



Last update: 16<sup>th</sup> March 2023

# Dell Optimizer Frequently Asked Questions

## General Questions

### **What is Dell Optimizer or Dell Optimizer (DO) for Precision (DO-P)?**

Dell Optimizer/Dell Optimizer for Precision is our AI-based optimization software available on most Dell PCs. It enhances the device experience and enables the user to work better from any location. It learns the user's behavior and dynamically optimizes the system's performance using artificial intelligence and machine learning.

### **If the customer re-images their device, does DO/DOP get wiped?**

Yes. However, users can download Dell Optimizer from [support.dell.com](https://support.dell.com) and deploy it using a management console (SCCM or WS1) or manually running the installer on the end point.

### **If a customer downloads Dell Optimizer on older platforms (prior to Comet Lake platforms in CY20), will it work?**

No, DO/DO-P will not install or work on a platform that is not supported.

### **Will Dell Optimizer slow down my system?**

Dell Optimizer is designed to improve your system performance. To optimize your system performance, DO is designed to not use more than 3% of system resource.

### **Is Dell Optimizer part of Services, like ProSupport?**

Dell Optimizer is a separate application from ProSupport (and SupportAssist), but they are complementary to one another. ProSupport and SupportAssist has features that help clean files, tune operation system performance, and optimize browser and cache networking settings as well as provide PC services as the customer needs them. Dell Optimizer further enhances this experience with workload optimization, improvement of app, audio, networking and privacy features.

### **Do our customers need to install Dell Optimizer for their system to function?**

Dell Optimizer was designed to elevate the experience of Dell devices. Much research and data has gone into the design and develop of Dell Optimizer to ensure customers receive a personalized, optimized experience on their Dell device(s).

Ultimately, we understand that customers are at different stages of adoption. If the customer chooses not to install Dell Optimizer, Dell devices will still function but note that they will not get some of the additional features that are only available in Dell Optimizer (like application/audio/network optimization and Intelligent Privacy or even the Collaboration touchpad on the Latitude 9330 and 9440).

Users also now have the flexibility to install only the features they want with Modular Installation.

### **Where does Dell Optimizer gather and analyze data?**

Dell Optimizer gathers data locally on the device. Data is not stored in the cloud. System resource utilization data is collected on the system, then fed into the machine learning models to improve system performance.

Learning does not require an internet connection and does not apply to web-based applications.



Last update: 16<sup>th</sup> March 2023

### **Does Dell Optimizer collect any data?**

It collects operational event data on a regular basis. This helps us understand if the application is working as it should be. The information collected includes:

- One-time ping (first launch)
- Heartbeat (every 30 days)
- App started
- App closed

If the end user/IT Admin opts-in to the Privacy Notice, telemetry data on resource utilization (CPU, GPU, memory, storage, battery) is exported to Dell anonymously to improve our machine learning models. **No resource utilization data is sent to Dell without explicit consent. Sensitive data is never collected.** The end goal is to improve our machine learning models to benefit all of our customers.

### **Are new Dell Optimizer features backward compatible?**

Dell Optimizer overall is backward compatible, but some features are hardware dependent. The new Intelligent Privacy feature for example, requires the latest Intel user presence detection sensor available on select Latitude and Precision PCs. The new Intelligent Audio feature Neural-noise cancellation is also only backwards compatible on select 2021 devices and dependent on the newest audio driver. Our new compatibility matrix will go live on the 31st which will allow customers to see what features are available to their specific device. Please refer to the latest [Feature Availability Matrix](#) for more information.

### **Does the entire portfolio of new laptops include the Dell Optimizer suite, or will it be limited to select models/ SKUs? Any plans to bring these features to existing machines as well?**

Most Latitude, Precision, OptiPlex, and Rugged PCs include the new Dell Optimizer features. Feature compatibility will vary by model. Please refer to the latest [Feature Availability Matrix](#) for more information.

### **Recently added questions**

#### **If the customer has the older version of Dell Optimizer installed, will the Dell system trigger to download the latest Dell Optimizer via any notification?**

Yes, Dell Optimizer can check for updates and prompt the user to upgrade with a notification when a newer version exists. IT Admins can also control updates to Dell Optimizer with endpoint management systems (SCCM, Intune, etc.), Dell Command Update, or give users full control to upgrade themselves.

#### **Any visibility on the possibility of Dell Optimizer eventually being integrated fully with Dell Display Manager and Dell Peripheral Manager?**

We are continuously trying to simplify the experience and manageability and are actively working towards this with a target of late 2024 or 2025.

#### **How long (timewise) does the power charging (machine learning) take?**

The Dynamic Charge Policy and Intelligent Battery Extender features take one week to analyze battery usage data to optimize your battery usage intelligently. This process is repeated each week.

#### **What's the PC resource utilization of the Dell Optimizer software?**

Dell Optimizer is designed to improve system performance and does not cause the system to slow down. It is engineered not to use more than 3% of system resources.



Last update: 16<sup>th</sup> March 2023

**Is there a step-by-step instruction to add Dell Optimizer Command Line Interface Script to Azure or SCCM? The user guide only provides the command line interface but no instruction how to do it.**

We are looking to expand our documentation for deploying, managing, and controlling Dell Optimizer through endpoint management systems like Intune and SCCM.

**Will Dell Optimizer be consolidating other functions besides Power? Display Manager? Any others?**

Both Dell Display Manager and Dell Peripheral Manager have been integrated into the latest release of Dell Optimizer. As we evaluate and learn via customer feedback, we will further consolidate and advance the Optimizer suite to elevate convenience and customer experience.

**How does it help overheating in Latitude?**

Under the Dell Optimizer power module is our thermal management settings, where the user can customize their PC's thermal and fan settings by choosing from four preset modes: Optimized, Cool, Quiet and Ultra performance. The Cool mode adjusts processor and fan speeds to help maintain a cooler system surface temperature.

**What type of resource utilization does Dell Optimizer use?**

Dell Optimizer uses machine learning and analytical AI within its suite of optimization features – including power. The **Dynamic Charge Policy** and **Intelligent Battery Extender** within the power module learns user behavior for on a set seven-day period. It analyzes battery usage data to optimize your settings intelligently. This process is repeated every seven days – the algorithm makes a new recommendation based on the latest week's battery usage data and the user is notified of any changes.

To drive efficiency and power savings, ITDMs and users can also take advantage of the power module's thermal management features and Peak Shift. Recent studies reveal that setting your policy on Quiet Mode can help you save up to 18% in power savings. Our peak shift technology is also there to help reduce electricity usage during certain times of the day by choosing time slots during which the system automatically switches to your preferred power source, allowing the ITDM (or the user) to set their power schedule. Learn more about power savings through Dell Optimizer [here](#).

Dell Optimizer also uses AI on our **Applications module (ExpressResponse)** via CPU, memory and storage workload optimization. It lets users identify their top five most used applications, identify workload types and apply optimal settings to improve performance. AI will definitely continue to play a bigger role with system performance optimization – we drive to complement existing hardware technology to elevate the PC experience.

**Is there any creative material that Dell has that customers can use to help their users use Dell Optimizer?**

We have a suite of marketing materials from customer presentations, user guides, brochures, marketing and demo videos you can send to your customer to deliver the Dell Optimizer pitch. Please check out the [Dell.com/Optimizer](https://Dell.com/Optimizer) for more information or download the latest [Dell Optimizer Brochure](#).

**When will IT be able to do centralized access? Our customers are waiting for this to activate Dell Optimizer usage.**

Dell Optimizer provides many administration features for managing Dell Optimizer within your fleet including CLI commands, WMI, and log files. These features integrate with popular endpoint management systems like Intune. The user guide provides extensive documentation on this functionality in the Administration section.

**Dell Power Manager was recently integrated into Optimizer, what's next?**



**Last update: 16<sup>th</sup> March 2023**

With the Dell Power Manager integration, it means Dell Power Manager will not be available on new platforms as a standalone app, and will eventually End of Life. Both Dell Display Manager and Dell Peripheral Manager have been integrated into the latest release of Dell Optimizer.

As we evaluate and learn via customer feedback, we will further consolidate and advance the Optimizer suite to elevate convenience and customer experience.

### **Is there a central management console in Optimizer's future or just more integration into existing tools?**

We are actively exploring solutions for deploying, managing, and controlling Dell Optimizer through endpoint management systems like Intune and SCCM.

## **Security and privacy**

### **Is Dell Optimizer safe?**

Not only is Dell Optimizer safe, but it also goes through a comprehensive launch process of security and compliance procedures through the Secure Development Lifecycle (SDL). Following Dell's code of ethics and the rules established by Dell's Product and Applications organization, we follow a framework that addresses all aspects of product security: Policy, People, Process and Technology.

### **Dell adheres to a repeatable, secure development process.**

Dell's Secure Development Lifecycle (SDL) defines security controls that product teams should adopt while developing new features and functionality. Dell's SDL includes both analysis activities as well as prescriptive proactive controls around key risk areas. The analysis activities, such as threat modeling, static code analysis, scanning and security testing, are intended to discover and address security defects throughout the development lifecycle.

Furthermore, Dell has a comprehensive approach to endpoint security with built-in security, comprehensive threat management and data security features that help protect your competitive advantage.

### **What is Dell's approach to mitigating the risk of malicious code or backdoor insertion in its software?**

Dell's approach to mitigating the risk of malicious code and backdoors is based on industry practices including, but not limited to, supplier contract requirements, supplier security reviews and audits, source code classification and labeling, authentication, access and monitoring controls for hardened engineering systems, source code reviews and scanning, source code component inventories, a centralized FOSS (Free or Open Source Software) management system, and secure source code signing.

### **What is Dell's Vulnerability Response Policy?**

Dell strives to help our customers minimize the risk associated with security vulnerabilities in our products by providing customers with timely information, guidance and mitigation to address threats from vulnerabilities. The Dell Product Security Incident Response Team (PSIRT) is responsible for coordinating the response and disclosure for all product vulnerabilities reported to Dell.

Dell employs a rigorous process to continually evaluate and improve our vulnerability response practices. Dell is an active participant in the Software Assurance Forum for Excellence in Code (SAFECode):

<http://www.safecode.org> ), the Forum for Incident Response (<http://www.first.org> ) and international standards efforts that are developed for vulnerability disclosure and handling such as ISO 29147 and ISO 30111. See Dell's [Vulnerability Response Policy](#) for more information.



Last update: 16<sup>th</sup> March 2023

### Does Dell perform code reviews or code assessments on its products?

Where deemed appropriate, Dell product organizations use code analysis tools and activities as part of their development process to identify quality defects and security vulnerabilities and comply with Dell's Secure Development Lifecycle.

### Does Dell perform thread modeling?

**Threat Modeling** is an essential part of Dell's Secure Development Lifecycle. It is a conceptual exercise designed to analyze a system's data flow to find potential security vulnerabilities and identify ways in which they may be mitigated effectively. Proactively understanding and identifying threats early in the development process helps mitigate design flaws and complements other techniques, such as code reviews and static source analysis.

### How about security testing?

**Security Testing** is an essential part of Dell's Secure Development Lifecycle and can be broken down into multiple categories, some examples include:

- **Network Vulnerability Scanning** performs analysis to identify open ports, associated services operating on those ports, vulnerable embedded components and basic configuration settings that may indicate security lapses.
- **Web Application Vulnerability Scanning** performs more detailed analysis of a web component of the product to identify common web application vulnerabilities and weaknesses.
- Fuzz testing to validate robustness and resiliency to unexpected inputs.
- **Manual Testing** consists of a variety of techniques, including testing for specific use cases (e.g. proper certificate validation and protection from command injection). Manual testing is a process completed by each product development team as they have the best understanding of the product architecture and design.

### How does Dell harden its products?

Dell offers the industry's most secure commercial PCs with robust "Below-the-OS" built-in features that deliver unmatched Prevention, Detection and Response capabilities, including, off-host BIOS verification, BIOS indicators of attack, BIOS image capture and Intel ME verification. For added security, Dell offers "Above-the-OS" solutions that protect devices from malware, ransomware, non-malware and unknown attacks, as well as sensitive data on the device and in the cloud.

With Dell's comprehensive approach to endpoint security, Dell Trusted Devices are the foundation to a modern workforce environment with invisible and seamless protection to ensure faster, smarter experiences. End users stay productive, and IT stays confident with modern security solutions for the Dell Trusted Device.

In addition, our Secure Development Lifecycle(SDL) includes **secure design and implementation practices for products and applications**; as well as the use of hardening for embedded components such as operating systems, server software, database, and embedded frameworks.

We use **industry benchmarks including those provided by the Center for Internet Security (CIS) and the US Defense Information Systems Agency (DISA) as hardening references**. Information about the security posture of Dell products, and additional steps customers may perform to achieve an enhanced secure posture, are documented in the product's Security Configuration Guide (SCG) or Administration Guide. The applicable guides are customer-facing and searchable on the Support Portal.

*We always strive to provide customers with timely information, guidance, and mitigation options to minimize risks associated with security vulnerabilities. Dell's Security Advisories and Notices are posted on the [Security Advisories & Notices portal](#).*

## Collaboration Touchpad (Collaboration Module)

### What is Collaboration Touchpad?

Collaboration touchpad allows you easy access to conferencing software in-meeting functions that are commonly used multiple times during conference calls, allowing you to focus on your meeting with peace of mind that your essential in-meeting controls are within quick reach regardless whether you are a meeting facilitator or a multi-tasking participant.

### What does it do and how do I use it?

When you join a Zoom meeting, the 4 collaboration control keys will light up, indicating that pressing any one of the keys will activate the corresponding function. When you do not have an active Zoom meeting, the keys will not light up. In fact, they would not even be visible on the touchpad for a clean, seamless look.

### What are the 4 collaboration controls and what happens when I press them?

The controls and respective behaviors are:

- Mic mute: white icon means mic is active; red icon means mic is muted
- Camera: white icon means camera is active; red icon means camera is muted
- Chat: Pressing will open Zoom's chat window (if it is not open) and pressing again will close Zoom's chat window (if it is open). Icon stays white throughout during a Zoom call. Additionally, when a Zoom chat message is received, the icon will blink (breathe).
- Screenshare: Pressing will open Zoom's screenshare tray (if you have not started a screenshare) and pressing again will end your screenshare. Icon stays white throughout during a Zoom call

### Can my Collaboration Touchpad work with Zoom meetings the web browser?

No, collaboration touchpad only works with Zoom app for now.

### Can my Collaboration Touchpad work with other conference software like Microsoft Teams?

No, collaboration touchpad only works with Zoom app for now. Having said that, we are actively working with Microsoft Teams to explore support. Our solution requires deep integration with conference solution providers in order to provide the value add to users like yourself, and these require time.

### My PC is a 2-in-1 laptop. Can I use Collaboration Touchpad in all the positions?

Collaboration touchpad is only functional when laptop is in standard position (clamshell). It does not function when laptop is in these positions: tablet, stand, tent.

### What if I do not want to use Collaboration Touchpad features and keep it as a standard touchpad.

#### Can I disable?

Yes, you can disable it via 2 ways:

- In settings (open Dell Optimizer and go to Collaboration menu) you can disable the feature.
- You can also choose to disable individual functions only. In BIOS, you can disable collaboration touchpad.

### How long would it take for CTP to work when first booted to the operating system?

Around 1-2 mins, for key services to start.

**I am multi-tasking and my Zoom call window is either minimized or in the background. Can I still use the collaboration touchpad keys?**

Yes! Pressing any of the 4 collaboration control keys will bring your Zoom call window to the foreground and activate the corresponding action. For example, if your mic is muted (red icon) and Zoom is minimized, when you press the mic mute key, it will bring Zoom call window to the foreground and unmute (turn to white icon).

**What is so innovative about collaboration touchpad? For example, can I program shortcut keys eg Alt-A to mute/unmute my mic**

Thanks to deep partnership with Zoom, Collaboration touchpad has direct communications with Zoom app, and does not utilize shortcut keys. This adds value in multiple unique ways:

- It works right after installation, and is predefined hence saving you the hassle of setting up mapping keys
- It is contextual, and it syncs perfectly with Zoom app. For example, in Screenshare, if you are already screensharing, pressing will end the screenshare (whereas a shortcut key would still open the screenshare tray). If your mic and/or camera is active, the icon shows white. When you mouse click within the Zoom app to mute it, the mute status syncs and the icon will turn red on collaboration touchpad
- It avoids potential unintended interactions with other programs while multitasking in a Zoom call because it does not use shortcut keys.

**My PC comes with a privacy mute, F4 to mute mic and F9 to mute camera. How does it interface with my collaboration touchpad?**

We value your privacy above all else. Following this principle, collaboration touchpad's mic and camera mute functions will not override your privacy mute. If you have privacy mute ON for mic and/or camera, you will need to turn them OFF first before collaboration touchpad control keys can be used.

No worries if you forget how, we will prompt you with these on-screen messages: "Press F4 to unmute your microphone" or "Press F9 to unlock your camera". These will show if you press the mic or camera mute icon on collaboration touchpad while still having privacy mute ON for mic and/or camera.

**I am worried that I may accidentally trigger unwanted functions while in a zoom meeting, for example accidentally turning on my camera or closing my screenshare. Can I temporarily turn it off?**

There are 2 options to address concerns on unwanted triggers:

- In settings (open Dell Optimizer and go to Collaboration menu) you can change your preference from single tap to a double tap in order to activate the function.
- During a Zoom meeting, you can swipe right across all 4 icons in the collaboration touchpad to deactivate it. And to reactivate it, swipe left across all 4 icons.

**I am an IT admin, can I define company specific default settings for Collaboration Touchpad. For example, setting default tap behavior as double tap.**

Yes, collaboration touchpad follows Dell Optimizer's flexibility in setting custom settings.

**What is needed for Collaboration Touchpad to work?**

To enable functionality, please ensure that all of these are installed 1) Dell Optimizer version 3.1 and above, 2) in-app Collaboration module in Dell Optimizer, 3) Zoom Client version 5.9.3 and above, and that collaboration touchpad is enabled in the BIOS.

**Do I need to manually install Dell Optimizer for Collaboration Touchpad to work?**

Dell Optimizer is pre-installed in your PC. If you are an IT admin and using a company corporate image, please ensure that collaboration touchpad is enabled in the BIOS first before installing Dell Optimizer. This is because the Collaboration module in Dell Optimizer will only be installed if the BIOS setting is true. If this sequence is



Last update: 16<sup>th</sup> March 2023

missed, turn on Collaboration Touchpad in BIOS first, then run Dell Optimizer installer and choose Modify Install to install the Collaboration module.

**Do I need to install Zoom app for Collaboration Touchpad to work?**

Yes, you will need to install the latest Zoom Client version 5.9.3 and above.

**If I have not yet installed Zoom or I am using an older version of Zoom, how will I be notified that I need to do so?**

When you open Dell Optimizer and go to Collaboration menu, a sticky banner on top will read "Collaboration Touchpad only works with the latest Zoom desktop version."

Note: our principle is to not interrupt user flow in their work with notification that may be deemed distracting or unnecessary, that is why when Collaboration Touchpad is not functional, the touchpad itself behaves and looks like a standard touchpad and no error messages are triggered.

**Do I need to update my touchpad firmware for Collaboration Touchpad to work?**

No, we will qualify the touchpad firmware and pre-install it with your PC.

**What should I do if I only want to install CTP functionality from Dell Optimizer?**

You can choose specific feature during an "Advance Setup" installation.

Default will install full feature of the latest Dell Optimizer installer.

**Can CTP support a Webinar session ?**

Yes, webinar host behavior as same as joining a regular meeting.

Webinar participant (no capability to share video, share screen and mute mic)

**Can CTP mute function override hardware audio and camera mute ?**

No, SW can't override HW mute/camera to enable/disable.

**Does the collaboration control keys on Collaboration Monitor (U3223QZ) function the same way as Yellowstone Collaboration Touchpad?**

No, they are not the same.

On Collaboration Monitor: Hook switch, Mic mute/unmute, volume up/down keys are based on USB HID industry standard. Camera key triggers physical shutter, it does not turn on and off the camera in Zoom or Teams and Teams button is based on Microsoft Teams Accessory Signaling Protocol.

On Yellowstone Collaboration Touchpad, all the keys are interfacing with a custom Zoom SDK.

In Teams, CTP keys will not light up at all.

**Does the collaboration icons on Dell Premier Collaboration Keyboard (KB900) function the same way as Yellowstone Collaboration Touchpad?**

Yes they function the same way, all the conference controls are interfacing with the same custom Zoom SDK.

Note that conference controls in the Collaboration Keyboard are enabled by Dell Peripheral Manager 1.6.4 or later, while Collaboration Touchpad is enabled by Dell Optimizer. This means that if Dell Peripheral Manager 1.6.4 or later is not installed, the collaboration icons on Collaboration Keyboard will not light up while in a Zoom call.

Also, note that the default setting for Collaboration Keyboard is to double tap the icons in order to activate.

From a co-existence perspective, the icon status will stay synced, for example if a user has mic muted, the mic icon would show red across Collaboration Touchpad, Collaboration Keyboard. And when user unmutes, regardless whether clicking in Zoom Client or tapping the icons in Collaboration Touchpad or Collaboration Keyboard, then the mic icons would show white across both.

Lastly, settings are controlled separately in Dell Peripheral Manager and Dell Optimizer. For example a user could choose to set the Collaboration Touchpad to only show the Chat icon, while on the Collaboration Keyboard all 4 icons could be shown.

## Power: Battery and Thermal Management, Peak Shift (Power Module)

### Are these the same features that exist in Dell Power Manager (DPM) and BIOS?

Yes, these features provide the same functionality as features found within DPM and system firmware (BIOS). If an IT Admin has set defined Global policies (GPO) for Thermal Management or Peak Shift within DPM, then DO will not surface the respective feature(s) within the DO UI.

### What is the difference between Thermal Management and USTT (User Selectable Thermal Table) modes?

No Difference other than Thermal Management is a more user friendly and accessible way to change USTT modes found within the system firmware (BIOS).

### What is the difference between Thermal Management and the Windows Performance Power Slider (Better Battery, Better Performance, etc.)?

Thermal Management is developed by Dell and gives options to balance PC performance, fan noise, and temperature. Windows Performance Power Slider is developed by Microsoft and gives options to balance PC performance and battery consumption.

### How does Dell Optimizer synchronize the thermal management mode with Windows Performance Power Slider?

- When the user selects Ultra Performance, DO will change the Power Slider to Best Performance.
- When the user selects Optimized, DO will change the Power Slider to Better Performance.
- When the user selects Quiet or Cool, DO will change the Power Slider to Better Battery.
- And vice versa, changes to Power Slider by the user will be reflected in DO.

### When will I not be able to customize my thermal management/USTT mode?

If a FanFailure BIOS alert is actively detected, no USTT setting will be highlighted, and the user will be unable to select a USTT mode. The fan failure status reported to USTT is only supported on Precision 7670/7770.

### Is Thermal Management supported on Desktops?

Quiet, Optimized, and Ultra Performance will be supported on OptiPlex and Precision Alder Lake Desktops.

### Can Peak Shift and Dynamic Charge Policy feature be ON at the same time?

No, they are mutually exclusive features due to Peak Shift not allowing the battery to charge when an AC adapter is plugged in.

### Will my PC battery drain quickly when the feature “Boost Application Performance” (or Performance Discharge) is engaged?

Battery runtime may decrease.

### **Will my PC get hot when the feature “Boost Application Performance” is engaged?**

PC surface temperature may increase.

### **When will the feature “Boost Application Performance” engage?**

Once turned ON in Dell Optimizer, ALL the following criteria must be met before the feature will engage:

- System is running on battery/DC power
- Targeted app from DO ‘Optimize Applications’ list is running
- Windows Performance Power Slider is set to one of the following:
  - Best Performance or Better Performance (Windows 10 - Power Slider)
  - Best Performance or Balanced (Windows 11 - Power Mode)

The feature “Boost Application Performance” will disengage when any of the above criteria are no longer met.

### **Is the feature “Boost Application Performance” compatible with all Dell batteries?**

No, a Performance Discharge compatible battery must be purchased with select Precision Mobile Workstations (Precision 5470 and 7670/7770)

## **Intelligent Privacy (Presence Detection Module)**

### **What is the technology behind Intelligent Privacy features?**

The proximity or vision sensor detects the user presence in the field-of-view (FOV), which is about one to two meters. Camera-based detection uses the vision-based sensor (Intel CloverFalls or EMZA) to detect facial landmarks.

### **Will Intelligent Privacy features show up on previous gen systems?**

Onlooker Detect and Look Away Detect require ADL chipset and a vision-based camera (Intel CloverFalls or EMZA), which are only available on the select CY22 and CY21 systems.

### **In Look Away Detect, does the device lock when the screen dims?**

No, the device doesn't lock. Only the screen dims. The screen then returns to normal brightness when the user turns their gaze back to the screen.

### **Do the sensors work when SafeShutter is closed?**

No, presence detection features are paused or unresponsive while the sensor is covered.

### **What does Onlooker Detection look for? How does it recognize another person behind me?**

The vision-based sensor detects an additional presence by identifying specific facial landmarks of the onlooker. Facial landmarks only identify if there is a person there or not but is not capable of facial recognition/identification. This is important to note because onlooker detection will only engage/trigger when someone behind the customer has their face toward the screen for at least 3 seconds. It won't be triggered by someone just walking by unless they are facing toward the customer's screen.

### **How come the camera light doesn't blink when it's detecting an onlooker?**

All sensors used are called “Low Power” sensors, which consume <5 milliwatts per hour. They are always on/detecting and the camera light does not blink when it is sensing.

### **Are the sensors on by default?**

No, when Dell Optimizer is first installed, the user will have to enable the vision-based sensor in the UI before they can use the Intelligent Privacy features. Presence Detection with proximity sensor is on by default.

**What is the farthest distance can “Onlooker” support?**

It works best at 1 meter, but it can work up to about 2 meters.

**What's the latency on the "look away" feature within Dell Optimizer? In other words, how long do you have to look away before the speed dims? And is that option configurable in some way?**

Look Away Detect is designed to dim the screen after the user looks away for about 6-8 seconds and the option is not configurable at this time.

## Intelligent Audio (Audio Module)

**Between Dell Optimizer’s Intelligent Audio, and the Noise Suppression in Teams and Zoom, what will take precedence? DO or the software’s noise suppression?**

Both noise suppressions will work together. During the development and tuning, this setup was tested to ensure there was good quality. However, there may still be corner cases where there are artifacts. This happens today with the built-in processing from Teams and Zoom, as well. As such, DO provides the user enable/disable feature for each situation and preference.

**Will previous gen systems be able to get the new audio enhancements?**

The new enhancements to Intelligent Audio require the Alder Lake chipset and Waves MaxAudio 11, which will be available in the CY2022 devices. Previous gen devices can install Dell Optimizer 3.0, but users will not see the “Remove Background Noise” or “Remove Others’ Background Noise”.

**Will Intelligent Audio work with peripherals, like headsets and speakers?**

Yes, this feature will work with peripherals attached to the supported device.

**Will Intelligent Audio remove the voices from other people in your surroundings?**

It can eliminate sounds of baby cries, but not other human voices. It will reduce other intrusive sounds in your environment, like doorbells, dog barking, vacuum cleaner, desktop notifications, keyboard typing, sirens, traffic sounds and fan.

**Can you explain the SW and HW dependencies on neural noise cancellation? How does neural noise cancellation work?**

Intelligent Audio's new features use Waves Maxx Audio technology coupled with neural noise cancellation through Intel (Gaussian & Neural Accelerator) GNA Technology. AI algorithms are trained to separate human speech vs noise and can manipulate the non-voice information for noise removal. Background noises that can be removed include, but are not limited to desktop notifications, background conversation, traffic noises, baby cries, lawn mowers, and dining sounds.

**Will Intelligent Audio’s noise cancellation tax the CPU?**

Intelligent Audio’s noise cancellation is done at the driver level so no impact to the CPU.

## ExpressResponse (Application Module)

### **How does ExpressResponse's application optimization feature compare to Windows 11 native optimization?**

These optimizations are complementary. Win11 improvements are targeted towards improving responsiveness via hardware assisted scheduling and deep power management. Dell Optimizer optimizations provide better sustained performance and resource allocation.

### **What are the exact “knobs and levers” we are adjusting to enhance performance of applications? For example, are we prioritizing single vs multithreaded processes to the CPU? adjusting virtual cache? Etc. This will be helpful for us to articulate how Optimizer is optimizing using AI.**

Setting changes pertain to power and priority of the resources provided to the user's selected application. Depending on the application and hardware, the multiple settings may be changed in the Operating System, and/or hardware driver. These settings include combination of process priorities, power slider, Graphics sync settings, cpu frequency, power plans, Cache and Memory, memory superfet settings, etc.

DO applies these setting automatically and dynamically manages the settings as user transitions across applications, system power state transitions (Standby, Reboot), and power source transitions (AC vs. battery use).

### **Is ExpressResponse always learning? Will it continue to improve my application performance over time?**

Learning is initiated when an application is added to the optimization list. The learning takes place over a period of up to 24 active use hours (depending on if/how the user uses the app) and optimization settings are applied automatically. It does not continue to learn after the learning period is complete. If behaviors change, it is recommended to initiate learning of specific apps again.

## ExpressConnect (Networking Module)

### **Are the new features for ExpressConnect backwards compatible for previous generation devices?**

Yes, ExpressConnect is a software-based solution and does not have a hardware dependency. It will work on any device that supports Dell Optimizer.

### **Do we need anything in order to connect to multiple networks?**

The hardware device has to be able to support multiple wired/wireless connections. Our devices do not currently support two WIFI connections or cellular and will need a USB adapter dongle to connect to a second network.

### **Does this work with wired and/or wireless network connections?**

It works with both wired or wireless. Please see the table of supported combinations on this page.