

Perle WinAttach

Quick Start Guide

Part number 5500142-10

About this document

This document is intended as a brief guide to getting started with Perle WinAttach. Detailed information is available as on-line documentation after the installation. It's assumed the reader is an experienced Windows NT/2000 Administrator and has the necessary privileges and knowledge to perform the tasks outlined below.

For information on the Perle CS9000 please refer to the documentation on the CD that accompanies the unit or visit the website <http://www.perle.com>

Throughout this document the terms Windows NT and Windows 2000 can be considered interchangeable.

What is Perle WinAttach

Traditional servers *running* commercial systems all have "system consoles".

The console is defined to be the system's primary terminal where you can:

1. Manage the system, even when it is in difficulty, without relying on the standard network
2. Shutdown and reboot the system
3. See important operator event messages concerning system and application status

In mainframes these system consoles were usually dedicated terminals with specialised wiring into the system. In medium size servers like Unix and OpenVMS a dedicated terminal was attached to a specific serial port known as the console port.

The problems of handling multiple system consoles for many servers in disparate locations led Perle to develop the CS9000 as a remote system console manager. This has now been employed by many users to handle a wide variety of computers and other devices that have a serial (RS232) console ports.

This still leaves a problem on Windows NT/ Window 2000 servers, which are increasingly being used in mission critical applications. This problem can be characterised with the question: Where is Windows NT's console?

The answer is that being single user/multiprocessing and originally based on PC type hardware, the "system console" is the single screen, mouse and keyboard at which the user would normally be using the computer. This answer works well enough for Workstation type systems, but not for servers operating in the essentially lights out environment of today's computer room.

A traditional solution to the problem has been to use one of the range of remote control tools available in today's market. These tools have the following problems:

- a) When the system is in severe difficulty the GUI does not seem to work, so no remote control possibilities are available either. Thus system management tasks cannot be performed to determine the cause of the problem etc. Even when the GUI is working there is a large reliance on the network and often a high bandwidth requirement too.
- b) With the GUI essentially inoperable shutdown and reboot are unavailable. The only recourse being to use the systems reset or power switches.
- c) Important operator messages are sent to the 3 NT event log files where they will only be seen if the system user starts the log file viewer application. Some important events are issued as pop-ups too, but again this is compromised if the GUI is inoperable.

The mission of Perle WinAttach is to provide a serial console providing the 3 expected functions of the console as enumerated above.

Thus Perle WinAttach is a quasi console for Windows NT/2000 systems.

Pre-installation

As with many Windows products Perle WinAttach installs using "InstallShield", so the installation process will feel very familiar. There are some minimum hardware and software requirements plus additional information worth noting. These are detailed in appendix A.

Installation

Browse the Perle CS9000 CDROM to locate the set-up program

Run the set-up program

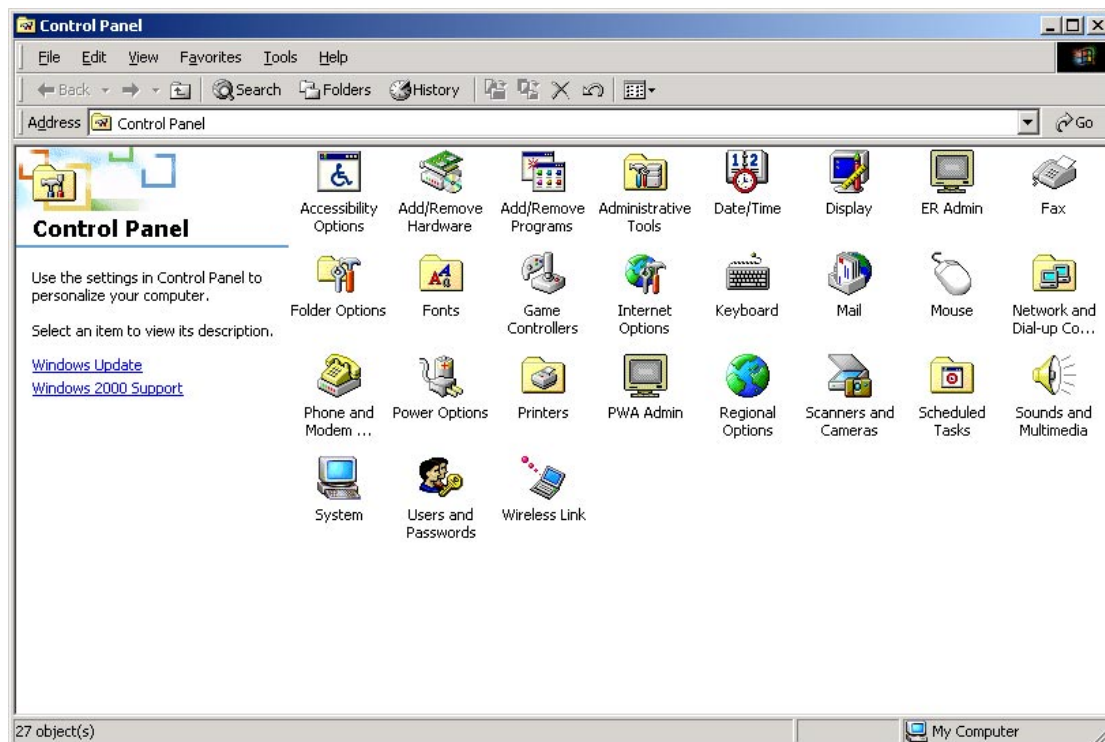
Enter where the product will be loaded (or accept the default location)

Enter your licence key (unless evaluating the product, in which case there is a 14 day evaluation period)

Installation will proceed in one phase and should take no more than a couple of minutes

Control Panel configuration applet

Perle WinAttach installs a new Control Panel applet called " PWA Admin" as shown below. It should be noted that after any configuration changes the Perle WinAttach service should be restarted.



Checking the Perle WinAttach installation

After installation and configuration you probably want to have a quick try of the software. Before trying to connect make sure you've started the Perle WinAttach service via the service control applet in control panel.

Let's assume that you installed Perle WinAttach on a system called "MANAGED" and you are going to access it from a system called "MASTER".

Connecting using Serial (RS232)

Here are the enumerated steps for a quick try out of the software:

1. MASTER needs to have a terminal emulator (either Telnet or SSH capable) and be able to access the CS9000 via LAN or dialup connection. MANAGED will be connected via a proper serial cable to a com port on the CS9000. MASTER might be another Windows NT/2000 system, a Windows '95 system or any other system with a suitable terminal emulator. The port on the CS9000 needs to be configured to have the same baud rate, parity settings etc. as WinAttach had on MANAGED.

The following assumes access from Windows NT's HyperTerminal:

2. Refer to the CS9000 user guide for details on connecting to devices attached to the CS9000
3. After gaining access to the CS9000 port press return. You should now be presented with the dialogue show in Logging on below.

Logging on

The following dialogue (or very similar) should appear after connection

```
Perle WinAttach - Version 2.0a

Produced for Perle Systems by Heroix Corporation Ltd.

Creators of multi-platform systems monitoring solutions.
(c) 2002 - Heroix Corporation Ltd.
All rights reserved.

Authorised users only.

Login ID :
```

At the "Login ID :" prompt enter a valid NT username and password for the managed system.

Logon Success

If you logon successfully you are greeted with the prompt PWA >

```
Login ID : administrator
Password :

PWA >
```

Try a few commands

Now you've logged on you can try a few commands:

Help

Tells you what commands are available, their syntax etc.

```
PWA > help

PWA supports the following commands.
For more information on a specific command, type HELP command-name.

DOS          DOS shell control.
EVENT        Event listing control
LOGOFF       Log user off system.
HELP         Display help information.
PROCESS      Process control
REBOOT       Reboot system.
REGEDIT      View/Edit the Registry.
SERVICE     Service control.
SET          Modifies system behaviour.
SHUTDOWN     Shut down system.
SYSINFO      Display system information.
THREAD       Display thread information.

PWA >
```

Sysinfo

Provides general information on the system. You will find this useful to get a feel for the behaviour of the system at any time.

```
PWA > sysinfo

Machine Name      : MANAGED
Number of Processors : 1
Processor Architecture : Pentium II, Model 1 Stepping 7
Memory Alloc. Block : 65536 bytes
Page Size         : 4096 bytes
Physical Memory    : 256 Mbytes
Operating System   : Windows NT 4.0 (Build 1381 : Service Pack 5)

CPU % CPU % User % Priv Interrupts % DPC Interrupt      DPC  DPC  DPC Bypasses
   Busy   Time  Time      /sec   Time  Time/sec Queued/sec Rate      /sec
-----
0         9     1     8      101     0         0         1     0         0

Available Committed Commit Page   Cache   D'md Zero Pages Cache   System Code
Kbytes      Kbytes   Limit Faults/s Faults/s Faults/s /sec   Kbytes Resident Kb
-----
187252     114660  374580     39         0         39     0   17344     1752

PWA >
```

Service /start <name>

Assuming the managed system has no UPS power supply installed in it try: **service /start ups**. This will not only deliver an error from WinAttach, but also an event will be written to Windows NT's system event log. Detailed event will be displayed on the console if event listing has been enabled

```
PWA > service /start ups
ups is now starting. Please wait.
ups failed to start. The error code returned was 0.

PWA >
```

Contacting perle systems

For contact information and support pages for Perle Systems see our website at <http://www.perle.com>.
For e-mail support use the following e-mail address: ptac@perle.com

Consult the on-line help or the Perle WinAttach User Guide

Appendix A

Local privileges

Membership of the local Administrators group is required when installing any Perle WinAttach component.

System Requirements

Hardware requirements

- Standard x86-based host machine
- 200MHz or faster processor that supports the Pentium instruction set
- RAM memory
 - Enough memory to run the Windows operating system plus memory required for any additional applications.
 - Minimum: 96MB; recommended: 128MB
- Disk space
 - Initial installation 20 MB

Software requirements

- Windows NT 4.0 Service Pack 5 or 6
 - Workstation and Server Family supported
- Windows 2000
 - Professional and Server Family supported