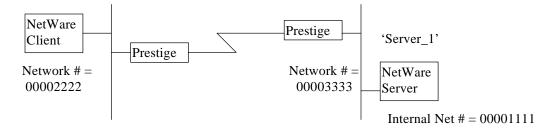Last modified: July 31, 1996

LAN to LAN Connection Routing IPX with One NetWare Server

Note: The IPX network numbers shown above are examples only!

This configuration note explains how to set up a workstation on a network to use a Prestige to make a connection to another Prestige to route IPX. In this configuration, the workstation has NetWare client software so that you will be able to log into the NetWare server on the remote network. There will be three items that you need to set up. These are the workstation and the two Prestiges.

I.   Workstation Setup (NetWare Client)

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

   • **IPX Frame Type** - First determine the frame type that the NetWare server that you wish to login to is using, and set the same frame type on the NetWare client workstation.
   • **Server Name** - In some cases, you may need the name that has been configured for the NetWare server you wish to login to. In the previous example, that would be 'Server_1'.

   The procedure for configuring these parameters for your workstation may differ depending on the type of IPX client 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.

   • DOS workstation w/ NetWare Client (VLM) software
   • Windows 95/NT - see section 'LAN-to-LAN'

II. Prestige 2 Setup

   In order to configure the Prestige on the NetWare client side 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= No
          Route IPX= Yes
          Route AppleTalk= N/A
          Bridge= No




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

- In menu 1, make sure the **Route IPX** 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 3.3:

```
            Menu 3.3 - Novell IPX Ethernet Setup

        Seed Router= Yes

        Frame Type 802.2= Yes
          IPX Network #= 00002222

        Frame Type 802.3= No
          IPX Network #= N/A

        Frame Type Ethernet II= No
          IPX Network #= N/A

        Frame Type SNAP= No
          IPX Network #= N/A




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

- Make sure that you have set the correct **Frame Type**(s) to 'Yes'. You should enable the frame type or types that the NetWare server is running. Please note that it is possible to set more than one frame type to 'Yes'.
- For the frame type that you have enabled, set that **Seed Router** field to 'Yes'.
- Set **IPX Network #** to any valid unique network number that is not being used on that network. In our example, we chose to use '00002222'.

Menu 11:

```
              Menu 11 - Remote Node Profile

  Rem Node Name= IPX_user           Route= IPX
  Active= Yes                       Bridge= No
  Call Direction= Outgoing          Encaps= PPP
                                    Edit PPP Options= No
  Incoming:                         Rem IP Addr= N/A
    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 'IPX'.
- Set **Edit IP/IPX/AppleTalk/Bridge** to 'Yes' and press ENTER.

Menu 11.2:

```
              Menu 11.2 - Remote Node Network Layer Options

 IP Options:                        AppleTalk Options:
   Rem IP Addr:                       Dial-On-Query= N/A
   Rem Subnet Mask= N/A               Rem LAN Net Range= N/A
   My WAN Addr= N/A                    1st Zone Name= N/A
   Metric= N/A                         2nd Zone Name= N/A
   Private= N/A                       My WAN Net #= N/A
   RIP= N/A                            My WAN Node ID= N/A
 IPX Options:                         Metric= N/A
   Dial-On-Query= Yes                 ZIP Timeout(min)= N/A
   Rem LAN Net #= 00001111
   My WAN Net #= 00000000           Bridge Options:
   Hop Count= 1                       Dial-On-Broadcast= N/A
   Tick Count= 2                      Ethernet Addr Timeout(min)= N/A
   W/D Spoofing(min)= 3
   SAP/RIP Timeout(min)= 3

              Enter here to CONFIRM or ESC to CANCEL:
```

- **Dial-On-Query** should be 'Yes'.
- The **Rem LAN Net #** field should be set to equal the internal network number of the remote NetWare server station. This number can be obtained by that network's system administrator. In our example, this value is '00001111'.
- **SAP/RIP Timeout** can be set to a greater value, so if your ISDN connection drops for an extended period of time, the Prestige will still retain the proper SAP and RIP tables. This value should be the same as the **W/D Spoofing** field in the server-side Prestige.

III. Prestige 1 Setup

In order to configure the Prestige on the NetWare server side, 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= No
          Route IPX= Yes
          Route AppleTalk= N/A
          Bridge= No





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

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

Menu 2:

```
                   Menu 2 - ISDN Setup

          Switch Type= Northern Telecom Custom

          B Channel Usage= Switch/Switch
          1st Phone #= 5551214
            SPID #= 408555121400
            Analog Call= Modem
          2nd Phone #= 5551215
            SPID #= 408555121500
            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 3.3:

```
              Menu 3.3 - Novell IPX Ethernet Setup

          Seed Router= No

          Frame Type 802.2= No
            IPX Network #= N/A

          Frame Type 802.3= Yes
            IPX Network #= N/A

          Frame Type Ethernet II= No
            IPX Network #= N/A

          Frame Type SNAP= No
            IPX Network #= N/A



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

- Make sure that you have set the correct **Frame Type**(s) to 'Yes'. You should enable the frame type or types that the NetWare server is running. Please note that it is possible to set more than one frame type to 'Yes'.
- For the frame type that you have enabled, set that **Seed Router** field to 'No'.

Menu 11:

```
                    Menu 11 - Remote Node Profile

 Rem Node Name= IPX_user              Route= IPX
 Active= Yes                          Bridge= No
 Call Direction= Incoming             Encaps= PPP
                                      Edit PPP Options= No
 Incoming:                            Rem IP Addr= N/A
   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 the remote router will use to connect to this Prestige.
- **Route** should be set to 'IPX'.
- Set **Edit IP/IPX/AppleTalk/Bridge** to 'Yes' and press ENTER.

Menu 11.2:

```
               Menu 11.2 - Remote Node Network Layer Options
```

```
   IP Options:                         AppleTalk Options:
     Rem IP Addr:                         Dial-On-Query= N/A
     Rem Subnet Mask= N/A                 Rem LAN Net Range= N/A
     My WAN Addr= N/A                      1st Zone Name= N/A
     Metric= N/A                          2nd Zone Name= N/A
     Private= N/A                       My WAN Net #= N/A
     RIP= N/A                             My WAN Node ID= N/A
   IPX Options:                          Metric= N/A
     Dial-On-Query= No                   ZIP Timeout(min)= N/A
     Rem LAN Net #= 00000000
     My WAN Net #= 00000000            Bridge Options:
     Hop Count= 1                        Dial-On-Broadcast= N/A
     Tick Count= 2                       Ethernet Addr Timeout(min)= N/A
     W/D Spoofing(min)= 3
     SAP/RIP Timeout(min)= 3

                 Enter here to CONFIRM or ESC to CANCEL:
```

- **Dial-On-Query** should be 'No'.
- **W/D Spoofing** can be set to a greater value, so if your ISDN connection drops for an extended period of time, the Prestige will still retain the proper SAP and RIP tables. This value should be the same as the **SAP/RIP Timeout** field in the client-side Prestige.
- You should be able to make this connection by using the default values for the remaining fields.