

Version 1

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INTRODUCTION

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ModemShare Server Installation – see below

ModemShare Server Installation

SpartaCom ModemShare Millennium for Small Networks is a group of software products that allow peer to peer sharing of COM ports between LAN workstations.

Sharing COM ports means sharing resources like modems, ISDN adapters, X.25

PADs or in fact any device that connects to a COM port.

ModemShare gives you completely transparent access to shared resources for outbound communications and operates in most networking environments:

Windows NT/2000, Windows 95/98, Windows 3.X and DOS.

LAN Share modems ISDN adapaters,... ISDN adapaters,... ISDN adapaters,... ModemShare server for Windows NT or Windows 9x (or OS/2 Server) ModemShare Client for Windows 9x, Windows 3x or DOS

ModemShare supports all kind of network protocols, TCP/IP, NetBEUI, IPX, etc.

The ModemShare software consists of two parts: ModemShare Server and ModemShare Client.

The network station with one or more COM ports to be shared must have the ModemShare Server software installed.

Each workstation that is to use shared COM ports must have the ModemShare Client software installed.

Both the ModemShare server software and the ModemShare client software can reside on the same computer. ModemShare does not require a dedicated server.

Once ModemShare is installed and configured, the workstation users can run any Windows communications program to access the shared COM port resources, just as if the devices were attached to their own computer.

This User Guide applies to ModemShare version 4 and its components:

- ModemShare Server for Windows NT
- ModemShare Server for Windows 9x
- ModemShare Client for Windows NT
- ModemShare Client for Windows 9x
- ModemShare Client for Windows
- ModemShare Client for DOS

The *ModemShare Server for Windows NT* makes it possible to share to 512 COM ports.

The *ModemShare Server for Windows 9x* makes it possible to share to 256 COM ports.

Access security is provided through the use of passwords for each shared COM port. Share level security is supported on the Windows ModemShare server, and both User level and Share level security are provided on the Windows NT ModemShare server.

Pools of COM ports (modems or other Asynchronous devices) can be defined and shared. When a Workstation COM port is redirected to a shared COM port pool, ModemShare will locate the first available COM port in the pool and assign that port to the requesting application.

Neither the ModemShare Client for Windows 9x nor the ModemShare Client for Windows support the sharing of COM ports by applications running under DOS or applications running in a Windows DOS shell. However, the ModemShare Client for Windows NT does support DOS applications using shared COM ports.

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The ModemShare Client for DOS support DOS applications using BIOS (Int 14h).

Minimum requirements

ModemShare Server for Windows NT

- Any PC equipped to run Windows NT version 3.51 and 4.0, or Windows 2000.
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).
- One or more COM ports available for sharing.

ModemShare Server for Windows 9x

- Any PC equipped to run Windows 95/98
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).
- One or more COM ports available for sharing.

ModemShare Client for Windows NT

- Any PC equipped to run Windows NT version 3.51 and 4.0, or Windows 2000.
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).

ModemShare Client for Windows 9x

- Any PC equipped to run Windows 95/98.
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).

ModemShare Client for Windows

- Any PC equipped to run Windows 3.1 or Windows for Workgroups 3.11.
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).

ModemShare Client for DOS

- Any PC running Microsoft MS-DOS or IBM PC-DOS.
- NetBIOS compatible network (TCP/IP, IPX, NetBEUI, etc.).
- Communications program using BIOS (Int 14h) to communicate with COM port.

MODEMSHARE MILLENNIUM SERVER FOR WINDOWS NT

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Features

- Simultaneous sharing of local communication ports (COMn).
- Implemented as a Windows NT Service with automatic startup when the system is switched on.
- Password protection (optional) incorporated for accessing each shared resource.
- Verification (optional) as to whether the user is logged on the workstation and member of an authorized ModemShare group.
- Microsoft RAS Server compatible. Pools of modems previously dedicated to RAS communications can also be used for outbound calls.
- Significant events which occur on any of the shared communications ports (user connected, calls, etc...) are recorded in the Windows NT/2000 event log.
- Hardware independent (multiport cards, internal/external modems, external ISDN adapters, etc.).
- Local or remote administration of the ModemShare Server for NT from any Windows NT/2000 or Windows 95/98 computer in the network.
- Pools of shared resources can be defined on the server, transparent to the users.

 ZETAFAX Server compatible. Pools of modems used for outbound or inbound faxing can also be used by ModemShare.

Installation

ModemShare Server for Windows NT should be installed and configured on each PC in the network running Windows NT/2000, and which has one or more COM ports to be shared.

Insert the ModemShare CD-ROM in your computer, wait for the autostart program to run and follow the instructions on subsequent screens to complete the installation.

You can also directly start the installation process from the ModemShare Millennium cd by running:

 $Artisoft \ Eng \ Mdmshare \ Server \ Ntw2k \ Setup.exe$

During installation you will be prompted to enter a serial number and key. This information is provided in the material packaged with ModemShare. If you do not provide this information, ModemShare will run in evaluation mode.

Using the default installation settings, both the ModemShare Server software and the Administration software will be installed. The same SETUP program can be used to install the Administration software only. This will allow you to remotely maintain your ModemShare Server(s) from any Windows NT/2000 or Windows 95/98 computer in the network.

Configuring ModemShare Server for Windows NT

After ModemShare has been installed, you will need to configure ModemShare to share the desired COM port(s) before other workstations can access the shared device(s). To do this, you need to start the ModemShare Server Manager:

1. Go into the SpartaCom\ModemShare Server program group.

- 🐺 ModemShare Server Manager ANN2 _ 🗆 × Server Configuration View Help <u>1</u> <u>£</u> !? ୧ **,** Server name : ANN 2 Version: 4.00 Stop The server is started. No active connections. Pause Evaluation license. Days left : 26 Allowed shares : 1 For Help, press F1
- 2. Double-click on the ModemShare Server Manager Icon.

3. Click on the icon. The "Shares" window will display:

ANN2 - Shares	×
Serial Port <u>S</u> hares	ΠΚ
POOL	Cancel
	Help
New Remove Configure	

4. Click on Configure.

5. The configuration whildow will display.				
ANN2 - Share configuration		×		
Share <u>N</u> ame : POOL Pass <u>w</u> ord :		OK		
Available Ports Add → <- Remove	Shared Ports	Help		

5. The Configuration window will display:

- 6. Select one or more ports from the list on the left and click on Add. You can also click several times on Add to pool several ports. Any time a ModemShare Client requests a connection to the pool, the ModemShare Server will use a round robin algorithm to select an available Port from the list of Shared Ports on the right.
- 7. Click on OK. Keep in mind that ModemShare does not know what devices are connected to the Serial Ports and will assign any available port in the pool. You should install the same type of modems or ISDN adapters in a given pool.
- 8. Click on OK in the "Shares" window to save the changes. You do NOT need to restart the ModemShare Server to make the changes effective.

9. Click on Start to start the ModemShare server. After a few seconds your screen should look like this:

🐺 ModemShare Server Manager - ANN2	_ 🗆 ×
<u>Server</u> <u>Configuration</u> <u>View</u> <u>H</u> elp	
S 🖻 🤶 ?	
Server name : ANN 2 Version: 4.00	t t
The server is started. No active connections.	<u>St</u> op Pause
Evaluation license. Days left : 26 Allowed shares : 1	
For Help, press F1	

- Note... ModemShare can share a COM port that is assigned for use by Microsoft RAS (Remote Access Server).
- **Note...** To stop sharing a COM port, click on the icon. Select (high-light) the desired Shared port or pool and click on Remove. Also, all COM port sharing on the server may be stopped by stopping the ModemShare Server (Click on the Stop button).

You may also pause the ModemShare Server, which will prevent the server from accepting new connections. Existing connections will not be aborted.

Setting ModemShare Server for Windows NT Options

To set additional ModemShare Server options, select Options... from the Configuration Menu.

The "Options" window will display:



To request that ModemShare record significant events into the Windows NT/2000 application log, select the "Record events" checkbox.

To request that ModemShare is to initialize the COM port (modem) after each use, select the "Reinitialize Modem at Disconnect" checkbox. ModemShare will then issue the reset string "+++ATHATZ" to the COM port after each use.

To request that ModemShare starts when Windows NT/2000 starts up, select the "Start Sharing on startup" checkbox. This will set the ModemShare Server service startup mode to Automatic.

Click on OK to save the change(s).

Starting ModemShare Server for Windows NT

The ModemShare Server startup is automatic when starting the system. However, the startup can be changed to Manual by using the Options menu (see #3.4 above).

ModemShare can be Started or Stopped anytime by clicking on the Start or Stop button.

Pausing ModemShare Server for Windows NT

To temporarily pause the ModemShare server, click on the Pause button. This will prevent ModemShare from connecting any additional users to a shared resource, but will allow any existing connections to continue.

To resume the ModemShare server, click on the CONTINUE button.

Note... The Pause button is displayed only when the ModemShare server is started.

Viewing current ModemShare users

To list the users currently connected to the ModemShare server, click on the icon.

The "User Sessions" window will display, showing the connected users and the shared resources in use.

M/	ASTER - User Sessions					×
	Connected Users		Computer YAKUMO		In Use 1	
	Recourse	Port	Cont	Passived	Duration	1
	eqN1	COM3	46	407	00:01:25	-
	Close <u>D</u> isco	nnect	Discor	nnect (<u>A</u> ll)	Help	

The content of the window is updated every two seconds.

Statistics on the number of bytes Sent and Received are displayed.

Two buttons allow the Administrator to force disconnection of users.

For each resource, a LED displays the status of the port:

- Gray: port not open
- Red: port open, Carrier Detect signal is off
- Green: port open, Carrier Detect signal is on

The "Connected Users" field will be empty if no ModemShare group of users has been created on the server (see #0 below).

ModemShare Server for Windows NT Event Viewing

The events recorded by ModemShare can be viewed by using the Event Viewer utility provided by Windows NT/2000. The Event Viewer utility icon is located in the NT Administrative Tools group but you can start it from the ModemShare Server Manager window by clicking on **Image**.

To view the ModemShare events, do the following:

- **1.** Click on the **1** icon.
- 2. The Event Viewer window will display.
- 3. Select the Log menu and click on Application.
- 4. Exit the Log menu and select the View menu.
- 5. Click on Filter Events....
- 6. Enter SPSRVNT in the Source dialog box.
- 7. Click on OK.
- 8. The ModemShare events will be displayed in a scroll window.
- **9.** To view additional details on a selected event, click on Detail in the View menu.

The following information is displayed in the event scroll window:

DATE	The date the event occurred
TIME	The time the event occurred
SOURCE	The application (SPSRVNT) that recorded the event
CATEGORY	Classification of the event as defined by ModemShare ("none" or "communication")
EVENT	Event number that identifies the event (see below)
USER	User name provided on the Windows client station using the shared resource. This is valid only when the ModemShare group exists (security)
COMPUTER	The name of the computer on which the event occurred

Event Numbers:

16	Successful connection to a shared resource
17	Incorrect password supplied when attempting connection
18	Successful disconnection from a shared resource
19	Connection attempt by an unauthorized user
256	Successful "open" of a shared resource
257	Unsuccessful "open" of a shared resource
258	Successful "close" of a shared resource
2048	Server started
4096	NetBIOS error
8192	Successful line connection (CD on)
8193	Unsuccessful line connection (CD off)

The events in the NT event log can be imported into standard spreadsheet or database programs for summarizing or other processing. Use the "Save As" facility of the Event viewer, and specify "Comma Delim. Text" format.

Using security for ModemShare Server for Windows NT

ModemShare allows the shared Ports to be limited to the users who are members of a specific local group. This group must be named "ModemShare". The "ModemShare" group can be defined by using the "User Manager for Domains" NT utility (located in the Administrative Tools group). Both Users and Global users may be added to the ModemShare group.

- **WARNING!** the "ModemShare" group will also contain the Windows NT/2000 Domain name of each authorized user or group of users. ModemShare will enforce full NT security. For example, a user logged on LOCALLY on an NT Client workstation, but not on the Domain controller, will be denied access to shared resources.
 - **Note...** The group GUESTS can be included as part of the ModemShare group to allow all users to use the shared resources on the NT server.
 - **Note...** It is NOT necessary to stop and restart the ModemShare Server for the changes to the "ModemShare" group to be effective.

Managing remote ModemShare Servers

You can run the "SpartaCom ModemShare Server Manager" software on any Windows NT/2000 or Windows 95/98 workstation.

Refer to section #3.2 above for installing only the "SpartaCom ModemShare Server Manager" (check the right box in the first Setup window).

In the ModemShare group, start the "ModemShare Server Manager".

Click on the **use** icon and select one of the installed ModemShare Servers detected on your LAN.

Note: the first search for ModemShare servers on the network can take a long time if there are many computers on the LAN. Once a first search has been performed, a list of ModemShare Servers will be saved on your disk. Press F5 to update the list on your disk.

Note... you can also enter directly the name of your ModemShare server.

Uninstalling ModemShare Server for Windows NT

ModemShare may be removed from the system using the ModemShare Server Uninstall application located in the SpartaCom\ModemShare Server program group.

Chose:

- The SpartaCom ModemShare Server Uninstallation icon if you installed both the ModemShare Server and the ModemShare Server Manager. Both components will be uninstalled.
- The SpartaCom ModemShare Server Manager Uninstallation icon if you only installed the SpartaCom ModemShare Server Manager.

You do not need to restart Windows NT/2000 for uninstallation to be effective.

ModemShare Server for Windows NT and RAS Server

COM ports used by RAS Server can also be shared by ModemShare.

When a ModemShare Client requests one of the Server resources, the ModemShare Server software will ask RAS if the COM port is available.

If the COM port is not in use by RAS, ModemShare will be allowed access to the requested COM port. If the COM port is in use by a remote connection, ModemShare will get an error. Then, if the ModemShare pooling mechanism is specified, ModemShare will look for the next available port in the pool.

If RAS is installed after ModemShare has been installed, you must reinstall ModemShare, or use the Registry Editor (REGEDIT.EXE) to add the name "RasMan" to the "DependOnService" path in:

 $HKEY_LOCAL_MACHINE \SYSTEM \CurrentControlSet \Services \SPSRVNT.$

ModemShare Server for Windows NT and ZETAFAX Server

ModemShare Server can share COM ports used by the ZETAFAX Server.

When a ModemShare Client requests one of the ZETAFAX Server resources, the ModemShare Server software will ask ZETAFAX if the COM port is available.

If the COM port is not in use by ZETAFAX, ModemShare will be allowed access to the requested COM port. If the COM port is in use, ModemShare will get an error. Then, if the ModemShare pooling mechanism is specified, ModemShare will look for the next available port.

If ZETAFAX is installed after ModemShare has been installed, you must stop and restart the ModemShare Server for NT.

If you are using ModemShare, RAS and ZETAFAX simultaneously on your NT Server, please keep in mind that ZETAFAX and RAS are not compatible, i.e. they cannot share the same COM ports. You will need at least two COM ports:

- One used by ModemShare and RAS
- One used by ModemShare and ZETAFAX.

If you do not use ZETAFAX to receive incoming faxes, the above restriction does not apply. You may install the ModemShare Client for NT on your Server and configure ZETAFAX to use a ModemShare COM port redirected to a shared RAS COM port. Then, ZETAFAX will be able to send faxes using a RAS COM port.

ModemShare Server Statistics

Statistics for ModemShare are maintained in real time and can be displayed using Windows NT/2000 Performance Monitor.

Click on the + button and select the ModemShare Server object.

Select one of the counters:

- Number of bytes sent
- Number of bytes received
- Number of packets sent

- Number of packets received
- Number of port open errors
- Number of opened sessions

ModemShare Server for Windows NT Licensing

Your ModemShare Server for Windows NT is licensed on a per port basis. To increase the number of ports you should purchase an additional user/ports product and add the server license number to the existing list:

- 1. Go into the SpartaCom\ModemShare Server program group.
- 2. Double-click on the SpartaCom ModemShare Server Manager icon.

🕅 ModemShare Server Manager - ANN 2	
<u>S</u> erver <u>C</u> onfiguration <u>V</u> iew <u>H</u> elp	
🔍 🖆 🕵 😰 💡	
Server name : ANN 2 Version: 4.00 The server is started. No active connections.	Stop Pause
Evaluation license. Days left : 26 Allowed shares : 1	
, For Help, press F1	

3. Click on the Configuration menu and select License:

License		×
Type your serial n	umber and its protection key.	
Do not enter this i	nformation if you are installing an evaluation version.	
WARNING, chan	ging license causes ModemShare Server to restart.	
<u>S</u> erial number:	000 - 0000 0000 0000 0000	-
<u>K</u> ey:	0000 0000	
[OK Cancel	

- 4. From the list of Serial Numbers select one that is unused. Enter an additional server Serial Number and then add the corresponding Key.
- 5. Click on OK. Your ModemShare server will restart automatically.

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MODEMSHARE SERVER FOR WINDOWS 9X

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Features

- Simultaneous sharing of local communications ports (COMx)
- Password protection (optional) incorporated for accessing each shared resource
- Significant events which occur on any of the shared communications ports (user connected, calls, etc...) are recorded in a local event log.
- Hardware independent (multiport cards, internal/external modems, external ISDN adapters, etc.).
- Local or remote administration of the ModemShare Server for Windows 9x from any Windows NT/2000 or Windows 95/98 computer in the network.
- Pools of shared resources can be defined on the server, transparent to the users.
- ZETAFAX Server compatible. Pools of modems used for outbound or inbound faxing can also be used by ModemShare.

Installation

ModemShare Server for Windows 9x should be installed and configured on each station in the network that has one or more COM ports to be shared.

Insert the ModemShare CD/ROM in your computer, wait for the autostart program to run and follow the instructions on subsequent screens to complete the installation.

You can also directly start the installation process from the ModemShare Millennium cd by running:

Artisoft\Eng\Mdmshare\Server\Win9x\Setup.exe

During installation you will be prompted to enter a serial number and key. This information is provided in the material packaged with ModemShare. If you do not provide this information, ModemShare will run in evaluation mode.

Follow the self-explanatory prompts during installation.

After the installation is complete, click on the README.TXT icon in the ModemShare group window and review the document for additional information not included in this manual. It is suggested that you print this document and keep it with the ModemShare User Guide.

Using the default installation settings, both the ModemShare Server software and the Administration software will be installed. The same SETUP program can be used to install the Administration software only. This will allow you to remotely maintain your ModemShare Server(s) from any Windows NT/2000 or Windows 95/98 computer in the network. If you did not previously install the Microsoft Windows 95/98 Remote Registry Service you will be prompted to provide your Windows 95/98 CD/ROM in order to add this software to your Windows 95/98 system.

Configuring ModemShare Server for Windows 9x

After ModemShare has been installed, you will need to configure ModemShare to share the desired COM port(s) before other workstations can access the shared device(s). To do this, you need to start the ModemShare Server Manager:

1. Go into the SpartaCom\ModemShare Server Program Group.

2. Double-click on the ModemShare Server Manager Icon.

🕅 ModemShare Server Manager - ANN 2	_ 🗆 ×
<u>Server</u> <u>Configuration</u> <u>V</u> iew <u>H</u> elp	
Server name : ANN 2 Version: 4.00 The server is started. No active connections.	Stop Pause
Evaluation license. Days left : 26 Allowed shares : 1	
, For Help, press F1	

3. Click on the icon or select Configuration menu and Shares. The "Shares" window will display:

ANN2 - Shares	×
Serial Port <u>S</u> hares	ОК
POOL	Cancel Help
New <u>R</u> emove <u>Configure</u>	

4. Click on Configure.

		1 2	
ANN2 - Share co	nfiguration		×
Share <u>N</u> ar	ne: POOL		ОК
Pass <u>w</u> o	ord :		Cancel
Available <u>P</u> orts	<u>A</u> dd → <- <u>R</u> emove	Shared Ports CDM2	Help

5. The Configuration window will display:

- 6. Select one or more ports from the list on the left and click on Add. You can also click several times on Add to pool several ports. Any time a ModemShare Client requests a connection to the pool, the ModemShare Server will use a round robin algorithm to select an available Port from the list of Shared Ports on the right.
- 7. Click on OK
- 8. Repeat steps 4 to 7 and change the Share Name if you need to define several shared pools. Keep in mind that ModemShare does not know what devices are connected to the Serial Ports and will assign any available port in the pool. You should install the same type of modems or ISDN adapters in a given pool.
- **9.** Click on OK in the "Shares" window to save the changes. You do NOT need to restart the ModemShare Server to make the changes effective.
- Note... To stop sharing a COM port, click on the 🗳 icon. Select (high-light) the desired Shared port or pool and click on Remove. Also, all COM port sharing on the server may be stopped by stopping the ModemShare Server (Click on the Stop button).

You may also pause the ModemShare Server, which will prevent the server from accepting new connections. Existing connections will not be aborted.

Setting ModemShare Server for Windows 9x Options

To set additional ModemShare Server options, select Options... from the Configuration Menu.

The "Options" window will display:

ANN 2 - Options	×
Record events	
Reinitialize Modem at disconnect	
✓ Start Sharing on startup	
OK Cancel He	lp

To request that ModemShare record significant events in its log, select the "Record events" checkbox.

To request that ModemShare is to initialize the COM port (modem) after each use, select the "Reinitialize Modem at Disconnect" checkbox. ModemShare will then issue the reset string "+++ATHATZ" to the COM port after each use.

To request that ModemShare starts when Windows NT/2000 starts up, select the "Start Sharing on startup" checkbox. This will set the ModemShare Server service startup mode to Automatic.

Click on OK to save the change(s).

Starting ModemShare Server for Windows 9x

The ModemShare Server startup is automatic when starting the system. However, the startup can be changed to Manual by using the Options menu (see #4.4 above).

ModemShare can be Started or Stopped anytime by clicking on the Start or Stop button.

Pausing ModemShare Server for Windows 9x

To temporarily pause the ModemShare server, click on the Pause button. This will prevent ModemShare from connecting any additional users to a shared resource, but will allow any existing connections to continue.

To resume the ModemShare server, click on the CONTINUE button.

Note... The Pause button is displayed only when the ModemShare server is started.

Viewing current ModemShare users

To list the users currently connected to the ModemShare server, click on the icon or select View and Users....

The «User Sessions» window will display, showing the connected users and the shared resources in use.

ASTER - User Sessions					х
	C	omputer			1
KAJW	Y	AKUMO		1	
•					
Resource	Port	Sent	Received	Duration	1
\varTheta EQN1	COM3	46	407	00:01:25	
Close <u>D</u> isco	nnect	Discor	nect (<u>A</u> ll)	Help	

The content of the window is updated every two seconds.

Statistics on the number of bytes Sent and Received are displayed.

Two buttons allow the Administrator to force disconnection of users.

For each resource, a LED displays the status of the port:

- Gray: port not open
- Red: port open, Carrier Detect signal is off
- Green: port open, Carrier Detect signal is on

ModemShare Server for Windows 9x Event Viewing

The events recorded by ModemShare Server for Windows 95/98 can be viewed by using the Event Viewer utility provided with ModemShare. From the ModemShare Server Manager Window click on reselect View menu and Events....

📋 SpartaCom Moder	nShare Server I	Event Viewer		K
Event list				
Date Time	Category	Event	<u>C</u> lose	
11/07/2000 11:47:58	None	2048		
11/0//2000 11:4/:09	None	2049	<u>R</u> efresh	
11/07/2000 11:43:31	None	2040		
11/07/2000 11:36:03	None	2048	Clear All	
11/07/2000 11:35:13	None	2049 2048	_	
11/0//2000 11:00:40	None	2040	<u>H</u> elp	
Description				
The ModemShare Serv	rer was started.		×	
4			Þ	
Raw Data				

The following information is displayed in the event scroll window:

DATE	The date the event occurred
TIME	The time the event occurred
CATEGORY	Classification of the event as defined by ModemShare("none" or "communication"
EVENT	Event number that identifies the event (see below)

Event Numbers:

16	Successful connection to a shared resource
17	Incorrect password supplied when attempting connection

18	Successful disconnection from a shared resource
19	Connection attempt by an unauthorized user
256	Successful "open" of a shared resource
257	Unsuccessful "open" of a shared resource
258	Successful "close" of a shared resouce
2048	Server started
2049	Server stopped
4096	NetBIOS error
8192	Successful line connection (CD on)
8193	Unsuccessful line connection (CD off)
24576	Call statistics

Managing remote ModemShare Servers

You can run the "SpartaCom ModemShare Server Manager" software on any Windows NT/2000 or Windows 95/98 workstation.

Refer to section #4.2 above for installing only the "SpartaCom ModemShare Server Manager" (check the right box in the first Setup window).

In the SpartaCom\ModemShare Server group, start the SpartaCom ModemShare Server Manager.

Click on the installed ModemShare Servers detected on your LAN.

- **Note...** the first search for ModemShare servers on the network can take a long time if there are many computers on the LAN. Once a first search has been performed, a list of ModemShare Servers will be saved on your disk. Press F5 to update the list on your disk.
- Notes... you can also enter the name of your ModemShare server directly.

Uninstalling ModemShare Server for Windows 9x

In the SpartaCom\ModemShare Server group double-click on:

- The SpartaCom ModemShare Server Uninstallation icon if you installed both the ModemShare Server and the ModemShare Server Manager. Both components will be uninstalled.
- The SpartaCom ModemShare Server Manager Uninstallation icon if you only installed the ModemShare Server Manager.

You do not need to restart Windows 95/98 for uninstallation to be effective.

ModemShare Server for Windows 9x and DUN Server

ModemShare Server CANNOT share COM ports used by Microsoft Dial-Up Networking Server. You will have to dedicate one port to the DUN Server.

ModemShare Server for Windows NT and ZETAFAX Server

ModemShare Server can share COM ports used by the ZETAFAX Server.

When a ModemShare Client requests one of the ZETAFAX Server resources, the ModemShare Server software will ask ZETAFAX if the COM port is available.

If the COM port is not in use by ZETAFAX, ModemShare will be allowed access to the requested COM port. If the COM port is in use, ModemShare will get an error. Then, if the ModemShare pooling mechanism is specified, ModemShare will look for the next available port.

If ZETAFAX is installed after ModemShare has been installed, you must stop and restart the ModemShare Server.

ModemShare Server for Windows 9x Licensing

Your ModemShare Server for Windows 9x is licensed on a per port basis. To increase the number of ports you should purchase an additional user/ports product and add the server license number to the existing list:

1. Go into the SpartaCom\ModemShare Server program group.

- 😿 ModemShare Server Manager ANN2 Server Configuration View Help n¥. Ð 9 Server name : ANN 2 Version: 4.00 Stop The server is started. No active connections. Pause Evaluation license. Days left : 26 Allowed shares : 1 For Help, press F1
- 2. Double-click on the SpartaCom ModemShare Server Manager icon.

3. Click on the Configuration menu and select License:

License
Type your serial number and its protection key.
Do not enter this information if you are installing an evaluation version.
WARNING, changing license causes ModemShare Server to restart.
<u>S</u> erial number: 000 - 0000 0000 0000 0000 • •
<u>K</u> ey: 0000 0000 ▼
OK Cancel

- 4. From the list of Serial Numbers, select one that is unused. Enter an additional server Serial Number and then add the corresponding Key.
- 5. Click on OK. Your ModemShare server will restart automatically.

MODEMSHARE CLIENT FOR WINDOWS NT

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Features

- Provides for automatic redirection of one or several (default 4) COM ports to shared COM ports on a Windows NT/2000 or Windows 95/98 ModemShare server.
- May be setup to automatically disconnect when no COM port activity has occurred for a specified length of time.
- Compatible with 32-bit communications software using COM ports under Windows NT/2000.
- Compatible with 16 bit Windows or DOS communications software using COM ports under Windows NT/2000.
- Communication error logging is provided in the Windows NT/2000 Event log.

Installation

The ModemShare Client for Windows NT should be installed on each Windows NT/2000 station in the network that will be allowed to redirect one or more COM ports to a shared COM port(s).

Log onto Windows NT/2000 as an ADMINISTRATOR

On Windows NT version 4.0 or Windows 2000:

Insert the ModemShare CD-ROM in your computer, wait for the autostart program to run and follow the instructions on subsequent screens to complete the installation.

You can also directly start the installation process from the ModemShare Millennium cd by running:

Artisoft\Eng\Mdmshare\Client\Ntw2k\Setup.exe

On Windows NT version 3.51:

- 1. Click on the Start icon, move the mouse pointer to Settings, and click on Control Panel
- 2. Double Click on Network.
- 3. Click on Add Software...
- 4. Select < Other> Requires disk from manufacturer
- 5. Click on Continue
- 6. Insert the ModemShare CD-ROM and enter the path where the ModemShare Client for Windows NT files are located: \Clients\Nt
- 7. Follow the instructions on subsequent screens to complete the installation
- **Note...** During installation you will be prompted to enter a serial number and key. This information is provided in the material packaged with ModemShare.

The new ModemShare COM ports will be assigned to non-existing COM ports, for use by your applications. Example: If the computer is equipped with COM1 and COM2, the four (4) new ports will be assigned to COM3, COM4, COM5, and COM6.

However, you can change the COM port assignments made by the installation procedure using the ModemShare Ports Configuration screen:

Network Ports Configuration	×
Select a Port Object and give it a name in the Port Configuration a Press the Help buttom for more information.	ifea.
Network <u>P</u> orts	
SP Port1> COM1	
Port2> COM3	
A Port3> COM4	
🔎 Port4 → COM5	
BetMarine	
Port Naming	
Currently Selected Port Name: COM5 Apply	
Automatically Enumerate Port Names	
OK Cancel <u>H</u> elp	

To accept the default COM port name assignments, click OK.

To change a default name assignment:

- 1. Select (high-light) the port to be re-assigned,
- 2. Enter the new name (COMx) in the Port Naming section,
- 3. Click the Apply button.

If all port assignments listed below the one being changed are to be reassigned sequentially, click on Automatically Enumerate Port Names. Then, when you click the Apply button, the selected port and all ports below it will be assigned to sequential COM port names.

Note... You should restart NT after completing the ModemShare Client installation on NT 3.51.

A new serial device driver, supporting four (4) COM ports, has been added to the NT system. These four (4) ports can be redirected to a ModemShare server.
Configuring ModemShare Client for Windows NT

During installation, the SpartaCom ModemShare Client icon was added in the Control Panel.



Double click on this icon to display the following screen:

SpartaCom ModemShare (Client 🔀
Network Ports:	ок
🔎 СОМ1	
🔊 сомз	Cancel
🔊 сома	Settings
🔊 СОМ5	<u></u>
About	<u>H</u> elp
Disconnect on jnactivity	

ModemShare must be configured to redirect a COM port to a shared modem or modem pool on a ModemShare server.

- 1. Click on one of the four (4) ModemShare ports to be redirected,
- 2. Click on Settings,

- **3.** Enter the path to the shared COM port in the Network Path field, \\server_name\resource_name,
- 4. Enter the password (optional) required to connect to the shared resource. Leave this field blank if you are running in User Security mode, i.e. you are a member of a ModemShare group of users configured on the NT server,
- 5. Click on OK,
- 6. Click on OK,
- 7. Exit Control Panel.

The ModemShare COM port can now be used by your applications. Start the communications application and configure it to use the ModemShare COM port. The connection to the shared modem pool on the server will be made every time the port is opened by the application.

Advanced Configuration

ModemShare Network Bindings on Windows NT

To select the protocol stacks to be used with the ModemShare Client, or change the protocol stacks binding order.

- 1. Click on the Start icon, move the mouse pointer to Settings, and click on Control Panel
- 2. Double Click on Network
- 3. Click on Bindings

4. Click on the + sign in front of SPNetNT Interface to display the following screen:

Network ? 🗙
Identification Services Protocols Adapters Bindings
Network bindings are connections between network cards, protocols, and services installed on this computer. You can use this page to disable network bindings or arrange the order in which this computer finds information on the network.
Show Bindings for: all services
NetBIOS Interface Remote Access Server Service Server SpartaCom MPSN Client SPNetNT Interface NWLink NetBIOS WINS Client(TCP/IP) [1] 3Com EtherLink III (3C589D) LAN PC Card [5] Remote Access WAN Wrapper [6] Remote Access WAN Wrapper Workstation
Enable Disable Move Up Move Down

In this example, the ModemShare Client does not use the Remote Access (RAS) protocol stacks. This is the recommended setting as deactivating the bindings with RAS will allow a faster startup of the service.

ModemShare Network Bindings on Windows 2000

We recommend you that you disable the bindings between the ModemShare Client and the Remote Access Connections.

1. Click on the Start icon, move the mouse pointer to Settings, and double click on Network and Dial-up Connections

📴 Network and Dial-up	Connect	tions	J	
∫ <u>E</u> ile <u>E</u> dit <u>V</u> iew F <u>a</u> v	vorites	<u>T</u> ools Adva <u>n</u> c	ed ⊦ ≫∫Links ×	
	QSearc	h 🖻 Folders	③History	»
Address 🔁 Network and	d Dial-up	Connections	•	∂Go
Name	Туре	Status 🛆	Device Name	Owner
🖻 Make New Connection				
Local Area Connection	LAN	Connected	3Com EtherLi	System
SPARTACOM	Dial-up	Disconnected	CPI EuroViVa	System
2000 COMPUSER VE	Dial-up	Disconnected	CPI EuroViVa	System
				_
1 object(s) selected				1.

- 2. Right click on a Dial-up connection and select Properties
- 3. Click on the Networking tab

SPARTACOM Properties
General Options Security Networking Internet Connection Sharing
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
<u>S</u> ettings
Components checked are used by this connection:
Internet Protocol (TCP/IP)
Ele and Printer Sharing for Microsoft Networks
SpartaLom Modem Pooling for Small Networks Client Elient for Microsoft Networks Elient for Microsoft Networks Elient for Microsoft Networks
Install Uninstall Properties
Description
SpartaCom Modem Pooling for Small Networks - Network interface
OK Cancel

- 4. Search for SpartaCom Modem Pooling for Small Networks Client and uncheck it.
- 5. Repeat steps 2 to 4 for each Dial-up connection

To change the binding order of ModemShare on your network protocol stacks:

- 1. Click on the Start icon, move the mouse pointer to Settings, and double click on Network and Dial-up Connections
- 2. Click on Advanced
- 3. Select Advanced Settings
- 4. Search for SpartaCom Modem Pooling for Small Networks Client, use the Up and Down arrows to change the order.

Advanced Settings	? ×
Adapters and Bindings Provider Order	
Connections are listed in the order in which they are accessed by DNS and other network services.	
Connections:	
Local Area Connection	Ĵ Į
Bindings for Local Area Connection:	
✓ Internet Protocol (TCP/IP) ✓ NetBELII Protocol	Ĵ
SpartaCom Modem Pooling for Small Networks Client Soft Internet Protocol (TCP/IP) NetBEUI Protocol	Ŷ
Client for Microsoft Networks	
ОК	Cancel

Reassigning ModemShare ports

To reassign ModemShare ports on Windows NT:

- 1. Click on the Start icon, move the mouse pointer to Settings, and click on Control Panel
- 2. Double Click on Network
- 3. Select (high-light) ModemShare Port Redirector
- 4. With NT-3.51: Click on Configure, with NT-4.0: Click on Properties
- 5. The ModemShare Ports Configuration screen will be displayed
- 6. Enter the new name(s) as described above

To reassign ModemShare ports on Windows 2000 run the installation program again.

Disconnect on inactivity

ModemShare Client for Windows NT can be configured to automatically disconnect from a shared COM port when no communications activity occurs for a specified length of time. On the ModemShare Client screen (see #5.3 above), check the Disconnect on Inactivity button and enter the desired inactivity time in minutes. Click on OK.

Administration

ModemShare provides entries into the NT Event Log for communications errors.

To view the ModemShare entries in the Event Log, select Event Viewer from the Administrative Tools Group, and specify a Source of SPNetNT or SPRDRNT in the View/Filter Events.

The recorded events will contain the following fields:

- Date = Event date
- Time = Event time
- Category = "none", NetBIOS", "SMB", or "System"
- Event = Event number

When viewing the Event Log, double click on a selected event to display the detailed information for the entry.

Uninstalling ModemShare Client for Windows NT

Before: Log onto Windows NT/2000 as an ADMINISTRATOR.

- On Windows NT:

1. Click on the Start icon, move the mouse pointer to Settings, and click on Control Panel

- 2. Double-Click on Network icon
- 3. Click on Services tab (if Windows NT 4.0)
- 4. Click on SpartaCom ModemShare Client
- 5. Click on the Remove button.
- On Windows 2000:
 - 1. Click on the Start icon, move the mouse pointer to Settings, and double-click on Network and dial-up Connections
 - 2. Right click on Local Area connection and select Properties
 - **3.** Select the line SpartaCom Modem Pooling for Small Networks Client and click on Uninstall button.

MODEMSHARE CLIENT FOR WINDOWS 9X

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1 1

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Features

- Provides for automatic redirection of COM ports to one or more shared COM ports on a Windows NT/2000 or Windows 95/98 ModemShare Server.
- May be setup to automatically disconnect when no COM port activity has occurred for a specified length of time.
- Compatible with 32-bit communications software using COM ports under Windows 95/98. Applications using TAPI and UNIMODEM are supported.
- Compatible with 16-bit Windows communications software using COM ports under Windows 95/98.
- Communication errors display in a ModemShare pop-up Window.

Installation

The ModemShare Client for Windows 9x should be installed on each Windows 95/98 workstation in the network that will be allowed to redirect one or more COM ports to a shared pool.

Insert the ModemShare CD-ROM in your computer, wait for the autostart program to run and follow the instructions on subsequent screens to complete the installation.

You can also directly start the installation process from the ModemShare Millennium cd by running:

Artisoft\Eng\Mdmshare\Client\Win9x\Setup.exe

Redirection Path for CO	DM3
	Please, give the redirection path that will be connected to your new Port. Network Path :
7	Disconnect on inactivity, after 5 minute(s). Note: This parameter is used by all Ports.
	< Back Next > Cancel

- 1. Enter the path to the shared COM port in the Network Path field: \\server_name\resource_name
- 2. Enter the password (optional) required to connect to the shared resource. This password must be the same as the one entered for the resource on the ModemShare Server.
- **3.** The ModemShare Client for Windows 9x can be configured to automatically disconnect from a shared COM port when no communications activity occurs for a specified length of time. Check the Disconnect on inactivity box and enter the desired inactivity time in minutes.
- **4.** Click on Next>, follow the instructions on subsequent screens to complete the installation.
- 5. Restart Windows

The installation procedure has added one (1) COM port to the Windows 95/98 system. The new COM port has been assigned the first non-existing COM port number. Example: if the computer is equipped with COM1 and COM2, the new port will be assigned to COM3. For all programs that do not use UNIMODEM, the name of this new port will be "COMx".

For all programs that use UNIMODEM, the name of this new port will be the name of the redirection path: "\\SERVERNAME\RESOURCE (COMx)".

Modem detection

Before using a shared modem, Windows 95/98 needs to detect it.

Note... You must have defined the COM port redirection (enter a network path to a shared port) before running the modem detection.

To perform Modem detection:

- 1. Go into Control Panel.
- 2. Double Click on Modems.

Modems Properties	?	х
General Diagnostics		1
The following modems are set up on this computer	:	
Standard Modem		
Add Remove Properties		
Dialing preferences		
Dialing from: New Location		
Click Dialing Properties to modify how your calls are dialed.		
Dialing Properties		
	_	
OK Cance	el	

- 3. Click on Add.
- 4. Click on Next> to start detection on every port.

If your shared modem cannot be detected on the port that was added by ModemShare, try to run the same modem detection on the server to make sure it is working properly.

Configuring ModemShare Client for Windows 9x

To configure ModemShare:

- 1. Click on the Start icon, move the mouse pointer to Settings and click on Control Panel.
- 2. Double Click on System
- 3. With Windows 98 click on the Device Manager tab
- 4. Click on ModemShare Network Port
- 5. With Windows 98 Click on Properties
- 6. Click on the ModemShare Settings tab

Network Port (COM3) Properties	? ×
General Port Settings ModemShare Settings Driver	
- Redirection path	
Network Path : \\SERVER\\POOL	
Pass <u>w</u> ord :	
Settings common to all Ports	
Disconnect on inactivity, after 5 minute(s).	
OK Cancel He	elp

Errors

Connection errors are displayed in a window of ModemSharectrl. This window will pop up anytime an error occurs. You can force this window to pop up by double-clicking on the icon at the bottom right of your screen, in the Windows 95/98 taskbar.

👷 Event View	er - Application L	og on \\PL	_ 🗆 🗙
Log ⊻iew <u>O</u> j	ptions <u>H</u> elp		
Date	Time	Source	Category
less 7/10/00	9:24:29 AM	BizFax FAX Service	None 🔺
1 7/8/00	11:14:40 AM	SPSRVNT	None 🔫
@ 7/6/00	4:59:16 PM	 BizFax FAX Service 	None
17/6/00	4:56:22 PM	SPSRVNT	None
07/6/00	11:07:35 AM	SPSRVNT	None
l 🐵 7/5/00	9:03:53 AM	BizFax FAX Service	None
1 7/5/00	9:03:41 AM	SPSRVNT	None 🔄
A 7/3/00	10:29:18 AM	SPSBVNT	None 🔳

If the mouse pointer is moved over the ModemSharectrl icon, a message will indicate the status of the redirection.

ModemSharectrl

To display the ModemSharectrl window click on the Start icon, move your mouse to Run and type ModemShareCTRL.

Use ModemSharectrl to display the current version of ModemShare Client for Windows 9x, change your license number or other options.

Adding a port

To add another port to an existing ModemShare installation:

- 1. Click on the Start icon, move the mouse pointer to Settings and click on Control Panel.
- 2. Double click on Add/Remove Programs.
- **3.** Select ModemShare Client for Windows 95/98 from the list of installed software.
- 4. Click on Add/Remove...
- 5. Select Add a ModemShare Port in the ModemShare Client Setup window.
- 6. Click on Next.
- 7. Proceed as described in section above.

Uninstalling ModemShare Client for Windows 9x

To remove ModemShare Client for Windows 9x:

- **1.** Click on the Start icon, move the mouse pointer to Settings and click on Control Panel.
- 2. Double click on Add/Remove Programs.
- 3. Select ModemShare from the list of installed software.
- 4. Click on Add/Remove...
- 5. Select Uninstall SpartaCom ModemShare Client in the ModemShare Setup window and click on Next>.
- 6. Click on OK.

Always restart Windows after updating an existing installation.

MODEMSHARE CLIENT FOR WINDOWS

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Features

- Provides for automatic or manual redirection of up to nine (9) COM ports to one or more shared COM ports on a Windows NT/2000 or Windows 95/98 ModemShare server.
- May be setup to automatically disconnect when no COM port activity has occurred for a specified length of time.
- Compatible with most 16-bit Windows software using COM ports under Windows.

Installation

The ModemShare Client for Windows should be installed on each Windows 3.x workstation in the network that will be allowed to redirect one or more COM ports to a shared pool.

Insert the ModemShare CD/ROM in your computer, wait for the autostart program to run and follow the instructions on subsequent screens to complete the installation.

You can also directly start the installation process from the ModemShare Millennium cd by running:

Artisoft\Eng\Mdmshare\Client\Win3x\Setup.exe

1. When the installation is complete, you will be asked if Windows may be restarted. Click on "Restart Windows".

- 2. The ModemShare Group Window will display (If not displayed, click on the ModemShare Group icon which was added during installation).
- **3.** Click on the "Read me" icon and review the document for additional information not included in this manual. We suggest you that you print this document and keep it with the ModemShare Users Guide.

Configuring ModemShare Client for Windows

Once ModemShare has been installed, you will need to configure the ModemShare Client for Windows to redirect a local COM ports to a shared port before the redirected COM port can be used.

The ModemShare Program Group Window will be displayed. If not displayed, click on the ModemShare Program Group icon that was added during installation.



Double click on the 'SpartaCom ModemShare Client' icon in the SpartaCom ModemShare Group Window.

The SpartaCom ModemShare Client window will display the available ports (COM1-9) and their status:

SpartaCOM ModemShare (Client	-	+
Port View Options ?			
🕿 🗶 🛛 🌌			
Port name	Status		
ற்கு Serial Port COM1: (Local not present)	Available		÷
🌮 Serial Port COM2: (Local)	Available		
🌮 Serial Port COM3: (Local)	Available		
🔊 Serial Port COM4: (Local)	Available		
erial Port COM5: (Local not present)	Available		+
			T

A toolbar is provided just below the menu bar, and can be used to quickly access the functions of the SpartaCom ModemShare Client.



Toolbar description



Connect to a shared network COM port.



Disconnect a shared network COM port.



Change ModemShare setup options.



Update the "SpartaCom ModemShare Client" window.



Display Help screen

Automatic Connect/Disconnect

ModemShare can be configured to provide automatic connection (transparent to the user) to a shared network COM port. The connection will automatically be made when the communications application opens the local COM port. Without the automatic connection, it is necessary to go into the SpartaCom ModemShare client and manually establish the connection to a shared COM port before the local redirected COM port can be used.

ModemShare also provides for automatic disconnection from a shared COM port when an application closes the local COM port, or when no activity has occurred on the COM port for a specified length of time. Inactivity means that no data has been received or transmitted. Once the shared COM port has been disconnected, it becomes available for use by another station on the network.

If it is desirable to allow automatic connection and/or disconnection to the shared COM port, do the following:

1. Click on the **SpartaCom ModemShare Client** window.

2. The "Connection/Disconnection" window will display:

Connection / Disconnection		
<u>S</u> elect a po disconnecti	ort from the list in order to modify its connection / ion parameters :	
COM1 +	Options for COM3	
COM2 COM3	R econnect automatically Parameters	
COM4 COM5	X Disconnect automatically	
	X Disconnect on inactivity 5 min(s).	
	OK Cancel <u>H</u> elp	

- **3.** To allow the automatic reconnection of a local COM port to a shared network port:
 - a) Click on the "Reconnect automatically" button.
 - b) Click on the "Parameters" button.
 - c) The "Reconnect Automatically Parameters" window will display.

Reconnect Automatically Parameters : COM3		
O Last network port used		
<u>U</u> ulet connection to network port :		
\\SERVER\POOL		
User Name : SPARE		
Password :		
OK Cancel <u>H</u> elp		

d) To allow automatic connection to the last shared COM port successfully used, click on "Last network port used".

e) To allow automatic connection to a specific COM port:

i) Click on "Quiet connection to network port".

ii) Click on the down arrow to the right of the "Network Path" dialog field, and the list of defined shared ports will be displayed.

- iii) From the list, click on the desired port.
- iv) Enter the "User Name" (If required).

v) Enter the "Password" (If required).

vi) Click on OK.

- **4.** To allow automatic disconnection from the shared COM port when the application closes the local COM port, click on "Disconnect automatically".
- **5.** To allow automatic disconnection from the shared COM port after a specified length of inactive time, click on "Disconnect on inactivity", and enter the inactivity time.
- 6. Click on OK.
- **Note...** ModemShare does not support redirection of COM ports to which a serial mouse is attached.
- Note... Redirection of a locally shared port is not supported.

ModemShare Special keyboard commands

F1	Display on-line Help		
ALT+C	Display the Connection dilaog window		
ALT+D	Display the Disconnection dialog window		
F5	Refresh "SpartaCom ModemShare client: window		
ALT+F4	Quit ModemShare, or quit Help		
ALT+PrtScr	Copy HELP screen to the clipboard		

Connect to a shared COM Port

- **1.** Select (high-light) an available port (COM1-9) from the list in the SpartaCom ModemShare client window.
- 2. Click on the "Connect" icon.
- 3. The "Connect to Network Port" window will display.
- 4. Click on the down arrow to the right of the "Network Path" dialog field, and a list of previously defined shared COM ports will be displayed. Click on the desired shared port. If no shared COM ports have been previously defined or one is to be added, enter the "Network Path" of the shared COM port. The correct syntax for the "Network Path" is as Follows: \\Server_Name\Share_Name

- 5. Click on OK.
- 6. If the shared COM port requires a password, the "Connection" window will display. Enter the password for the shared COM port. The password is either the password as entered when logging onto the OS/2 server, or the resource password as defined on a Windows ModemShare server.
- 7. Click on OK.

Disconnect from a shared COM Port

- 1. Click on the "Disconnect a shared network COM port" icon in the "SpartaCom ModemShare client" window.
- 2. The "Disconnect from Network Port" window will display.
- **3.** Click on the port(s) to be disconnected in the Connected Network Port(s) list.
- 4. Click on OK.

After completing the ModemShare setup information, Exit (Quit) the SpartaCom ModemShare client for Windows.

Additional installation notes

ModemShare can be installed on a workstation from a shared directory on a network server.

a) Copy the \Clients\3x\English\Setup.exe installation directory to a shared directory on a network server.

b) From the workstation, go into the Windows File Manager and log onto the shared directory.

c) Double click on the SETUP.EXE file.

d) Complete the installation as previously described for using the install diskette.

If multiple workstations are to be setup with the same ModemShare configuration in the "SpartaCom ModemShare client", the SAPS.INI file from the first installation can be copied to the \Windows directory of each of the other workstations. This will eliminate the necessity of individually configuring ModemShare on each workstation.

ModemShare Error messages

Note... When a port is "In Error", you must manually disconnect it before attempting to connect it again.

Error Message	
"COMn is redirected. To share it, stop the redirection"	The port you want to share is already redirected.
"NetBIOS Error xxx"	This indicates a problem with the Network. Error 05 may occur if you are trying to connect to a locally shared port.
"Network access is denied"	The server denied access to the resource. Check your access rights on the server.
"Redirection from port COMx to pool xxx did not complete successfully. See xxx.LOG file for more information"	ModemShare probably could not find an available port in the pool. Additional information can be found in the xxx.LOG file in the ModemShare working directory. (xxx represents the pool name).
"SMB_HRD Error xxx"	This indicates a problem with the server. Error 21 may occur if you are trying to connect to a port that does not exist on the server.
"The redirection is stopped"	The inactivity time-out stopped your redirection.
"The resource is used on the server"	The network port you are trying to connect is already in use by an application running locally on the server. Stop the application on the server to free the resource.
"The resource isn't available"	The port you are trying to connect is no longer shared.
"The resource isn't currently available"	The network port you are trying to connect is already in use by an application running on another workstation.
The network port you are trying to connect is already in use by an application running on another workstation.	You are not allowed to connect or disconnect a port that is already in use by an application.
"Unable to reconnect automatically port COMx. Error xxx"	

For other errors, please contact SpartaCom technical support.

ModemShare Client for Windows Parameters

SAPS.INI file

The SAPS.INI file is stored in the \Windows directory and has several sections:

[SAPS]

- **FastSpeed** indicates that line speeds higher than 19200bps will be used by the application.

0 =do not change the speed,

1 = change the speed according to the following conversion table:

110bps ---> 38400bps 300bps ---> 57600bps 600bps ---> 115200bps

- LanaBase indicates which protocol stack should be used by ModemShare.

Default = ModemShare scans the installed protocol stacks

0 to 7 = use a specific protocol stack

Before changing the default configuration, make sure that the protocol stack you intend to use is defined in PROTOCOL.INI or SYSTEM.INI.

Other parameters such as the name of the communications driver to which ModemShare directs messages sent by Asynchronous applications using a non-redirected port. If you intend to control the local non-redirected serial ports with a driver other than the Windows driver (COMM.DRV), edit the COMM.DRV=MSCOMM.DRV statement, replacing MSCOMM.DRV with the appropriate driver name. (ModemShare gives COMM.DRV a new name of MSCOMM.DRV during installation.).

In the [COMx] sections, the configuration options for each of the local serial ports.

Note... Be very careful when changing the contents of the SAPS.INI file. Any errors in the syntax will result in problems when running ModemShare.

SAPSUSER.INI file

The SAPSUSER.INI file is stored in the \Windows directory.

- **1.** In the [SAPS] section, the Serial number and key for this ModemShare installation.
- **2.** In the [SPORTMAN] section, the ModemShare server parameters, including the working directory.
- **3.** In the [CONNECTIONS] section, a list of the local COM port(s) that were successfully connected to a shared COM port and the path to the shared COM port.
- **4.** In the [COMn] sections, the parameters for each local port for which a Quiet mode connection has been activated.
- **Notes...** This file is specific to the workstation and should not be duplicated on other network stations.

Uninstalling ModemShare Client for Windows

- 1. Quit Windows
- 2. During the installation, ModemShare copies the SYSTEM.INI and CONTROL.INI files into the working directory for ModemShare as SYSOLD.INI and CTLOLD.INI. If no updates to the original .INI files have occurred since the ModemShare installation, restore these two files from the ModemShare working directory.
- **Note...** When you restore these files, you will lose any updates to the files that occurred since ModemShare was installed.

As an alternative to restoring these two files, do the following:

In the [BOOT] section of the SYSTEM.INI file, replace the line COMM.DRV=SPCOMM.DRV with COMM.DRV=COMM.DRV (or with the line saved in the SAPS.INI file)

3. Delete the following files from the \WINDOWS directory:

SAPS.INI and SAPSUSER.INI.

- 4. Delete the following files from the \WINDOWS\SYSTEM directory: SPCOMM.DRV and SPNET.DLL
- 5. Delete all files from the ModemShare working directory (specified during installation). The SYSOLD.INI and CTLOLD.INI files are write protected and must be unprotected by entering ATTRIB -r *.INI before attempting to delete them.
- 6. Remove the ModemShare working directory
- 7. Restart Windows
- 8. Delete the ModemShare icon(s) that were added during installation

MODEMSHARE CLIENT FOR DOS

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Features / Requirements

- The ModemShare Client for DOS allows DOS applications to access shared resource on a ModemShare server.
- The ModemShare Client for DOS is built around a DOS TSR that redirects a local COM port.
- Requires NetBIOS to communicate with a ModemShare server. Works with applications that use the BIOS interrupt 14h interface (serial port interface). Applications directly interfacing the hardware are not supported.

Installation

To install the ModemShare Client for DOS:

- 1. In your DOS window, go to the Artisoft\Eng\Mdmshare\Client\Dos directory on your SpartaCom ModemShare cd.
- 2. Once you are in the Artisoft\Eng\Mdmshare\Client\Dos directory, at your DOS prompt type:

Setup.bat C:\MDMSHARE

where "C:\MDMSHARE" is an example of the destination directory for the DOS Modemshare Millennium installation.

You can enter any destination directory of your choice. Press enter.

3. Once the files have been copied to your destination directory, go to your destination directory and edit the SAPSDOS.INI file. For example, at the C:\MDMSHARE> prompt type:

C:\MDMSHARE> edit sapsdos.ini

4. The two SAPSDOS.INI options you will need to change is:

USER=xxx

where you replace "xxx" with your username

and

CxAutoRes=\\COMSERVER\POOL

where you need to replace "COMSERVER" with the computer name of your ModemShare server machine.

Once you have completed your changes click file, save, and exit.

5. To start your DOS ModemShare Millennium client session and connect with your ModemShare server type MPSNDOS as shown:

C:\MDMSHARE> MPSNDOS

Configuring ModemShare Client for DOS

After ModemShare has been installed, you will need to configure ModemShare to redirect one (1) COM port.

You first need to configure your SAPSDOS.INI file in your installation directory. Use the DOS Edit program to modify this file. Entries and keys are not case sensitive, but their associated value may be case sensitive, depending on the item.

Any time you change any setting in either file, you need to unload the TSR and reload it to make the change effective.

Basic configuration parameters in SAPSDOS.INI [SAPS]

SerialNb=	Insert your product serial number after the equal sign
Key=	Insert your product associated protection key
Station=	Insert your workstation name as known on the network
User=	Insert your user name when you logon to your server

[COM1], [COM2}, [COM3], [COM4]	Specify the COM port you want to redirect. Enter either COM1, COM2, COM3 or COM4. Note: only one (1) may be specified.
CxAutoRes=	Specify the shared resource name on the server you want to redirect to. The syntax is \\ServerName\Resource (Ex: \\SERVER1\COM1).

Advanced configuration parameters in SAPSDOS.INI [SAPSCTRL]

SMBTempo=	You can adjust the SMB response time by changing its value. Specify a value in seconds. This is the maximum time that ModemShareDOS will wait for a response to a SMB request.	
TimeSlice=	This is the minimum delay between two consecutive SMBReadXs. Its value is specified in milliseconds.	
FastSpeed=	If FastSpeed=1 (or different from 0) The low speed baud rates (110, 150, 300, 600) are mapped to a faster speed. Mapping values:	
	110 is mapped to 19200	
	150 is mapped to 38400	
	300 is mapped to 57600	
	600 is mapped to 115200	

DxTimeOut=	Specifies that an automatic disconnection is to occur after a specified time of no activity. If DxTimeOut=1 (or different from 0), this feature is activated. Otherwise, this feature is not active.
TimeOut=	Associated with DxTimeOut. Specify this value in minutes. If DxTimeOut is active, and if the inactivity time is longer than this value, the resource will be disconnected. When this occurs, ModemShareDOS should be unloaded and reloaded again, to reconnect to a shared resource.

Using ModemShare Client for DOS

Once configured, the ModemShare Client for DOS is easy to use.

A batch file named "SPD.BAT" has been installed which allows you to start the COM port redirection, start your application, and then stop the redirection when the application terminates.

Enter: SPD <application>

Example: SPD KERMIT

You will be prompted to enter a password, if required by the shared resource. Enter the password at the prompt.

Uninstalling ModemShare Client for DOS

Delete all files located in the ModemShareDOS install directory.

Delete the ModemShareDOS directory itself.

Edit AUTOEXEC.BAT and remove all reference to ModemShareDOS from the PATH parameter.

MODEMSHARE SERVER ADVANCED CONFIGURATION

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Using ModemShare with TCP/IP over a router

As we use NetBIOS that is a Name oriented protocol, some problems may occur, most of the time related to the Name P IP address resolution.

Go through the following checklist when experiencing problems (most often ModemShare Client cannot find the ModemShare Server):

6. Try to 'Ping' the IP address of the ModemShare Server from the Client workstation. If this fails, then the IP network is not running properly (not a ModemShare problem).

Open a DOS box and type: PING <Server IP address>

7. If test 1 is successful, type NET DIAG/S at the command prompt and enter the name of the ModemShare Server. If this fails, you have a problem with the Name resolution system or with the configuration of your routers.

For example, you may have configured your IP routers to filter broadcasts that may prevent NetBIOS names to be managed properly.

8. If test 2 is successful, check that the name @<server> is listed in the Names Table displayed by NET DIAG. If not, then the ModemShare Server is not started or not running on this TCP/IP LANA.Make sure that your name resolution system is configured with @server. Depending on which name resolution system you are using, you will have to:

- change the configuration of your NT WINS server

or

- modify your local LMHOSTS or HOSTS file to add a line with

@server<Server IP address>

For more information about Name Resolution, WINS and LMHOSTS refer to the Microsoft documentation. For example the Windows NT Resource Kit 'Networking Guide' chapter 14 'WINS' and 15 'LMHOSTS'. Alternatively, have a look at Microsoft "TechNet" CD-ROMs.

RAS / Dial-up Networking Troubles

If you experience a lock-up of a ModemShare Client workstation when running Windows 95/98 or Windows NT and using a TCP/IP Dial-Up connection to the Internet, you may have encountered a Microsoft problem related to the management of IP Default Gateways:

- Microsoft 32 bit TCP/IP layers only manages one Default Gateway at a time.
- Connecting to the Internet usually adds a new Gateway (i.e. your Internet Provider's Gateway) in order to route IP packets to the Internet
- Consequently, your Internet Provider's Gateway now receives all IP packets that were being processed by your local Gateway. You can no longer access the local servers connected on a different LAN Segment (see diagram below).

To obtain your IP configuration parameters:

 Use IPCONFIG /ALL command on Windows NT computers (ModemShare Client and ModemShare Server).



Use WINIPCFG application on Windows 95 computers.

In this example, a Dial-Up connection to the Internet will create a new LAN Segment 'LAN 3' and a new Default Gateway different from 'Router 1'.

Once the Dial-Up connection is setup, the ModemShare data flow which was routed to the ModemShare Server on 'LAN 2' will then be sent on 'LAN 3', and will be lost.

A workaround is to set a route in the Microsoft IP tables to your ModemShare Server.

With Windows NT, you can set a Permanent Route on each ModemShare Client for NT using the following command:

ROUTE ADD -p <network address of your ModemShare Server> MASK <network mask of your ModemShare Server> <default gateway IP address>

Note... network address is not the same as the IP address

For the above example you would set:

<network address of your ModemShare Server> 192.21.117.0 (i.e. 192.21.117.245 AND 255.255.255.0).

<network mask of your ModemShare Server> 255.255.255.0

<default gateway IP address> 192.24.16.1

With Windows 95, there is no Permanent Route setting. You will need to include the following command in your .BAT file for startup:

ROUTE ADD <network address of your ModemShare Server> MASK <network mask of your ModemShare Server> <default gateway IP address>

How to use ModemShare with Novell Netware

ModemShare cannot access COM ports on servers running Netware. Any PC running Windows NT/2000, Windows 95/98 can be used as a non-dedicated ModemShare server.

ModemShare cannot be used directly with the IPX/SPX protocol.

If you are using ModemShare with Windows 3.1, install the NetBIOS layer provided with every Netware package: NETBIOS.EXE.

NETBIOS.EXE is a DOS TSR that is loaded by typing "NETBIOS' at the MS-DOS Prompt, before loading Windows. Of course, you can also put this command in your AUTOEXEC.BAT file.

Also, make sure NetBIOS is loaded on the PC acting as ModemShare Server.

Check in the file NET.CFG that only one frame type is configured (either 802.2 or 802.3) on all PCs.

Under Windows 3.x some versions of Novell's NETBIOS.EXE do not operate properly. SpartaCom tested ModemShare successfully with version 3.14

If you are using ModemShare with Windows for Workgroups 3.11 (WFWG) you could also use Microsoft's "IPX/SPX Compatible Transport with NetBIOS" protocol, which is part of the WFWG package.

Again, make sure the 'Frame Type' parameter is set to the same value, either 802.2 or 802.3 on all PCs.

You cannot use NETBIOS.EXE with the 32-bit Netware protocol for Windows 95/98. Install Microsoft's "IPX/SPX compatible protocol" and select the "I want to enable NetBIOS over IPX/SPX" option in the NetBIOS section of its properties.

Possible problems using ModemShare with Netware:

- On startup, ModemShare Server for Windows 95/98 reports "Error # 0 (0000h)
- On redirection, ModemShare Client for Windows immediately reports "Miscellaneous network error."
- On redirection, ModemShare Client for Windows 95/98 immediately reports "No network stack protocol"

All three messages mean no NetBIOS is loaded. Check your network settings and make sure the IPX/SPX protocol has NetBIOS support.

- When redirecting, the ModemShare Client for Windows reports "The computer name specified in the network path cannot be found".
- When redirecting, the ModemShare Client for Windows 95/98 reports "Name of server not found".

These two error messages could mean:

No NetBIOS available on the PC running the ModemShare Server, or the name of the ModemShare Server is misspelled.

ModemShare is not limited to Microsoft or Novell networking environments. Baynan VINES, DEC PATHWORKS, LANtastic, etc., all provide NetBIOS support and are compatible with ModemShare.

Questions and Answers

Q: Is ModemShare "Year 2000 Compliant"?

A: Yes. Any ModemShare data containing date information is defined and referred to as 4 digits.

Q: What procedure must be followed to allow ModemShare and RAS/RRAS to share the same COM port?

A: Please follow the steps listed below:

a) RAS/RRAS must be installed before ModemShare.

b) RAS/RRAS must be started first. (If ModemShare and RAS start as a Service automatically, they will start in the correct order.)

c) RAS/RRAS ports must be configured as both dial-in AND dial-out.

d) You must be running the latest Service Pack for NT.

e) If any Service Packs are installed after ModemShare, you must reinstall the ModemShare Server.

Q: Microsoft RAS Server is using modems to accept incoming calls; can ModemShare use these modems as well?

Y: Yes. Starting with Windows NT 3.51 an interface between RAS and ModemShare allows ModemShare to query RAS for an available COM port. Whenever no incoming call is active, RAS will allow ModemShare to get the COM port. ModemShare will return the COM port to RAS, when the application closes the COM port.

Q: Does ModemShare function on a Novell network?

A: Yes. On computers running Windows 3.1, load the NetBIOS layer supplied by Novell as a DOS TSR (NETBIOS.EXE). On PCs running Windows for Workgroups, install the 'IPX/SPX Compatible Transport with NetBIOS' protocol. On PCs running Windows 95/98 install the 'IPX/SPX-compatible Protocol' and enable, it is NetBIOS option.

ModemShare cannot access COM ports on servers running Netware. Any PC running Windows NT/2000, Windows 95 can be used as a non-dedicated ModemShare server.

Q: Can I use ModemShare with TCP/IP?

A: Yes. When using Windows 3.1x make sure that you have installed NetBIOS on TCP/IP.

Q: Can I use a shared COM port from applications running in MS-DOS or in a DOS box in Windows?

A: Yes. With no restrictions in the DOS box of Windows NT/2000.

Yes, with applications that use the BIOS interrupt 14h interface (serial port interface). Applications directly interfacing the hardware are not supported under DOS, Windows and Windows 95/98.

Q: Can I use the Microsoft RAS Client with ModemShare?

A: Yes, with Windows NT/2000 or Windows 95/98.

No, with Windows for Workgroups. The architecture of the 16-bit version of RAS is not compatible with ModemShare.

Q: What is the maximum baud rate supported by ModemShare?

ModemShare only limitation is the baudrate supported by the hardware on the ModemShare server.

Q: How does ModemShare affect performance, compared to the use of a local COM port?

ModemShare normally adds less than 5% to the system overhead. However, it depends:

- on the application used (blocksize, protocol, etc.)
- on the ModemShare client computer's hardware
- on the LAN (theoretical throughput, workload, etc.)
- on the ModemShare server's hardware (CPU, operating system, workload, etc.)

- on the COM ports used on the ModemShare server (UART, intelligent multiport card, etc.)

Q: Are there any special considerations for installing ModemShare on a Citrix WinFrame server or on Microsoft NT Server Terminal Server Edition?

A: Yes. In some implementations, other SpartaCom products MPWS (Modem Pooling for WinFrame Server) or MPTS (Modem Pooling for Terminal Server) may be required.

Q: How is ModemShare used with ISDN?

ModemShare is compatible with any ISDN device that works the same as a standard COM port. For example, you could use external ISDN adapters connected to a standard COM port or to multiport cards. Internal ISDN cards may not be compatible with ModemShare if they are not provided with serial drivers. ModemShare does not support ISDN devices using CAPI.

Q: What does "Open Port Error 2004, No Network Stack Protocol" mean?

A: ModemShare requires NetBIOS or NetBEUI in order for the ModemShare Client to locate the ModemShare Server. If you are running IPX/SPX, you should enable NetBIOS over IPX/SPX. Otherwise, you should install NetBEUI.

Q: I am receiving the following error in the NT Event Log:

Event ID: 1008, Source: Perflib, Type: Error, Category: None.

"The Open Procedure for services "SPSRVNT" in DLL "c:\Program Files\SpartaCom\ModemShare Server\ModemShareCTRS.DLL" failed. Performance data for this service will not be available. Status code returned is DWORD 0."

How can I correct this?

A: The message in the Event Log indicates that the registering of ModemShare Performance Counters for the Windows NT/2000 Performance Monitor failed.

Sometimes this will occur after the ModemShare Server installation. Most often, the error will disappear after rebooting the computer. If the error does not go away:

Open a DOS session on the ModemShare Server. Go to the folder where the ModemShare server is located, (default: Program Files\SpartaCom\ModemShare Server). At the DOS Prompt, enter:

lodctr "C:\Program Files\SpartaCom\ModemShare Server\ModemShareCTRS.INI" (Change the path for your configuration. You must use double quotes ("") if the path contains spaces.)

Q: When dialing out using Dial-Up-Networking on an NT4.0 ModemShare Client machine, there is a long pause when "Opening Port" before dialing begins. How can I speed up the connect time?

A: Go into Control Panel | Network | Bindings. Show bindings for SPNETNT Interface and disable all Remote Access Wan Wrappers.

NOTE: Only disable the Remote Access Wan Wrappers located under SPNETNT Interface.

Q: What does the error "SMB ERROR CLASS 02 - INVALID RESOURCE NAME" mean?

A: This error means that a specified resource name is not on the server. Check the share name(s) in the Redirection Path (\\server_name\SHARE_NAME). After making corrections, stop and restart the ModemShare server.

Q: What does the error "OPEN PORT ERROR 1006 - USER NAME NOT FOUND" mean?

A: The user name is not found in the registry. To check this, go into the Registry Editor under HKEY_LOCAL_MACHINE\Network\Logon. If the entry is not found in the Registry, choose Edit, New, String value. The value name is "username"; the data is the user's logon name. The reason for the user name not being in the Registry is due to some customers installing a Microsoft Power Tool called Tweak UI, which deletes the username. To remove this process, run Tweak UI and clear the "Paranoia" check box. That removes the username after logon. This will allow the username to be entered into the registry at logon, and will allow the ModemShare client to connect to the ModemShare server.

Q: I receive the following error message on my ModemShare Client machine:

"Open Port Error 0x1012: Evaluation or Bundle time expired". What does this mean?

A: Unfortunately, you have encountered a known problem with the ModemShare eval product. Please follow the steps below to correct the problem.

a) Uninstall the ModemShare client.

b) Set the date of your computer back by 1 day.

c) Reinstall the ModemShare client.

d) Set the date of your computer back to the current date and proceed as normal.

NOTE: This problem only exists in the eval product and not the retail product.

Q: Why do I get an'Access Denied' error message when I start the SpartaCom ModemShare NT Server?

A: You may get an error 'Access Denied' when starting the SpartaCom ModemShare Server for Windows NT with an NTFS formatted disk drive. Verify that the ModemShare directory has 'Execute' permission for the 'System' account. You can also choose to install ModemShare in a subdirectory of Windows NT \SYSTEM32 which always has 'Execute' permission.

Q: How do I use ModemShare NT Server with the Microsoft 'Routing and RAS Server' (code name 'Steelhead')?

ModemShare is compatible with Microsoft 'Routing and RAS Server'. To share the same ports, please check " Dial out as a RAS client " box in the Port Properties.

Q: What if I can't access the local ModemShare 9x server through the ModemShare Server Manager?

If you are unable to access your local ModemShare Server in the ModemShare Server Manager, click the right mouse button on the ModemShare Server icon (bottom right of the screen). Select 'Exit' from the menu. Click on 'Start' in the ModemShare Server manager.

Server parameters

Experienced Administrators using the Registry Editor can modify the ModemShare Server advanced configuration parameters.

Use REGEDIT.EXE if you are running Windows 95/98, Windows NT 4.0 or Windows 2000.

Use REGEDT32.EXE if you are running Windows NT 3.51.

WARNING! Erroneous modifications to the registry parameters may cause ModemShare to fail. Any modifications should be performed with the utmost care.

The Server configuration parameters are stored in the registry under path HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SPSRVNT if you are running Windows NT/2000.

The Server configuration parameters are stored in the registry under path

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SPSRV95 if you are running Windows 95/98.

For example, to add the ExcludeLanas string proceed as follows:

- Select the menu 'Edit', 'Add Value'
- Enter in the 'Value Name' field the following string: ExcludeLanas
- Select 'REG_MULTI_SZ' in the Data Type field
- Click on 'OK'
- In the 'Data' field enter all the Lana Numbers you want to exclude, for example: 3, 'Enter', and 4 'Enter'. Note: press 'Enter' following each Lana number entered.
- Click on 'OK'
- Exit from the Registry Editor
- Restart the ModemShare Server

Each Server parameter is described in the following table

Server Parameters			
Name	Туре	Possible Values	Description
DomainController	REG_SZ	String	This parameter can be used to speed up user authentication by choosing a default Domain Controller (\\YourDomainController). Default = (empty).
Log	REG_DWORD	0 or 1	When set to 1, events will be logged in the Server log. The ModemShare Server Manager controls this parameter. Default = 256 bytes.
Server Parameters			
-------------------	-----------	---------------------------------------	---
Name	Туре	Possible Values	Description
Spy	REG_DWORD	from 0 to 4096 bytes	Size of the buffer used to store the Hayes commands passed to the modem before each connection (DCD going high). The dialed number is also stored in this buffer. The content of the buffer is written to the Event Log if the Log parameter is set to 1. Default = 256 bytes.
WriteDelay	REG_DWORD	from 1000 to 30000 milliseconds	Timeout value for Write requests on COM ports. When the Windows NT/2000 COM Device Driver reports timeouts, the ModemShare Server will emit short 'beeps'. Do not change this parameter unless you encounter transmission. Problems and hear 'beeps' on the Server. Default = 15000.
RxSize	REG_DWORD	from 4096 to 32768 bytes	COM ports Receive Queue size. Default = 8192.
TxSize	REG_DWORD	from 4096 to 32768 bytes	COM ports Transmit Queue size. Default = 8192.
ReinitModem	REG_DWORD	0 or 1	This enables reset commands to be sent to the modem every time a COM port is closed by ModemShare. This parameter can be set using the ModemShare Server Administration. Default = 0. Reset commands are: - Set DTR & RTS to high, - Wait 1 second, - Send the Hayes escape sequence "+++", - Wait 1 second, - Send "ATH" <cr> - Wait 1 second, - Send the Hayes reset sequence (see ResetModem parameter) - Wait 1 second, - Set DTR & RTS to low.</cr>

Server Parameters			
Name	Туре	Possible Values	Description
ResetModem	REG_SZ	ASCII string	This parameter contains the Hayes reset sequence. (E.g.: "AT&F S0=0 E1")
			Default = "ATZ"
			Enhanced syntax for ResetModem string supporting the following:
			^ <character> : is interpreted as <control character="">.</control></character>
			For example ^M is <control m="">, i.e. <cr>.</cr></control>
			For example ^PCLR^M is a standard PAD X.29/X.28 escape and call clear sequence.
			^0 to ^9 is a variable length pause in $\frac{1}{4}$ seconds (^4 is a 1 sec pause).
			A <cr> is always added to the end of the ResetModem string.</cr>
Mode	REG_DWORD	0 , 1 or 2	When set to 0, ModemShare will allow any user who has the resource password to access shared COM ports ("ShareLevel" mode).
			With the ModemShare Server for Windows NT, when set to 1, ModemShare will only allow users who are member of the group "MSPN" to access shared COM ports ("UserLevel" mode). No Domain validation is performed.
			When set to 2, ModemShare will only allow users who are member of the group "MPSN", and logged on their workstation on the Domain specified in group "MPSN", to access shared COM ports ("UserLevel" mode).
			This parameter is ignored if no group "MPSN" has been created.
			Default = 2

Server Parameters			
Name Type	Possible Values	Description	
ExcludeLanas REG_MULTI_S	Z Strings	This parameter can be used to prevent the ModemShare Server from monitoring listed Protocol Stacks for calling clients. For example, you could decide to accept ModemShare Clients using only NetBIOS on TCP/IP protocol stack. Default = (empty). If you are running Windows 95/98, type 'NET DIAG /S' to know more about your protocol stacks. If you are running Windows NT, please see the NetBIOS Interface properties in the Network control panel for information on the Lana Numbers: - Open the 'Control Panel' window - Double-click on 'Network' - Click on 'Services' - Select 'NetBIOS Interface' - Click on 'Properties' - You should get a window similar to the following one: $\frac{NetBIOS Configuration ? X}{Use this screen to change the lana number on thelisted NetBIOS network routes.Lana Number Network Route000 Nbf -> Elnk3 -> Elnk31001 NwlnkNb -> Nwlnklpx002 Nbf -> NdisWan6003 NetBT -> NdisWan6004 NetBT -> Elnk3 -> Elnk31Edit$	

Server Parameters				
Name	Туре	Possible Values	Description	
KeepSession	REG_DWORD	from 0 to 127 seconds	Timeout period for NetBIOS receives. (0 = infinite wait). This is a watchdog system used to prevent failed ModemShare Clients from locking up Server resources. This timeout will free resources any time a ModemShare Client locks up. Default = 60	
ModemSleep	REG_DWORD	from 0 to 5000 milliseconds	Minimum time between Open/Close port. Some modems have been experiencing lockups when port was opened and closed very rapidly. If your shared modem does not respond to AT commands, try increasing this value. Default = 100 milliseconds	
RasSleep	REG_DWORD	from 0 to 5000 milliseconds	Minimum time ModemShare will wait after closing a port and returning it to the RAS Server. Some modems have been experiencing lockups when port was opened and closed very rapidly. If your RAS Server is unable to reinitialize shared modems, try increasing this value. Default = 2000 milliseconds	
Two other parameters are specific to the ModemShare Server for Windows 9x:				
LogSize	REG_DWORD	from 0 to 4 294 967 295 bytes (4 GB)	Sets the maximum size on disk of the ModemShareLOG file. When the maximum size is reached, ModemShare will stop recording events. Default = 131 072 bytes (128KB).	
StartOnbegin	REG_DWORD	0 or 1	Sharing of COM ports will occur as soon as the ModemShare Server is started when set to 1. Default = 1.	

Administration parameters

The configuration parameters of the ModemShare Server Manager are stored in the registry under path:

 $HKEY_CURRENT_USER \ Software \ SpartaCom \ SAPSAdmin \ Settings \ \$

EnableAutodial	REG_DWORD	0 or 1	SWhen set to 0 the ModemShare Server Manager will disable Microsoft Dial Up Networking from the time it is started to the time it is stopped. Set this parameter to 1 if you are remotely managing ModemShare Servers using a Dial Up connection. Default = 0
MaxRespTime	REG_DWORD	from 0 to30000 milliseconds	Sets the maximum time the ModemShare Server Manager will wait for a reply of the ModemShare Server on the internal Mailslot. After two consecutive timeouts, the ModemShare Server Manager will consider that the Server cannot communicate anymore and will stop polling it. You may restart the polling by pressing on F5. Default = 4000
ServerBlink	REG_DWORD	from 0 to 30000 milliseconds	Following a change in the Server state, this parameter will set the blinking rate of the ModemShare Icon and the polling rate of the Server as well,. Default = 250
ServerRefresh	REG_DWORD	from 0 to 30000 milliseconds	This parameter sets the lapse of time between two updates of the port status and the port statistics. If set to 0 no refresh will be performed. Default = 2000
ServerTimeout	REG_DWORD	from 0 to 30000 milliseconds	This parameter sets the maximum time the ModemShare Server Manager will wait for a ModemShare Server to come to a stable state (Stopped, Started, Paused). Default = 30000
ShareNameLength	REG_DWORD	from 1 to12	Specifies the maximum number of characters for the name of the Shared resources. Default = 12
TwoRefresh	REG_DWORD	0 or 1	If set to 1 both Port Status and user status will be refreshed. Default = 1
UserRefresh	REG_DWORD	from 0 to30000 milliseconds	This parameter sets the lapse of time between two updates of the User status. If set to 0 no refresh will be performed. Default = 2000

Browser parameters

The browser part of the ModemShare Server Manager parameters is stored in the registry under path:

 $HKEY_CURRENT_USER \ Software \ SpartaCom \ Browse \ \ \\$

bMPSNNtSearch	REG_BINARY	0 or 1	If set to 1 the stopped ModemShare Servers for NT will be browsed. This may result in a very time-consuming browse. Default = 0
dwRetry	REG_DWORD	in 200 milliseconds units	Sets the maximum time the ModemShare Server Manager will wait for a reply of ModemShare Server on the internal Mailslot. All the ModemShare Servers on your network are assumed to have replied in less than this time. Default = 20 (i.e. 20 * 200 = 4 seconds)