# Mercury DialBridge Multi-Lane Mode and SQLPos

DialBridge can be configured in your network on a single computer or as a "multi-lane" connection where one computer can process cards for up to three other POS units. The multi-lane configuration utilizes the **Alternate URL** configuration field for the IP network address of the computer that is *physically connected* to the DialBridge modem. In the example to the right, the register is set up in TEST-DIALBRIDGE mode and the computer to which the DialBridge modem is *physically connected* has an IP address of 192.168.1.101.
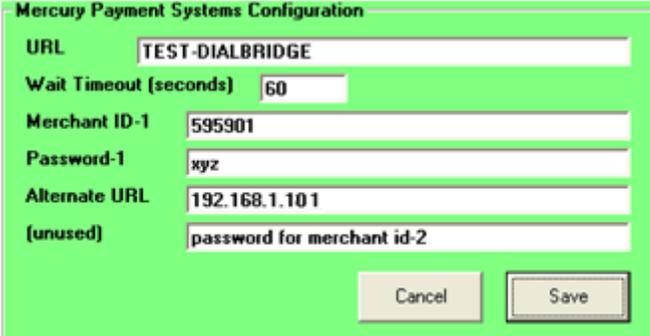
How DialBridge Works

DialBridge is like having a "smart switch" in your POS system. It acts as an automatic switch between two different connection methods to the credit card processing network depending on the best connection available. It always favors the fastest connection method and if that isn't available, it automatically switches to the backup method.

1. When SQLPos sends credit card information, it actually connects to the DSIClientX.dll installed on the computer using the SQLPos configuration parameters for Mercury along with the credit card number, expiration date and sale value information.

2. The DSIClientX.dll then determines if the information is complete enough to continue. If the information isn't complete, SQLPos redisplays the credit card screen along with a message such as "card expiration date missing," etc. If the transaction information is okay to send, it uses the IP address of the computer that is physically connected to the DialBridge modem as its "destination" and sends the information to it.

3. The DialBridge software running on the "destination" computer then performs the following:

   a. It senses which register is sending the card processing request to it.

   b. It tries to connect using the normal, direct Internet connection.

      i. If the Internet connection is successful, it processes the card directly and sends the reply back to the register that originated the request.

      ii. If the Internet connection fails, it automatically dials the modem, quickly connects to the card system and processes the card. It then sends the reply back to the register that originated the request. It holds the connection open in case there are other transactions that need to be processed and if there are none, it disconnects after about 20 seconds.

   c. It reverts to its normal "wait" mode.

Notes:

1. DialBridge is limited to a maximum of 4 simultaneous connections (itself and three additional units).

2. It can be installed as a centralized connection for your whole network on a main file server that also has access to both the Internet and a dedicated telephone connection or on a register as the central DialBridge unit for other registers.

3. Individual DialBridge units can be used on each POS register, although each requires its own dedicated telephone connection (not a shared connection).

4. It's a good idea to set the IP address of the computer connected to the DialBridge modem to use a specific address instead of DHCP so that the IP address never changes after power outages or router resets.

5. **Caution:** Installing DialBridge on a file server that is also an intranet or Internet Web Server may create unpredictable results and is not advised.

6. The computers that will be used in DialBridge mode must have 128-bit encryption enabled for security purposes. Typically this means that Microsoft Internet Explorer version 6.0 or later must be installed on the computer(s) involved. You can check by opening Internet Explorer on each computer and clicking the Help-About option on Internet Explorer. Look for the "cipher strength" setting.

Using a POS REGISTER as the main DialBridge unit

Here's a basic network schematic for a 3-register networked SQLPos system with DialBridge running on the register. In this example:

- The network router provides IP addresses for each computer and provides normal access to the Internet.

- *Only one* of the computers has the DialBridge software installed *and running.*

- *Only one* of the register computers is physically connected to the DialBridge modem. It is important to know this computer's IP address because the other registers will be pointed to it.

- Note that Register #1 is set to use "LOCALHOST" as its Alternate URL because both SQLPos and DialBridge are running on the same computer.

- Registers #2 and #3 have the SQLPos configuration screen's Alternate URL setting pointed to the IP address of the Register #1 unit.
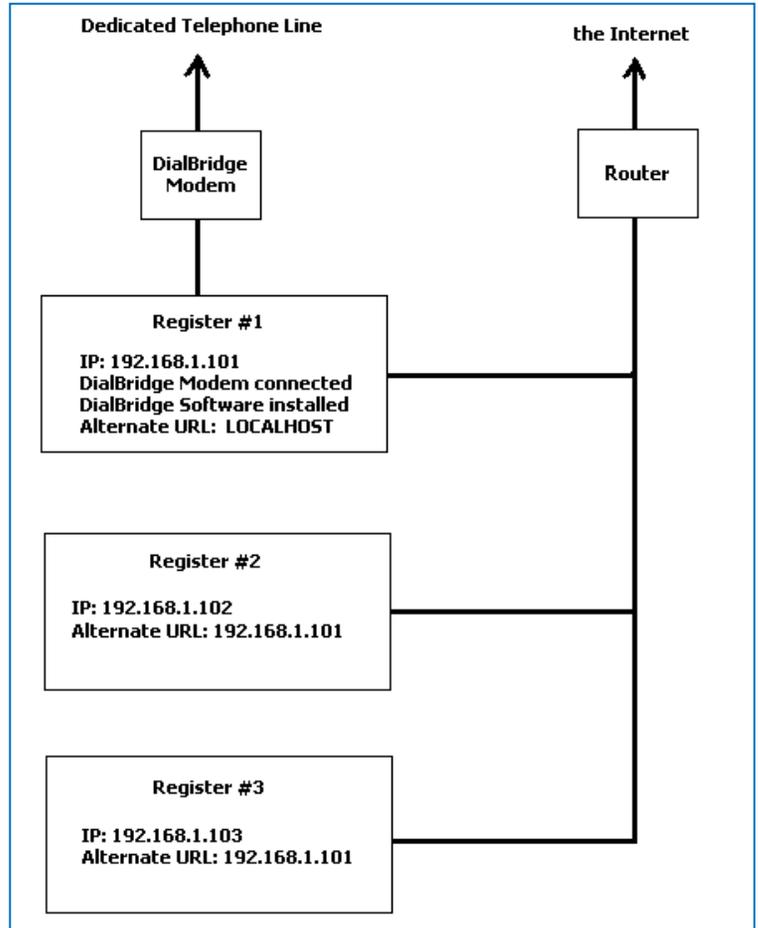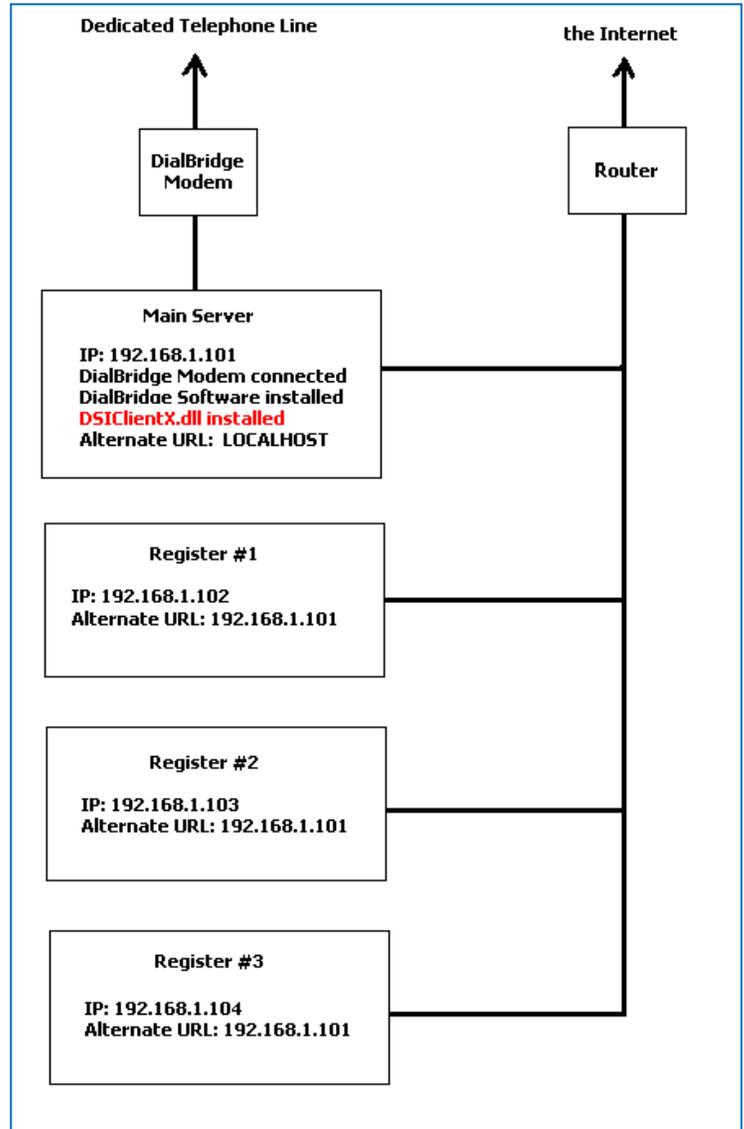
Notes:

1. The Mercury DialBridge option is only available in SQLPos version 09.01.01a or later.

2. When both SQLPos and DialBridge are running on the same computer, you may also use the computer's own IP address in place of "LOCALHOST" as the Alternate URL.

Using a MAIN FILE SERVER as the main DialBridge unit

Here's a basic network schematic for a 3-register networked SQLPos system with DialBridge running on the main file server. In this example:

- The network router provides IP addresses for each computer and provides normal access to the Internet.

- *Only the server* computer has the DialBridge software installed *and running.* Note also that the server must also have the DSIClientX.dll installed into its Windows registry.

- *Only the server* computer is physically connected to the DialBridge modem. It is important to know this computer's IP address because the other registers will be pointed to it.

- Registers #1, #2 and #3 have the SQLPos configuration screen's Alternate URL setting pointed to the IP address of the Register #1 unit.

Dedicated Telephone Line   **the Internet**

DialBridge Modem

Router

Main Server
IP: 192.168.1.101
DialBridge Modem connected
DialBridge Software installed
DSIClientX.dll installed
Alternate URL: LOCALHOST

Register #1
IP: 192.168.1.102
Alternate URL: 192.168.1.101

Register #2
IP: 192.168.1.103
Alternate URL: 192.168.1.101

Register #3
IP: 192.168.1.104
Alternate URL: 192.168.1.101

Notes:

1. The Mercury DialBridge option is only available in SQLPos version 09.01.01a or later.

2. The DSIClientX.dll can be installed manually or via the DSIClientX install utility provided with the DialBridge modem. To install the DSIClientX.dll manually:

   a. The DSIClientX.dll will be placed in the CDCO folder after updating your Club Office system with the proper Club Office software update.

   b. Open a command prompt and navigate to the CDCO folder.

   c. Type: **regsvr32 DSIClientX.dll** and press the ENTER key. The DLL is linked into the Windows registry after the command was successful.