



net-runna
DriverBackup
User Guide

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1. Introduction

The *net-runna DriverBackup* guide is intended for use by individuals who wish to backup and distribute drivers to single or multiple systems.

Objectives

- Initially this guide will get around the basics of driver backups and imports
- For managing multiple systems this guide will go over network and configuration concepts
- For enterprise use the application allows for remote collection and distribution using Microsoft standard networking facilities – the guide will go over these in detail

2. *net-runna DriverBackup* description

The core concept behind the application is to provide a method to backup drivers which are currently installed on any Microsoft Windows 2000 or later operating system. This is done by determining those drivers which are installed, then parsing the driver installation files to find the driver files listed. Once that list is built they are then transported to a location as determined by the user.

DriverBackup also creates a backup log which serves two purposes, firstly to document activities and secondly to provide an import script for later use.

There are some additional settings that *DriverBackup* changes in order to facilitate easier driver identification and installation by the operating system. These are to create a single source driver folder and to make the operating system aware of this location.

The guide will illustrate additional methods for streamlining the process, specifically referring to driver signing and sysprep / unattended installs.

3. Prerequisites

For single system use there are no real prerequisites, as the application will discover drivers and create a default folder for storage in the users 'My Documents\nrDriverBackup' folder.

For more advanced use it is entirely up to the user to decide whether or not network locations are required.

For remote driver collection it is necessary to have administrative rights on the remote computer, the remote computer also needs to have the 'Remote Registry' service running, this can be activated from within the application. The administrative shares also need to be available, specifically the 'C\$' share.

To overcome this, the application can be run in silent mode as a login script or by deployment application software like *net-runna Enterprise* or equivalent network management application.

4. Getting started

DriverBackup has three licensing options:

- Free mode is the default option. Free mode allows all functions except remote driver collection via the enterprise panel. It also brings up the nag screen as illustrated below
- Professional Mode is intended for company use where you don't want the nag screen to appear
- Enterprise mode has an additional panel on the left allowing remote connection to systems for driver collection

The figure below shows the initial start up screen in free mode:

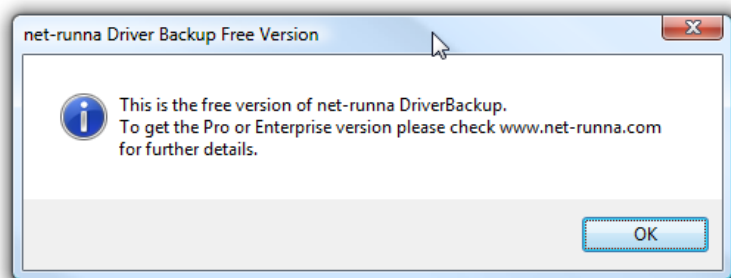


Figure 1

After clicking the 'OK' button, if you have purchased a Professional or Enterprise License you can register the license as follows, click on the 'File' menu and select 'Enter Registration Code'.

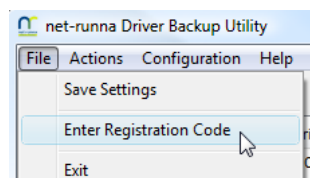


Figure 2

Then enter the name and key as returned to you after your purchase and enter them in the dialog as shown below.

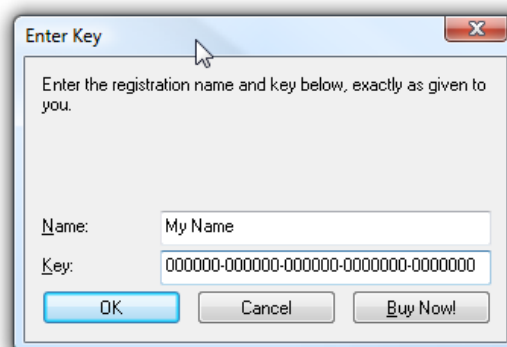


Figure 3

5. Creating driver backups

If the backup is a local one to a local folder, then just click the backup driver's button. The screenshot below shows drivers being backed up locally.

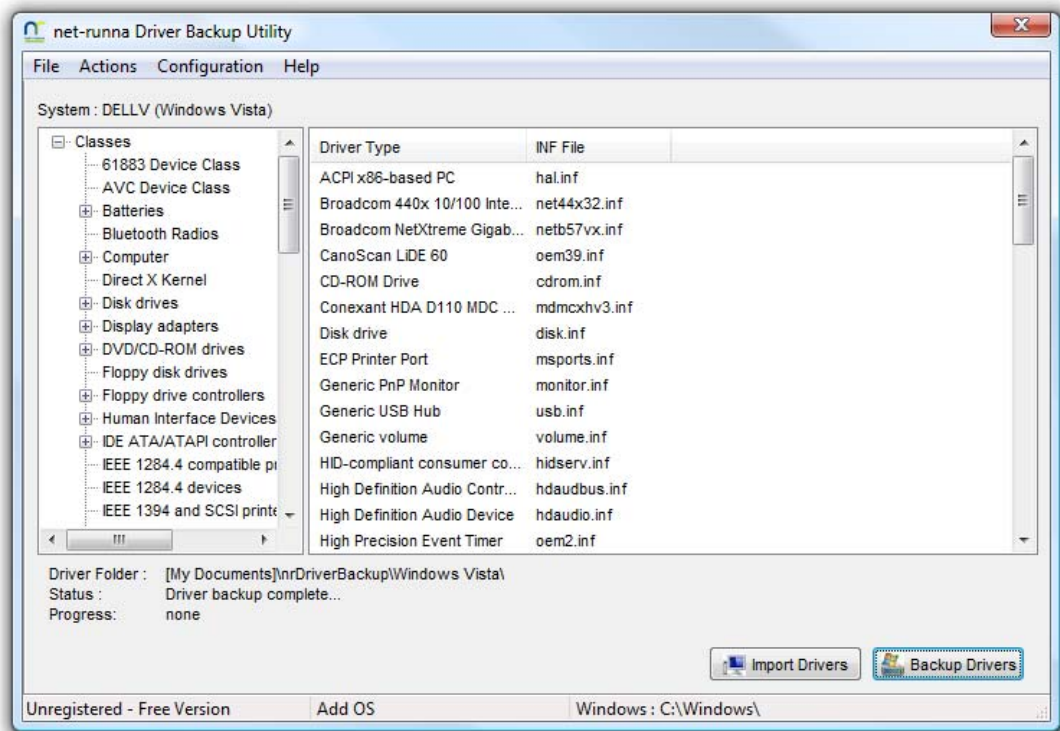


Figure 4

It's that simple! The system's drivers will now be located in the folder as shown by the 'Driver Folder' text. By default this is 'My Documents\nrDriverBackup\Windows Folder' where the 'Windows Folder' would typically be replaced by either Windows XP or Windows Vista etc.

6. Backup location

The backup location as mentioned before is usually in the 'My Documents' folder, with the operating system added on. This can be changed in one of 3 ways:

- 1) By clicking on the 'Configuration' Menu option and then clicking on the 'Select Driver Folder', this will bring up a folder selection dialog as illustrated below.

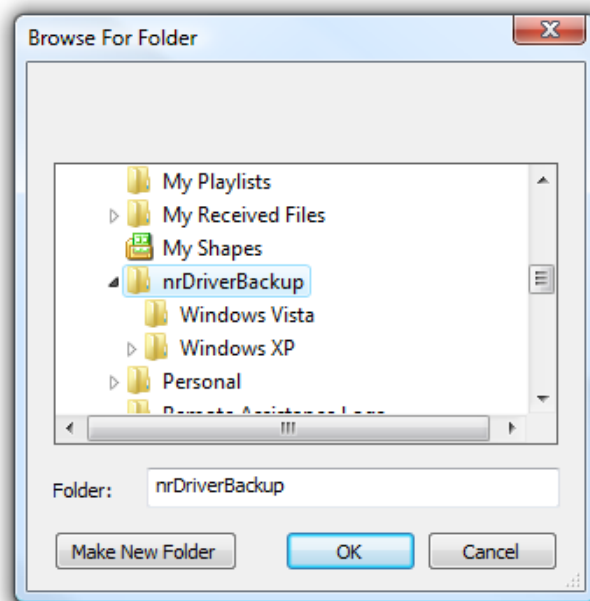


Figure 5

- 2) The location can be changed by changing the configuration file called 'nrDriverBackup.ini', the setting is in the '[CONFIG]' section and is called 'DriverFolder',
Example : DriverFolder = C:\Drivers
- 3) If you are using the application in command line mode there is a command line switch to change default folder location. The switch is '/driverfolder'.
Example: nrDriverBackup /driverfolder C:\Drivers

There are two other configurable options which could affect the folder selection, the machine name and or operating system can be appended to the default folder. They are also configurable by the main menu or the configuration INI file. Please refer to the INI file section of this guide.

7. Backup process

When a driver backup takes place it uses the driver files to scan for relevant files, it is however important to note that in most if not all cases not all the files listed in these configuration files are actually installed. This can be for various reasons - the most common is because it might not be applicable to the current operating system or system configuration.

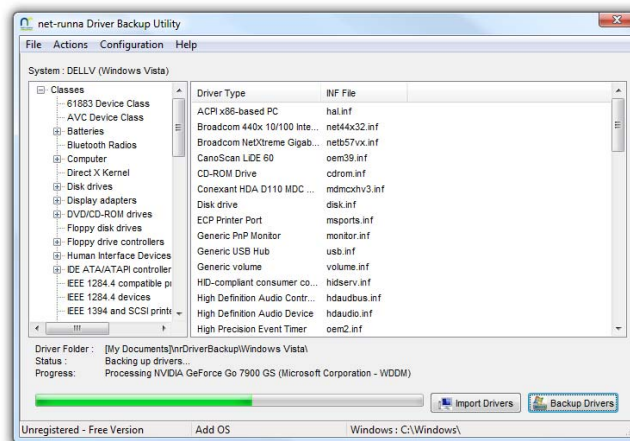


Figure 6

Files that aren't found can be scanned for as the second part of the backup process. This is configurable and when used interactively the question can be asked if the 'autoscan' option is disabled in the configuration file. It is still important to note that some files listed will not be found as they simply aren't installed. This is because a driver inf file contains all drivers relevant to all the operating systems it was written for, this includes legacy operating systems. This could cause the driver installation to fail. If they are located in another folder it is recommended that they are manually copied into the *DriverBackup* folder.

The search process is illustrated below:

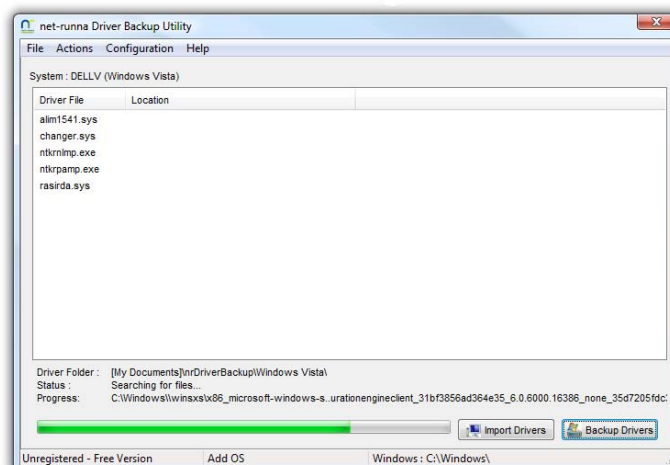


Figure 7

8. Importing drivers

When a backup is completed an 'import.ini' file is created in the backup folder. This is used for importing drivers, without this file an import is not possible. The image below shows the 'Import Drivers' button at the bottom right of the window highlighted.

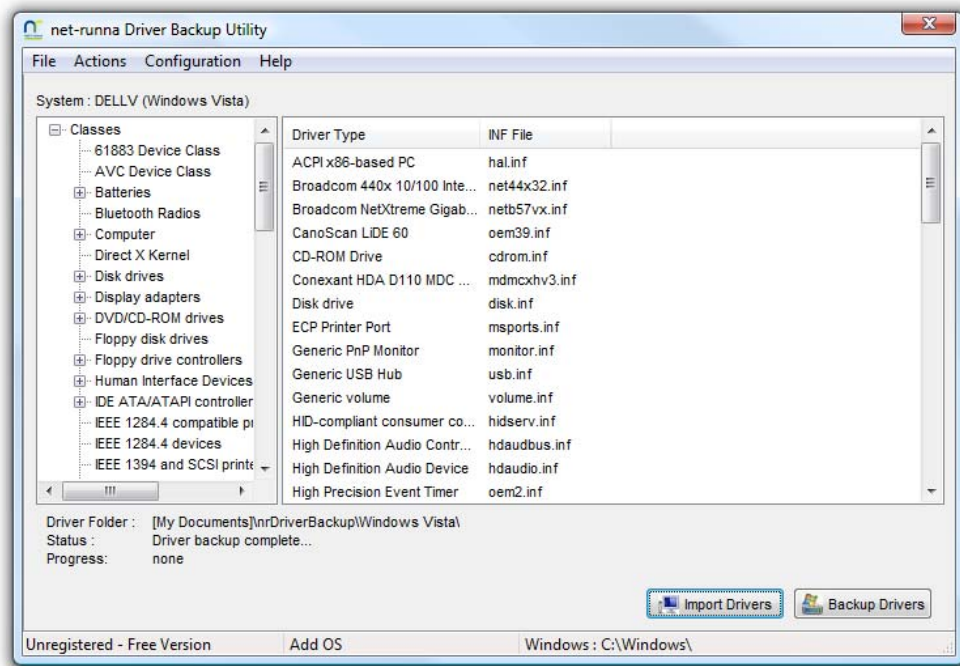


Figure 8

The image below shows the button in full size.

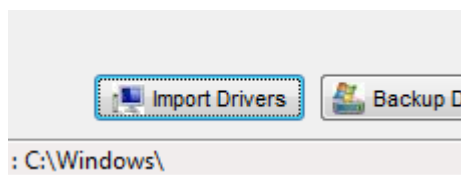


Figure 9

9. Enterprise driver backup

When an enterprise license is purchased the enterprise panel on the left is visible. The panel will list the systems visible to you on your network. The image below shows an example of the right click menu available to Enterprise license holders.

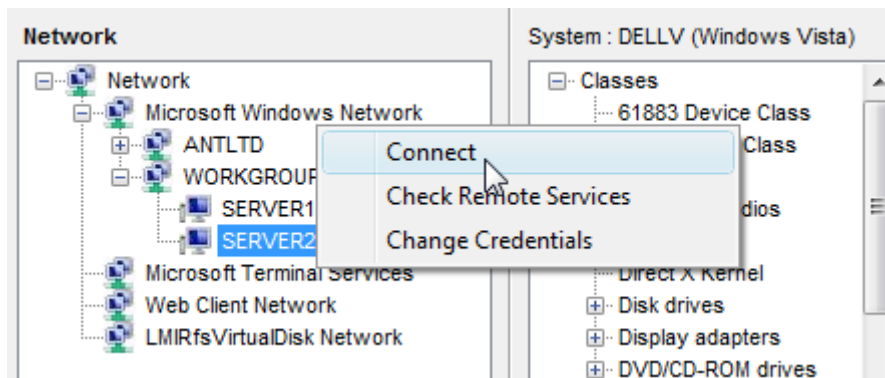


Figure 10

If you click on the connect button the application will attempt a remote connection using the default admin shares using the credentials of the user currently logged on. If the connection is refused then the following dialog box is displayed to allow the user to attempt a remote connection with other credentials.

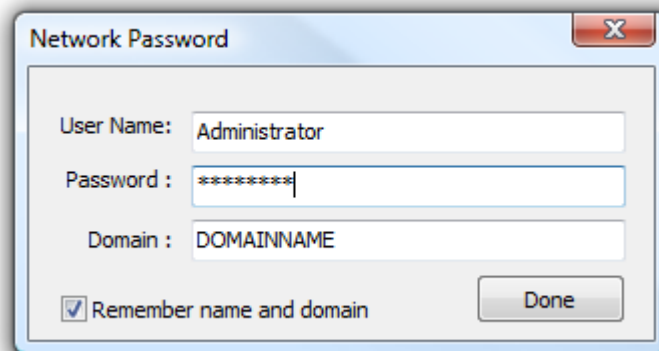


Figure 11

Enter the users name, password and relevant domain administration rights to the system, click 'Done'. In some cases the system might not have the 'Remote Registry' service running. As you can see in Figure 10 there is an option to check and then start the service if your credentials allow you to do this.

When a connection is successfully established the drivers will be checked and a list will be displayed on the right as before. If you then click backup drivers the remote systems drivers will be backed up to the desired location.

10. Silent mode operation

Silent mode operation is achieved by running the application with command line switches. To get a list of the commands run the application with '/?' option.

Example: nrDriverBackup /?

Silent mode can display progress if required; this is a mini window without any input buttons or interactive questions. The INI file is still used but the command line switches override these settings.

The image below shows an example of a silent mode operation with the '/showprogress' option enabled:

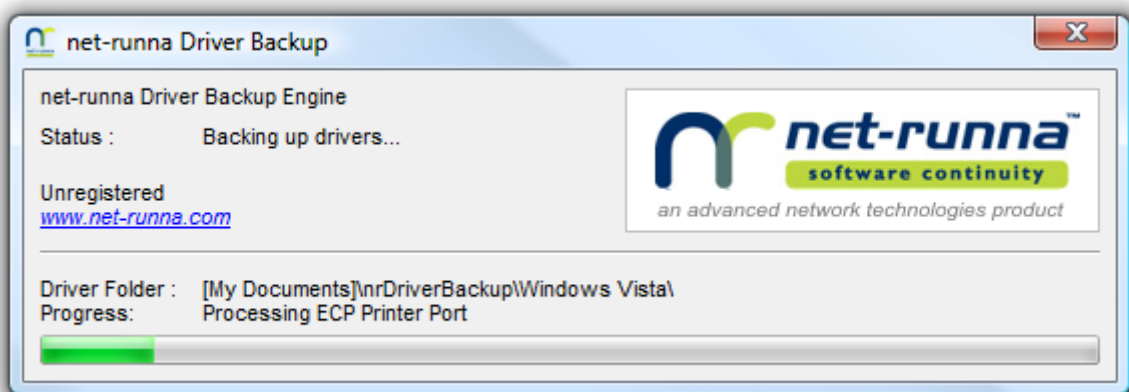


Figure 12

11. Silent mode switches

The image below shows the switches:

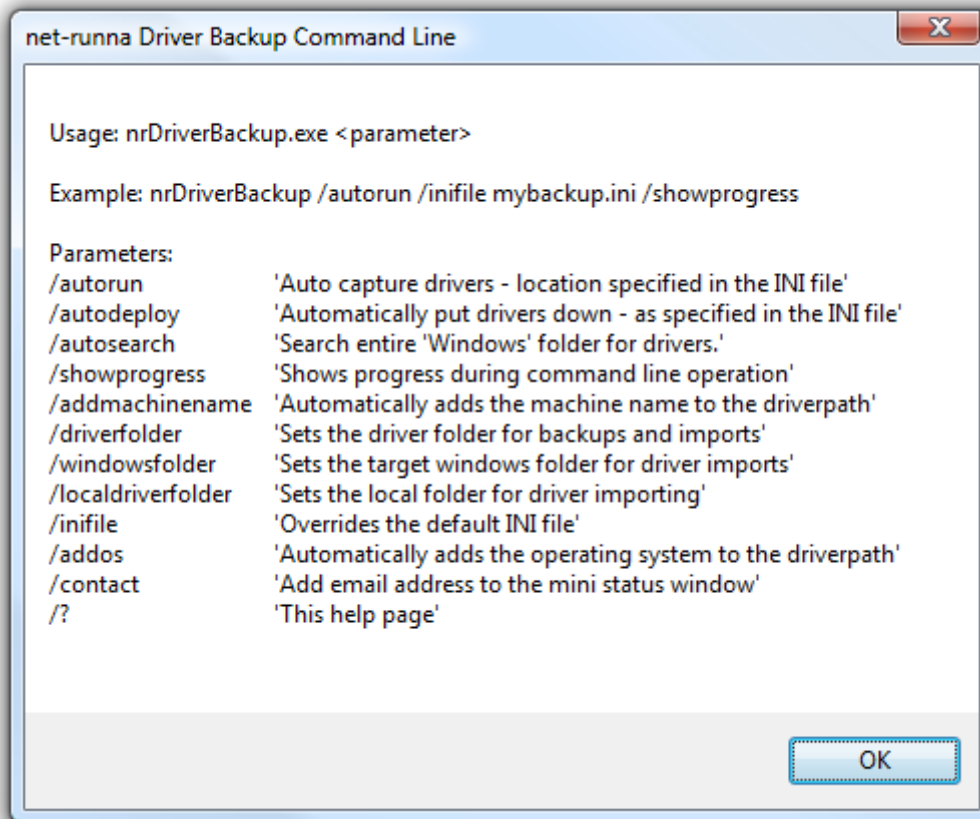


Figure 13

Command Line Example:

nrDriverBackup /autorun /showprogress /contact support@mycompany.com /addos

12. INI file

The default INI file is nrDriverBackup.ini, but any changes to the applications settings will be saved as the name of the machine e.g. a system called 'Gary' will save its configuration INI file as 'Gary.ini'.

The file only has two sections:

- CONFIG
- SEARCH PATHS

The options are as follows:

[CONFIG] Section

1. DriverFolder

This is where the drivers will be backed up to, this can be a local disk or network location

Example:

```
DriverFolder = c:\Drivers
```

Or:

```
DriverFolder = \\myserver\backupdrive\drivers
```

2. LocalDriveFolder

When importing the drivers again on the target/destination system this will point to the import location.

Example:

```
localdriverfolder=C:\Drivers\
```

Or for a sysprep image

```
localdriverfolder=C:\SysPrep\i386
```

3. WindowsFolder

By default the local windows folder is used but if on a dual boot, or when booting from a Windows PE environment, this can be used to override the default.

Example:

```
Windowsfolder=D:\Windows
```

4. AddMachineName

When creating a driver backup it is useful to separate systems in a common backup folder. This setting will automatically append the host name to the 'DriverFolder'.

Example:

AddMachineName = yes

Or:

AddMachineName = no

5. AddOS

When creating a driver backup it is useful to separate drivers by operating system in a common folder. This setting will automatically append the operating system to the 'DriverFolder'.

Example:

AddOS = yes

Or:

AddOS = no

6. USBDriveReplace

When executing the application from a USB or other portable media, the drive letter of that media would typically vary from system to system. This switch will allow the application to automatically alter the 'DriverFolder' to the drive where the application was executed from. So if the destination folder was E:\Drivers and the USB Drive was mounted as F: it would automatically switch the destination folder to be F:\Drivers

Example:

USBDriveReplace = yes

Or:

USBDriveReplace = no

7. AutoSearch

Drivers not found during the search operation could be because they are not in default locations. This switch will do an additional complete search of the 'Windows' folder and all sub folders for the remaining drivers.

Example:

AutoSearch = yes

Or:

AutoSearch = no

[SEARCH PATHS] Section

This section lists a series of folder locations. Please note that it must start with a '\' and must not include the 'Windows' folder or drive letters. An example of that section is listed below. Note also that if this section doesn't exist the paths shown below are added automatically.

Typical search path folder entry should be `\path\` or if you want it to search through subdirectories it should be `\path*`

13. Example INI file

[CONFIG]

DestinationFolder = F:\Drivers

localdriverfolder = C:\Drivers\

AddMachineName = yes

AddOs = yes

usbdriverereplace = yes

WindowsFolder=C:\Windows

[SEARCH PATHS]

\

\Driver Cache\i386\

\Help\

\inf\

\System\

\System32\

\System32\Drivers\

\System32\DriverStore*

\windowmobile\drivers\