

# Simplifying E-Series Updates Using Dell™ Client System Update

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A Dell Technical White Paper

Dell | OpenManage™  
Systems Management

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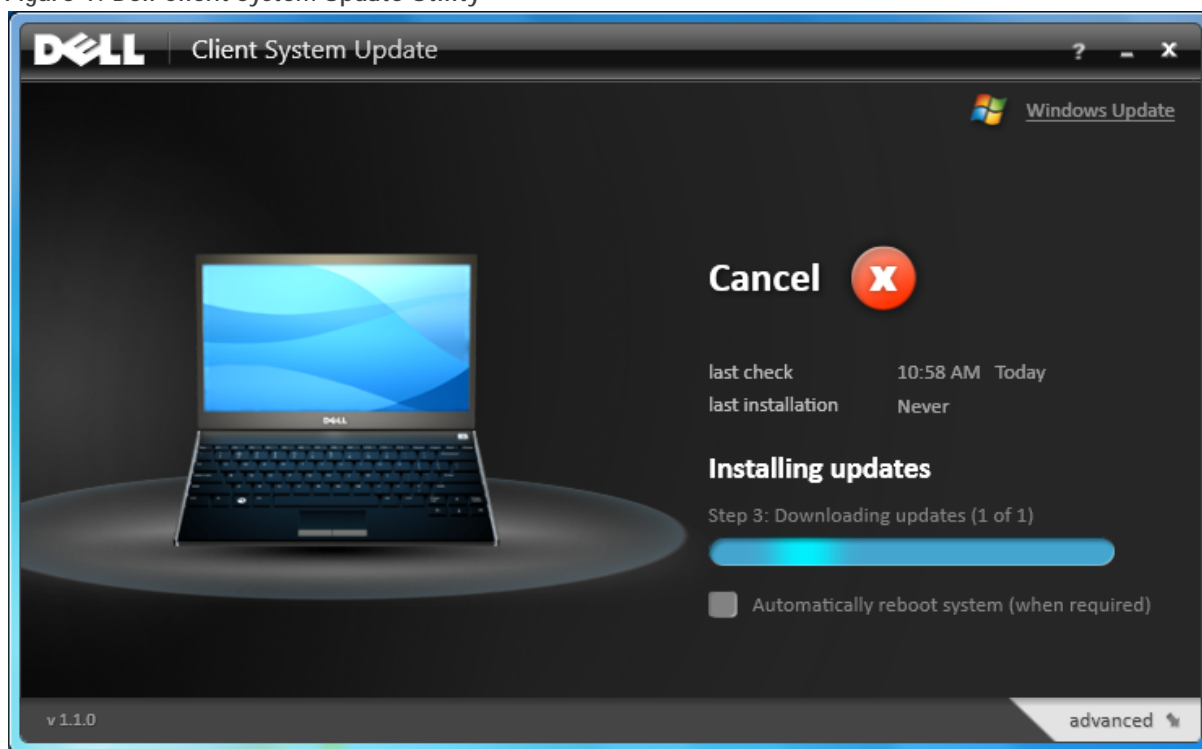
## Introduction

Computer systems must be kept up-to-date with the latest versions of drivers and platform software in order to maintain optimal performance throughout their lifetime. Up until now, staying in this desired state required a significant amount of individual work for multiple reasons:

- (a) The process of identifying, downloading, and installing new system updates is time consuming
- (b) The process must be repeated at regular intervals

The Dell Client System Update (DCSU) utility provides an easy-to-use tool that updates systems such as OptiPlex™, Latitude™, and Dell™ Precision™ with the latest drivers, BIOS, firmware, and systems management software available from Dell's support site.

Figure 1: Dell Client System Update Utility



With DCSU customers can-

- Automate the identification, download, and installation process for new updates to occur as they are released by Dell.
- Select what system updates are applied automatically using several criteria, like criticality or system component type.
- Minimize required number of reboots when applying system updates.
- Automatically check for new updates at a pre-determined interval.
- Configure common software update policies using the graphical user interface (GUI) or command line Interface (CLI) mode.
- Remotely script for applying updates.

## Locate and Download Tool on Dell Support

DCSU can be downloaded from the Dell support website using one of the following methods:

- Enter the system service tag
- Select the system model, OS type, and architecture
- Use the **Scan My System** option to list the available updates

Once the results are displayed, DCSU can be located under the **Systems Management** category.

Figure 2: DCSU Download from Dell Support



File Title(s)	Importance	Release Date	Version	Download & Options
<a href="#">Dell - Application</a> Applies to: <a href="#">Client System Update</a>	Recommended	12/17/2009	1.0.1, A01	<a href="#">Download</a> <a href="#">Add To Download List</a>

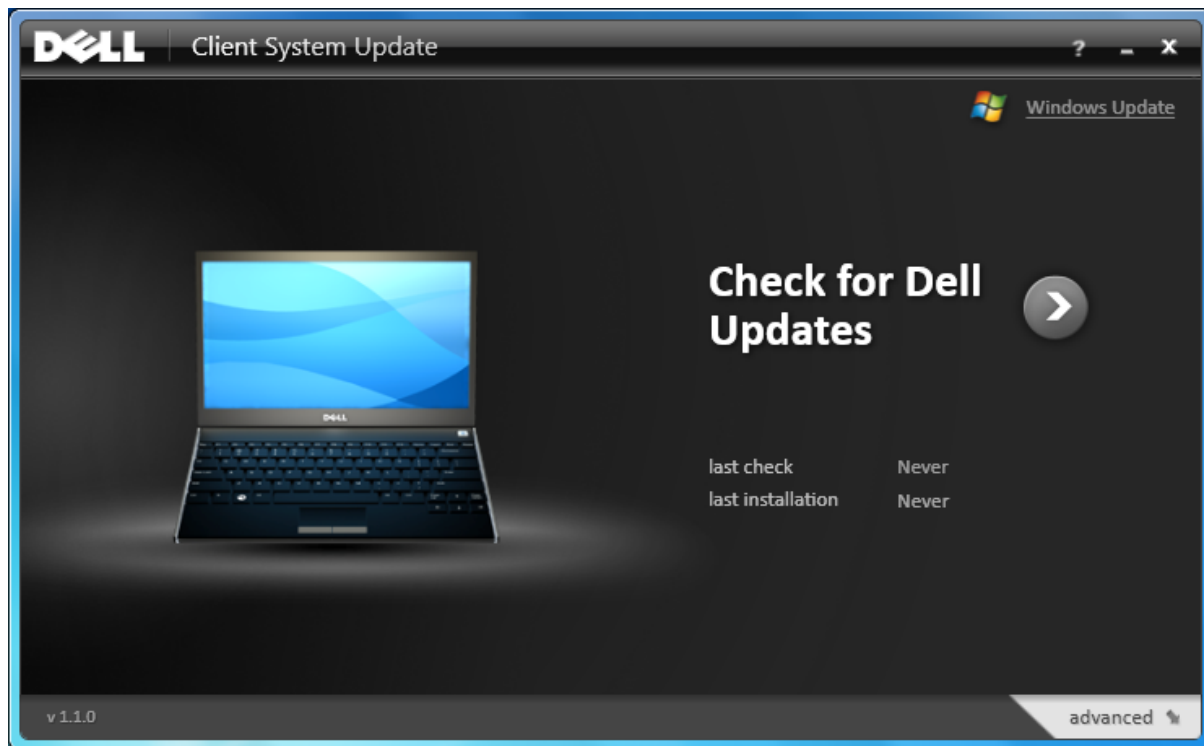
When the application is downloaded, install it with the **Run as administrator** process privileges. On Windows® 7 or Windows Vista®, you may be required to run the executable with elevated privileges by launching the installer from a command prompt launched with Administrative rights or right-clicking on the installer itself to run as an **Administrator**.

## Launching DCSU

Once DCSU is installed, the application can be launched in one of three ways on the client system:

1. Control Panel; if viewing the control panel by category, check under **System & Maintenance**, or equivalent
2. Start → Programs→Dell→Dell Client System Update
3. Console mode: dcsu-cli.exe <options> (See Command Line Interface below)

Figure 3: Launching DCSU



To check for updates using the default settings, click **Check for Dell Updates** from the main or **Home** screen. DCSU will scan your system to determine its current state, and then will connect to the configured reference source for updates, the Dell support site by default, to determine the latest Dell system software available for the current configuration.

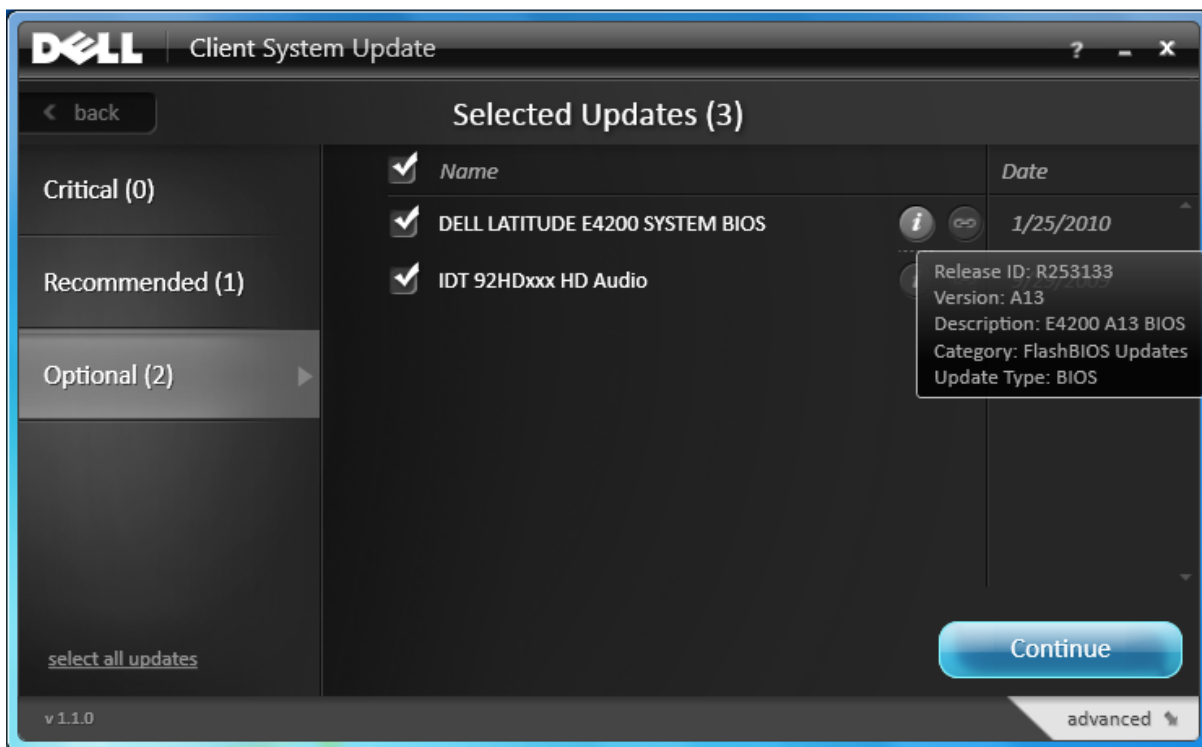
When the process completes, a results overview is presented. If updates are identified, DCSU will give you the opportunity to review and select the updates to proceed with.

Figure 4: Check for Dell Updates Screen



Selecting the **Customize Selection** link will allow you to inspect available updates in detail, and remove any unwanted updates.

Figure 5: Customize Updates Screen



The informational icon displays a quick summary of the update, and clicking on the “link” icon takes users to the support.dell.com website where additional details are available for each update listed in the window.

Click “Install” on the previous screen to move onto the final step. DCSU will download all selected updates locally, and then install them. When the installation is complete, an overall status is displayed that includes whether a system reboot is required for one or more of the updates. In addition, the updates that were applied successfully will be added to the **History** list. Users can review the installation status later by clicking on the information icon that appears to the left of **last installation** on the home screen; this icon is not shown in the previous figures.

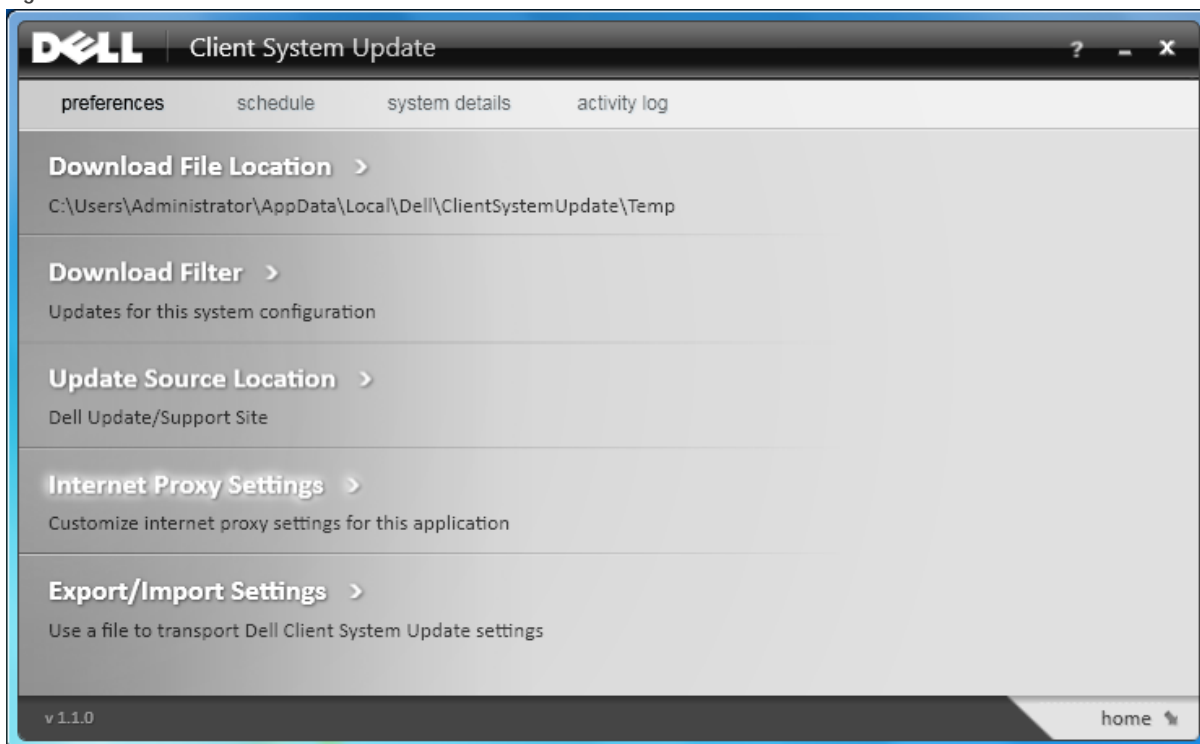
## Activity log

DCSU keeps track of your activity history in its log; the activity log can be accessed under the **Advanced** section. The log contains additional details beyond the summary information that is displayed at the end of the update process. This log is preserved based on the user preferences, and can be preserved for a maximum of 30 days. The activity log provides the user the ability to review the updates that were applied to the system over time.

## Setting preferences

DCSU offers several configuration options to customize its behavior, they are located in the preferences menu options under the **Advanced** section from the Main application screen. Any settings saved using this screen are persistent for the application at a system level.

Figure 6: Preferences Menu





The **Download File Location** option allows for the configuration of the location, on the local system, where update content is temporarily downloaded; the default location is a user-profile specific location that is secured by Windows logon credentials. If the download location is changed, then the user should ensure that it is secured with appropriate access credentials.

The **Download Filter** option allows for update customization; it allows the user to set what types of updates they want to view and download. For example:

1. Criticality of updates ( Critical, Recommended, Optional)
2. Update Type (Application, BIOS, Firmware, etc.)
3. Device-specific software to check for (Network, Audio, Video, etc.)

Deselecting an option will remove the updates of that type from being shown or selectable. Additionally, if you configure DCSU to select and install updates automatically without a prompt (see Scheduling below) the filter settings will also tailor what is automatically selected and installed. For example if **Recommended** was deselected, then the updates displayed on the main screen would change.

The default option for DCSU is to do a 1:1 hardware match, and to only download updates for existing system software. There are certain cases where the user may want to download additional software components that are not currently installed on their system. In those cases, the **Select All Updates for this model** filter option should be selected.

The **Internet Proxy Settings** option is used in network environments where specific proxy server security settings are required for connection to the Dell support site so that DCSU can obtain the latest update information and packages.

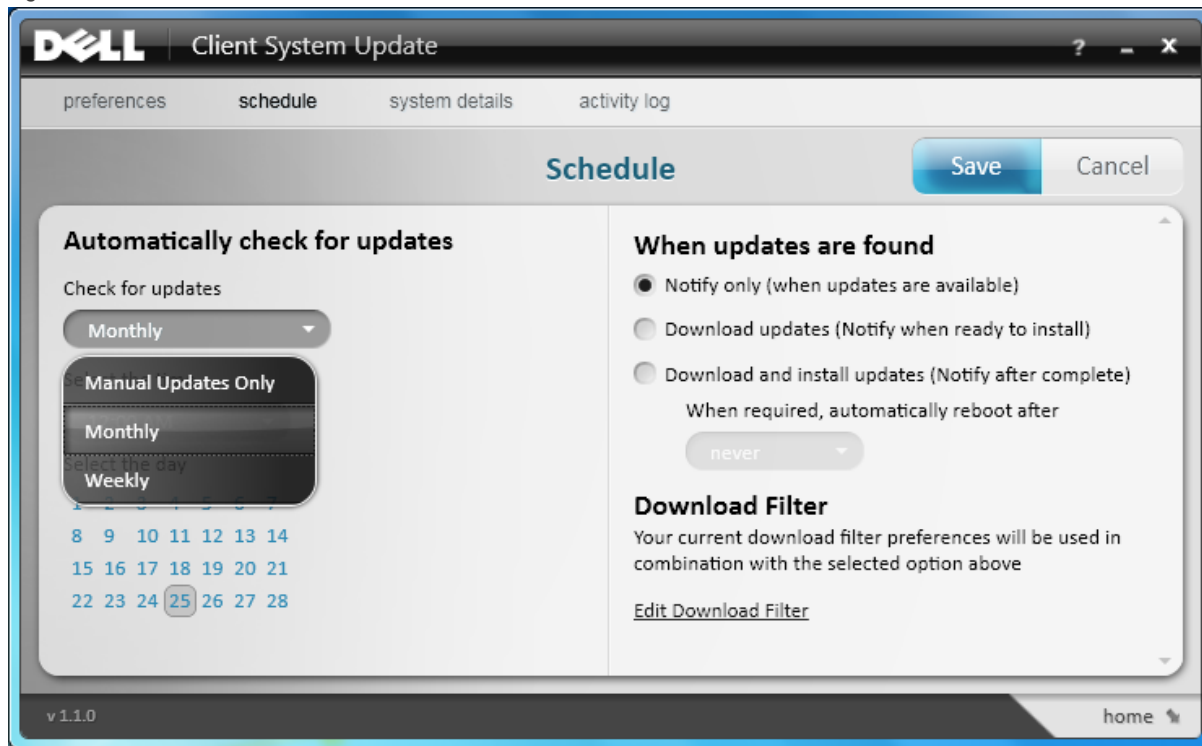
### Limited rollback using Windows System Restore

DCSU provides a limited ability to roll back OS-level changes using the Windows System Restore service that is built into Windows. When DCSU begins to update the operating system with systems software, it creates a system restore point. If the system were to fail during or shortly after the updates are applied, customers have a way to rollback changes made to the system. This roll back will only restore drivers and application software; any BIOS or firmware updates are lost due to their interaction with low level interfaces not managed by the system restore feature. The log should contain the updated versions, and therefore the older versions can be obtained from the Dell website and applied to the system.

### Scheduling

DCSU can be configured to automatically check for, and inform you when, new Dell updates are available for your system. The **Schedule** tab can be accessed from the **Advanced** section.

Figure 7: Schedule Menu



You can have DCSU perform the complete update process automatically. To turn on automatic updates, select the **Schedule** tab in the advanced section; by default, this feature is turned off. The update frequency can be set by using the **Check for updates** drop-down menu to select how often automatic update checks should occur, monthly or weekly, and then the desired time and day; by default, notifications are sent when one or more new updates have been identified.

Once new updates are discovered, DCSU can simply notify, or download and then notify, or download and install, as displayed in the right panel. Updates classified as “available” are defined by the filter preferences. For example, if a user only wishes to download or be notified of network and video updates, then the other devices should be unselected in the download filter settings.

If you are using the scheduled mechanism to update, the recommendation to perform the update once a month or so.

## Policy

DCSU can be configured by an IT administrator with a policy that restricts configuration values from being changed. Any preference values set using a policy will then become locked in the user interface, and will automatically override the values previously set by a user. DCSU’s policy file is an XML-based file format that is identical to the format used for setting import/export. The easiest way to generate a policy file is to configure the desired settings on a sample system, and then use the export function available on the **Export/Import Settings** screen to create a policy file. Once the XML file is created, rename the file “policy.xml,” and then place it in the application’s installation folder. The next time DCSU is launched, the policy data will be permanently imported and the file is deleted.

## Command Line Interface

The DCSU installation package includes a console only/command line interface version of the application for use with batch and scripting scenarios. The command line mode version is fully automatic, and does not have any interactive prompts. Several basic runtime options can be specified as command line parameters (silent, logging directory, etc), but the full list of configuration settings is available by setting up and specifying a policy file. The main difference for the command line mode policy, as compared to GUI policy described previously, is that the policy file name is not restricted and the data is not permanently imported. If a policy file is not specified for the command line mode application, the configuration settings are inherited from those set using the GUI preferences.

Figure 8: Command Line Interface

```

Administrator: Windows Command Processor - dcsu-cli.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd "%Program Files (x86)\Dell\ClientSystemUpdate"

C:\Program Files (x86)\Dell\ClientSystemUpdate>dcsu-cli.exe -?
Usage:
dcsu-cli.exe <option1> [<value1>] [<option2> <value2>]...
<option>: One of the options listed below.
options:
  /? - Print usage (this information), all other options ignored.
  /catalog - Set the repository/catalog file location, <value> is the path for catalog file. (
e.g. C:\catalog.xml)
  /help - Same as /?.
  /log - Set the log file directory, <value> is the path for log directory. (e.g. C:\logs)
  /policy - Use a policy file to determine settings for the duration of a single execution, <v
alue> is the path for policy. (e.g. C:\policy.xml)
  /reboot - Reboot the system automatically (if required by one or more updates)
  /silent - Run silently (no status output)

C:\Program Files (x86)\Dell\ClientSystemUpdate>dcsu-cli.exe
Check for updates started...
Checking for application component updates...
No application component updates found.
Scanning system devices...
\

```

On Windows Vista or later OSs with UAC enabled, the console must be elevated with Administrator rights for the command line interface to function properly.

## Summary

DCSU provides simplified tools that can quickly keep Dell platform software up-to-date. Small to medium business customers can use the policy configuration option to set up a policy file, or use the command line mode, to updating systems seamlessly. The current version is supported on Dell Business Client systems starting with the E-Series product line, and includes most Latitude, OptiPlex, and Dell Precision systems. All client Windows operating systems, starting with Windows XP Service Pack 2 and newer, are supported.