

Dell Command | Endpoint Configure for Microsoft Intune



Simplifying BIOS configuration for Dell
devices

March 2024

Mismanaged BIOS settings Impact Enterprises



Security risks

Incorrect BIOS settings can expose devices to security vulnerabilities. Ensuring that secure settings are consistently applied is crucial.



Non-compliance risks

Compliance regulations (such as GDPR and HIPAA) mandate data protection. BIOS vulnerabilities can lead to unauthorized access or data breaches. Non-compliance jeopardizes sensitive information security. [Federal Emergency Management Agency \(FEMA\)](#) notes that **40% of businesses that suffer data loss end up shutting down operations indefinitely.**



Compatibility

BIOS settings must align with the operating system and hardware. Mismatched configurations can lead to compatibility issues thereby impacting productivity.



Legacy Systems

Managing BIOS settings for older systems with outdated firmware can be cumbersome. These systems may lack modern management features.



Password Management

Often a single BIOS password is applied to a fleet of devices. A single, inconsistently managed BIOS password across a device fleet can pose security risks to an organization.

BIOS configuration across devices is a challenging task for IT admins

Traditionally the process to configure BIOS settings has differed across individuals, companies, and policies. Each administrator typically developed their own processes, passwords and implementation strategies leading to numerous processes rather than a unified, streamlined approach. Some of the common hurdles that IT admins face when deploying BIOS settings are:

- **Lack of standardization:** The processes that IT administrators have followed to configure BIOS settings have traditionally been developed for specific use cases. As technologies transform and newer peripherals or devices surface, lack of a standardized process to configure BIOS can become a problem for IT admins.
- **Deployment Automation:** Automating BIOS settings during deployment is essential. However, achieving this seamlessly across various devices can be tricky.
- **User Interaction:** Some BIOS settings require manual intervention during deployment. Admins need to strike a balance between automation and user involvement.

But what if ...



...there was a native integration that simplified configuring BIOS within the tools you're already using



...you could reduce IT time spent configuring BIOS settings and passwords across fleets of devices



Often times when an IT admin is configuring BIOS for a new feature, capability or closing out a new threat- being able to do it after a machine is deployed is very critical. What hasn't existed is a simplified method to do it.

– **Joe Kozlowski**

*Senior Distinguished Engineer,
Dell Technologies*

Dell Command | Endpoint Configure for Microsoft Intune.

Dell has worked with Microsoft to develop a capability that allows IT admins to manage and push Dell BIOS settings quickly, easily and natively within Microsoft Intune using BLOBs. The industry's first* Binary Large Object (BLOB) package-based solution for securely configuring & managing endpoints natively in Microsoft Intune.

Now you can



Manage Dell client device BIOS configuration



Deploy a unique-per-Dell-client device BIOS password



Report Dell client device BIOS configuration status

What this means for you and your IT team

IT admin/users can now access a single pane of glass solution. On Dell devices when opening Microsoft Intune, they can now see an option to easily configure their desired BIOS settings by going to Dell Command Configure. A simple, fast and streamlined way to keep firmware updated with...

600+

BIOS and hardware settings that can be configured with Microsoft Intune Infrastructure natively

1:1

Unique-per-device BIOS password, automatically managed by Microsoft Intune and Azure Active Directory

0

External API authorization, configuration or access requirements

100%

A solution that works on all Dell Windows Pro/Enterprise business clients – old and new - for configuring BIOS settings

1

Uses the same settings configuration GUI - Dell Command | Configure - that customers use with Configuration Manager, for a simplified transition to Microsoft Intune

1

Distribution is configured, edited, deployed, and monitored, natively, like any other configuration profile in Microsoft Intune

Dell Command | Endpoint Configure for Microsoft Intune.

How it works: Configure and update BIOS settings for Dell devices with zero touch



IT Admin deploys Dell Command | Endpoint Configure for Microsoft Intune connector service



IT admin then configures desired BIOS settings with Dell Command | Configure



Exports the configuration package with the desired BIOS settings



Imports the configuration package into Microsoft Intune configuration profile, and assigns it to device group



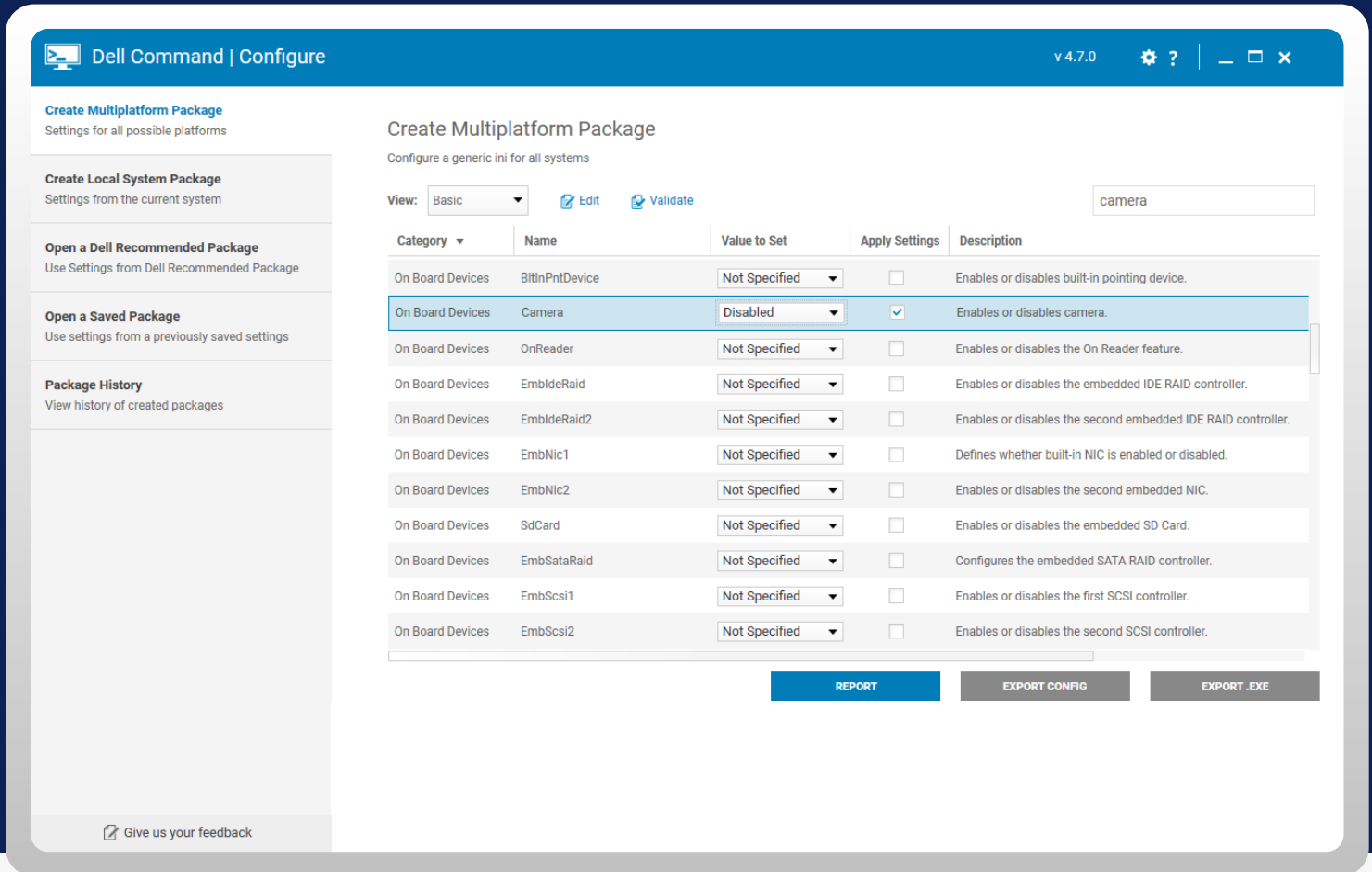
Configuration package is then deployed via Microsoft Intune to the end points



Microsoft Intune Connector Service receives configuration package, verifies integrity, and applies it to the endpoints

Dell Command | Endpoint Configure for Microsoft Intune – In action

1 Start with Dell Command Configure



The screenshot displays the Dell Command | Configure web interface. The main heading is "Create Multiplatform Package" with the subtitle "Configure a generic ini for all systems". The interface includes a sidebar on the left with navigation options: "Create Multiplatform Package" (Settings for all possible platforms), "Create Local System Package" (Settings from the current system), "Open a Dell Recommended Package" (Use Settings from Dell Recommended Package), "Open a Saved Package" (Use settings from a previously saved settings), and "Package History" (View history of created packages). The main content area shows a "View:" dropdown set to "Basic", "Edit", and "Validate" buttons, and a search input field containing "camera". Below this is a table of configuration options:

Category	Name	Value to Set	Apply Settings	Description
On Board Devices	BltnPntDevice	Not Specified	<input type="checkbox"/>	Enables or disables built-in pointing device.
On Board Devices	Camera	Disabled	<input checked="" type="checkbox"/>	Enables or disables camera.
On Board Devices	OnReader	Not Specified	<input type="checkbox"/>	Enables or disables the On Reader feature.
On Board Devices	EmbldeRaid	Not Specified	<input type="checkbox"/>	Enables or disables the embedded IDE RAID controller.
On Board Devices	EmbldeRaid2	Not Specified	<input type="checkbox"/>	Enables or disables the second embedded IDE RAID controller.
On Board Devices	EmbNic1	Not Specified	<input type="checkbox"/>	Defines whether built-in NIC is enabled or disabled.
On Board Devices	EmbNic2	Not Specified	<input type="checkbox"/>	Enables or disables the second embedded NIC.
On Board Devices	SdCard	Not Specified	<input type="checkbox"/>	Enables or disables the embedded SD Card.
On Board Devices	EmbSataRaid	Not Specified	<input type="checkbox"/>	Configures the embedded SATA RAID controller.
On Board Devices	EmbScsi1	Not Specified	<input type="checkbox"/>	Enables or disables the first SCSI controller.
On Board Devices	EmbScsi2	Not Specified	<input type="checkbox"/>	Enables or disables the second SCSI controller.

At the bottom of the table are three buttons: "REPORT", "EXPORT CONFIG", and "EXPORT .EXE". A "Give us your feedback" link is located at the bottom left of the interface.



This is a screenshot of Dell command configure. IT admins can go here to create the BIOS package that they want to deploy via Intune across their fleet or enterprise.

Dell Command | Endpoint Configure for Microsoft Intune – In action

2 How it works within Intune

The screenshot displays the Microsoft Intune admin center interface. On the left, the navigation pane shows 'Devices' (Step-1) and 'Configuration profiles' (Step-2) under the 'Policy' section. The main area shows a list of profiles with a '+ Create profile' button (Step-3). The 'Create a profile' dialog is open, showing 'Platform' set to 'Windows 10 and later' (Step-4), 'Profile type' set to 'Templates' (Step-5), and 'BIOS configurations' selected under 'Administrative templates' (Step-6). The 'Create' button (Step-7) is at the bottom of the dialog.

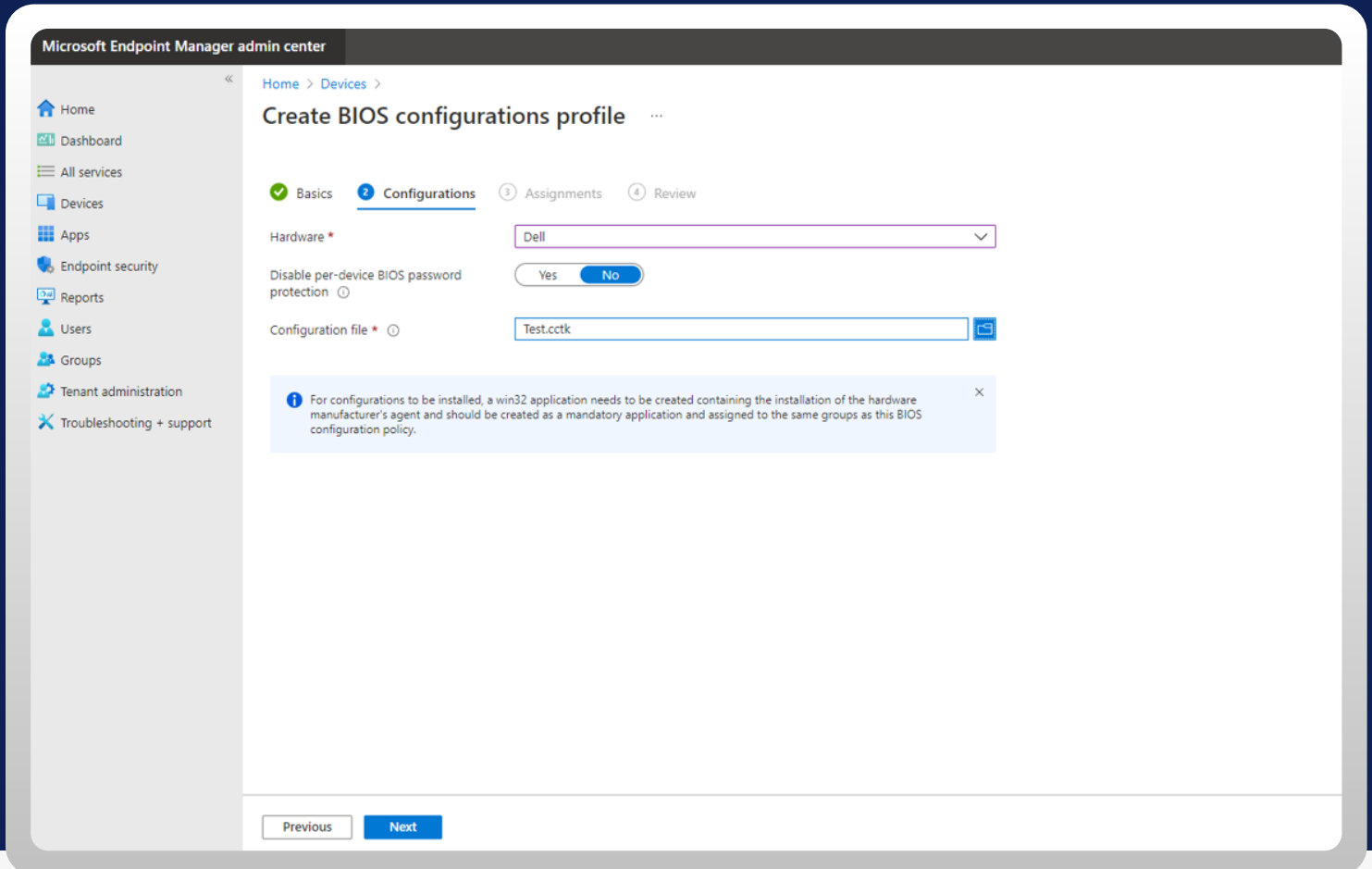


Once the BIOS package is ready, IT admins should take the following steps in Microsoft Intune

- 1 | Select the device that need to be configured
- 2 | Click on configuration profile
- 3 | Move to “create profile”
- 4 | Input the platform that you have for your devices for e.g. Windows 10, windows 11
- 5 | Click on “profile type”, select “Templates”
- 6 | “BIOS configuration will then pop up for Microsoft InTune

Dell Command | Endpoint Configure for Microsoft Intune – In action

3 Create BIOS profile



The screenshot displays the Microsoft Endpoint Manager admin center interface. The main content area is titled "Create BIOS configurations profile" and is divided into four steps: Basics, Configurations, Assignments, and Review. The "Configurations" step is currently active. The form includes the following fields and controls:

- Hardware ***: A dropdown menu with "Dell" selected.
- Disable per-device BIOS password protection**: A toggle switch set to "No".
- Configuration file ***: A text input field containing "Test.cctk" and a file selection icon.

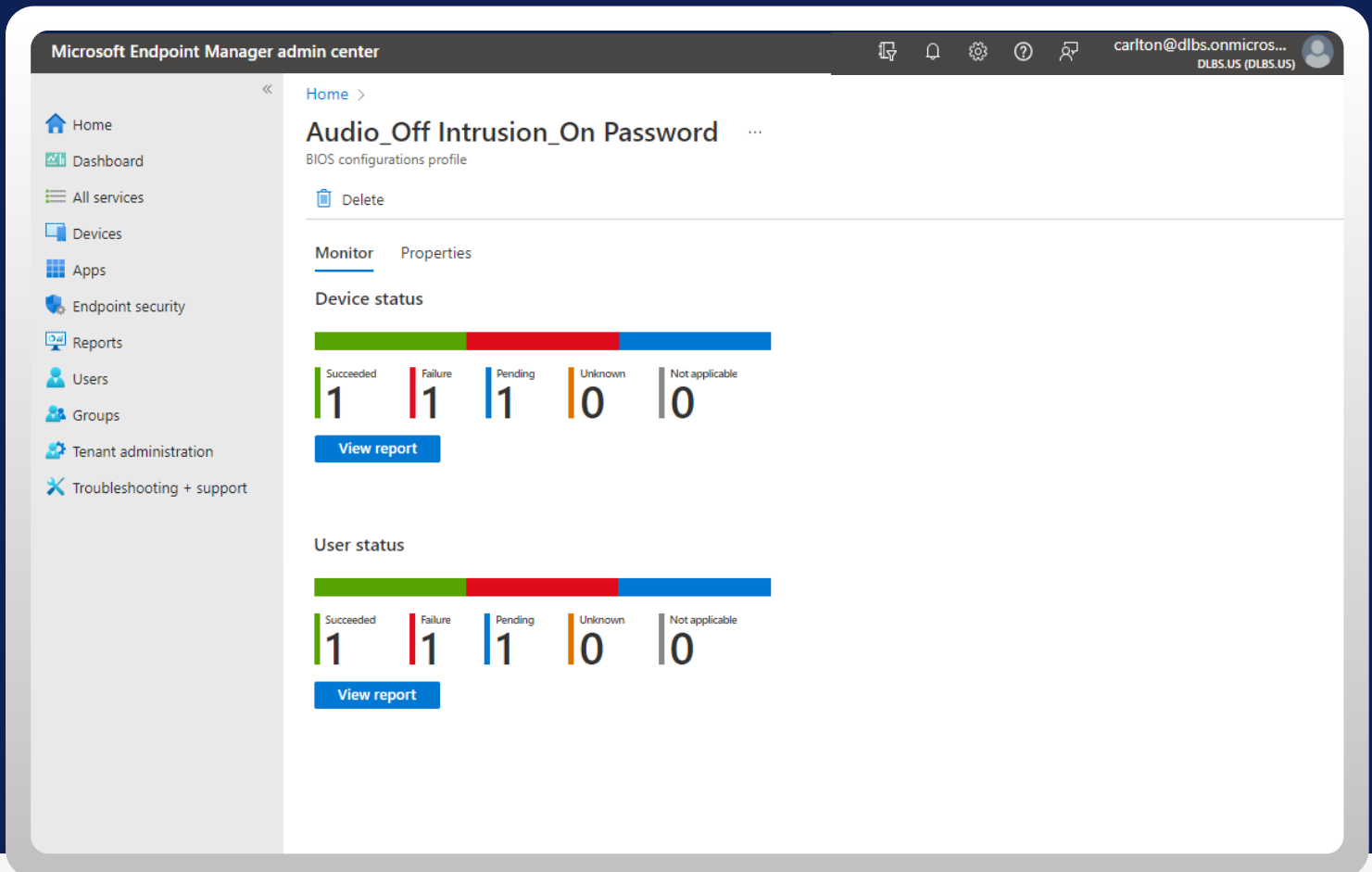
A blue information banner at the bottom of the form states: "For configurations to be installed, a win32 application needs to be created containing the installation of the hardware manufacturer's agent and should be created as a mandatory application and assigned to the same groups as this BIOS configuration policy." Below the form are "Previous" and "Next" navigation buttons.



Once “**create**” is clicked in Microsoft Intune, IT admins will see this window which prompts them to get the BIOS configuration profile that will help push updates out. **ADD CCTK reference**

Dell Command | Endpoint Configure for Microsoft Intune – In action

Example of a report







Once you create a CCTK file (previous slide) inside of Dell Command Configure, you can then see the status of the BIOS configuration which was pushed out to the required endpoints.

An IT Admin can see the actual device status and user status - with granular details on success and failure metrics that can be drilled into further.

IT Teams Can Now Streamline Endpoint Security and Manageability

The operation, assignment and reporting are native in Intune and handled just like any other configuration profile.

The BLOB adds the capability to configure over 600+ BIOS and hardware settings using current zero-touch deployment methods.

-  **Easier than ever to manage your company's fleet of devices**, while helping you and your peers work more securely, especially since one of the key BIOS settings it can manage is the BIOS password.
-  Set a **strong and unique per-device BIOS password that is automatically rotated every time it's used**. Each password is stored in an Azure secure field. You simply toggle a button to set up this protection for your devices.
-  This works with **all new and previous generation Dell commercial devices**.
-  Additionally, **all these BIOS configuration settings can be managed through the cloud** because of the unstructured nature of BLOB Storage.

Interested to know more

Contact your Dell Sales Representative for more information or visit www.dell.com/command



Related Dell Manageability Solutions

Dell Client Command Suite

Streamlines how you deploy drivers, configure BIOS, monitor devices, and manage updates

Dell Command | Configure

Provides configuration capability to business client platforms

Dell Command | Endpoint Configure for Microsoft Intune

Configures BIOS on a fleet of Dell devices securely, quickly, and natively in Microsoft Intune

Dell Trusted Update Experience

The latest BIOS, driver, and firmware updates – Validated against all your device models and delivered seamlessly, on an industry-standard release cadence