

**NAME**

*winreg* – text-based access to the Windows registry

**SYNOPSIS**

**winreg** [**-F** *FS*] [**-r** *name*] [**-ntvci**] [*key*]

**DESCRIPTION**

*Winreg* provides text-based access to the Windows registry. Running *winreg* with a registry key specified as part of its invocation will result in all the registry tree from that point downwards to be printed on its standard output. By default for every registry key *winreg* will print its name, type, and value. When *winreg* is run without specifying a registry key it will read registry data formatted in the same way as its default output format and set (update or create) the corresponding registry values.

The following lines describe the default registry data format read and written by *winreg* for each defined registry data type. *Winreg* will not process data types other than the ones described.

**REG\_BINARY**

*Winreg* will print the word **BINARY** followed by the data bytes as character-separated two digit hexadecimal values.

**REG\_DWORD**

*Winreg* will print the word **DWORD** followed by the value using eight hexadecimal digits.

**REG\_QWORD**

*Winreg* will print the word **QWORD** followed by the value using 16 hexadecimal digits.

**REG\_SZ**

*Winreg* will print the word **SZ** followed by the value as a string with escape codes used for non-printable characters.

**REG\_MULTI\_SZ**

*Winreg* will print the word **MULTI\_SZ** followed by the value as a string with escape codes used for non-printable characters.

**REG\_EXPAND\_SZ**

*Winreg* will print the word **EXPAND\_SZ** followed by the value as a string with escape codes used for non-printable characters.

**REG\_NONE**

*Winreg* will print the word **NONE** without any trailing data. A field separator will be printed.

**REG\_LINK**

*Winreg* will print the word **LINK** followed by the data bytes as character-separated two digit hexadecimal values.

**REG\_RESOURCE\_LIST**

*Winreg* will print the word **RESOURCE\_LIST** followed by the data bytes as character-separated two digit hexadecimal values.

**REG\_RESOURCE\_REQUIREMENTS\_LIST**

*Winreg* will print the word **RESOURCE\_REQUIREMENTS\_LIST** followed by the data bytes as character-separated two digit hexadecimal values.

**REG\_FULL\_RESOURCE\_DESCRIPTOR**

*Winreg* will print the word **FULL\_RESOURCE\_DESCRIPTOR** followed by the data bytes as character-separated two digit hexadecimal values.

When printing string values *\character* escape codes are used for the characters *\*, *\a*, *\b*, *\f*, *\t*, *\r*, *\n*, *\v*, *\0* representing the corresponding values as defined by the C programming language. All other non-printable characters (as defined by the C *isprint* function) are represented using the sequence *\x* followed by two digit hexadecimals.

A commonly used idiom involves processing Windows registry data as the output of *winreg* using Unix tools like *sed* and *awk* and redirecting their output back to the registry via *winreg*.

## OPTIONS

- F FS** Specify the field separator used to delimit fields (registry key name, type, value) on output. The default field separator is a tab.
- r name**  
Connect to the registry of the remote machine **name**, instead of the local registry. Data will be retrieved from and stored to the remote registry. Appropriate permissions must be established and services be running; see <http://msdn.microsoft.com/library/default.asp?url=/library/en-us/sysinfo/base/regconnectregistry.asp>. The name can be a Netbios name (`\\host`), a Netbios IP-address (`\\192.168.1.2`), a Netbios fully qualified domain name (`\\host.company.com`), an Internet host name (`\\host`), an Internet host IP-address (`\\192.168.1.2`), or an Internet host fully qualified domain name (`\\host.company.com`).
- n** Do not print key names.
- t** Do not print key types.
- v** Do not print key values.
- i** Ignore errors returned by Windows registry operations. The error code will be printed on the standard output, but the program will attempt to continue processing.
- d** Output DWORD and binary data of 1, 2, and 4 bytes in decimal. This can be used to extract performance data (found under `HKEY_PERFORMANCE_DATA`) in a format that can be used by other analysis tools. Decimal output can not be parsed-back for setting registry values.
- c** Check input by parsing it and print any errors found. No registry keys will be created or modified.

## EXAMPLE

```
winreg -nt HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\ComputerName\Computer-
Name
will display a machine's name.

winreg HKEY_CURRENT_USER | sed -n 's,C:/home,D:/home,gp' | winreg
Change all user registry references from c:/home to d:/home.

winreg -r \\pooh HKEY_LOCAL_MACHINE\Software\Netscape | winreg -r \\piglet
Copy the Netscape machine-specific software settings from the registry of the machine pooh to the registry
of the machine piglet.
```

## SEE ALSO

D. Spinellis. *Outwit: Unix tool-based programming meets the Windows world*. In *USENIX 2000 Technical Conference Proceedings*, pages 149-158, San Diego, CA, USA, June 2000, USENIX Association.

Microsoft Corporation. *Microsoft Windows NT Server 4.0 Resource Kit*. Microsoft Press.

Ron Petruscha and Andrew Schulman. *Inside the Windows 95 Registry*. O'Reilly & Associates.

## AUTHOR

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## BUGS

Although reasonable care has been taken to make *winreg* work with many possible types of registry data, note that incorrect operation by *winreg* or inappropriate registry data manipulations can render a machine unusable.

At least under Windows 2000 SP2, a failed remote connection is not correctly reported by the Windows API, and may cause the program to display wrong data or silently fail.