

Printing to a *Print Server Device*

"*Print Server*" is a term used to describe various different kinds of things (see [Print Server in Glossary](#)). Many so called *print servers*, including those built into some routers, are very simplistic and not much more than LAN adapters with a parallel port (type 4 in [Print Server in Glossary](#)). The internal LAN adapters in many "network" or "network ready" *print devices* are *print servers* of this type. Note that some *print servers* are more sophisticated and do actually implement the Microsoft Networking protocols required to Microsoft Networking *print servers* (see type 5 in [Print Server in Glossary](#)). Read the documentation to understand the capabilities of the particular *print server device* you have (or are contemplating acquiring).

If your *print device* is connected to one of these (type 4) *print server devices* (or has an internal one), it is not a *network printer* in Microsoft Networking terms. Sometimes, the device comes with software that adds a *port monitor* so it can emulate a Microsoft Networking (type 1) *print server* and thus enables the *print server device* to emulate a *network printer* (see type 5 at [Print Server in Glossary](#)). Check the documentation that came with the *print server device* or the manufacturer's web site for more information about such software.

However, with many *print servers* you have to use either the **lpr/lpd** or the **port 9100** protocol to be able to print to *print devices* connected to *print server devices*. With Windows 2000 or XP, the **Standard TCP/IP port monitor** supports both of these protocols for *print server attached print devices*.

The instructions on this page are for Windows 2000, XP and later Windows versions. If you have Windows 95, 98 or ME, these do not have the **Standard TCP/IP port monitor** - check the *print server* documentation or manufacturer's web site for how to use it with these operating systems. With Windows NT 4, install the **Print Services for Unix** component to get the lpr port monitor, or use the DLC protocol, which is supported by most *print server devices*.

After you have created the **Standard TCP/IP port** for the *print server device* and added a *printer* to use it (as described below), the *printer* is a normal *local printer*. You can then create a *share* for it and use it as a *network printer* in the usual way.

The more recent *print server devices* support both **lpr/lpd** and **port 9100**, but check the documentation because some of them only support one or the other of these.

If the *print server device* supports the **port 9100** protocol, this is the easiest to configure and is the default for the **Standard TCP/IP port type**. If the *print server device* doesn't support the **port 9100** protocol, you will need to use the **lpr/lpd** protocol. In this case, check the documentation to find out what **Printer Queue Names** (text or text1 are common) the device supports. Some of the *print server devices* will accept print for any **Printer Queue Name**, but some will only accept print for the names they know.

To configure the **Standard TCP/IP port** for your *print server device*, you will need to know its IP address. Check the documentation that came with the *print server device* (or *print device* if the *print server* is internal) or see [Find IP address of print server device](#) for some hints.

If the *print server device* has multiple *print device* connections (e.g. parallel ports), you will need to create a *port* for each such connection (i.e. one *port* for each attached *print device*). The IP address will usually be the same for all the *print devices* (i.e. the *print server device* itself has only a single IP address). If you are using the **RAW (port 9100)** protocol, the **Port Number** for the second *print device* will probably be 9101 and for the third, 9102. If you are using the **lpr/lpd** protocol, the **Printer Queue Name** for the second *print device* will probably be the same as for

the first, but with 2 on the end (e.g. text2) and for the third, with 3 on the end (e.g. text3). If you create the **Standard TCP/IP port** using the **Add Printer** wizard as described below, you will need to give each **Standard TCP/IP port** a unique name (step 7) and may need to set the **Port Number** or printer queue name after the **Add Printer** wizard completes.

To change the configuration of a **Standard TCP/IP port**:

1. open the **Printers and Faxes** folder
2. click **File, Server Properties**
3. select the **Ports** tab
4. select the port and click the **Configure Port...** button

To create a **Standard TCP/IP port** for a *print server device* and add a *printer* to it:

1. start the **Add Printer** wizard (e.g. click **Start, Control Panel, Printers and Faxes, Add Printer**)
2. on the **Welcome** panel, click **Next**
3. on the **Local or Network Printer** panel, select **Local Printer...**, make sure there is no check mark in **Automatically detect and install my Plug and Play printer**; click **Next**
4. on the **Select a Printer Port** panel, select the **Create a new port** radio button, then select **Standard TCP/IP Port** from the **Type of port:** drop down list box; click **Next**
5. on the **Welcome...** panel; click **Next**
6. on the **Add Port** panel, in the **Printer Name or IP Address:** text box, key the IP address of the *print server device*.
7. on the **Add Port** panel, the **Port Name:** text box is the name that this *port* is to be known by on this computer. You can key whatever name you want as long as it is unique on the computer or accept the default name that appears; click **Next**
8. at this point, the **Add Printer** wizard will attempt to communicate with the *print server device* and determine what make and model it is. If this communication is successful, the **Add Printer** wizard will automatically configure the *port* with default settings - usually the **RAW (port 9100)** protocol, then display the **Completing...** panel. If this happens, click **Finish** and continue with step 10
9. if the **Additional Port Information Required** panel displays, then:
 - a. the IP address you supplied is not the one in use by your *print server device*; click **Back** and check the IP address against the device's configurationor
 - b. you have the correct IP address, but the *print server device* did not respond with identifying information appropriately. In this case:
 - i. from the drop down list beside **Standard**, select the make and model of *print server device* you have; click **Next**
 - ii. if your particular device is not listed, or you want/need to change the *port's* configuration (e.g to use the lpr/lpd protocol), select the **Custom** radio button and click **Settings...**
 - iii. make the configuration changes you need - for example, to configure the *port* to use the **lpr/lpd** protocol:
 - a. select **LPR** in the **Protocol** frame
 - b. in the **Queue Name** text box, key the **Printer Queue Name** recognised by the *print server device* (e.g. text1)
 - c. click **OK**

- iv. click **Next**
- v. click **Finish**

10. complete the rest of the **Add Printer** wizard normally, as you would for a *print device* on any other type of *port*