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Remote Serial Ports Server Documentation

Remote Serial Ports Server is an integral part of the Virtual Serial Port Tools product.

It needs to be installed on a computer which serial ports you want to "share" across the network. By default, server is installed as Windows Service and runs even without a logged-on user. In addition, the server may be launched on-demand, providing quick way to share serial devices.

Server component is used to provide remote access to all local serial devices, including legacy serial ports, virtual serial ports or "serial over USB" devices. The server can be used in one of the following modes: installed as Windows Service or running as stand-alone process.

By default, all local serial devices are shared across the network and all users are granted access. In addition, the server automatically advertises itself over the local network.

All these defaults may be changed using either the command-line parameters if the server is running stand-alone mode or using the Server Configuration Utility if the server is installed as Windows Service. See below for more information.

Windows Service Mode

In this mode (default), server is installed as Windows Service and is configured to run without logged-on user. This is the default mode, configured by server installation utility. Server options are controlled with a help of Server Configuration Utility.

If the user needs to manually configure Remote Serial Ports Server to Windows Service mode, the following command-line parameter may be used:

```
Command Prompt
ps_server.exe -install-service
```

To remove Windows Service, use the following command-line parameter:

```
Command Prompt
ps_server.exe -uninstall-service
```

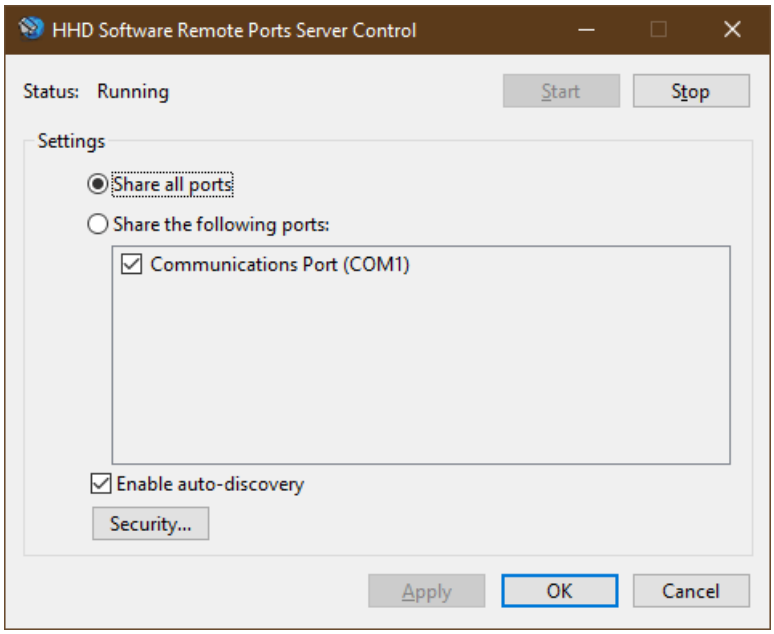
Stand-alone Mode

Remote Serial Ports Server supports simple deployment for quick serial sharing experience. All you need is to copy the `ps_server.exe` file to the target computer and launch it, optionally providing command-line parameters for fine-grain control. See the Server Command-Line Parameters section for more information.

Server Configuration Utility

Configuration utility (an optional component installed by Remote Serial Ports Server installation package) provides a way to configure Remote Serial Ports Server, running in Windows Service mode.

It may also be used to configure server running in stand-alone mode, however, the preferred way is to use command-line parameters.



At the top of the window you can see the current status of Windows Service. Use the**Start** and **Stop** buttons to control the service. If configuration utility is used to configure server running in stand-alone mode, these buttons are disabled.

Next, there's an option to select which ports are shared by the server. Default setting is to share all ports.

Check the "Enable auto-discovery" option to specify whether the server automatically advertises itself over the local network.

Pressing the **Security** button brings up the Security window where you can configure which users and groups are granted access to shared serial ports. By default, all users are granted access.

When new settings are applied, server automatically restarts, loading new settings. All existing connections are kept.

Command-Line Parameters

When Remote Serial Ports Server is running as stand-alone process, use command-line parameters to configure its options. The server supports the following options:

Option	Argument	Description
`-?`, `--help`		Display command-line parameters.
`--nologo`		Do not display logo message.
Server options		
`--security-descriptor`	`SDDL`	Security descriptor in SDDL format.
`--share-ports`	`N1[,N2[,N3...]]`	Only share specified ports.
`--no-discovery`		Turn automatic discovery off.
Logging options		
`--log-path`	`path`	Write server log to the specified file.
`--log-level`	`LOGGING-LEVEL`	Set logging level to one of the following: **critical** only critical errors **error** all errors **warnings** errors and warnings **info** informational messages **debug** maximum information for debugging
`--no-screen-log`		Do not display a copy of log to the console.
Service operations		
`-install-service`, `--install-service`		Install service.
`-uninstall-service`, `--uninstall-service`		Uninstall service.

Server Redistribution

Server component may be redistributed using one of the following ways:

Installer Redistribution

Server installation package may be freely re-distributed to other computers. Installer supports unattented installation:

Installation

```
Command Prompt
remote-serial-ports-server.exe -silent -machine
```

Uninstallation

```
Command Prompt
remote-serial-ports-server.exe -silent -machine -uninstall
```

In-place Upgrade

```
Command Prompt
remote-serial-ports-server.exe -silent -machine -type 2
```

Since installer adds a system service to the target machine, it must be launched by the user with sufficient privileges (and must be elevated). Any non-zero error code returned by the installer should be treated as error.

Running as system service, server always shares configured serial ports and does not require a logged-on user.

Copy-Paste Redistribution

Remote Serial Ports Server supports simple deployment for quick serial sharing experience. All you need is to copy the `ps_server.exe` file to the target computer and launch it, optionally providing command-line parameters for fine-grain control. See the Server Command-Line Parameters section for more information.

In this mode, server does not need to be elevated and may be launched by a non-privileged user. However, it requires a user to log in to the server and manually launch a server process. Ports are shared as long as server process is running.