

## SERVER ADMINISTRATION

## Windows Server 2003 Resource Kit Tools

[www.microsoft.com/uk/ws2003resourcekit](http://www.microsoft.com/uk/ws2003resourcekit)

```

C:\Program Files\Windows Resource Kits\Tools>timeit /?
Invalid switch -?
Usage: TIMEIT [-f filename] [-a] [-c] [-i] [-d] [-s] [-t] [-k keyname] [-r keyname] [-m mask] [commandline...]
where:
-f specifies the name of the database file where TIMEIT
  keeps a history of previous timings. Default is .\timeit.dat
-k specifies the keyname to use for this timing run
-r specifies the keyname to remove from the database. If
  keyname is followed by a comma and a number then it will
  remove the slowest (positive number) or fastest (negative)
  times for that keyname.
-a specifies that timeit should display average of all timings
  for the specified key.
-i specifies to ignore non-zero return codes from program
-d specifies to show detail for average
-s specifies to suppress system wide counters
-t specifies to tabular output
-c specifies to force a resort of the data base
-m specifies the processor affinity mask

C:\Program Files\Windows Resource Kits\Tools>timeit -f timeit.dat -a -t -s -k m

```

Windows Server 2003  
Resource Kit

The Microsoft Windows Server 2003 Resource Kit Tools is an invaluable set of over 100 utilities that can help you streamline and automate your administrative tasks. It includes everything from Active Directory tools to network troubleshooting utilities to CD/DVD image burners.

The Custom Reason Editor (custreasonedit.exe) is a great tool for getting your Shutdown Event Tracker organised. A component of Windows Server 2003, the Shutdown Event Tracker logs reasons for system shutdowns to the event log. Meanwhile, the Custom Reason Editor tool lets you create a custom list with configurable parameters that will override the built-in reasons that are enabled by default. This tool can make it easy to aggregate and identify troubling processes,

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The opinions expressed in this column are solely those of the author and do not necessarily reflect the opinions of Microsoft.

applications, or system states that lead to a shutdown by keeping event items logical and organised.

The DNS Resolver Tool, a command-line utility that simulates the SMTP service's execution of DNS resolution, displays messages regarding the status of the DNS query you specify as a command parameter. This utility will run on any Windows Server 2003 host with the SMTP service installed and will return error codes you can use in batch files. CDBurn.exe and DVDburn.exe are command-line utilities that let you create CDs and DVDs from ISO images and provide limited support for RW media with the /Erase switch that will clean the media before applying the new disk image. They can be used, for instance, to automate archival processes in your infrastructure.

If you need to verify whether an account has been successfully locked out, the Account Lockout Status tool makes it quick and easy with both a command-line and GUI option. The tool queries every reachable domain controller and checks the status of the target user's account. Perhaps one of the best tools for automation, the Robust File Copy Utility,

Robocopy.exe, gives you a variety of options for moving or copying files. This tool lets you use wildcard characters and even file attributes to specify candidates for copying, and copying can be selectively set to be recursive. You can use the tool for synchronization, and set it to delete destination files or directories that have been removed from the source directory.

Another one of my favorite utilities is the simple tool Tail (tail.exe) which, like the Linux/UNIX utility, lets you display the last *N* number of lines from a file, refreshing the display when new lines are added. This is great way to debug or monitor any task that writes to a log file.

Time It (timeit.exe) lets you time commands and stores the data into its own database file letting you test how long your administrative tasks are really taking.

You should note that the tools have not been localised, having been written and tested in English only, and may "produce unpredictable results" upon execution. Be sure to test on your non-English-based systems before you use one of these utilities in a production environment.

**Price: Free download.**

**DATA ENCRYPTION**

# TrueCrypt

[www.truecrypt.org](http://www.truecrypt.org)

TrueCrypt, from TrueCrypt Foundation, is a free, open-source “on the fly” encryption tool that, with the correct password or encryption key, will decrypt information you are trying to read or encrypt data you are trying to write in memory, from and to your encrypted volumes. But don’t worry—at no point does your volume exist in a decrypted state. Only if you have a memory dump while the application is decrypting data in memory could an aggressor find what information you are trying to protect. That can easily be avoided by turning off memory dumps on your system, not to mention that only a small portion of your data exists in memory decrypted at any one time.

The application supports both virtual volumes and physical partitions or devices. Virtual volumes, dubbed “file containers” by the authors, can be created with any file extension or have no file extension at all, so to peering eyes your sensitive data will appear to be made up of random data; there is no TrueCrypt “file signature.”

In addition, you can run TrueCrypt in “traveller mode” which essentially means you can create a file container on a USB key along with the application files and take your encrypted data with you wherever you go without requiring installation of the TrueCrypt application on the host system. But, by the nature of the read/write via memory, you will need administrative privileges on the system you want to use your traveller disk on.

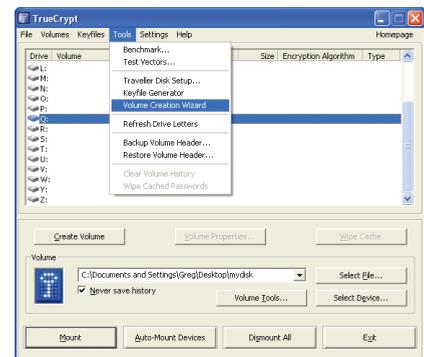
TrueCrypt has a simple wizard to set up your traveller disk as well. This would be a great way to carry around your sys-admin information and not have to worry (as much) about eyes peering into sensitive corporate data.

For another extra level of security, TrueCrypt also lets you create a hidden volume within a file-container, so even if an intruder mounts the outer volume, he won’t be able to discover that there is an inner hidden volume on the disk. Every volume is initialised with random data, making the hidden volume that resides

in the outer volume “free space” very difficult to detect.

TrueCrypt can use AES, Blowfish, CAST5, Serpent, Triple DES, Twofish, and a few combinations of those algorithms to encrypt your data. The application uses the LRW mode of operation for encryption, which is to become an IEEE standard for sector-based storage encryption. For the header hashing algorithm, you can choose to use Whirlpool, SHA-1, or RIPEME-160, and the application will not store any hash on your system as an added layer of protection. The application supports FAT12, FAT16, FAT32, and NTFS file systems, but as with other Windows-based sector encryption utilities out there, it doesn’t let you encrypt a Windows boot partition.

**Price: Free.**



**TrueCrypt**

**TRACK PROBLEMS**

# ASP.NET Issue Tracker

[www.microsoft.com/uk/issuetracker](http://www.microsoft.com/uk/issuetracker)

There are two things that, in my mind, always make an application better: when it’s free and when it’s customisable. The ASP.NET Issue Tracker, which is provided through the ASP.NET online developer community, is both of these things. Designed as a Starter Kit for learning

to program Web applications under the ASP.NET 1.1 framework, Issue Tracker is a simple, but useful tool for tracking issues related to projects.

The interface is straight forward and lets you create projects, users, and issues with ease. The application supports multiple users with role-based permissions, protecting issues from unwanted eyes. You can also create custom issue categories for each project and custom data fields of various types. Tasks can be assigned a

status, a priority, and a milestone, which helps organise your projects.

Another cool feature is that upon project creation, you can specify your own status codes, priorities and milestones for each project and assign an image to represent it. All the code is available in the download, so, if you have a .NET developer on hand, or can work your way through existing code, you can use the starter kit as a basis for any custom functionality you may need.

**Price: Free.**