ESYSINFO DRIVER

Filename	EsysInfo.dll
Manufacturer	Elipse Software
Devices	Not available
Protocol	Not available
Version	1.0
Last Update	DRV 04/23/2008 - DOC 04/23/2008
Platform	Win32
Dependencies	Microsoft Management Console 1.2 or higher; IOKit v1.14 or higher; E3

Introduction

The goal of this driver is to monitor computer performance by reading counters provided by the operating system, services and drivers and it is possible to collect data from a local machine as well as a remote machine.

These counters have information relative to system usage and relative to the current state of these resources, always in real time.

The driver uses resources available in Performance Monitor, which is a *snap-in* of *Microsoft Management Console* (MMC), a *framework* used in Windows (2000, 2003, XP and Vista) to host administrative tools.

Requirements

To monitor remote computers, you need to perform the following settings:

1) If you have an enabled Windows *firewall*, you must select *File and Print Sharing* exception in *Windows Firewall* settings;

2) Start *Remote Registry* service on the computer that will be monitored. On Windows Vista this service is not active by default, so you must start it manually (figure 1). To start it automatically, change the type of initialization to *Automatic*.

Figure 1 - Activate Remote Registry

Driver configuration

This driver depends on the machine administrator rights to work properly and a specific user account might be defined to use this driver.

For this, get into driver settings, on *ESysInfo* tab (figure 2), check the option *Connect remotely using* and fill in the fields *Domain*, *Username* and *Password*.

When clicking *Test Logon*, the success of the operation should be indicated on the status box right below the button.

NOTE: The user account set on the driver must be part of the *Administrator* group in the computer being monitored. On Windows Vista, users from *Performance Logs User* or *Performance Monitor User* groups can also have access to the data.

Figure 2 - ESysInfo driver settings

Inserting tags via Tag Browser

This driver supports only tag configurations via strings and you cannot set them via *[N]* addressing parameters.

Tag Browser (figure 3) has a *Local* folder that shows the local computer counters and a *Remote* folder which also shows all counters, although separated by machines found in the network.

Figure 3 - *Tag Browser* in ESysInfo driver

[P] parameters of driver configuration

P1 Not used

P2 Not used

P3 Not used

P4 Not used

Tag references

Introduction

Every tag added to the driver is designed to read data provided by performance counters. The counters may vary according to the operating system and also according to the installed programs on the computer. Every computer has its own counters and some of them are generic, like the ones related to processing, memory and disk.

READING COUNTER	Writing/Reading
This tag reads the counter corresponding to parameter values *Device* and *Item*. In case you use *Tag Browser* to add the tag, these parameters will be filled in automatically. If the tag is created manually, you must check if the added counter is really available on the checked computer. **N1** Not used. **N2** Not used. **N3** Not used.	Reading

N4 Not used. **Device:** The name of the computer being accessed. If not informed, the search will be done on the local computer. The format is *\\COMPUTER*. **Item:** Counter path, using the same format of Windows *Performance Monitor*: *\PerfObject(ParentInstance/ObjectInstance#InstanceIndex)\Counter* As a standard, the received value is of type *DOUBLE*. These values can be directly read as a *LONG* or a *LARGE*. To change the return type, insert at the end of the counter path (*Item* parameter) an *l* for *LONG* type or an *ll* for *LARGE* type. Ex: *\Processor(_Total)\% Processor Time, l* or *\Processor(_Total)\% Processor Time, ll*	

NOTE: To check the complete list of available counters on a specific computer without this driver, run *Performance Monitor* application (*perfmon.msc*).

Driver revision history

Version	Date	Author	Comments
v1.00	04/23/2008	M. Zani	- First version of the driver.