

#### What is WINSERV?

WINSERV is a software that allows users on a Novell NetWare network to share printers connected to any workstation. WINSERV fetches data directly from print queues located on a file server and does not require Novell's print server (PSERVER) to be present. The printer may be connected to any parallel or serial port on the workstation. It is also possible to direct the print data to a file. WINSERV requires Microsoft Windows 3.0 or later on the workstation where the shared printer is connected and Novell NetWare 2.1x or later on the file server. No special software (VAP or NLM) needs to be loaded on the file server. No TSRs need to be loaded on the workstation. Standard NetWare programs, like CAPTURE and NPRINT are used for printing. The workstation where a shared printer is connected can of course be simultaneously used for tasks other than printing.

## Installation and configuration

Log in to a NetWare file server and use Novell's PCONSOLE to create a new print server and a new print queue. You may also use an existing print queue, in which case you only need to create a new print server. Leave the print server password empty as WINSERV creates its own password. Connect the print queue to the print server.

On the workstation where the shared printer is connected do the following:

- 1. Load the IPX communications driver (IPX.COM, IPXODI.COM) and, optionally, the NetWare requester (NETX.EXE,VLM.EXE).
- 2. Start Windows and configure it for a NetWare network.
- 3. Copy WINSERV files to a directory of your choice and add the program (WINSERV.EXE) to any group in the Program Manager.
- 4. Start WINSERV and select the option Server/Configure.
- 5. Enter the name of the file server where the previously defined print server exists.
- 6. Enter the name of the print server as defined using PCONSOLE.
- 7. Enter the name of the print queue.
- 8. Select the printer port where the printer is connected. If possible, use one of the *LPTx-Hardware* ports.
- 9. Check the *Autostart WinServ* box if you want WINSERV to automatically start servicing the print queue every time the program is started.
- 10. Check the *Local configuration* box if you want to enable local configuration of the print server. When local configuration is disabled, the print server can only be configured remotely. (Note: the remote configuration software is not provided with this version.)
- 11. Click OK-button and the configuration will be saved. You are now ready to use WINSERV on your network.

### Technical specifications

**Operating systems:** Microsoft Windows 3.0 or later on the workstation where the shared printer is connected. Windows Enhanced and Standard mode are supported. Standard mode requires use of TBMI. See the file NETWORKS.WRI in the Windows directory for more information about TBMI. Windows needs to be configured for a NetWare network, or at least, the Windows IPX driver must be loaded. Novell NetWare 2.1x or later is required on the file server. Any workstation connected to a NetWare network may be used to submit print jobs.

**Modes of operation:** WINSERV acts as a print server (queue server), attached directly to the print queues residing on a NetWare file server. The presence of the Novell print server, PSERVER, is not required. CAPTURE, NPRINT and all other programs that use NetWare queues for printing are supported.

**Performance:** varies depending on the type of the workstation type, workstation load and the printer type.

**Protocols:** WINSERV requires IPX communication driver (IPX.COM,IPXODI.COM) to be loaded. The recommended version of IPX.COM is 3.10. IPXODI.COM should be version 2.0 or later. The NetWare shell (NETX.EXE,VLM.EXE) needs not to be loaded for WINSERV to operate. WINSERV uses one user connection on the file server.

**Security:** Since WINSERV does not require the NetWare Shell to be loaded there is no possibility for unauthorized access to the file server from an unattended workstation. Both encrypted and plain passwords are supported as required by the NetWare server. Local configuration can be disabled.

# Troubleshooting

You may need to increase the number of IPX sockets your computer can handle. Add the following line to the NET.CFG (or SHELL.CFG) file: IPX SOCKETS=xx, where 'xx' is the maximum number of sockets allowed. This value should be at least 20. WINSERV uses 4-10 sockets.

Local configuration can be re-enabled by editing the file WINSERV.INI, located in the Windows directory.

#### Limitations

Only Windows 3.1 has been tested.

LPT1-Hardware is the only printer port that has been extensively tested.

No support for multiple servers/queues/printers.

No support for forms changing.

No support for printer configuration using PCONSOLE.

No support for packet signing.

WINSERV is freeware. You use it as you like, with no cost attached. The author retains all rights to the software.

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