

Engagent Remote Administration

Version 2.1

Engagent Remote Administration



Version 2.1

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INTRODUCTION

What is Engagent Remote Administration?

Engagent Remote Administration is a remote control program that lets you work on another computer remotely through your own. You see the remote computer's screen in a resizable window on your own monitor or as the full screen. Your mouse and keyboard control the remote computer so you can work on the remote computer just as if you were sitting right at it.

The remote computer can be anywhere on the Internet or in your local network. You don't need a fast network connection. Even with a **MODEM** the screen update speed is an acceptable 5-10 screen updates per second. If the remote computer is on your **LOCAL NETWORK** the typical speed is from 100 to 500 screen updates per second.

Often while working in Engagent Remote Administration's full-screen mode, you forget that you are working on a **REMOTE** computer!



Engagent Remote Administration working.

Engagent Remote Administration Architecture

Engagent Remote Administration consists of two parts:

- The **server** on the remote computer that sends the remote computer's screen display.
- The **client**—also called the viewer—that shows the remote screen display on your own monitor.

To get started you need to run Engagent Remote Administration server on the remote computer. Then run Engagent Remote Administration client on your own computer. The current version of Engagent Remote Administration requires a **TCP/IP connection** between both computers, so you'll need to set this up if they are not already connected.

What Makes Engagent Remote Administration Different

The speed: Engagent Remote Administration is much faster than every other remote control system available. For example, we tested the widely used VNC (AT&T's Virtual Network Computing) and found that Engagent Remote Administration is 150 times faster!

Engagent Remote Administration outperforms every other known remote control system, including pcAnywhere, Timbuktu, LapLink, etc.

The test was performed on:

Server: 800 X 600 65535 colors, OS - WindowsNT 4.0 Service pack 4

Client: 800 X 600 256 colors, OS - Windows95

Ethernet 10Mbit local network.

What's New in Version 2.1?

New features in v2.1:

- Extended "Ask user to allow incoming connection" options. In earlier versions the default answer for incoming connection was "yes". Since v2.1 you have the opportunity to choose "no" as the default. Optional "time out" value.
- Enhanced File transfer mode:
 - File Transfer resuming after abnormal disconnection
 - Progress bar
 - Show date, time, attributes in detailed view of File Transfer
 - Sorting files support
 - "Replace File" confirmation dialog
 - Disk names support
 - Icons support
 - Saving of File Transfer window size and position, view and sorting modes
 - File properties dialog
 - Improved interface
 - Other small changes
- All data is encrypted with 128 bit strong crypto in any connection mode
- Writing to Event Log support
- Remote shutdown improving
- About box on the server side
- Program dialogs optimization

- Some useful registry settings for system administrators -disabling some server functions such as telnet, file transfer, control, the possibility of changing server settings by a user
- Interface changes

Features

Run as a Service

Engagent Remote Administration server can work as a SERVICE under Win9x, ME, NT4.0 and Win2000. This lets you log a user on or off remotely.

Multiple Connections Support

Engagent Remote Administration server supports simultaneous multiple connections to the same remote screen.

Full-Screen, Scaled and Windowed View Modes

Full-screen mode shows the remote screen full-size on your own monitor. Scaled mode lets you see the remote screen in a window on your monitor scaled to the remote screen's defined size.

Video Hook Driver Technology is Used

Engagent Remote Administration uses video hook kernel mode drivers under Windows NT to capture screen changes. This boosts the speed to hundreds of screen updates per second.

File Transfer

Lets you transfer files easily between computers with Windows Explorer like interface.

Remote Shutdown

Now you don't have to connect in the Full Control mode.

Telnet Server

Engagent Remote Administration server provides Telnet access to remote computers (except on Win9x/ME).

Windows NT Security Support

You can allow remote control, remote view, telnet and file transfer access to specific users or user groups from an NT domain. If a user logged into a WinNT domain connects to Engagent Remote Administration server, the user's current username/password are employed by Engagent Remote Administration viewer to authorize a connection to the Engagent Remote Administration server.

Password Protection

If Windows NT security support is switched off, access to a remote computer is controlled by a password. Engagent Remote Administration uses a challenge-response password authentication method based on 128 bit strong encryption.

128 Bit Strong Encryption of All Data Streams.

In the version 2.1 encryption is always enabled, it causes just 5% performance loss.

IP Filter

Allows an access to the Engagent Remote Administration server only from specified IP addresses and subnets.

Engagent Remote Administration Supports High-Resolution Modes

Display resolutions up to 2048 X 2048 X 32 bit color are supported by Engagent Remote Administration.

System requirements

No special requirements for hardware:

If your computer can run Windows 95 or higher, the program will run.

It even runs on a 386 with 8 MB RAM.

NOTE: Engagent Remote Administration still operates successfully when the display, mouse and keyboard are disconnected from the remote computer; however some computers do not boot successfully without a keyboard plugged in.

For all operating systems (Windows9x/ME/NT/2000):

The computer must have TCP/IP installed, the most-used protocol for networking computers.

Windows NT 4.0:

Service pack 4 or higher is required.

Administrator rights are required, if video hook driver or Remote Administrator service are installed.

Windows 2000:

Administrators rights are required, if Engagent Remote Administration is installed as service.

Engagent Remote Administration Security

Scrupulous attention was paid to security issues in the Engagent Remote Administration design. Here are some reasons that the Engagent Remote Administration operation is secure:

- Engagent Remote Administration 2.1 supports **WindowsNT/2000 user level security**. You can give the right of remote control to some specific users or user groups.
- If Windows NT security support is switched off, access to a remote computer is restricted by password. Remote Administrator uses a challenge-response password authentication method (MD5 and Twofish crypto algorithms are used). This method is similar to the authentication method used in Windows NT, but uses more powerful security keys.
- Remote Administrator work in encrypted mode, where all data, including screen images, mouse movements and keypresses are encrypted. **128 bit Twofish encryption** is used. Twofish crypto is distinguished for its combination of speed, flexibility and conservative design.
- Remote Administrator server has a logging feature. All actions are written to the **log file**. Event Log support is also included.
- Remote Administrator server has an **IP-filter table**. Using this IP table allows Engagent Remote Administration access only from specified IP addresses and networks.
- Remote Administrator has a self-testing code defense, which protects the code from changing.

NT Security

To view or change Engagent Remote Administration security settings, activate '*Options for Remote Administrator server*' and choose '*Set password*'... Click '*Enable NT security*' and then '*Permissions*'. The '*Registered users*' window allows you to change the security features for an Engagent Remote Administration connection. You can grant or deny permissions, it is typically done on the basis of NT User Group membership.

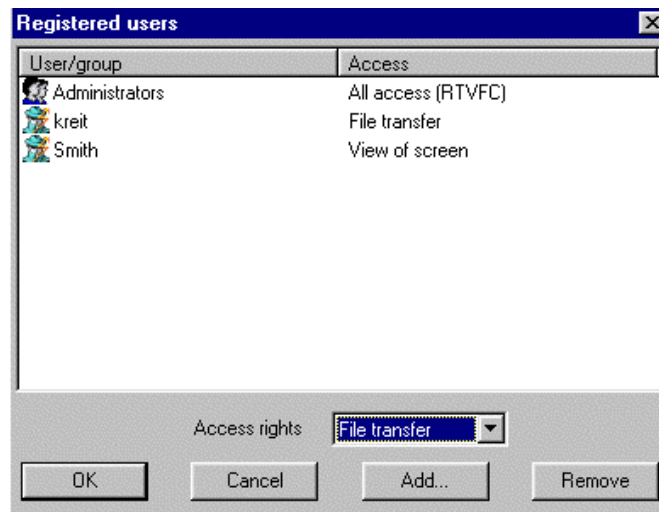


Enabling NT security

The '*Registered users*' window allows you to change the security features for Engagent Remote Administration connection. You can grant or deny permissions that is typically done on the basis of the NT User Group membership.

It's possible to choose between five access rights: **Redirect**, **Telnet**, **File transfer**, **Full control of screen** and **View of screen**.

To grant permissions from trusted domains you have to create a local group and add members from another domains. '*Add user/group dialog*' will allow you to configure Engagent Remote Administration NT security permissions for just created local group



that contains users from trusted domains.

'Registered users'

IP Filter

This feature restricts access to the Engagent Remote Administration server only from specified IP addresses and subnets.

Set the IP filter from the 'Options' menu of the 'Settings for Engagent Remote Administration server' (from start menu group).

Example:

Subnet 192.168.1.xx

Computer 192.168.1.67

To permit an access for a whole subnet you should set:

Filter IP - 192.168.1.0

Mask - 255.255.255.0

If IP AND MASK == FILTER IP the connection is successful, else you get '*Client I/O error*'.

Setting/Changing a password for Engagent Remote Administration server

You can set and change the Engagent Remote Administration server password directly from the *Settings for Engagent Remote Administration Server*.

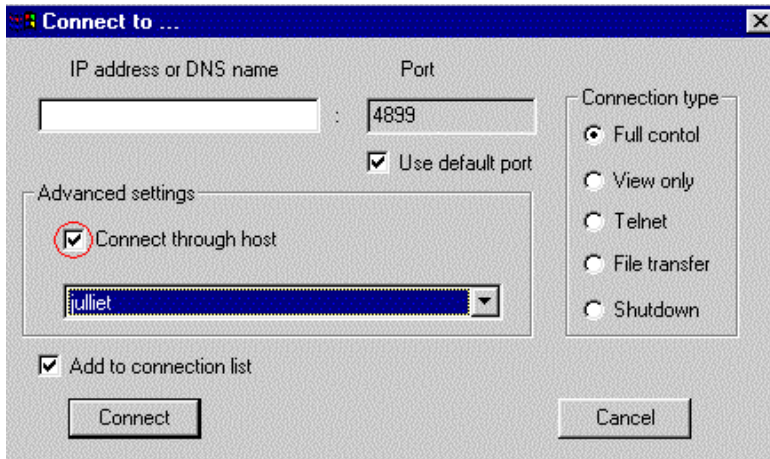


Setting the password

If your server runs under WinNT4.0/2000 you can enable NT security support in the Engagent Remote Administration server settings. You will be able to give users and user groups various rights to access the server (Full control/View only/Telnet/File transfer/Redirect).

Redirect Right

This right allows to users to use only **Connect through** option.



Selecting 'Connect through' option.

Avoid redundant permissions! This permission may be granted if a computer provides access to another PC. It's especially helpful for system administrators to ensure additional security.

A user who is granted redirect right can use the 'Connect through host' option.

INSTALLATION

Before Installation

Two computers need to be connected by TPC/IP, either on a local network or the Internet.

Before installation for all users:

Uninstall any earlier version of Engagent Remote Administration, before installing a newer version.

For Windows 2000 Users:

You need administrator rights to install Engagent Remote Administration Server as a service.

For Windows NT 4.0 Users:

You need administrator rights to install Engagent Remote Administration Server as a service and install the driver.

Before installing Engagent Remote Administration's video hook driver be sure that any other Remote Control software that uses video hook driver technology has been removed. Running more than one video hook driver can lead to a system crash while booting.

Sample applications that use a video hook driver: **NetMeeting 3.0+**, **SMS**, **Timbuku**. If a problem occurs while booting with the Engagent Remote Administration driver, you can press the '1' (number one) key repeatedly during booting and the Engagent Remote Administration driver will not load.

Installing Engagent Remote Administration Files

- Unpack the installation files by running the self-extracting executable.
- Run Engagent Remote Administration21.exe from the unpacked distribution.
- Follow the setup instructions.

After installation, the Engagent Remote Administration server or the Engagent Remote Administration client (viewer) can be started from Start menu.

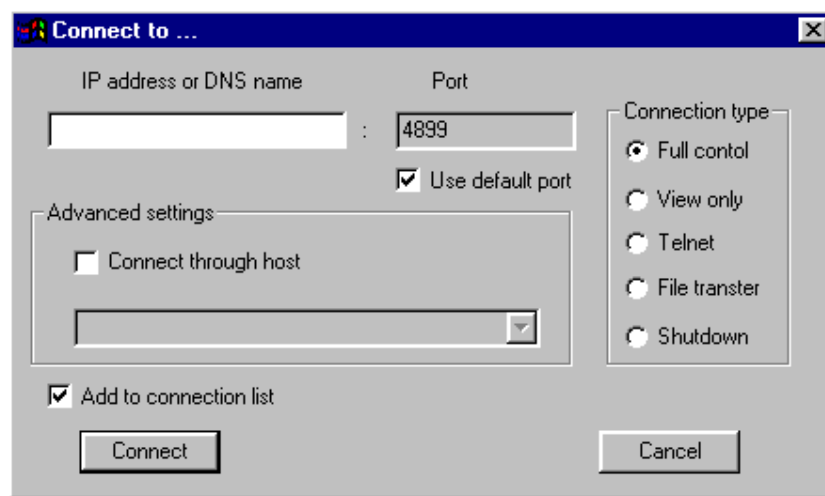
You can also start the 'Settings for Engagent Remote Administration Server' from a menu. There you can set the Engagent Remote Administration Server to load at Windows start-up, designate a password for network access to Engagent Remote Administration server and other options.

"Silent" installation is possible. See **Network installation** for details.

Setting up the Connection

Run Engagent Remote Administration server on the remote computer. If Engagent Remote Administration server is working, the tray icon should appear on the Windows toolbar. When the cursor is over this tray icon you can see the list of computer IP addresses. Double-clicking opens the connection list. The icon can be disabled in Engagent Remote Administration server settings using 'Hide Tray Icon' option.

On the local computer run Engagent Remote Administration viewer. Select 'Conection/Connect to...' from the menu. In the 'IP address or DNS name' entry specify the IP address (example: 10.0.0.1) or DNS name (example: *comp1.company.com*) of the remote computer.



'Connect to.' menu

Network Installation of Engagent Remote Administration Viewer and Server

Engagent Remote Administration Viewer doesn't need installation. Just copy the files *Radmin.exe* and *admdll.dll* to a directory on the local computer.

Engagent Remote Administration Server does need to be installed. Here is a sample script for Windows, that installs Engagent Remote Administration server as a system service on the computer. Change the file paths to your values. To execute the script on network computers, use logon scripts in Windows NT networks.

```
net use z: \\server\d
copy "z:\instal\Radmin\r_server.exe" "c:\winnt\system32\r_server.exe"
copy "z:\instal\Radmin\raddrv.dll" "c:\winnt\system32\raddrv.dll"
copy "z:\instal\Radmin\admdll.dll" "c:\winnt\system32\admdll.dll"
c:\winnt\system32\r_server.exe /install /silence
regedit.exe /s z:\install\settings.reg
```

net use z: /delete

This script:

- 1) Maps a disk drive z: to \\server\d
- 2) Copies Engagent Remote Administration server files to the Windows system directory.
- 3) Installs Engagent Remote Administration server as a system service.
- 4) Saves server settings to the registry.
- 5) Deletes the mapping of the z drive

NOTE: Under WinNT, the user executing this script must have administrator rights to install the service and the driver.

Engagent Remote Administration server settings (tray icon options, port, log file options, IP filter settings, password) are stored in the registry. You can copy these settings from one computer to another:

- You need to define these settings on some computer, you can do it using the 'Settings for Remote Administrator server' from the Start menu.
- Run *regedit.exe* and export some settings from the registry to the file (*settings.reg*).
- Save these settings from the file to the registry of another computer executing:
regedit.exe settings.reg

There are locations of some keys:

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\FilterIp
HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Iplist
IP filter settings

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\AskUser
Show confirmation dialog option

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\AutoAllow
Sets default value 0

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableTrayIcon
Disable tray icon flag option

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\EnableLogFile
HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\LogFilePath
Logfile settings

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\Parameter
Password for Engagent Remote Administration server (encrypted).

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\Port
Port number settings

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\NTAuthEnabled
Enable NT security flag

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Users
User list for NT security support

You can enter it on one and export registration key from the registry

HKEY_LOCAL_MACHINE\SOFTWARE\Engagent Remote Administration\1.01\ViewType\Data

After that you can import it to the registry of your computers, there are many tools to enter some registry key to many computers.

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisallowChanges
Disallows changes

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableBeep
Disables beep

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableRedirect

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableScreen
Disables Full control

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableView

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableTelnet

HKEY_LOCAL_MACHINE\SYSTEM\Engagent Remote Administration\2.0\Server\Parameters\DisableFile
Registry key value must be binary 01 00 00 00

Uninstallation:

To uninstall execute:

c:\winnt\system32\r_server.exe /stop

c:\winnt\system32\r_server.exe /uninstall /silence

Delete all Engagent Remote Administration files.

Modem to Modem Connection

Engagent Remote Administration doesn't work with a modem directly. To use it in a modem to modem connection you need to configure **Dial-Up networking** on both the server and client sides. Engagent Remote Administration uses a **TCP/IP** connection between computers. So you need to set this service up on both computers.

On the server side you need to install the **Dial-Up networking server**. This is a standard component of Win98 and a component of **MS Plus!** in **Win95**), if you have **Win9x/ME**. Use **RAS** if you have **WinNT**. Then configure the server to use **TCP/IP** protocol.

On the client side install **Dial-Up networking**, then configure **Dial-UP networking** to use only the **TCP/IP** protocol.

Then you should make a call using **Dial-Up networking**. After connecting you can find the IP address of the remote server in the properties of the Dial-Up connection (as usual some tray icon appears). Alternatively, you can find this address in the DialUp monitor from the control panel.

Use this **IP address** as the host address to connect to the server using the **Engagent Remote Administration viewer**. As a rule in a modem to modem connection 192.168.55.1 IP address is used.

Working with a Serial Port/Null Modem Connection

First install the modem driver (Null modem/Dial-Up networking serial/Communication cable between two computers) if not already installed.

Then configure the system as with **Modem to modem connection**.

Connection via the Internet

You can establish a connection between the remote and local computers via the Internet as well as a local network connection. The only problem might be the IP address on the server side. It could be dynamically assigned, so you need to get it after the connection to the Internet and pass it somehow to the client side.

- 1) Install Engagent Remote Administration on both computers.
- 2) Run Engagent Remote Administration server on the remote computer.
- 3) Connect the remote computer to the Internet.
- 4) People from the remote side must tell you the IP address of the remote computer.
- 5) Connect the local computer to the internet.
- 6) Run Engagent Remote Administration viewer on the local computer, click menu '*Connect/Connect to*', enter the IP address of the remote computer.

Connection through a Firewall

Engagent Remote Administration uses TCP port 4899 by default. To allow Engagent Remote Administration to work across a firewall, you can open this port on the firewall.

Another solution is to change the Engagent Remote Administration port number—on both the server and the viewer—to the value of a port that is already open on your firewall.

If your firewall works under Windows, you can install and start the Engagent Remote Administration server on it. Then you can connect using '*Connect through host*' feature of the viewer.

Sometimes only the router has a public IP address. In this case you have to configure '*Forwarding*' on a router/firewall. Configure the router to forward connections from some port on the router to a specific IP address and port (the default port of Engagent Remote Administration server is 4899) of the computer on your internal network. You need to assign a port on the router for each computer you need to access. After that, to connect to a computer behind the router/firewall from the Internet you need to specify the IP address of the router and the port on the router that corresponds to your computer in the internal network. The router will then forward connections to computers in the internal network.

If you are using Internet connection sharing—a feature on win98 SE—Engagent Remote Administration's viewer program will not be able to find your server. The problem is that a port needs to be mapped so the viewer can find which computer the server is on. Here is the link to a program that maps the port in this case <http://www.practicallynetworked.com/sharing/ics.htm>

Sample TCP/IP Settings for a One-Segment Local Network

To set IP addresses in the one segment local network you can go to the TCP/IP settings of the network card on the first computer

Set IP address to *10.0.0.1*, set subnet mask to *255.255.255.0*
on the second computer

Set IP address to *10.0.0.2*, set subnet mask to *255.255.255.0*.

Try to ping one computer from another.

example :

ping 10.0.0.1

USING REMOTE ADMINISTRATOR

Telnet Access

Telnet access to Win9x/ME is not supported because of limitations of the *command.com* - command prompt interpreter in Win95/98/ME.

Some Win32 console applications use direct access to the console. Such applications can't work via the telnet mode, because the telnet mode on the server uses standard i\o streams to interact with the application. Just do not run such applications via telnet. You can run such applications in Remote Screen mode.

Finding the IP Address

In the Start/Run dialog enter *command.com*. Then at the command prompt enter: *ipconfig.exe* (*winipcfg.exe* for Win95)

Another way to know the IP address of the computer is to move your mouse pointer over the Engagent Remote Administration server tray icon. It will show you the list of IP addresses.

Log File

All actions can be written to the log file, you can allow it from the '*Options*' menu of '*Settings for Engagent Remote Administration server*' (from start menu group). Event Log support for WinNT4.0/2000 is also included.

Port Option

The server port number and address can be specified from the '*Options*' menu of '*Settings for Remote Administrator server*'. The default port number is '*4899*'.

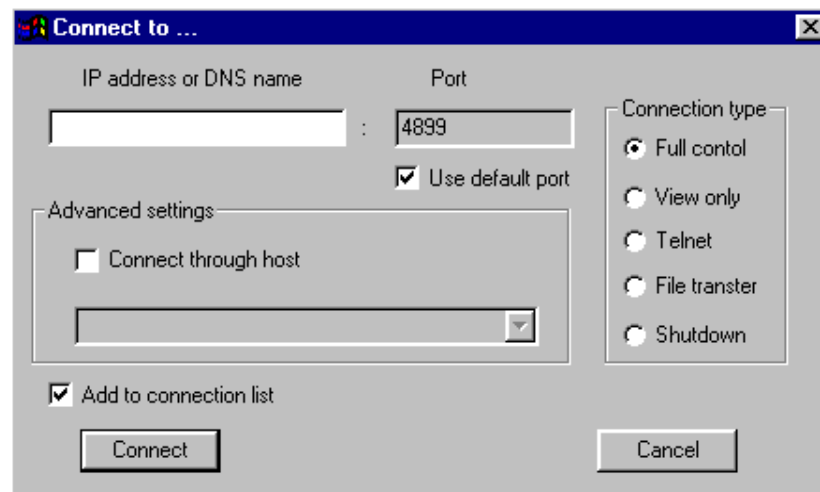
Connection Menu

You can make a new connection or use connections that were used before. By default all connections are added to the connection list. The connection modes are set directly from the Remote Administrator viewer menu.



Engagent Remote Administration viewer window

You can use either 'Connect to.' or 'New' options to establish a connection. 'Connect to.' option allows to set or disable 'Connect through' feature, to set the connection type, the port number.



'Connect to.' menu

'Connect through host' Option

This lets you connected through an intermediate host when there is no direct TCP/IP connection with the computer you want to administer, but an intermediate computer (or host) does have a direct TCP/IP connection to both your target computer and to

your computer. Engagent Remote Administration server must be running on such an intermediate (host) computer for this to work.

Example: You have a local network without a direct connection to the Internet. However, there is one computer on that network that does have a direct connection to the Internet. If you install Engagent Remote Administration server on that computer to make it an intermediate host, you can connect the other computers in the local network to the Internet through that intermediate host.

Note: If NT security permissions are used, it's advisable to grant users **Redirect Right**.

Full-screen Text Mode

Currently, Engagent Remote Administration cannot register screen changes when the remote computer is in full-screen text mode. Drawing on the screen isn't performed by the GDI (Graphic Display Interface) when the remote computer is in that mode.

Windows works with full-screen text modes in an undocumented way via a video port driver.

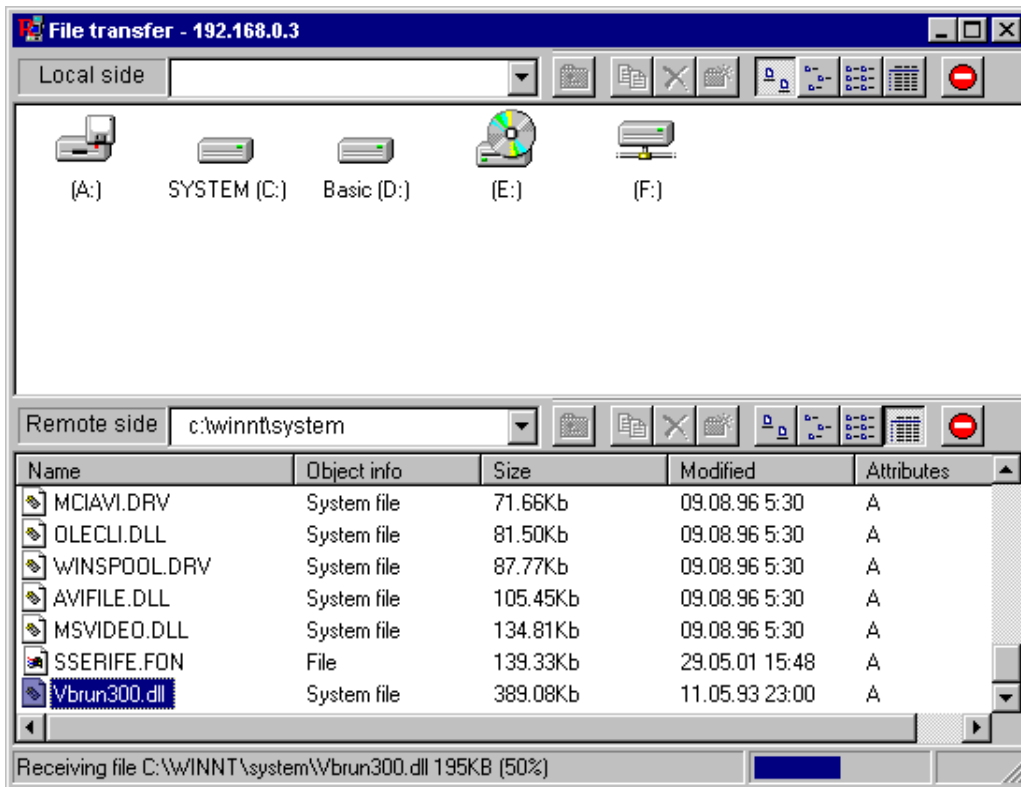
File Transfer

This feature was added in version 2.0.

Choose the 'File transfer' option from the 'Mode menu' or press the button on the toolbar. The interface of Engagent Remote Administration's file transfer is similar to Windows Explorer except it works with two windows—local and remote.

You can choose to display file icons on the toolbar buttons.

To copy a file or folder you can drag-and-drop it. Or use the 'Copy' button on the toolbar. Or right-click and chose 'copy' on the menu that appears. Use the Stop option to cancel a file transfer.



File Transfer

Switching between Normal and Full-Screen Modes

Press F12. It switches between normal, stretch and full-screen modes.

If you want to send F12 to a remote computer, use 'Send F12' from the RScreen window menu.

When the remote computer screen is larger than the local one you can use mouse 'scrolling' feature (just move your mouse to the screen edges) to navigate within this larger screen. However it is possible to stretch the RScreen window to see the whole screen of the remote computer. You can set the window size as you like using this feature..

Sending Ctrl-Alt-Del

To send Ctrl-Alt-Del to a remote computer, use 'Send Ctrl-Alt-Del' from the Remote Screen window menu.

This feature works in the 'Full control' connection type.

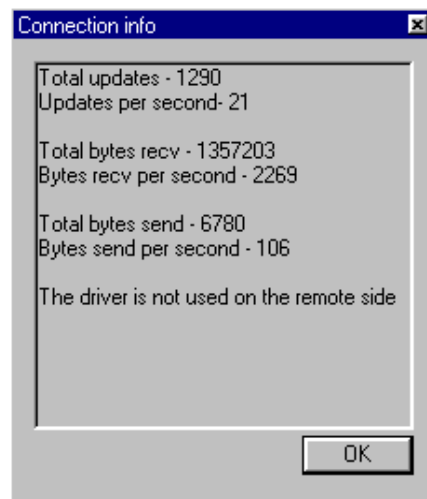
Note: This feature works only when the remote computer is running Windows NT4.0/2000 and the Engagent Remote Administration server is registered as a system service on the remote computer.
You can also use Ctrl-Alt-F12 for a quick send.

'Send key' Option

You can use this option for sending such commands as '*Ctrl-Esc*', '*F12*', '*Ctrl-F12*', '*Alt-F12*', '*Ctrl-Alt-F12*'.

Connection Statistics

Use '*Connection info*' entry from the RScreen window menu to monitor updates per sec, bytes per sec etc.



Current connection information

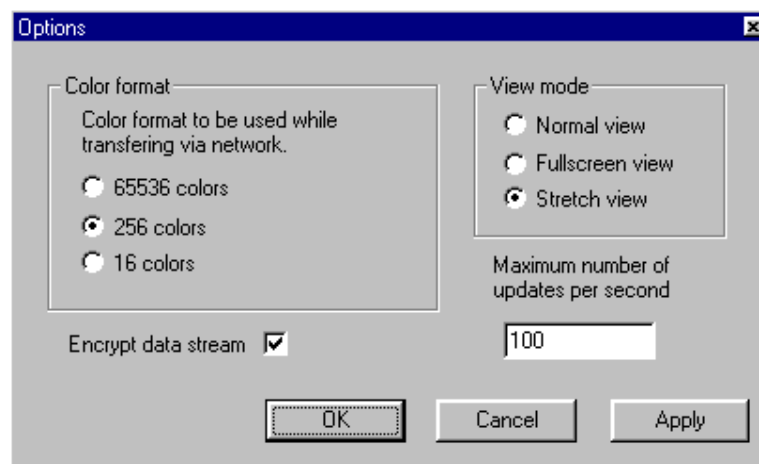
'Options' Dialog

If you have a high processor load on the remote computer, set the '*max screen updates per second*' entry to a smaller value in the '*Options*' dialog of the RScreen window menu. If your remote computer works under Win9x/ME (or under WinNT, without the video hook driver installed) the Engagent Remote Administration server can cause a high processor load when the '*Maximum updates per second*' value is set to values bigger than 50.

To speed up, you can disable wallpaper on the remote computer. Also, you can set 'Color format' to '16 colors' mode in the Options dialog of the Remote Screen window. Note, if you are connected via a modem you can't have update rates higher than 10 per second, just because signals can't go there and back more than 10 times per second (ping > 100ms).

If you use Win9x/ME OS on the remote side, the speed depends on the screen resolution of the remote computer. So set a lower screen resolution on the remote computer. Also set a lower color format 8bpp (256 colors) or 16bpp (65536 colors). On some systems 8bpp is faster, on others 16bpp. Make sure your update speed is not limited by the '*Maximum updates per second*' field from the option dialog of the RScreen window.

If you use WinNT on the remote side without the video hook driver installed, note that with the video hook driver Engagent Remote Administration works about 10 times faster and uses much less processor time.



'Options' dialog'

Get and Set Clipboard Commands

To get the remote clipboard:

1. Select text for example In the Remote Screen.
2. Execute standard command "copy" or ctrl-c.

3. Click *Get clipboard* from RScreen menu.
4. Execute standard command "paste" or ctrl-v on the local computer.

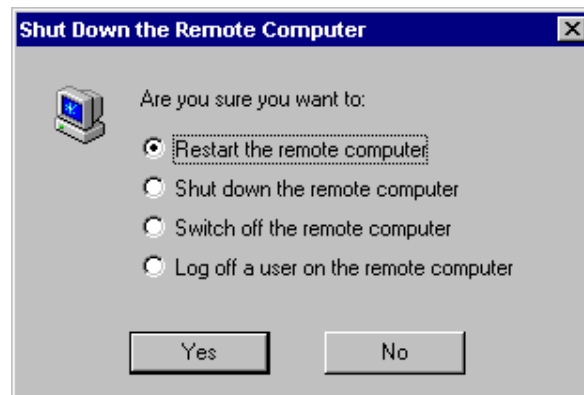
To send the local clipboard:

1. Select text for example In the Local Screen
2. Execute standard command "copy" or ctrl-c.
3. Click *Set clipboard* from RScreen menu.
4. Execute standard command "paste" or ctrl-v on the remote computer

Shutdown Command

This feature lets you turn off, restart, switch off and log off the remote computer.

It is available from the RScreen menu and from the Engagent Remote Administration viewer mode menu.



Shutdown menu

Stop Remote Administrator Server

You can use the shortcut from the Remote Administrator folder to stop Engagent Remote Administration server or just enter in the command-line prompt: `r_server.exe /stop`

Command-line Switches

Engagent Remote Administration viewer command-line switches

`Radmin.exe /copyphonebook` - creates Engagent Remote Administration 2.x phonebook from Engagent Remote Administration 1.11 phonebook.

Engagent Remote Administration viewer has command line options, which enable you to get connected to the host without using a phonebook.

Usage : `Radmin.exe /connect:xxxxx:nnnn other_options`

Examples:

Radmin.exe /connect:server:1000 /fullscreen /encrypt

Radmin.exe /connect:10.0.0.100:4000 /telnet

Radmin.exe /connect:server /through:gate

Options:

/connect:xxxxx:nnnn - specify an address and a port of the server. This option is required for connection without a phonebook.

/through:xxxxx:nnnn - specify an address and a port of the intermediate server

By default, connection mode is '*Full control*' (see remote screen, send mouse and keyboard input)

To specify other connection modes use switches:

/noinput - specify a *View only* connection mode (view of remote screen).

/shutdown - specify a *Shutdown* connection mode

/file - specify a *File* connection mode

/telnet - specify a *Telnet* connection mode

These switches are used in '*Full control*' and '*View only*' modes:

/fullscreen - specify the fullscreen view mode

/hicolor - specify a 65536 color format, while transferring via a network.

/locolor - specify a 16 color format, while transferring via a network.

/updates:nn - specify a maximum number of screen updates per second

/encrypt - specify to encrypt data stream

Other switches:

/unregister - delete already entered key for Remote Administrator.

/? - shows help screen

Engagent Remote Administration server command-line switches

Engagent Remote Administration server has several command line switches.

Normally, all settings can be set through the installation process or by using 'Engagent Remote Administration server setup' and the user need not use any of the command line switches.

These switches are intended to be used by System Administrators. Using these switches you can manually install/uninstall parts of Engagent Remote Administration, such as the service and the driver, or set a password and a port number.

Usage: *r_server.exe <switches>*

/setup - shows a dialog box in which you can install the service and a driver, or set a password and a port number for the server.

Example: *r_server.exe /setup*

[/port:xxxx] [/pass:xxxx] - if there are no other switches specified, except */port* and */pass*, *r_server* runs as the Engagent Remote Administration server, with a password and a port from the a command line or from the registry, if corresponding switch is not present.

Example: *r_server.exe*

Example: *r_server.exe /pass:mypass*

Example: *r_server.exe /port:5505*

Example: *r_server.exe /port:3333 /pass:qwerty*

/save [/port:xxxx] [/pass:xxxx] - saves the password and the port in the default program settings in the registry. If you do not specify the port or\and the password using this option, the default port and/or the empty password will be saved.

Example: *r_server.exe /port:5505 /pass:qwerty /save*

This saves values of the port and password in the registry, these values will be used, when *r_server.exe* is executed without parameters (*/pass* or */port*) in the command line.

Example: *r_server.exe /save*

This saves the default port and the empty password in the registry .

/install - install the service (Win9x/ME/NT4.0 or Win2k) and a driver (WinNT).

IMPORTANT NOTE: To be installed, the driver (raddrv.dll) must be placed in the System32 directory which is in your Windows directory

Example: *r_server.exe /install*

/uninstall - uninstall the service and a driver, if present.

Example: *r_server.exe /uninstall*

/installservice - install the service only (Win9x/ME/WinNT or Win2k)

Example: *r_server.exe /installservice*

/uninstallservice - uninstall the service only

NOTE : Failure to remove the service usually indicates that it was not installed.

Example: *r_server.exe /uninstallservice*

/installdrv -to install the driver (works only in WinNT)

IMPORTANT NOTE: To be installed, the driver (raddrv.dll) must be placed in System32 directory which is in your windows directory

Example: *r_server.exe /installdrv*

/uninstalldrv - uninstall the driver only.

NOTE : Failure to remove the driver usually indicates that it was not installed.

Example: *r_server.exe /uninstalldrv*

/silence - do not show 'error' or 'ok' message boxes, in */install*, */uninstall* or */savecommands*.

/stop - stops Engagent Remote Administration server. This command can stop service and application as well. To stop service under WinNT your user must have rights to do it.

/? - shows a help screen.

/unregister - delete an already entered key for Engagent Remote Administration.

Engagent Remote Administration Phonebook

Our phonebook is stored in the registry. You can run regedit.exe.

Export all subkeys from the path

HKEY_CURRENT_USER\Software\Engagent Remote Administration\v2.0\Clients
to a file. You can import such registry file to other computers to copy phonebook.

If you would like to upgrade your old phonebook use this command

Engagent Remote Administration.exe /copyphonebook - creates Engagent Remote Administration2.x phonebook from Engagent Remote Administration1.11 phonebook.

Registering/Unregistering Engagent Remote Administration

If Engagent Remote Administration is run beyond its 30 day trial period, the message "Evaluation period has expired, enter the registration code to continue using the program" is displayed.

The registration information must be entered on both the viewer and server sides.

To register the Engagent Remote Administration viewer press the 'ENTER CODE' button and enter your registration code. You need to highlight your registration code and press CTRL-C. Then go to the registration edit box and press CTRL-V. Press enter.

Note: Be sure to select the entire code, about 80 characters long.

To register the Engagent Remote Administration server remotely, right-click the icon in the Engagent Remote Administration viewer connection list and choose 'Set registration code'. Then follow the prompts. You can also do it from Engagent Remote Administration Server About box.

To de-register Engagent Remote Administration:

```
Radmin.exe /unregister  
r_server.exe /unregister
```

FREQUENTLY ASKED QUESTIONS

1. How can I send Ctrl-Alt-Delete to the remote computer?

If you want to send Ctrl-Alt-Del key to a remote computer, just press Ctrl-Alt-F12, also you can use '*Send Ctrl-Alt-Del*' entry from the Remote Screen window menu. This feature will work only when the remote computer OS is WindowsNT and the Engagent Remote Administration server runs as a system service on the remote computer. This feature will work in '*Full control*' connection type.

You can also use *Ctrl-Alt-F12* hotkey.

2. I can not connect to the Engagent Remote Administration server. What can I do?

Test, that you can get connected with the remote host via TCP/IP: Type in the command prompt: *ping remote_host_name*

Example: *ping 10.0.0.1*

Example: *ping myserver.mycompany.com*

Make sure, that Engagent Remote Administration server is running on the remote computer. Make sure that you are connecting to the correct port, that is the port on which the Engagent Remote Administration server is waiting for the incoming connection.

You can also find the solution using logfile. It can be turned on and off from the '*Options*' of Remote Administrator server setup menu.

3. I'm getting an error 'Client I/O Error', when trying to connect to Engagent Remote Administration server. What can I do?

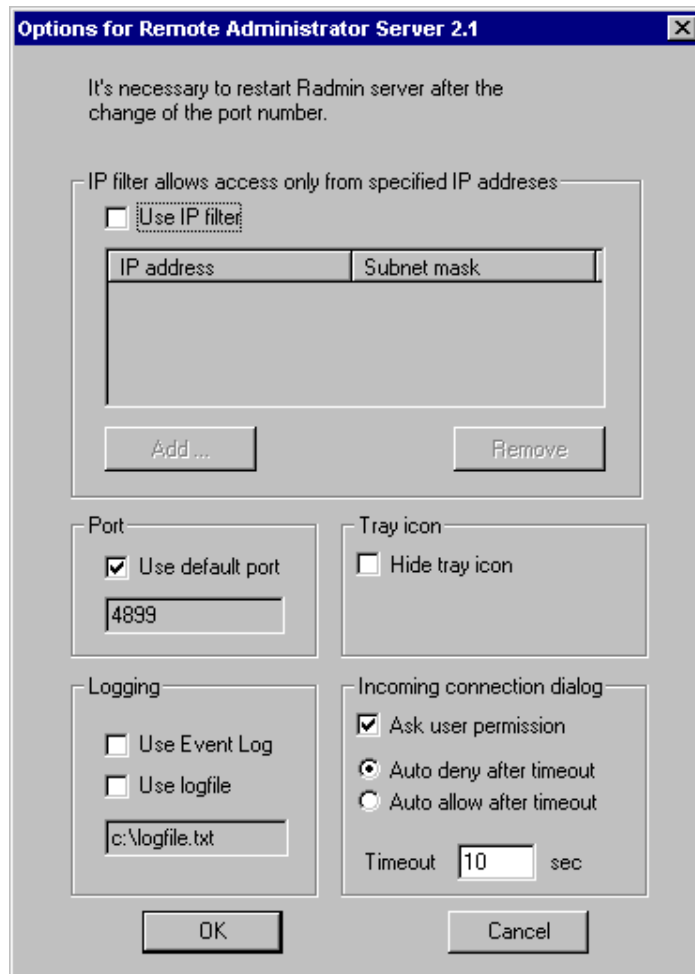
This error usually means that connection is broken by the server side due to IP filter restriction on the server. To see and change your IP filter settings, you can run 'Engagent Remote Administration server setup' from the Start menu on the server side.

4. How can I print during a remote session?

One solution is to use printer sharing from '*Microsoft networking*'. Add your local printer as remote printer to the remote computer and while printing select to print on your computer..

5. How can I hide Engagent Remote Administration Tray icon from desktop?

Just run Remote Administrator server settings from Programs menu. Then click 'Options'. After that you can select 'Hide Tray icon' option.



Hiding Engagent Remote Administration Tray icon

TECHNICAL SUPPORT

Engagent Remote Administration is supported by Engagent Software. You can obtain technical support using any of the following methods:

Engagent Software Web site

The Engagent Software Web site at www.engagent.com provides a wealth of information and software downloads for Engagent users:

Answers to frequently asked questions (FAQs) about Engagent Software products, organized by functionality. Please consult the FAQs before contacting us directly, as this can save you time and also introduce you to other useful information pertaining to Engagent Software.

Free product updates, which provide you with bug fixes and new features.

Internet e-mail

The best way to get direct technical support is through Internet e-mail. We respond to e-mail quickly and efficiently--you will receive a response within one business day:

E-mail: support@engagent.com

Phone and fax

Please use these telephone numbers:

Voice: 1 (877) 820 7980

Fax: 1 (425) 820 9182