to track it down. Click on the *Find Database* button under the *Connection* tab on the DBConnect main window.



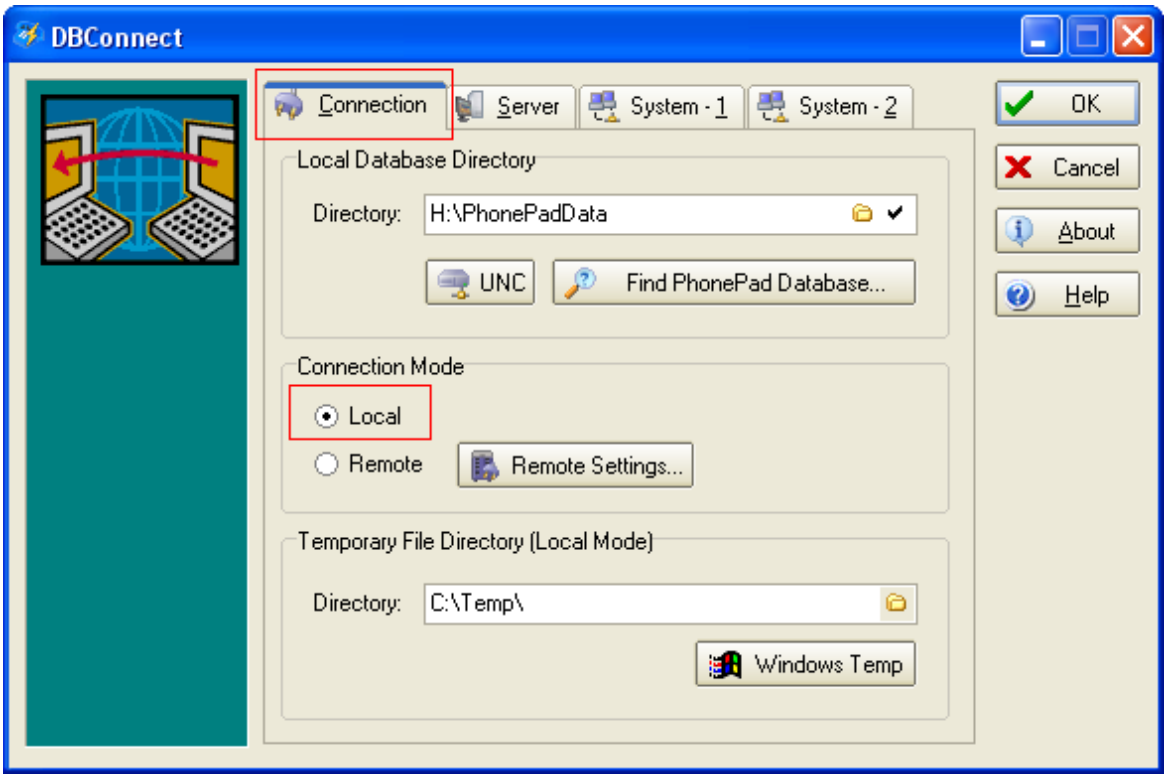
Select the location to search from the Explorer-like tree on the left (eg. the D: drive), then click the *Search* button. DBConnect will scan the location and all sub-folders for the PhonePad database. The results will be displayed in the list on the right. If no results are displayed in the list then the database does not exist in the location you selected. The status of the search will be displayed on the status bar at the bottom of the window.

Once DBConnect has finished searching, select the appropriate location from the list on the right and click the *OK* button.

OK	Adds the selected location to the Local Database Directory setting in the DBConnect main window.
Cancel	Closes the window.
Search	Commences searching for the PhonePad database.
Stop	Cancels the search.
Help	Displays online help (which you are now viewing).

1.4 Setting Up PhonePad for Local Mode

Local mode is used when the PhonePad database is located on a shared drive and directory, ie. when you are using it on a peer-to-peer network or local area network (LAN). In this mode, PhonePad connects directly to the database in the location you specify.



Under *Local Database Directory*, type in the location of the PhonePad database, or click on the

folder icon and select the appropriate directory. Make sure *Local* is selected under *Connection Mode*, and then click the *OK* button.

If you are running PhonePad from the shared drive then there is nothing more you need to do. If you have PhonePad installed on each workstation then you will need to run DBConnect on each workstation, or copy the configuration file (PHONEPAD.INI) to the PhonePad directory on each workstation. PhonePad Admin also requires PHONEPAD.INI.

Selecting and Checking the Data Directory

The small folder button is used to select the location of the PhonePad database.

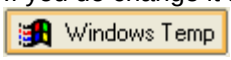
Click this button to validate the data directory you have selected or entered. DBConnect will check the location to verify that it does contain the PhonePad database.

See Checking the PhonePad Database for more information.

Click this button to activate the Find PhonePad Database feature. This facility will scan the selected location for the PhonePad database and set the location for you.

Temporary File Directory

PhonePad often creates temporary files during normal usage in Local mode. These files are created and deleted automatically so it is not something you need to worry about. PhonePad uses the default Windows temporary directory for these temporary files, which is displayed in the Temporary File Directory setting. This can be changed if required but generally should be left as it is.

If you do change it and want to reset it back to the Windows temp directory, click on the 

button.

Notes

You can also connect to the PhonePad database on a LAN using *Remote* mode. Normally, you would use *Local* mode but you may want to connect remotely if you are experiencing problems with transient drive connections. These typically occur on startup of Windows when PhonePad tries to connect to the database but the drive connections have not yet been established by Windows.

Connecting in Remote mode can also be beneficial if you are experiencing data corruption problems which is almost always due to workstations crashing, or being switched off or rebooted without first shutting down PhonePad.

Of course, if you need to connect to PhonePad from home or a remote location your only option is to use Remote mode.

See Setting Up PhonePad for Remote Mode for more information.

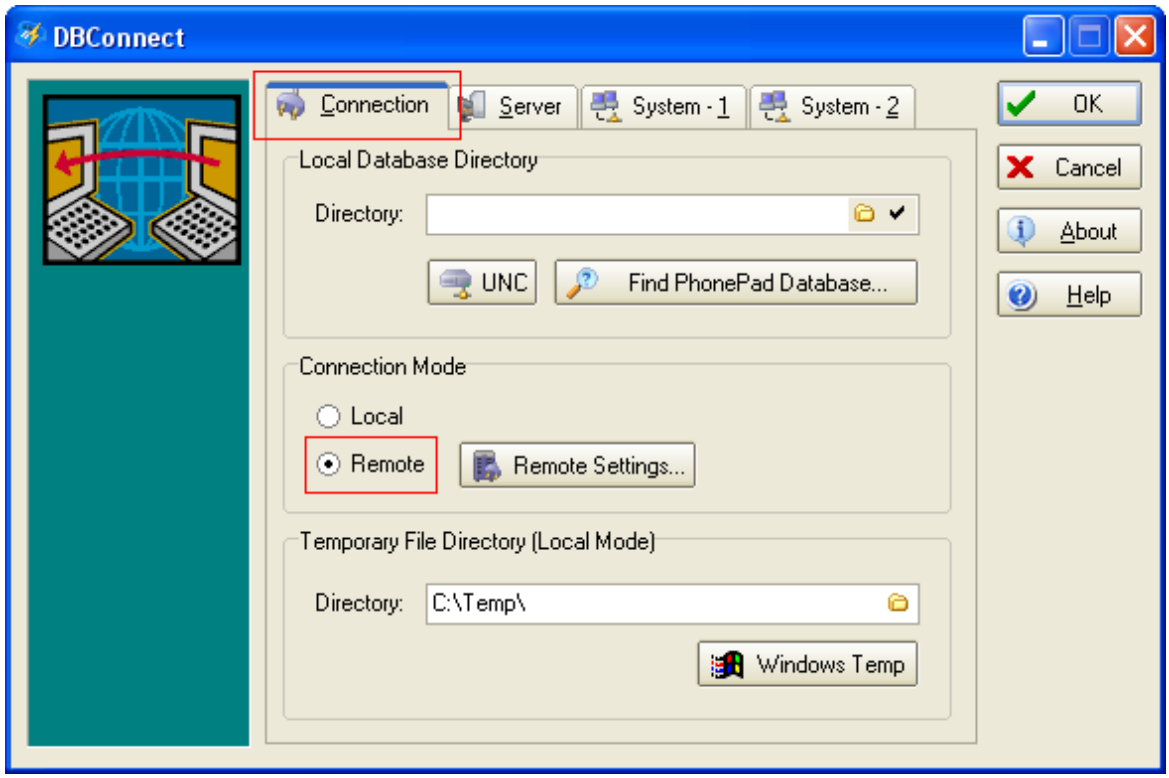
1.5 Setting Up PhonePad for Remote Mode

Remote mode is used to connect to a PhonePad database installed on a remote server. However it can also be used to connect to a PhonePad database located on a local server. In both cases, a server application (DBServer) must be run on the server.

There are a few steps you need to go through to setup PhonePad for Remote mode connection.

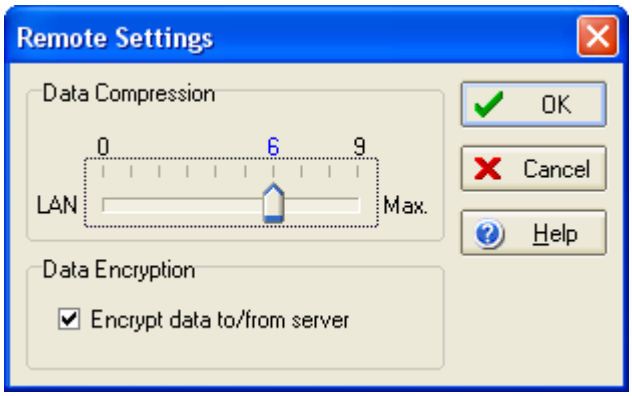
Step 1 - Select Remote Mode

First of all, select *Remote* under *Connection Mode*.



Step 2 - Configure the Remote Settings (Compression and Encryption)

Next, click on the *Remote Settings* button to set the Encryption and Compression options.

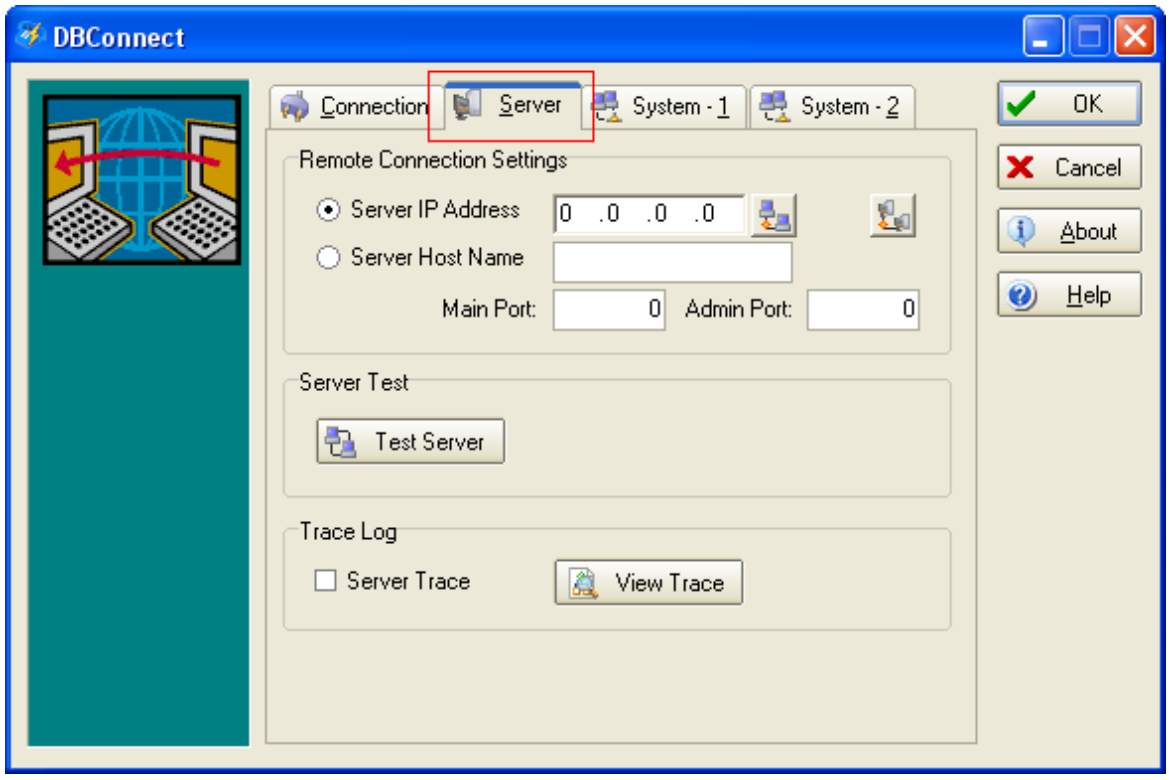


The *Remote Settings* window allows you to specify the amount of data compression you require. Compressing the data can speed up communications over the Internet. For a LAN, this should be set to **0**. For the Internet, **6** is the optimum setting.

You can also encrypt all communications between the workstation and the PhonePad server by checking the *Data Encryption* checkbox. This provides security over Wide Area Networks and the Internet, and prevents anyone with a packet sniffer from capturing and viewing your data.

Step 3 - Specifying the Remote Connection Settings

Now the server details have to be set up. Click on the *Server* tab.



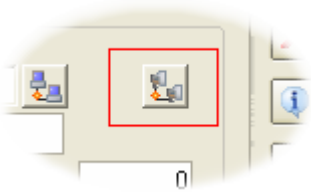
Enter the Server Settings Automatically

The server settings can be added automatically by selecting the *Announce* button in the DBServer interface and then selecting the *Listen for IP Announcement* button in DBConnect.

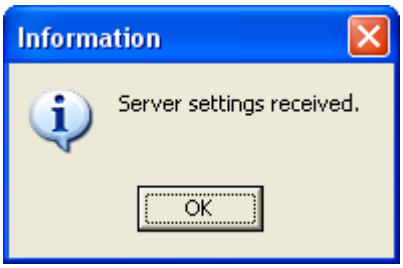
1. Open DBServer from the server or host computer's system tray.

2. Select DBServer's *Announce* button (it should appear depressed). It will broadcast it's IP address and ports every 15 seconds.

3. Select DBConnect's *Listen for IP Announcement* button.



4. Within 15 seconds the IP address and port fields should be automatically completed, and the button will be unselected. A message will be displayed advising that the settings have been received.



5. Don't forget to unselect the *Announce* button in DBServer once all of the workstations have been setup.

You may need to configure your network to use this facility. If you have routers or bridges on your network (or software firewalls such as ZoneAlarm), you may need to open **Port 12500** to allow **UDP** connections. If you find that the messages aren't being received by PhonePad users (remember, they have to be logged in to PhonePad), then the messages are being blocked somewhere.

Enter the Server Settings Manually

Server IP Address	You can check the server's IP address by running the server application (DBServer) on the computer that will be acting as the server for the PhonePad database. The IP address is displayed in DBServer's main window. The small button next to the Server IP Address is the *Ping* button. It can be used to "ping" the host computer to find out if it can be "seen" from the current workstation. If it can't be seen then you will be unable to connect to DBServer.
Main Port	The main port is how PhonePad communicates with the server (DBServer). The default setting is 12005 - you should use this setting unless another application is already using this port.
Administration Port	The administration port is used by various PhonePad utilities to perform administration functions on the server (DBServer). The default setting is 12006 - you should use this setting unless another application is already using this port.

You need to perform these settings on each workstation that will be connecting in Remote mode.

Step 4 - Test the Server Connection

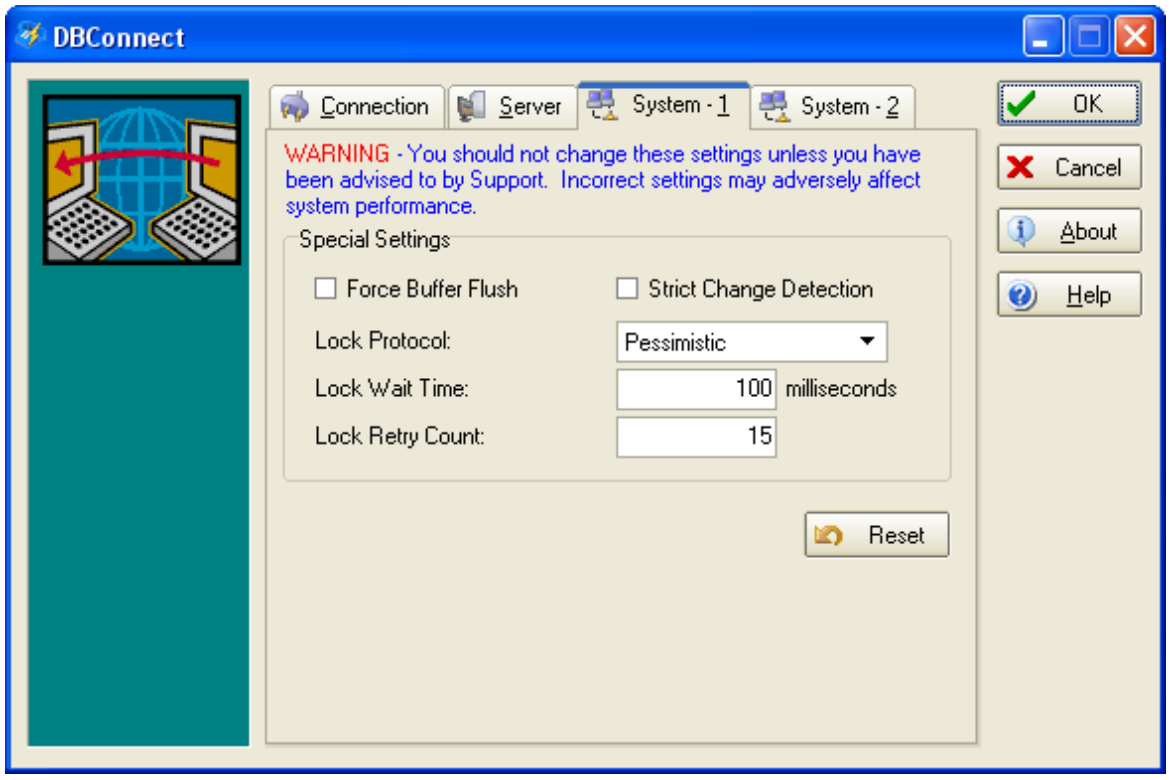
Click the Test Server button to test the connection between the workstation and the PhonePad server.

Server Configuration

In PhonePad 3, DBConnect was used to setup and configure the PhonePad Server. This is now done by the new *ServerManager* utility.

1.6 System - 1

The *System - 1* tab allows you to change crucial PhonePad system settings for both Local and Remote modes. You should not change any of these settings unless advised to by Cybercom Software support.



Special Settings

Force Buffer Flush — Windows caches data and can be slow to write them to the hard-disk. This can result in messages taking a while to be available or updated. This setting forces the operating system to write them, ensuring that the data is updated immediately. It should be unnecessary to use this option as PhonePad does this inherently.

Strict Change Detection — Controls whether the database engine will use strict or lazy change detection. The default is False, or lazy change detection.

Lock Protocol — Controls whether the database engine will use a pessimistic or optimistic locking model when editing records. The pessimistic locking model specifies that records should be locked when the record is retrieved for editing. The optimistic locking model specifies that records should be locked when the record modifications are posted to the database table. Using an optimistic locking model for remote connections to the PhonePad database server removes the possibility that dangling record locks will be left on the server if PhonePad is terminated unexpectedly.

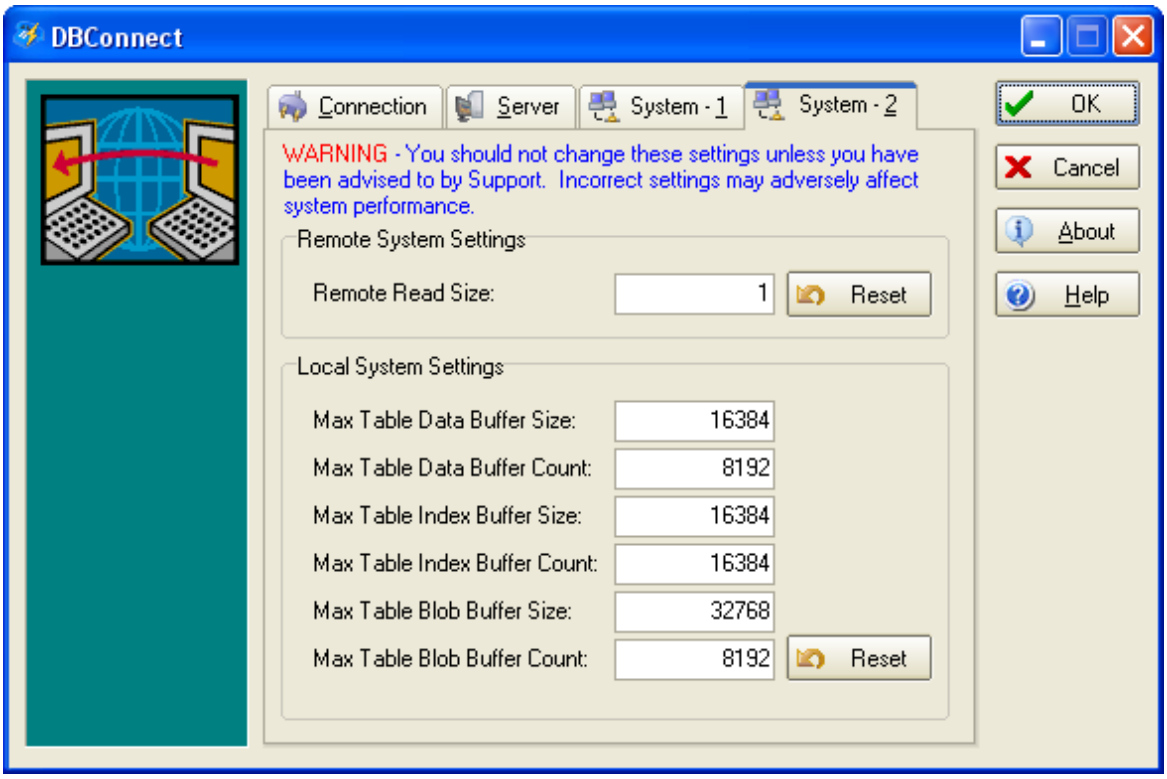
Lock Wait Time — Controls the amount of time, in milliseconds, that the database engine will wait in-between lock attempts.

Lock Retry Count — Controls the number of times the database engine will retry a record or table lock before reporting a lock error.

The  button resets all values on this screen back to their default values.

1.7 System - 2

The *System - 2* tab allows you to change crucial PhonePad system settings for both Local and Remote modes. You should not change any of these settings unless advised to by Cybercom Software support.



Remote System Settings

Remote Read Size — Specifies the amount of data to read from the server in Remote mode.

The  button resets *Remote Read Size* back to its default value.

Local System Settings

Max Table Data Buffer Size Specifies the amount of memory to use for buffering data.

Max Table Data Buffer Count Specifies the amount of memory to use for buffering data.

Max Table Index Buffer Size Specifies the amount of memory to use for buffering data.

Max Table Index Buffer Count Specifies the amount of memory to use for buffering data.

Max Table Blob Buffer Size Specifies the amount of memory to use for buffering data.

Max Table Blob Buffer Count Specifies the amount of memory to use for buffering data.

The 

button resets the above settings back to their default values.

1.8 Changing the Server Ports

The server (DBServer) assumes you will be using the default port settings for the Main Port (12005) and the Administration Port (12006). If you decide to use different ports you will need to let the server know by creating a ini file called DBSERVER.INI. This file should be in the same directory as the server. It requires the following settings:

```
[Server Parameters]
Server Port=port
Administration Port=port
```

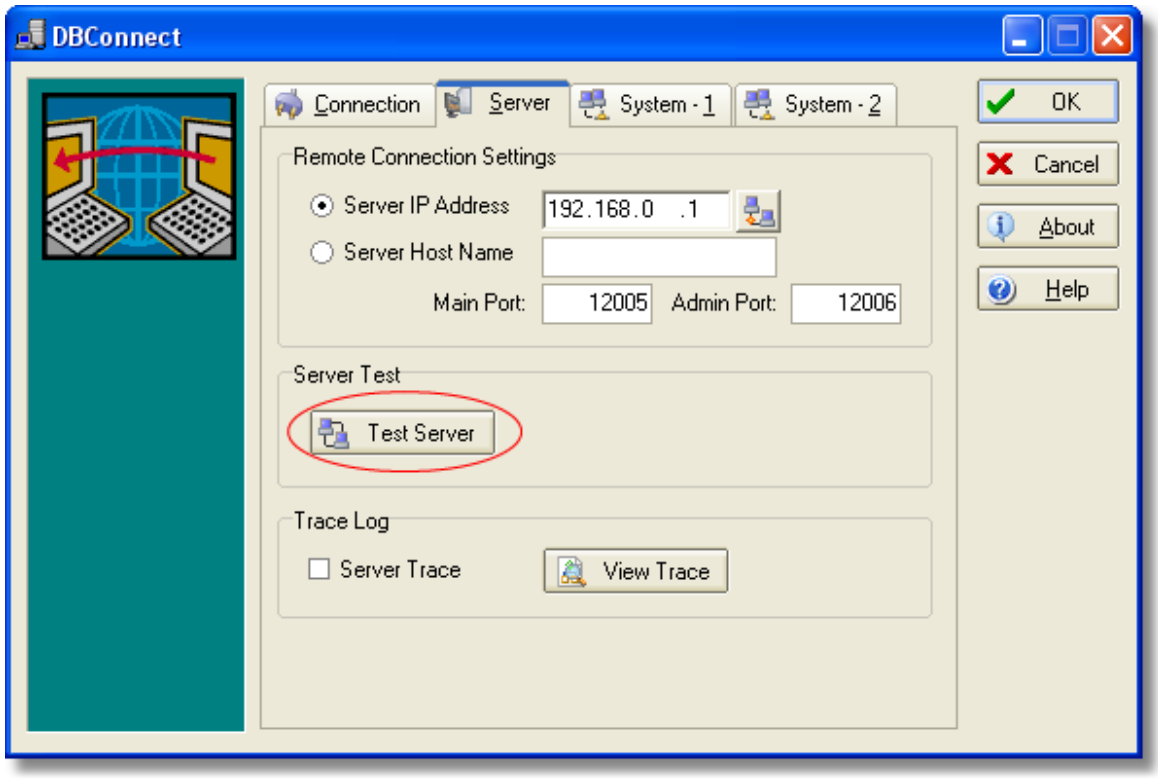
For example:

```
[Server Parameters]
Server Port=13501
Administration Port=13502
```

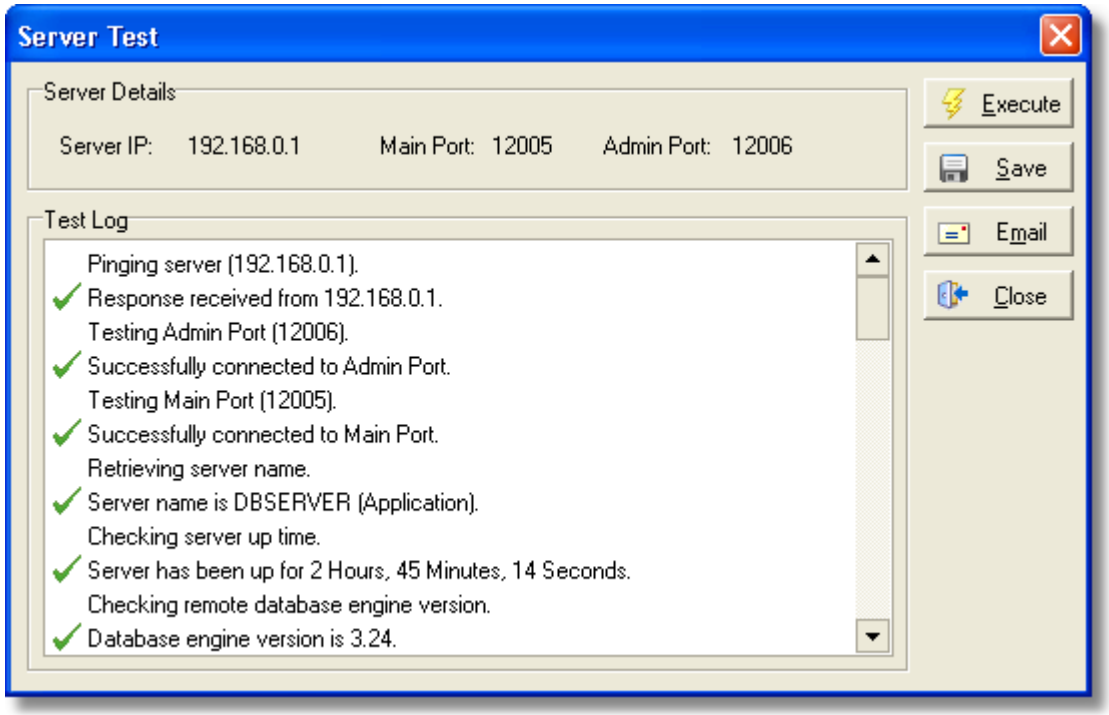
Please note: the two ports must be different. You should never use the same number for both ports.

1.9 Testing the Server

If you are not able to connect to the PhonePad server successfully, the Server Test facility can be used to diagnose the problem. Click *Test Server* under the *Server* tab.



The *Server Test* window will be displayed.



Server Details Displays the IP address and ports from the main window.

Execute	Tests the server.
Save	Saves the test results to a text file.
Email	Emails the test results to Cybercom Software Support.
Close	Closes the Test Server window.
Test Log	Displays the result of each test performed.

To test the server setup, click the *Execute* button. As series of tests will be performed and the results of each test will be displayed in the *Test Log*. If any tests fail you can email the results to us by clicking the *Email* button.

For more information see Troubleshooting Server Problems.

1.9.1 Troubleshooting Server Problems

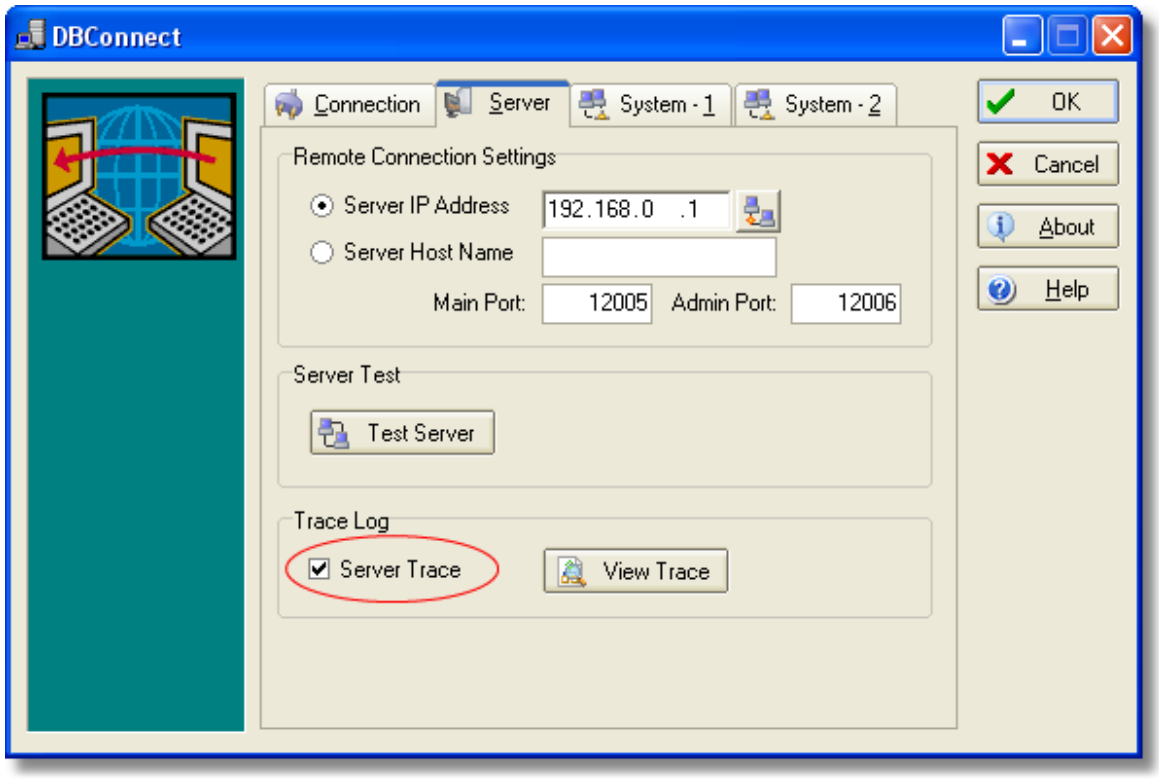
If any of the server tests failed, check the list below for possible causes. Alternatively, you can email the test results to us and we will diagnose the problem for you.

Test Result	Possible Causes
No response from [IP address].	• The server IP address is invalid or does not exist. • A firewall, bridge or router is blocking this address
Unable to connect to Admin port on server.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking this port.
Unable to connect to Main port on server.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking this port.
Unable to retrieve server name.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
Unable to server uptime.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
Unable to retrieve database	• The PhonePad server (DBServer) is not running or

engine version.	has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
Unable to retrieve remote database location.	• The remote database has not been setup on the server because you have not click the *Setup Server* button in *ServerManager*. • The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
Default login does not exist on the server.	• You have not clicked the *Setup Server* in *ServerManager* button.
Unable to check for default login on the server.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
PhonePad database does not exist on the server.	• You have not clicked the *Setup Server* button in *ServerManager*.
Unable to check for PhonePad database on the server.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.
Unable to retrieve server log.	• The PhonePad server (DBServer) is not running or has been stopped. • A firewall, bridge or router is blocking the IP address for the server. • A firewall, bridge or router is blocking the Admin port for the server.

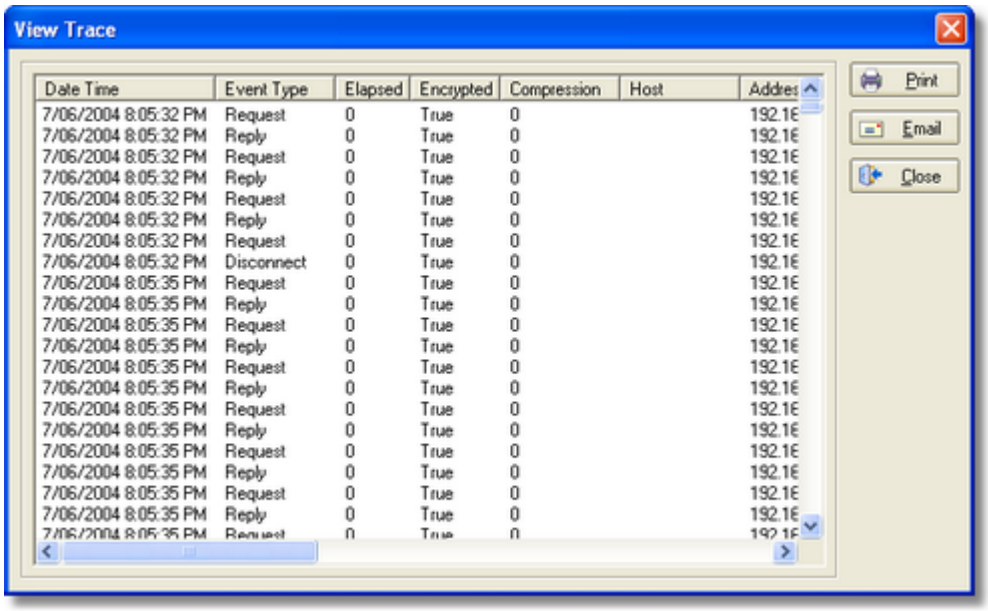
1.10 Running a Trace

When the Server Trace option is checked, all communications between the workstation and the PhonePad server will be traced. This is used to debug problems and so should normally be left unchecked.



1.10.1 View the Trace File

This window allows you to view the trace file, if one has been generated. A trace is used to diagnose any problems that you may experience communicating with the PhonePad server.



Print	Prints the trace file.
Email	Emails the trace file to Cybercom Software support. If you use this option, please include comments and a contact email address.
Close	Closes the trace window.