



ParetoLogic DriverCure

The Quick and Easy Way to Update Drivers and Software

Product White Paper
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ParetoLogic – The Company

ParetoLogic is an international software development company headquartered in Victoria, British Columbia, Canada. We are a member of SIIA (Software Information Industry Association) and we specialize in providing advanced security applications and performance tools for business and personal computer users.

ParetoLogic creates solutions that combine sophisticated technology with a truly user-friendly interface. Our products empower people to secure and optimize their computers and are available in eight languages in 192 countries around the world. ParetoLogic has established partnerships on a global scale to ensure our products are available to all computer users regardless of location, language, or computing experience.

Attention to consumer needs coupled with a commitment to deliver exceptional software applications and resource-rich websites, guarantees that our products will exceed expectations.

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DriverCure provides effective scanning and identification of outdated items on a computer. DriverCure identifies outdated drivers and software items and offers the option to download and install any and all items. By updating drivers and software a computer system can run at optimal levels and can stay current with the latest releases and patches made available by manufacturers. Safety mechanisms are built in to ensure any changes made to the system can be undone.

Addressed in this Product White Paper

This document provides information and recommendations related to using DriverCure. It is not meant for instructional purposes. We recommend using the local help file that comes with the application for detailed steps and instructions.

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About Drivers

A driver, also known as a device driver, is a program that enables other software applications to interact with devices connected to a computer. The operating system utilizes drivers to manage hardware devices such as the printer, keyboard, mouse, monitor, disk drive, graphics card, and more. Drivers enable computer programs to interact with the hardware devices by acting as a translator. Each device must have a driver associated with it. Drivers are frequently specialized and specific to the hardware and operating system – they are not interchangeable from computer to computer.

Adding a New Device

Hooking up a printer is a common example of dealing with a driver. When physically connecting the printer, Windows will recognize that there is a new device and will display notification that the printer has been found. It then attempts to interact with the printer by locating the necessary drivers. In some cases the operating system will have drivers available for the task but in other situations the system operator is required to install the necessary software provided by the manufacturer.

Update Drivers Using Windows

The system user can also update drivers by finding the hardware device in the Windows Control Panel. Using the printer example, we would open the Control Panel and double click on “Printers and Faxes”. From the list of printers, we would right-click on the printer name and select Properties. Typically the Advanced tab will include the option to add a new printer driver.

Drivers Wanted

In some situations it is necessary to have the most recent driver installed in order to achieve desired operability. Many generic drivers do not support advanced features of the associated hardware. Frequently manufacturers offer driver updates to fix issues, improve performance, enhance stability issues for the computer, or provide new features.

A computer system can operate efficiently and without problems if all the drivers are up-to-date and compatible with the system. If a driver is outdated, incompatible, or corrupt, the associated device may not perform as intended. In the worst case scenario, the system would not function at all.

There are many challenges in identifying issues related to drivers and in correcting associated malfunctions. Even after being able to pinpoint the problem to a particular driver the task of replacing it can be a great source of frustration. This becomes an ongoing tedious task when considering the effort related to maintaining drivers from multiple vendors that provide updates again and again.



This paper describes an alternative to labour intensive methods of updating drivers and software for a computer system.

Making alterations to a computer system can be problematic if there are not adequate safeguards in place to undo the changes. ParetoLogic, the makers of DriverCure, have placed safety at the top of the list.

Safety – History Items and System Restore

Making alterations to a computer system can produce unexpected and unwanted side-effects. In some instances this occurs when an item is installed incorrectly due to improper development standards and practices from the maker of the driver or software application. There are two safety mechanisms available with DriverCure: the History Tool and System Restore Point.

History Tool

The History page displays an entire list of items from previous scans.

The screenshot shows the DriverCure application window with the History page selected. The interface includes a sidebar with buttons for Scan, History, Ignore, Schedule, and About. The main content area displays a list of scan records with a table of software items.

History

With the History page you can download and install items that were detected, downloaded, or previously installed. To begin, expand a section by clicking the blue arrow. Click the + sign to expand the item. If you want to install the item you can select it and click Install.

Item Name	Company	Version	Updated Version	State	
2009-01-09 11:08:32 Delete this scan record: ✕					
+ Outdated Drivers 30 Items					
- Outdated Software 3 Items					
RealPlayer	Real Player	Unknown Version	11.0.0.477	Installed	Install
DivX Player	DivX	6.8.5.4	6.8.0.0	Detected	Install
QuickTime	QuickTime	7.2.0.240	7.5.5.0	Detected	Install

2009-01-09 09:47:25 Delete this scan record: ✕

2009-01-09 09:41:38 Delete this scan record: ✕

If you are having trouble with an installed driver, you can use [System Restore](#) to revert to a previous point in time.

Figure 1: History List



This list displays all the items that were previously detected, downloaded, or installed. If the user performed a scan and chose not to install items, these items are listed and can now be downloaded and installed. Of course, in the event that the scan is dated, it is best to re-scan the system.

The list of items on the History page serves as an excellent safeguard in case it is necessary to revert to a previous working version of a software program or driver. An example of this would be installing an item using DriverCure with no resulting issues and then performing subsequent installations that resulted in system failure or undesirable functioning. The problem could be remedied by finding the previous working item and re-installing it. In the event an item causes undesirable results and there was no previous working file installed using DriverCure, the System Restore Point feature can be used.

System Restore Point

System Restore is a feature offered by Windows Vista and Windows XP operating systems. In the event of a system failure or other major problems occurring, system restore can be used to return the computer to an earlier working state.

When setting a restore point the system takes a complete snapshot of the registry and certain system files and saves this information. Reverting to this saved state can be done without losing personal data. Microsoft states that this safeguard should only be used after trying less comprehensive methods of troubleshooting. Attempting to uninstall the item directly using the Add or Remove Programs tool would be the better alternative. There is no need to be concerned about how recent a system restore point is as DriverCure automatically sets a system restore point before each install.

DriverCure Scan

There are two types of items that are scanned. The following table identifies these categories.

Scan Type	Description
Hardware	All necessary information about the installed hardware for the entire system is collected. This includes information such as: hardware name; hardware type; ID number; associated driver (if applicable) and driver version; device vendor and manufacturer; and more.



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Software

All the information about the installed software for the entire system is also collected.

This includes information such as: software name, version, manufacturer, executable name, and more.

Table 1: DriverCure Scan Types

DriverCure uses sophisticated and thorough scan technology. The entire DriverCure scan process involves a step-by-step workflow that includes:

- Scanning the system and displaying the results,
- Selecting and downloading items,
- Installing selected items, and
- Displaying the results.

Scanning

The scan itself is simple and fast. Afterwards a complete list of items is displayed.

Item Name	Company	Version	Updated Version	Ignore
Outdated Drivers that need fixing Found: 36				
+ IDE ATA/ATAPI controllers 4 Items				
+ IEEE 1394 Bus host controllers 1 Items				
+ Network adapters 7 Items				
- Sound, video and game controllers 1 Items				
SigmaTel High Definition Audio CODEC	IDT	5.10.5185.0	6.10.5927.5	Ignore Item
+ System devices 11 Items				
- Universal Serial Bus controllers 12 Items				
Standard Universal PCI to USB Host Controller	Intel	5.1.2600.2180	8.2.0.1008	Ignore Item
Standard Universal PCI to USB Host Controller	Intel	5.1.2600.2180	8.2.0.1008	Ignore Item
Standard Universal PCI to USB Host Controller	Intel	5.1.2600.2180	8.2.0.1008	Ignore Item
Standard Universal PCI to USB Host Controller	Intel	5.1.2600.2180	8.2.0.1008	Ignore Item

Figure 2: DriverCure Scan Results



The scan results are listed in one of four categories. A category is displayed if one or more items are detected in the category.

Category Name	Description
Outdated Drivers	This includes drivers that are outdated and need to be downloaded and installed.
Outdated Software	This list includes all software that is outdated and needs to be downloaded and installed.
Up-to-Date Drivers	This includes all drivers that are up-to-date.
Up-to-Date Software	This list includes all software that is up-to-date.

Table 2: DriverCure Detected Items Categories

By default the most recent versions are selected for downloading. Any detected item can be sent to the Ignore list so they will not be included in upcoming scans.

Selection

For systems with a considerable number of software applications and numerous drivers and devices, the number of detected items will be numerous. In such situations it can seem overwhelming to update the system. A good approach in these situations is to review the list before selecting items to install and download.

The Results list displays information related to the current version of the item and the updated version that is available. More specifications are available when an item is selected. The information includes the associated hardware (for drivers), version information, and the associated vendor. From this more informed selections can be made for download and installation.

Download and Install

By default, all the detected items from a scan are selected to be downloaded and installed. Initiating the process of downloading the items is as easy and straightforward as performing a scan. It is important to note that DriverCure can perform multiple downloads. When these are complete there is the option to install the items right away or at a later time. More than one item can be selected for installation.

Verification

Installing an item requires trusting the source. During this step of the process, DriverCure lists the items that are safe for installation. The list includes safety icons to identify the items that are safe to install to the system as seen in Figure 3.



- ✓ Released by manufacturer and positively verified by DriverCure.
- ? Released by manufacturer.

Figure 3: DriverCure Verification Icons

Other DriverCure Features

There are more features that make performing scans an easier process and keep DriverCure current.

Ignore List

After a scan is complete items are listed and there is an option to send items to the Ignore list. DriverCure ignores these items in upcoming scans. The items are listed in the Ignore list page as seen here:

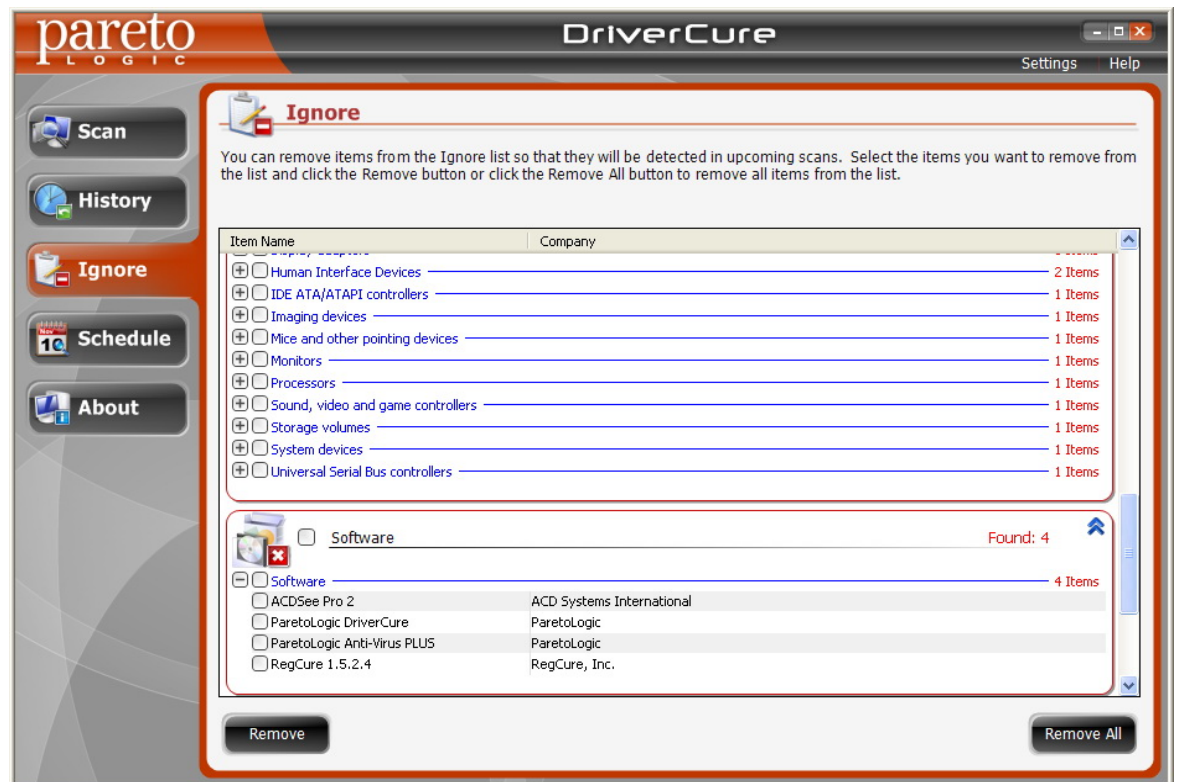


Figure 4: Ignore List Items

These items can be easily removed so as to be included in upcoming scans.



Scheduling Scans

DriverCure comes equipped with scheduling functionality to perform automatic scans on a regular basis. By default, DriverCure is set to scan twice a week. The settings can be adjusted and more than one schedule can be created.

Update Notifications

As for keeping DriverCure up-to-date, an automated update notification is available through email to all users who request it. This service is provided to the end user for peace of mind – notifications are delivered as new updates are made available for their computer.

Safety – Driving the Message Home

Updating software and drivers on a computer system is one of the most time consuming and annoying practices. Yet the positive effects that result in having a system running with the most recent tools are realized in the knowledge that the system is safe and is running at optimal levels of performance.

The creators of DriverCure have designed an effective tool with safety in mind. The easy to use interface and step-by-step process provide a simplified and streamlined approach.

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