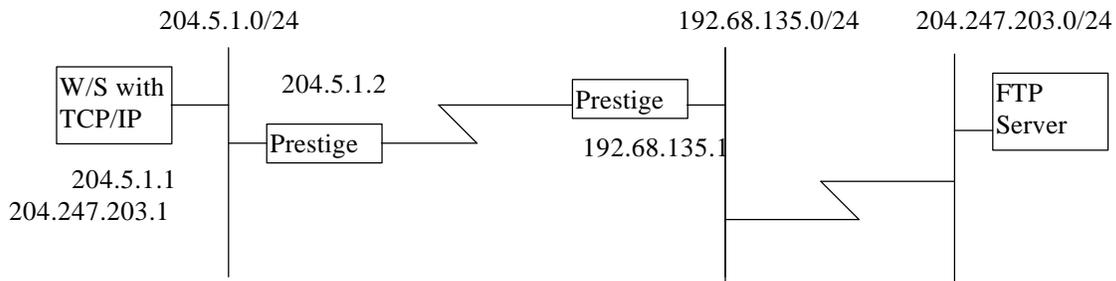Last modified: June 21, 1996

LAN to LAN Connection Routing IP

Note: The IP addresses shown above are examples only!

This configuration note explains how to set up a workstation on one network to use a Prestige to make a connection to another Prestige to route IP. In this configuration, the workstation has the TCP/IP software installed so that it will be able to run any applications with stations on the remote network (e.g., FTP, telnet, etc.). There will be three items that you need to set up. These are the workstation and the two Prestiges.

I.   Workstation Setup

To set up the workstation (W/S), you will need to set the following parameters:

- **IP Address** - the IP address assigned to the workstation itself, in the above example, '204.5.1.1'
- **Subnet Mask** - the subnet mask used for your network. Class C networks generally use a 24-bit netmask, '255.255.255.0'.

The procedure for configuring these parameters for your workstation may differ depending on the type of TCP/IP networking software you are using on your workstation. If you are unfamiliar with how to set these parameters, you can refer to the technical notes corresponding to your software.

- Trumpet LAN Setup - Setting up Trumpet TCP/IP
- Chameleon LAN Setup - Setting up Chameleon TCP/IP
- Windows 95/NT TCP/IP LAN Setup
- MacTCP Setup

II. Prestige 2 Setup

In order to configure Prestige 2 for this application, make sure you have the following menus configured correctly.

Note that the fields are indicated in **bold** type.

Menu 1:

```
                    Menu 1 - General Setup

             System Name= Pres_2
             Location= San Jose
             Contact Person's Name= CC


             Route IP= Yes
             Route IPX= N/A
             Route AppleTalk= N/A
             Bridge= No




             Press ENTER to Confirm or ESC to Cancel:
```

- In menu 1, make sure the **Route IP** field is set to 'Yes'.

Menu 2:

```
                    Menu 2 - ISDN Setup

             Switch Type= Northern Telecom Custom

             B Channel Usage= Switch/Switch
             1st Phone #= 5551212
               SPID #= 408555121200
               Analog Call= Modem
             2nd Phone #= 5551213
               SPID #= 408555121300
               Analog Call= Voice




             Press ENTER to Confirm or ESC to Cancel:
```

- In menu 2, set your switch type, phone numbers, and SPIDs (if necessary).
- After saving this menu, you will be asked if you want to perform an ISDN connection test. Select 'Yes' to perform the test. If the test fails, refer to the User's Manual Troubleshooting section for corrective action.

Menu 3.2:

```
              Menu 3.2 - TCP/IP Ethernet Setup

          IP Address= 204.5.1.2
          IP Subnet Mask= 255.255.255.0
          RIP Direction= Both









          Press ENTER to Confirm or ESC to Cancel:
```

- In menu 3.2, the **IP Address** and **IP Subnet Mask** field must be set correctly. In our example, the IP address of this Prestige should be set to '204.5.1.2'.
- The **RIP Direction** field must be set to either 'Both' or 'Out' in order for your workstation to receive the route to the remote network (destination 192.68.135.0/24, gateway, 204.5.1.2). If this field is not set in this way, you will need to create a static route in your workstation or another router that sends this RIP information.

Menu 11:

```
              Menu 11 - Remote Node Profile

 Rem Node Name= IP_user              Route= IP
 Active= Yes                         Bridge= No
 Call Direction= Outgoing            Encaps= PPP
                                     Edit PPP Options= No
 Incoming:                           Rem IP Addr= 192.68.135.1
   Rem Login=                        Edit IP/IPX/AppleTalk/Bridge= Yes
   Rem Password=
   Rem CLID=                         Telco Option:
   Call Back= N/A                      Transfer Rate= 64K or 56K

 Outgoing:                           Session Options:
   My Login= username                  Input Filter Sets=
   My Password= ******                 Output Filter Sets=
   Pri Phone #= 5551212                Call Filter Sets=
   Sec Phone #=                        Idle Timeout(sec)= 300

              Press ENTER to Confirm or ESC to Cancel:
```

- The **Call Direction** should be set to 'Outgoing'.
- Make sure the remote node is enabled by setting **Active** to 'Yes'.
- **My Login** and **My Password** is the login information that this Prestige will use to connect to the remote router.
- The **Pri Phone #** field should be set to the correct phone number to dial.
- **Route** should be set to 'IP'.
- Set **Rem IP Addr** equal to the IP address of the remote router. In our example, this would be '192.68.135.1'.

Menu 12.1 (optional):

```
             Menu 12.1 - Edit IP Static Route

        Route #: 1
        Route Name= Rem_Net
        Active= Yes
        Destination IP Address= 204.247.203.1
        IP Subnet Mask= 255.255.255.255
        Gateway IP Address= 192.68.135.1
        Metric= 2
        Private= No







        Press ENTER to Confirm or ESC to Cancel:
```

If you need to set up a static route to reach a station or device that is not directly connected to the remote network you are accessing, you can configure menu 12. In our example, let's say the workstation wants to log into the FTP server on the 204.247.203.0/24 network. He will need to create a static route to access this device.

- In menu 12, make sure to set the **Active** field to 'Yes'.
- Set the **Destination IP Address** field to the IP address of the device/network you want to access. In our example, this would be '204.247.203.1'.
- Set the **Gateway IP Address** field to the first hop in which to route your packets to the desired destination address; in this case, it would be '192.68.135.1'.

III. Prestige 1 Setup

In order to configure Prestige 1 for this application, make sure you have the following menus configured correctly.

Note that the fields are indicated in **bold** type.

Menu 1:

```
                    Menu 1 - General Setup

            System Name= Pres_1
            Location= San Jose
            Contact Person's Name= CC


            Route IP= Yes
            Route IPX= N/A
            Route AppleTalk= N/A
            Bridge= No







            Press ENTER to Confirm or ESC to Cancel:
```

- In menu 1, make sure the **Route IP** field is set to 'Yes'.

Menu 2:

```
                    Menu 2 - ISDN Setup

            Switch Type= Northern Telecom Custom

            B Channel Usage= Switch/Switch
            1st Phone #= 1234567
              SPID #= 408123456700
              Analog Call= Modem
            2nd Phone #= 1234568
              SPID #= 408123456800
              Analog Call= Voice







            Press ENTER to Confirm or ESC to Cancel:
```

- In menu 2, set your switch type, phone numbers, and SPIDs (if necessary).
- After saving this menu, you will be asked if you want to perform an ISDN connection test. Select 'Yes' to perform the test. If the test fails, refer to the User's Manual Troubleshooting section for corrective action.

Menu 3.2:

```
              Menu 3.2 - TCP/IP Ethernet Setup

          IP Address= 192.68.135.1
          IP Subnet Mask= 255.255.255.0
          RIP Direction= Both

          Press ENTER to Confirm or ESC to Cancel:
```

- In menu 3.2, the **IP Address** and **IP Subnet Mask** field must be set correctly. In our example, the IP address of this Prestige should be set to '192.68.135.1'.
- The **RIP Direction** field must be set to either 'Both' or 'Out' in order for your workstation to receive the route to the remote network (destination 204.5.1.0/24, gateway, 192.68.135.1). If this field is not set in this way, you will need to create a static route in your workstation or another router that sends this RIP information.

Menu 11:

```
                  Menu 11 - Remote Node Profile

  Rem Node Name= IP_user               Route= IP
  Active= Yes                          Bridge= No
  Call Direction= Incoming             Encaps= PPP
                                       Edit PPP Options= No
  Incoming:                            Rem IP Addr= 204.5.1.2
    Rem Login= username                Edit IP/IPX/AppleTalk/Bridge= Yes
    Rem Password= ******
    Rem CLID=                          Telco Option:
    Call Back= N/A                       Transfer Rate= 64K or 56K

  Outgoing:                            Session Options:
    My Login=                            Input Filter Sets=
    My Password=                         Output Filter Sets=
    Pri Phone #= N/A                     Call Filter Sets=
    Sec Phone #= N/A                     Idle Timeout(sec)= 300

              Press ENTER to Confirm or ESC to Cancel:
```

- The **Call Direction** should be set to 'Incoming'.
- Make sure the remote node is enabled by setting **Active** to 'Yes'.
- **Rem Login** and **Rem Password** is the login information that this Prestige will expect from the remote router.
- **Route** should be set to 'IP'.
- Set **Rem IP Addr** equal to the IP address of the remote router. In our example, this would be Prestige 2 which is '204.5.1.2'.

Menu 13:

```
                      Menu 13 - Default Dial-in Setup

  Telco Options:                       IP Address Supplied By:
    CLID Authen= None                    Dial-in User= Yes
                                         IP Pool= No
  PPP Options:                             IP Start Addr= N/A
    Recv Authen= CHAP/PAP                  IP Count(1,2)= N/A
    Mutual Authen= No
      PAP Login= N/A                   IPX Net Num. Supplied By:
      PAP Password= N/A                  IPX Pool= No
                                           IPX Start Net Num.= N/A
  Multiple Link Options:                   IPX Count(2,16)= N/A
    Max Trans Rate(Kbps)= 128
                                       Session Options:
                                         Input Filter Sets=
                                         Output Filter Sets=
                                         Idle Timeout= 300

             Press ENTER to Confirm or ESC to Cancel:
```

• Set the **Recv Authen** field to the type of authentication you want use (CHAP, PAP, or none).