Emulate a direct serial connection over the LAN via TCP

                                ETS

   Question
   Can we use 2 terminal servers that are connected over the lan so that if they
are turned on they make
   a connection via the lan that acts as a serial cable? (We can't make any
changes to the device, but
   we know the baudrate, number of bits, stopbits, etc.)

   Answer
   Yes. This procedure will work equally well with the ETS/EPS terminal servers
or the LRS remote access
   servers. An ETS terminal server is used in the examples. Your configuration
will appear as below:

```
+------+          +----+                +----+        +------+
|Serial|          |ETS |   Ethernet     |ETS |        |Serial|
|Device|--------| #1 |===============| #2 |-------|Device|
+------+          +----+                +----+        +------+

             192.168.5.2            192.168.5.10
```


The commands necessary for this configuration to automatically establish this
connection are as follows.
Note the reference to the ETSs by their number. You will also need to insure
that the port parameters
such as speed, number of bits, flow control etc. are correct on the ETS for the
serial device.

ETS #1

DEFINE SERVER IPADDRESS 192.168.5.2
DEFINE PORT 2 DEDICATED TELNET 192.168.5.10:3003T (to connect port 2 on ETS #1
to port 3 on ETS #2)
DEFINE PORT 2 AUTOSTART ENABLED
LOGOUT PORT 2

ETS #2

DEFINE SERVER IPADDRESS 192.168.5.10
DEFINE PORT 3 ACCESS REMOTE
LOGOUT PORT 3

ACCESS on port 3 of ETS #2 must be DYNAMIC or REMOTE for the connection to
succeed. These commands will
create a RAW (8-bit clean) TCP connection between the serial ports of the two
ETSs. Power cycle the two
ETS units and the "virtual serial line" will be created.

This connection passes data only, status signals such as dsr/dtr/cts/rts are not
passed between the ETSs.

Note that if the two devices are on different IP subnets, the default gateway on each unit will have to
be configured using the "DEFINE SERVER GATEWAY nnn.nnn.nnn.nnn" command.

Emulate a direct serial connection over the LAN

                                   MSS

  Question
  Can we use 2 serial servers connected over the LAN that act as a serial cable (when turned on they
  would make a connection via the LAN)? We can't make any changes to the device, but we know the baudrate,
  number of bits, stopbits, etc.

  Answer
  Your configuration will appear as below:
```
+------+          +----+                +----+          +------+
|Serial|          |MSS1|   Ethernet     |MSS1|          |Serial|
|Device|--------| #1 |===============| #2 |-------|Device|
+------+          +----+                +----+          +------+

            192.168.5.2             192.168.5.10
```

The commands necessary for this configuration to automatically establish this connection are as follows.
Note the reference to the MSS1s by their number. You will also need to insure that the port parameters
such as speed, number of bits, flow control etc. are correct on the MSS1 for the serial device.

MSS1 #1

CHANGE IPADDRESS 192.168.5.2
CHANGE DEDICATED TCP 192.168.5.10:3001T
CHANGE AUTOSTART ENABLED

MSS1 #2

CHANGE IPADDRESS 192.168.5.10
CHANGE ACCESS REMOTE

ACCESS on MSS1 #2 must be DYNAMIC or REMOTE for the connection to succeed. These commands will create a
RAW (8-bit clean) TCP connection between the serial ports of the two MSS1s. Power cycle the two MSS1
units and the "virtual serial line" will be created.

This connection passes data only, status signals such as dsr/dtr/cts/rts are not passed between the MSS1s.

Note that if the two devices are on different IP subnets, the default gateway on each unit will have
to be configured using the "CHANGE GATEWAY nnn.nnn.nnn.nnn" command.

On the MSS1 (only) you can use UDP instead of TCP. To do that you need to set up a dedicated connection
with Autostart on both MSS1s:

MSS1 #1

CHANGE IPADDRESS 192.168.5.2
CHANGE DEDICATED TCP 192.168.5.10:3001U
CHANGE AUTOSTART ENABLED

MSS1 #2

CHANGE IPADDRESS 192.168.5.10
CHANGE DEDICATED TCP 192.168.5.2:3001U
CHANGE AUTOSTART ENABLED

Emulate a direct serial connection over the LAN
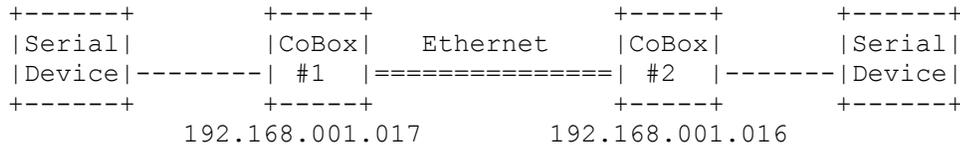

                              CoBox/UDS

  Question
  Can we use 2 serial servers connected over the LAN that act as a serial cable (when turned on they
  would make a connection via the LAN)?

  Answer
  Your configuration will appear as below:

+------+   +-----+   +-----+   +------+
|Serial| |CoBox| Ethernet |CoBox| |Serial|
|Device|--------| #1 |===============| #2 |-------|Device|
+------+   +-----+   +-----+   +------+
         192.168.001.017   192.168.001.016

The commands necessary for this configuration to automatically establish this connection are as follows.
Note the reference to the CoBoxes by their number. You will also need to insure that the port parameters
such as speed, number of bits, flow control etc. are correct on the CoBox for the serial device.

```
CoBox #1:
*** basic parameters
   Hardware: Ethernet TPI
   IP addr 192.168.001.017, no gateway set


 ******* Channel 1 *******
 Baudrate 09600, I/F Mode 4C, Flow 00
 Port 10001
 Remote IP Adr: 192.168.001.016, Port 10001
 Connect Mode: C5  Disconn Mode: 00
 Flush    Mode: 00
==========

CoBox #2:
*** basic parameters
   Hardware: Ethernet TPI
   IP addr 192.168.001.016, no gateway set


 ******* Channel 1 *******
 Baudrate 09600, I/F Mode 4C, Flow 00
 Port 10001
 Remote IP Adr: 192.168.001.017, Port 10001
 Connect Mode: C0  Disconn Mode: 00
 Flush    Mode: 00
```