

Dell Command | Configure Version 3.1.2 User's Guide



Notes, cautions, and warnings

-  **NOTE:** A NOTE indicates important information that helps you make better use of your computer.
-  **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
-  **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

© 2009 - 2016 Dell Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. Dell and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

2016 - 08

Rev. A00

Contents

1 Introduction.....	5
What's new in this release.....	5
Supported systems and operating systems.....	6
Other documents you may need.....	6
Accessing documents from Dell support site.....	6
2 Dell Command Configure graphical user interface.....	8
Accessing Dell Command Configure within Microsoft Windows system.....	8
Accessing Dell Command Configure within Linux.....	8
Files and folders of Dell Command Configure	8
Accessing the Dell Command Configure GUI.....	9
Creating a BIOS package using the GUI.....	9
Configuration options.....	10
Configuring the setup, system, and hard disk drive passwords.....	11
Clearing setup, system and hard disk drive passwords.....	11
Password protection screen.....	12
Configuring the autoon option.....	12
Configuring the bootorder option.....	12
Configuring the primarybatterycfg option.....	14
Configuring the advbatterychargecfg option.....	15
Configuring the peakshiftcfg option.....	16
Configuring the keyboardbacklightcolor option.....	17
Advanced System Management.....	17
Setting the noncritical threshold values.....	17
BIOS option validation.....	18
Validating a multiplatform package or saved package.....	18
Validating a local system package.....	19
Exporting the BIOS configuration.....	19
Exporting the SCE (.EXE) file.....	19
Exporting the configuration without setting values.....	20
Target system configuration.....	20
Applying a INI or CCTK file.....	21
Applying a shell script on Linux.....	21
Applying a SCE file.....	21
Log details in Package History.....	22
Viewing a log file.....	22
Deleting log details.....	22
Providing feedback on Dell Command Configure	22

3 Troubleshooting.....	23
Running Dell Command Configure displays error messages.....	23
Running Dell Command Configure on 32-bit and 64-bit supported system.....	23
Running Dell Command Configure on Windows Vista, Windows 7, Windows 8, Windows 8.1, or Windows 10 when user account control is enabled.....	23
Running Dell Command Configure on Linux.....	23
TPM activation.....	24
SCE failing to run on Windows Preinstallation Environment (Windows PE).....	24
Contacting Dell.....	25

Introduction

Dell Command | Configure is a packaged software that provides configuration capability to business client systems. You can configure the client systems using a Graphical User Interface (GUI) or a Command Line Interface (CLI).

For more information on CLI, see *Dell Command | Configure Command Line Interface Reference Guide* available at Dell.com/DellClientCommandSuiteManuals. You can use Dell Command | Configure in Red Hat Enterprise Linux environments and Microsoft Windows Preinstallation Environment (Windows PE), and on the Microsoft Windows Vista, Windows 7, Windows 8, Windows 8.1, and Windows 10 operating systems.

 **NOTE:** Dell Command | Configure was formerly Dell Client Configuration Toolkit (CCTK). After the CCTK version 2.2.1, CCTK is rebranded as Dell Command | Configure.

What's new in this release

The new features for this release include support for:

- New operating systems: Windows 7 Professional FES, and Windows 10 Enterprise LTSB, Ubuntu Desktop 16.04.
- New platforms: Dell Embedded Box PC 3000 series, and Dell Embedded Box PC 5000 series.
- Configuring the Dell Type-C Thunderbolt docks to function when the Thunderbolt is disabled. See `--alwaysallowdelldocks` option.
- Configuring the BIOS recovery option. See `--biosrecovery` option.
- Configuring the threshold value for the operating system boot failure. See `--bootfailthreshold` option.
- Configuring the Controller Area Network (CAN) Bus. See `--canbus` option.
- Configuring the I/O module. See `--iomodule` option.
- Configuring the memory allocation size for the Intel Software Guard Extension (SGX) processor reserved memory. See `--enclavememorysize` option.
- Configuring onboard sound devices. See `--onboardsounddevice` option.
- Configuring the number of cores available in the system. See `--processorcorecount` option.
- Additional possible values for `--serial1` and `--serial2` options.
- Configuring the 3rd serial port. See `--serial3` option.
- Configuring the 4th serial port. See `--serial4` option.
- Configuring the 5th serial port. See `serial5` option.
- Configuring the 6th serial port. See `serial6` option.
- Configuring the system to boot from the Thunderbolt device. See `--thunderboltbootsupport` option.
- Configuring the OROMs and pre-boot UEFI drivers provided by Thunderbolt devices, or PCIe devices. See `--thunderboltprebootmodule` option.
- Configuring the touch screen. See `--touchscreen` option.

- Configuring the hash algorithm used for TPM 2.0 measurements. See --tpmhashalgo option.
- Configuring BIOS updates via UEFI capsule update packages. See --ueficapsule option.
- Configuring the system to wake when a docking connection is made. See --wakeondock option.
- Configuring the system to continue to boot, or to pause when warnings or errors are detected. See --warningsanderrors option.
- Configuring the WLAN code for a specific region. See --wlanregioncode option.

 **NOTE:** For more details on CLI options, see *Dell Command | Configure Command Line Interface Reference Guide* available at dell.com/dellclientcommandsuitemanuals.

Supported systems and operating systems

For the list of Dell client systems and operating systems, see the *Release Notes* available in the Dell Command | Configure installation files or at dell.com/dellclientcommandsuitemanuals.

Other documents you may need

In addition to this guide, you can access the following guides available at dell.com/dellclientcommandsuitemanuals.

- The *Dell Command | Configure Installation Guide* provides information about installing Dell Command | Configure on supported client systems. The guide is available as part of the Dell Command | Configure download.
- The *Dell Command | Configure Command Line Interface Reference Guide* provides information about configuring the BIOS options on supported Dell client systems.

Additionally, the *Release Notes* file, which is available as part of the Dell Command | Configure download and at dell.com/dellclientcommandsuitemanuals, provides the latest available information for the installation and operation of Dell Command | Configure .

Accessing documents from Dell support site

You can access the required documents in one of the following ways:

- Using the following links:
 - For all Enterprise Systems Management documents – Dell.com/SoftwareSecurityManuals
 - For OpenManage documents – Dell.com/OpenManageManuals
 - For Remote Enterprise Systems Management documents – Dell.com/esmanuals
 - For iDRAC and Lifecycle Controller documents – Dell.com/idracmanuals
 - For OpenManage Connections Enterprise Systems Management documents – Dell.com/OMConnectionsEnterpriseSystemsManagement
 - For Serviceability Tools documents – Dell.com/ServiceabilityTools
 - For OpenManage Connections Client Systems Management documents – Dell.com/DellClientCommandSuiteManuals
- From the Dell Support site:
 - a. Go to Dell.com/Support/Home.
 - b. Under **Select a product** section, click **Software & Security**.

- c. In the **Software & Security** group box, click the required link from the following:
 - **Enterprise Systems Management**
 - **Remote Enterprise Systems Management**
 - **Serviceability Tools**
 - **Dell Client Command Suite**
 - **Connections Client Systems Management**
- d. To view a document, click the required product version.
- Using search engines:
 - Type the name and version of the document in the search box.

Dell Command | Configure graphical user interface

Dell Command | Configure Graphical User Interface (Dell Command | Configure GUI) displays all BIOS configurations supported by Dell Command | Configure . Using the Dell Command | Configure GUI, you can do the following:

- Create BIOS configuration for client systems. For more information, see [Creating a BIOS package using GUI](#).
- Validate the BIOS configuration against the BIOS configuration of the host system. For more information, see [BIOS option validation](#).
- Export the customized BIOS configurations as a configuration file (**INI** or **CCTK**), Self-Contained Executable (**SCE**), shell script, or report. For more information, see [Exporting the BIOS configuration](#).

 **NOTE:** To apply the configuration using the Dell Command | Configure Command Line Interface (CLI), run the required file (**INI** or **CCTK** or **SCE**).

Accessing Dell Command | Configure within Microsoft Windows system

Click **Start** → **All Programs** → **Dell** → **Command Configure** → **Dell Command | Configure Command Wizard**.

Accessing Dell Command | Configure within Linux

Browse to `/opt/dell/toolkit/bin` directory.

Files and folders of Dell Command | Configure

The following table displays the files and folders of Dell Command | Configure on systems running the Windows operating system.

Table 1. Files and folders of Dell Command | Configure

Files/Folders	Description
Dell Command Configure Command Prompt	Allows access to the Dell Command Configure command prompt.
Dell Command Configure Wizard	Allows access to the Dell Command Configure GUI.

Files/Folders	Description
Dell Command Configure WINPE	Allows access to the Windows PE scripts to create a bootable image. For more details, see the Dell Command Configure Installation Guide available at dell.com/dellclientcommandssuitemanuals .
User's Guide Online	Provides access to the Dell Command Configure documentation that is available at dell.com/dellclientcommandssuitemanuals .

Accessing the Dell Command | Configure GUI

 **NOTE:** Dell Command | Configure GUI is supported only on systems running the Windows operating system.

To access the GUI, click **Start** → **All Programs** → **Dell** → **Command Configure** → **Dell Command | Configure Wizard** or double-click **Dell Command | Configure Wizard** on the desktop.

Creating a BIOS package using the GUI

Using the Dell Command | Configure GUI, you can create a BIOS package containing valid settings to apply to target client systems.

To create a BIOS package:

1. Access the Configuration wizard.

For more information, see [Accessing Dell Command | Configure GUI](#).

The **Create Multiplatform Package** screen is displayed with the following configuration options.

- **Create Multiplatform Package** — Click to view the BIOS settings that are supported on all possible client systems. Configure, validate, and export the settings as **INI**, **CCTK**, **EXE**, **shell script**, or **HTML** file.
- **Create Local System Package** — Click to view the BIOS settings of the host system. Configure, validate, and export the settings as **INI**, **CCTK**, **EXE**, or **HTML** file. The file displays the supported and unsupported BIOS options for the system.
- **Open a Saved Package** — Click to import a saved configuration file. Configure, validate, and export the settings as **INI**, **CCTK**, **EXE**, **shell script**, or **HTML** file.

 **NOTE:** To open a saved package, click **Open a Saved Package**, browse to the file location and then click **Open**.

2. Click the required option.

All the options supported for configuration are displayed. For more information, see [Configuration options](#).

3. Click **Edit** or double-click the option.

4. From the **Value to Set** drop-down list, select the values of the required option.

The **Apply Settings** check box of the edited options are displayed as selected.

5. Select the required export option to export the edited options.

For more information, see [Exporting the BIOS configuration](#).

 **NOTE:** If you do not want to export an option, then clear the **Apply Settings** check box.

Related Links:

- [Configuring auto on option](#)
- [Configuring boot order](#)
- [Configuring primary battery charging](#)
- [Configuring advanced battery charging](#)
- [Configuring peak shift battery charging](#)
- [Configuring keyboard backlight color option](#)

Configuration options

You can customize the BIOS settings and create a configuration package using the available configuration options described in the following table.

Table 2. Configuration options

Options	Description
View/Change	<p>Click to view or change the selected configuration and load a new configuration. When you click View/Change to load a new configuration, the configuration screen is displayed. After you have made the preferred modifications, click Save to save the changes, or click Cancel to return to the previous configuration.</p> <p> NOTE: If you try to load a new configuration without exporting the configured BIOS options, then a screen is displayed. Click Discard Changes to discard the configured values or click Cancel to continue with the same configuration.</p>
Edit	Click to edit the loaded configuration.
Advanced view	<p>Click to view the configuration details such as command line options, possible values that you can set for the option, current value of the option, options to apply settings, and the description of the option.</p> <p> NOTE: You can view the current value of an option if you have loaded the settings of the host system.</p>
Basic view	<p>Click to view the configuration details such as category to which the option belongs, name of the option, possible values that you can set for the option, current value of the option, options to apply settings, and the description of the option.</p> <p> NOTE: You can view the current value of an option if you have loaded the settings of the host system.</p>
Validate	Click to validate the loaded configuration against the configuration of the host system. For more information, see BIOS option validation .
Search	Search a text in the table. Type the text in the search box and the first occurrence of the text in the table is highlighted.
Category	Click to select the required categories from the drop-down list.
	 NOTE: You can view this option only in Basic View .
Name	Displays the name of the options.

Options	Description
	 NOTE: You can view this option only in Basic View .
Value to set	Displays the value of the option. Double-click the row or click Edit to change the values.
Present Value	Displays the current value of the option.
	 NOTE: You can view this option if you have loaded the settings of the host system.
Apply settings	Select the check box to export the option. By default, all the options having a value in the Value to set column are selected.
Description	Displays a short description of the option.
Command Line Options	Displays the command line representation of the options.
	 NOTE: You can view this option only in Advance View .
Status	Displays the status of the options of the loaded configuration.
	 NOTE: The Status column is displayed only when you validate.

Configuring the setup, system, and hard disk drive passwords

You can set or change the setup password (**setuppwd**) also known as BIOS password, the system password (**syspwd**), and the hard disk drive password (**hddpwd**).

To edit the setup, system, or hard disk drive password:

1. In the **Edit** mode, click the **Value to Set** text box of the required option.
The corresponding password screen is displayed.
 -  **NOTE:** To display the password as clear text, select **Show Password**. When you select **Show Password**, then the **Confirm Password** text box is not displayed. Type the password in the **Password** text box.
 -  **NOTE:** The setup and system passwords must contain a minimum of four characters.
2. Type the same password in the **Confirm Password** text box to confirm the password.
If both the entries match, then a green color check mark is displayed next to the **Confirm Password** text box, else a red **X** mark is displayed.
3. Click **SUBMIT**.
4. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Clearing setup, system and hard disk drive passwords

You can clear the configured setup, system and hard disk drive passwords.

To clear the passwords:

1. In the **Edit** mode, click the **Value to Set** text box of the required option.

The corresponding password screen is displayed.

 **NOTE:** To display the password as clear text, select **Show Password**. If you select **Show Password**, then the **Confirm Password** text box is not displayed.

2. Enter a blank space in the **Password** text box.
3. Enter a blank space in the **Confirm Password** text box to confirm the password.
If both the entries match, the a green check mark is displayed next to the **Confirm Password** text box, else, a red **X** mark is displayed.
4. Click **SUBMIT**.
5. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Password protection screen

While exporting a file or report with system or setup password, a password protection screen is displayed. To export the file with the password as clear text, click **Continue**. To export the file without the password, click **Mask**.

Configuring the autoon option

You can configure the days on which you want the system to automatically turn on using the **autoon** option from the **Power and Performance Management** category.

To configure the days:

1. Click the required option:
 - **Create Multiplatform Package**
 - **Create Local System Package**
 - **Open a Saved Package**

 **NOTE:** To open a saved package, click **Open a Saved Package**, browse to the file location, and then click **Open**.
2. Click **Edit**, or double-click the option.
3. In the **autoon** option row, click **View/Change** in the **Value to set** column.
The auto on screen is displayed.
4. Select one of the following options from **Auto On** screen:
 - **Disabled** – To turn off the feature.
 - **Weekdays** – To turn on the target system automatically only on weekdays.
 - **Every Day** – To turn on the target system automatically everyday.
 - **Selected Days** – To choose the days on which the target system has to turn on automatically.
5. Click **OK**.
6. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Configuring the bootorder option

You can configure the boot order of a client system using the **bootorder** option from the **Boot Management** category. You can add, remove, enable, disable, or change the boot order of the legacy and Unified Extensible Firmware Interface (UEFI) boot items.

To configure the boot order:

1. Click the required option:

- **Create Multiplatform Package**
- **Create Local System Package**
- **Open a Saved Package**

 **NOTE:** To open a saved package, click **Open a Saved Package**, browse to the file location, and then click **Open**.

2. Click **Edit** , or double-click the option.

3. In the **bootorder** option row, click **View/Change** in the **Value to set** column.

The boot order screen is displayed with the current boot order type and boot order options. For more information, see [Configure boot order](#).

- To create a multiplatform package, you can add devices.

 **NOTE:** The multiplatform package supports only the legacy boot order.

- To create a local system package and to open a saved package, you can add devices and edit the existing boot order, if present.

 **NOTE:** Use the arrow buttons at the bottom of the **Boot Order** screen to change the boot order of the devices.

4. Click **OK** to save the configuration, or click **CLOSE** to discard the changes and close the **Boot Order** screen.

5. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Related Links:

- [Adding a new device to the boot order](#)
- [Boot order type](#)

Boot order screen

The following table displays the available options on the **Dell Command | Configure - Boot Order** screen.

Table 3. Options on the boot order screen

Options	Description
Device Type	Displays the type of device.
Device Instance	Displays a unique number to identify the device on the system.
Shortform	Displays the short form of the device name. If the system has many devices of the same device type, then the short form of the device is displayed with a <i>.<number></i> notation. For example, if the system has an internal HDD, eSATA HDD, and eSATA Dock HDD, then the short forms are displayed as hdd.1, hdd.2, and hdd.3 respectively.
Description	Displays a short description for the device.
Status	Displays if the device is turned on or off.
Delete	Removes the device from the boot order. Click X to remove a device.

Options	Description
---------	-------------

 **NOTE:** You can view this option if the boot order screen is in **Edit** mode.

Adding a new device to the boot order

To add a new device to the boot order:

1. Click **Add Device** on the **Boot Order** screen.
2. Select the device from the **Device Type** drop-down list.
The **Shortform**, **Description**, and **Status** fields are automatically populated. By default, the **Status** of the device is **On**.
3. Select an instance for the device from the **Device Instance** drop-down list.
4. Click **OK**.

Boot order type

The boot order type displays the type of the loaded configuration. The two types of boot order are Legacy and UEFI. If the host system file is loaded, then it displays the currently active boot order type. If a saved file is loaded, then it displays the boot order type saved in the file.

The common scenarios for boot order type are:

- If boot order type is not specified in the file and if any UEFI devices are present on the system, then the system displays the boot order type as UEFI.
- If the boot order type is not specified in the file and if any legacy devices (other than **hdd**) are present on the system, then the system displays the boot order type as Legacy.
- If the boot order type is not specified and the loaded configuration file has only **hdd** items, then the system prompts the user to select the boot order type.
- If the boot order type is not specified for a legacy system and if both UEFI and legacy devices are present, then the system displays a warning message and removes the legacy or UEFI devices depending on the order of occurrence of the device.

Configuring the primarybatterycfg option

You can configure the primary battery charging mode using the **primarybatterycfg** option from the **Power and Performance Management** category.

To configure the primary battery charging option:

1. Click the required option:
 - **Create Multiplatform Package**
 - **Create Local System Package**
 - **Open a Saved Package**

 **NOTE:** To open a saved package click **Open a Saved Package**, browse to the file location and then click **Open**.
2. Click **Edit**, or double-click the option.
3. In the **primarybatterycfg** option row, click **View/Change** in the **Value to set** column.
The **Primary Battery** screen is displayed.
4. Select the mode to charge the battery in the **Primary Battery** screen.

- **Standard Charge** — Charges the battery over a longer period of time.
- **Express Charge** — Charges the battery using the express charging algorithm, Dell's fast charging technology.
- **AC Use** — Charges the battery while plugged-in.
- **Auto Charge** — Charges the battery based on a periodic evaluation of battery usage to deliver the best balance capacity.
- **Custom Charge** — The battery charging starts and stops based on user settings.

 **NOTE:** If you have selected **Custom Charge**, then specify the **Start Charging (50 – 95 %)** and **Stop Charging (55 – 100 %)** values.

5. Click **OK**.
6. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Configuring the `advbatterychargecfg` option

You can configure the advanced battery charging mode using the `advbatterychargecfg` option from the **Power and Performance Management** category. Advanced Battery charge mode uses standard charging algorithm and other methods during non-working hours to maximize battery health. During working hours, ExpressCharge is used to charge the batteries faster. You can configure the days and the work period during which the battery has to be charged. To enable advanced battery charging, provide the day, start time, and the duration of charging (optimal usage duration).

To configure the advanced battery charging option:

1. Click the required option:
 - **Create Multiplatform Package**
 - **Create Local System Package**
 - **Open a Saved Package**

 **NOTE:** To open a saved package, click **Open a Saved Package**, browse to the file location, and then click **Open**.
2. Click **Edit** or double-click the option.
3. In the `advbatterychargecfg` option row, click **View/Change** in the **Value to set** column. The **Advanced Battery Settings** screen is displayed.
4. Enable Advanced Battery Charge.

 **NOTE:** If advanced battery charge mode is enabled in the **BIOS Setup** screen, the **Enable Advanced Battery Charge** is selected by default.
5. Select the day of the week.

 **NOTE:** To apply the same settings to all the days select the **Apply these settings to other days** option.
6. In the **Beginning of Day** drop-down list, select the time at which the advanced charging has to start.
7. In the **Work Period** drop-down list, select the duration of advanced charging.
8. Click **OK**.
9. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Configuring the peakshiftcfg option

You can configure the Peak Shift battery charging mode using the **peakshiftcfg** option from the **Power and Performance Management** category. Using Peak Shift configuration, you can minimize the consumption of AC power during the peak power usage period of the day. You can set a start and end time for the Peak Shift period. During this period, the system runs on battery if the battery charge is above the set battery threshold value. After the Peak Shift period, the system runs on AC power without charging the battery. The system functions normally by using AC power and recharging the battery at the specified Charge Start Time.

To configure the Peak Shift Battery charging option:

1. Click the required option:
 - **Create Multiplatform Package**
 - **Create Local System Package**
 - **Open a Saved Package**

 **NOTE:** To open a saved package, click **Open a Saved Package**, browse to the file location and click **Open**.
2. Click **Edit**, or double-click the option.
3. In the **peakshiftcfg** option row, click **View/Change** in the **Value to set** column. The **Peak Shift** screen is displayed.
4. Enable the peak shift settings option.
5. Select the day of the week.

 **NOTE:** To apply the same settings to all the days select the **Apply these settings to other days** option.
6. From the **Operate only on battery** drop-down list, select the time from when you want the system to operate only on battery.
7. From the **Operate only on AC** drop-down list, select the time from when you want the system to operate only on AC.
8. From the **Resume normal power/charge** drop-down list, select the time from when the system has to start using the AC power and recharging the battery.

 **NOTE:** The system adjusts the value in the drop-down list to meet the following criteria:

 - **Operate only on battery** time should be less than or equal to the time specified for **Operate only on AC**.
 - **Operate only on battery** time and **Operate only on AC** time should be less than or greater than the **Resume normal power/charge** time.
9. Click **OK**.

 **NOTE:** Select **Apply these settings to other days** check box to apply the same settings for all days of the week.
10. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Configuring the keyboardbacklightcolor option

You can configure the keyboard backlight color for the Dell Latitude rugged Extreme systems using the **keyboardbacklightcolor** option from the **System Configuration** category. You can enable supported colors, set active color, and configure customcolor1 and customcolor2.

To configure the keyboard backlight color:

1. Click the required option:

- **Create Multiplatform Package**
- **Create Local System Package**
- **Open a Saved Package**

 **NOTE:** To open a saved package click **Open a Saved Package**, browse to the file location and then click **Open**.

2. Click **Edit** or double-click the option.

3. In the **keyboardbacklightcolor** option row, click **View/Change** in the **Value to set** column. The **Keyboard Backlight Color** screen is displayed.

4. Select the colors that you want to enable for the keyboard backlight from the list **Enable**.

 **NOTE:**

- You can select and enable multiple colors at a time.
- If you select **None**, no color will be enabled. You cannot select other colors if you have selected the option **None**.

5. Select the color that you want to set as an active color for the keyboard backlight from the list **Active**.

 **NOTE:** You can select only one active color for your keyboard backlight at a time.

6. Configure the Red, Green, and Blue (RGB) values if you have selected **CustomColor1** or **CustomColor2**.

To configure the RGB values for customcolor1 or customcolor2,

- a. Click **CHANGE**.
- b. Choose the color from the color canvas.
- c. Click **Select**.

7. Click **OK**.

8. To apply the modifications, export the configuration in .ini or .exe format. See, [Exporting the BIOS configuration](#).

Advanced System Management

Advanced System Management (ASM) is a feature supported on Dell Precision R7610, T5810, T7810, T7910 and later workstations. The feature displays information about voltage, temperature, current, cooling device, and power supply probes. The feature also allows you to set the non-critical upper threshold values of voltage, current, cooling, and temperature probes.

Setting the noncritical threshold values

 **NOTE:** You can set the critical and non-critical upper threshold values only for voltage, current, cooling and temperature probes.

To set the non-critical threshold values for the probes:

1. Click the required option:

- **Create Multiplatform Package**
- **Create Local System Package**
- **Open a Saved Package**



NOTE: To open a saved package, click **Open a Saved Package**, browse to the file location, and then click **Open**.

2. Click **Edit**, or double-click the option.

3. In the **advsm** option row, click **View/Change** in the **Value to set** column.

The **Advanced System Management** screen is displayed.



NOTE:

- If you are setting the non-critical threshold values for **Create Local System Package**, the columns displayed are: **Description, Type, Index, Location, Minimum, Maximum, Critical Upper Threshold, NonCritical Upper Threshold**, and **Delete**. The system displays the details of the available probes. You cannot edit the **Type** and **Index** fields of the listed probes.
 - If you are setting the non-critical threshold values for **Create Multiplatform System Package**, the columns displayed are: **Type, Index, NonCritical Upper Threshold** and **Delete**. The system does not display any values for the probes. You have to set the values for **Index**, and **NonCritical Upper Threshold** fields for each of the selected probes. Set the value of **Index** depending on the number of instances of the probes running on the system. The value of **NonCritical Upper Threshold** must be within the critical upper threshold range.
4. To set the non-critical threshold values for a new probe, click **Add Probe**, and then type the values in the required fields.
 5. To set the non-critical threshold value for the listed probes, provide the value in the respective column.
 6. To delete a probe, click **X** mark.
 7. Click **OK**.
 8. To apply the modifications, export the configuration in **.ini** or **.exe** format. See, [Exporting the BIOS configuration](#).

BIOS option validation

You can validate the options of a BIOS package against the configuration of the host system using the **Validate** option. You can validate the settings of a multiplatform package, local system package, or a saved package. You can validate all the options except the **bootorder**, **syspwd**, and **setuppwd** options.

Validating a multiplatform package or saved package

To validate the options of a multiplatform or saved package:

On the **Create Multiplatform Package** screen, click **Validate**.

- If the option and the configured value are supported on the host system, then a green check mark is displayed in the **Status** column.
- If the option is supported and if the configured value is not supported on the host system, then a red **X** mark is displayed in the **Status** column.
- All unsupported options are greyed out and the **Status** column remains blank.

- All the supported options on the host system are highlighted and the **Status** column remains blank with the **Value to Set** field as **Not Specified**.

Validating a local system package

To validate the options of a local system package:

On the **Create Local System Package** screen, click **Validate**.

- All the options that are applicable on the host system are highlighted, and a green check mark is displayed in the **Status** column.
- All unsupported options are greyed out, and the **Status** column remains blank.

 **NOTE:** You can configure the supported options on the host system even after you validate the local system package.

Exporting the BIOS configuration

You can export a customized configuration to apply the same settings on a target client system. You can export both supported and unsupported options. You can export certain options (**asset** and **propowntag**) without specifying any values.

To export an option:

Select the **Apply Settings** check box of that option, and then export in any of the following formats:

- **Self-Contained Executable** — Click **EXPORT.EXE** to export the configuration settings as a SCE (EXE file). For more information, see [Setup, system, or hard disk drive passwords screen](#).
- **Report** — Click **Report** to export the configuration settings as a read-only HTML file.
- **Configuration file** — Click **EXPORT CONFIG** to export the configuration settings as a CCTK or INI file.

 **NOTE:** To display and configure the options on the GUI, double-click the CCTK file.

- **Shell script** — The shell script is generated at the location where the SCE file is exported, and contains the same configuration as that of the SCE file. The shell script is used to configure a system running the Linux operating system.

Exporting the SCE (.EXE) file

Perform the following steps to export the BIOS configuration:

1. Click the **EXPORT.EXE** option to export the BIOS configuration as a .exe file.
2. The **Setup, System or Hard Disk Drive Password** screen is displayed prompting you to type a password.
3. Depending on the type of password set on the target system, determine which password to provide based on the table below:

Settings you want to configure	Passwords set on the target system						
	Setup Password	System Password	Hard Disk Drive Password	Setup and System Passwords	Setup and Hard Disk Drive Passwords	System and Hard Disk Drive Passwords	System, Setup and Hard Disk Drive Passwords
BIOS Tokens/features	Setup Password	System Password	Not Required	Setup Password	Setup Password	System Password	Setup Password
Setup Password	Setup Password	System Password	Not Required	Setup Password	Setup Password	System Password	Setup Password
System Password	Setup Password	System Password	Not Required	Setup and System Passwords	Setup Password	System Password	Setup and System passwords
Hard Disk Drive Password	Setup Password	System Password	Hard Disk Drive Password	Setup Password	Setup and Hard Disk Drive Passwords	System and Hard Disk Drive Passwords	Setup and Hard Disk Drive Passwords

Figure 1. Password Reference Table

For example,

- If the setup password is set in the system, and you want to configure BIOS tokens/features, you need to provide setup password.
 - If the setup and system passwords are set in the system, and you want to configure BIOS tokens/features, you need to provide setup password.
 - If the setup and system passwords are set in the system, and if you want to configure BIOS tokens/features as well as change system password, you need to provide both system and setup passwords.
 - If the setup, system and hard disk drive passwords are set in the system, and if you want to configure BIOS tokens/features as well as change hard disk drive password, you need to provide both setup and hard disk drive passwords.
4. Provide appropriate password(s) in order to be able to configure the desired settings.
 - To provide a setup password, click **Setup Password**, then select the **Use the password information below** option, and then type the setup password.
 - To provide a system password, click **System Password**, then select the **Use the password information below** option and type the system password.
 - To provide a hard disk drive password, click **Hard Disk Drive Password**, then select the **Use the password information below** option and type the hard disk drive password.
 5. If the target system does not have a setup, system, or hard disk drive password, then select **No password is required**.
 6. Click **OK**.

Exporting the configuration without setting values

To export **asset** and **propowntag** without specifying changes to values:

Select the **Apply Settings** check box of the corresponding option and export.

Target system configuration

You can apply the exported INI, CCTK, SCE, and shell script files to configure the target client systems.

Related Links:

- [Applying a INI or CCTK file](#)
- [Applying a shell script on Linux systems](#)

- [Applying a SCE file](#)

Applying a INI or CCTK file

The prerequisites for applying a INI file or CCTK file are as follows:

- Administrator privileges
- Dell Command | Configure installed on the client system

To apply a INI file or CCTK file, type `cctk -i <filename>`.

Applying a shell script on Linux

1. Copy the script to a system running the Linux operation system.
2. Run `dos2unix` on the system.
3. Run the script as: `sh <filename.sh>`

Applying a SCE file

 **NOTE:** You must have Administrator privileges.

To apply SCE on a target system:

Double-click the SCE, or from the command prompt, browse to the directory where SCE is located and type the name of the SCE file.

For example, `C:\Users\SystemName\Documents>"<filename>"`.

 **NOTE:** You cannot run SCE on Windows PE systems. For more information on applying SCE on target systems running the Windows PE operating systems, see [Troubleshooting](#).

SCE details

Some of the common scenarios in which you might use SCE are:

- When you apply SCE on a target system, it performs a silent installation for the BIOS settings on the target system. When the installation is complete, SCE generates a log file with the SCE name at the same location. The log file contains all the applied options and the status of the SCE file.
-  **NOTE:** To generate the log file in the required location, specify the location of the log file. For example, `SCE.exe /l="<folder_path>\log.txt"`.
- When you apply SCE on a target system from a read-only location, provide the **/nolog** option to prevent generation of the log file. For example, `SCE.exe /nolog`. The **/nolog** option helps the SCE to run successfully and informs that a log file is not created as SCE is in a read-only location.
- If you run SCE from a read-only location without providing **/nolog**, then SCE fails to run.
- To apply SCE on Windows PE, extract SCE from a system running the Window operating system using the **/e** option. For example, `SCE.exe/e=<folder_path_to_extract SCE>`.
- If you have configured a setup or system password on the target system, and while exporting SCE, if you have not provided the same password in the **Setup, System, or Hard Disk Drive Password** screen, then you cannot double-click and apply SCE on the target system. However, while applying SCE from the command prompt, you can provide the setup or system password of the target system.

 **NOTE:** Example of providing setup password: `C:\Windows\Command Configure \SCE">"<filename>" --valsetuppwd= <password string>`

 **NOTE:** Example of providing system password: `C:\Windows\Command Configure \SCE">"<filename>" --valsyspwd= <password string>`

Related Links:

- [Exporting the BIOS configuration](#)
- [Exporting the configuration without setting values](#)

Log details in Package History

You can view the details of the BIOS configuration exports in the **Package History** screen. The **Package History** displays the details such as time, date, type of export, and the location to which the file is exported.

Related Links:

- [Viewing a log file](#)
- [Deleting log details](#)

Viewing a log file

Click **Package History**, on the **Dell Command | Configure** page.

Deleting log details

On the **Package History** page, click the **Clear Log**.

Providing feedback on Dell Command | Configure

You can provide feedback on the Dell Command | Configure using the link on Dell Command | Configure GUI.

1. Click the **Give us your feedback** link to launch the online survey page.
2. Provide your feedback and satisfactory ratings.
3. **Submit** to share it with Dell.

Troubleshooting

Running Dell Command | Configure displays error messages

If you get the error message, `Required BIOS interface not found` or `HAPI load error`, then uninstall and reinstall Hardware Application Programming Interface (HAPI)

Running Dell Command | Configure on 32-bit and 64-bit supported system

Ensure that you are running **cctk.exe** based on the architecture of the system. If you are running Dell Command | Configure on a 32-bit supported system, browse to the `x86` directory in the installation directory, and run Dell Command | Configure commands. If you are running **cctk.exe** on a 64-bit supported system, then browse to the `x86_64` directory and run Dell Command | Configure commands.

If you are running Dell Command | Configure for 32-bit supported systems on a 64-bit supported system, then an error message is displayed: `HAPI Driver Load Error`.

If you are running Dell Command | Configure for 64-bit supported systems on a 32-bit supported system, then an error message is displayed: `Not a valid Win32 application`.

Running Dell Command | Configure on Windows Vista, Windows 7, Windows 8, Windows 8.1, or Windows 10 when user account control is enabled

To run Dell Command | Configure on systems running Windows Vista or later with User Account Control (UAC) enabled, right-click the **Dell Command | Configure Command Prompt** and select **Run as administrator**.

 **NOTE:** On a Windows Vista, Windows 7, Windows 8, or Windows 8.1, if UAC is enabled, then a user with Administrator privileges cannot install or uninstall Dell Command | Configure in silent mode.

Running Dell Command | Configure on Linux

When you install Dell Command | Configure on a system running the Linux operating system, the entry, **modprobe dcdbas**, is added in the `/etc/rc.modules` file. After uninstalling Dell Command | Configure, this entry is not removed.

TPM activation

Trusted Platform Module (TPM) is an industry standard cryptographic module that provides attestation, integrity metrics and reporting, and a secure key hierarchy. Client systems use TPM to verify if the state of the system has changed between two boot cycles.

To activate and check the TPM activation:

1. If not set, set the BIOS password on the system. Type:
`cctk --setuppwd=<new-BIOS-password>`
2. If not enabled, enable TPM. by typing the following command:
`cctk --tpm=on`
3. Reboot the system.
4. To activate TPM, type the following command:
`cctk --tpmactivation=activate --valsetuppwd=<Setuppwd>`
5. Reboot the system without interruption till the operating system loads.
6. To check the status of TPM. type:
`cctk --tpmactivation`

The status is displayed as **activate**.

SCE failing to run on Windows Preinstallation Environment (Windows PE)

The SCE generated using the Export option on the GUI is failing to run on Windows PE. To configure BIOS using SCE, on the target system running the Windows PE operating systems:

1. On systems running the Windows operating systems, extract the contents of SCE to a folder using the following command:
`Sce.exe /e=<folder_path_to_extract_contents>`
-  **NOTE:** For more information on using the command, use **/h** switch.
2. Copy the extracted contents to an accessible location on the system.
 3. From the location of the extracted contents, run the following command to apply the configuration:
`applyconfig.bat /logfile <A valid and existing folder with write permission>\<A valid file name>`

For example, `applyconfig.bat /logfile C:\log.txt`

To apply the configuration on a system, where setup or system password has been set, run the following command: `applyconfig.bat /logfile <A valid and existing folder with write permission>\<A valid file name> "--valsetuppwd= <setup password>"`

Example 1: `applyconfig.bat /logfile C:\log.txt "--valsetuppwd=password"`

Example 2: `applyconfig.bat /logfile C:\log.txt "--valsyspwd=password"`

Contacting Dell

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.