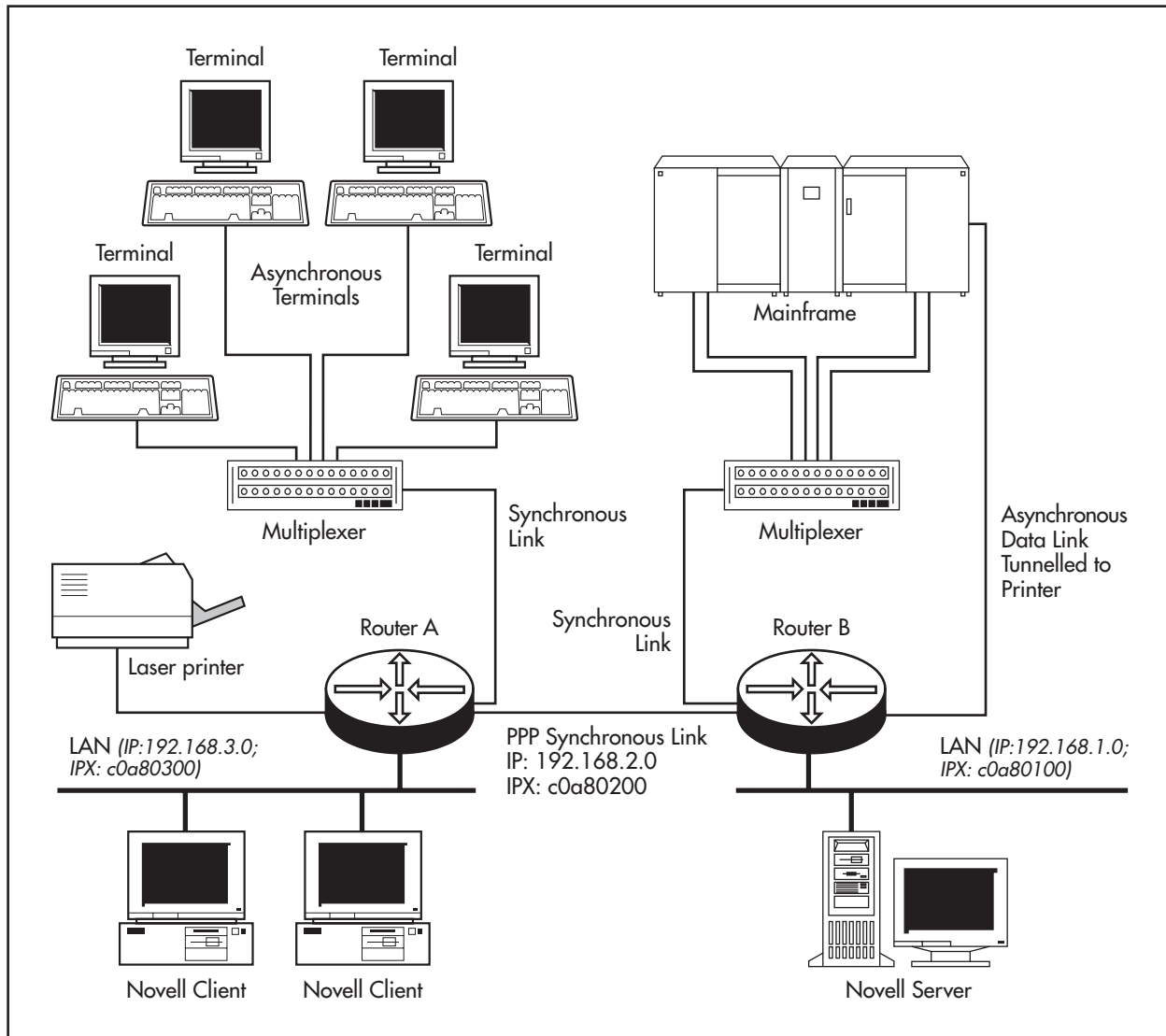


Configuration Example 13

Multiple Synchronous and Asynchronous Links Over One Leased Line

Sometimes legacy proprietary equipment is difficult because it can only talk over synchronous or asynchronous links to other devices of the same kind, forcing network managers to lease many expensive lines between offices. The AR Series router provides a solution—Synchronous Tunnelling (STT) and Permanent Assignments (or asynchronous tunnelling)—which allows the network manager to combine multiple synchronous and/or asynchronous links over a single leased line. This example illustrates how to configure STT and permanent assignments. An STT is configured between two Muxes connecting a group of terminals to a mainframe. The permanent assignment connects a printer to the mainframe. Both routers are attached to Ethernet LANs running IP and IPX.

Figure 1: Setup Diagram



Configuration Script for Router A [ex13a.scp]

1. Create a PPP link over the first synchronous port of the router.

```
create ppp=0 over=syn0
```

2. Assign an IP address to the PPP link.

```
add ip int=ppp0 ip=192.168.2.2
```

3. Assign an IP address to the first Ethernet port.

```
add ip int=eth0 ip=192.168.3.1
```

4. Create a default route to the PPP interface. Any traffic destined for an IP network not in the route table will be forwarded via this route.

```
add ip route=0.0.0.0 next=0.0.0.0 int=ppp0
```

5. Enable the IP module.

```
enable ip
```

6. Add an IPX network to the Ethernet, using the default 802.3 encapsulation.

```
add ipx circ=1 net=c0a80300 int=eth0
```

7. Add an IPX network to the PPP link, using the default 802.3 encapsulation.

```
add ipx circ=2 net=c0a80200 int=ppp0
```

8. Enable the IPX module.

```
enable ipx
```

9. Add the STT for the MUX from the local synchronous port 1 to the remote synchronous port 1 on Router B. The effect of this is that *any* data received via synchronous port 1 on Router A will be forwarded and transmitted unmodified out synchronous port 1 on Router B, and vice versa.

```
add stt=terminals lsyn=1 rsyn=1 ip=192.168.2.1
```

10. Add the permanent assignment for the laser printer from the local asynchronous port 1 to the remote asynchronous port 1 on Router B. The effect of this is that *any* data received via asynchronous port 1 on Router A will be forwarded and transmitted unmodified out asynchronous port 1 on Router B, and vice versa.

```
set port=1 sp=9600 cdc=online prompt=off
```

```
add perm=laser lport=1 rport=1 ip=192.168.2.1
```

Configuration Script for Router B [ex13b.scp]

1. Create a PPP link over the first synchronous port of the router.

```
create ppp=0 over=syn0
```

2. Assign an IP address to the PPP link.

```
add ip int=ppp0 ip=192.168.2.1
```

3. Assign an IP address to the first Ethernet port.

```
add ip int=eth0 ip=192.168.1.1
```

4. Create a default route to the PPP interface. Any traffic destined for an IP network not in the route table will be forwarded via this route.

```
add ip route=0.0.0.0 next=0.0.0.0 int=ppp0
```

5. Enable the IP module.

```
enable ip
```

6. Add an IPX network to the Ethernet, using the default 802.3 encapsulation.

```
add ipx circ=1 net=c0a80100 int=eth0
```

7. Add an IPX network to the PPP link, using the default 802.3 encapsulation.

```
add ipx circ=2 net=c0a80200 int=ppp0
```

8. Enable the IPX module.

```
enable ipx
```

9. Add the STT for the MUX from the local synchronous port 1 to the remote synchronous port 1 on Router A. The effect of this is that *any* data received via synchronous port 1 on Router B will be forwarded and transmitted unmodified out synchronous port 1 on Router A, and vice versa.

```
add stt=terminals lsyn=1 rsyn=1 ip=192.168.2.2
```

10. Add the permanent assignment for the laser printer from the local asynchronous port 1 to the remote asynchronous port 1 on Router A. The effect of this is that *any* data received via asynchronous port 1 on Router B

will be forwarded and transmitted unmodified out asynchronous port 1 on Router A, and vice versa.

```
set port=1 sp=9600 cdc=online prompt=off
add perm=laser lport=1 rport=1 ip=192.168.2.2
```