

Dell Display and Peripheral Manager for Mac

Version 1.3

User's Guide





CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



NOTE: A NOTE indicates important information that helps you make better use of your computer.

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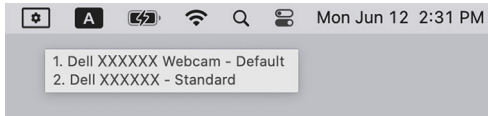


Overview

Dell Display and Peripheral Manager (DDPM) is an Apple macOS application used to manage a monitor or a group of monitors or webcams.

Dell Display and Peripheral Manager allows manual adjustment of the displayed image, assignment of automatic settings, energy management, window organization, image rotation, and other features on selected Dell monitors and webcams.


After installing Dell Display and Peripheral Manager, it runs each time your system starts. A quick access icon is available in the status menu, with information about connected monitors available when you hover your cursor over the icon.




System requirements

DDPM supports the following Apple macOS:

- macOS 12
- macOS 13
- macOS 14

 **NOTE:** Some hardware-dependent features are only available on monitors or webcams that support those features. See your monitors or webcams user guide for information about which features are available.

 **NOTE:** Screenshots in this document are for illustrative purposes only. Some features may not be supported by your monitor or webcam.



Downloading and setting up the Dell Display and Peripheral Manager

Downloading Dell Display and Peripheral Manager

Browse for your monitor or webcam model name, or type it in at <https://www.dell.com/support>. Download Dell Display and Peripheral Manager for Mac from the list of downloads, and install it on your Mac.

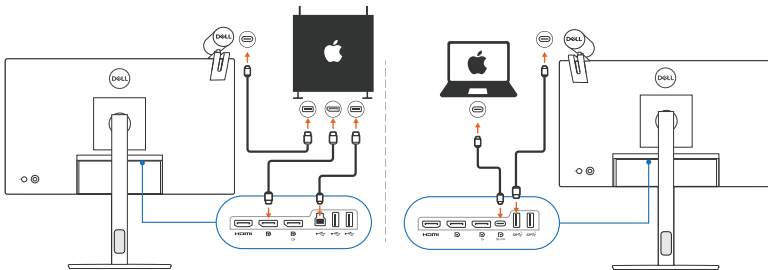
You can also visit <https://www.dell.com/support/ddpm> and download the software from the site. The Dell support website detects the OS of the computer, and the Dell Display and Peripheral Manager download link will appear if you are browsing from a Mac computer.

Alternatively, Mac OS can be selected from the Operating System drop-down list.

NOTE: For Apple Silicon Mac, install Rosetta before you download and install DDPM.

Connect your monitor and webcam to your Mac

1. Connect your Mac to monitor or webcam as described in your monitor or webcam user guide.



NOTE: Connectivity diagrams are for illustrative purposes only. See your monitor or webcam user guide for complete information about connecting your monitor or webcam.

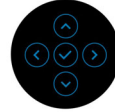
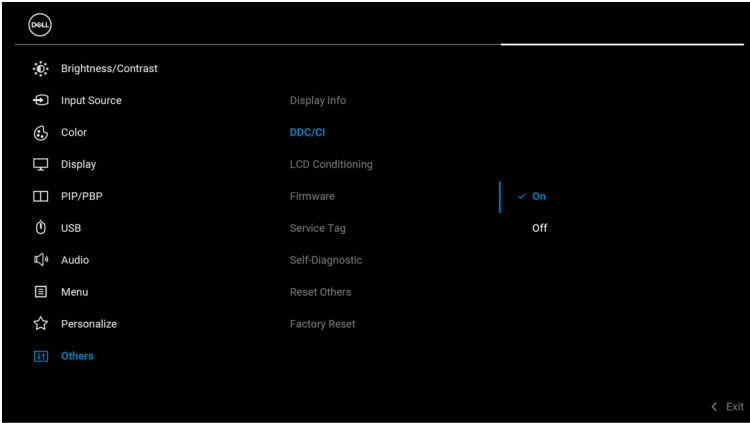
NOTE: Ensure that the USB Type-C cable or USB upstream (USB Type-B) cable is connected between your Mac and your monitor or webcam.

NOTE: For Apple Silicon Mac, ensure that the USB upstream cable is connected between your Mac and your monitor.



Before launching Dell Display and Peripheral Manager

Before launching Dell Display and Peripheral Manager, go to **Others** in your monitor's On-Screen Display menu and ensure that the **DDC/CI** feature is enabled.



Launching Dell Display and Peripheral Manager

Menu Launcher

Click the Dell Display and Peripheral Manager icon on the system tray to open the **Menu Launcher**. When multiple Dell monitors are connected to the computer, you can select any monitor from the drop-down menu.

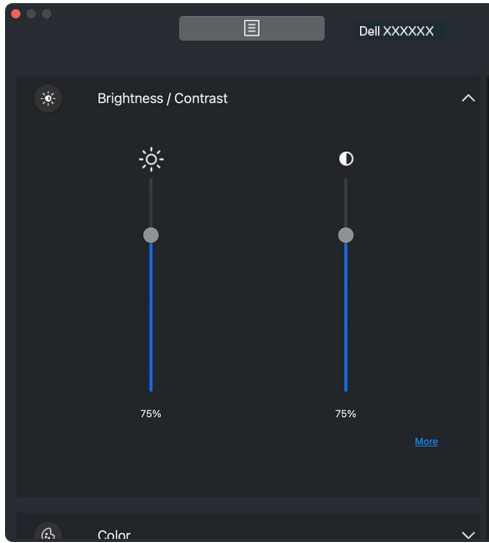
The **Menu Launcher** provides quick access to the following commonly used functions:


- **Brightness/Contrast**
- **Color**
- **Display**
- **Easy Arrange**
- **KVM / Network KVM** (optional)
- **Webcam** (if connected)



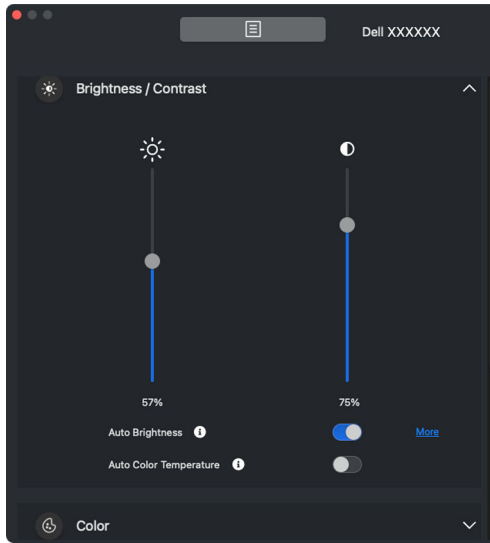
Brightness/Contrast


Allows you to adjust the brightness and contrast (or luminance) level of the selected model. If you have multiple monitors, select the monitor from the drop-down list or move the dialog to the monitor you want to adjust.



 **NOTE:** The minimum value of contrast setting is set to 25% to maintain the visibility on the screen.



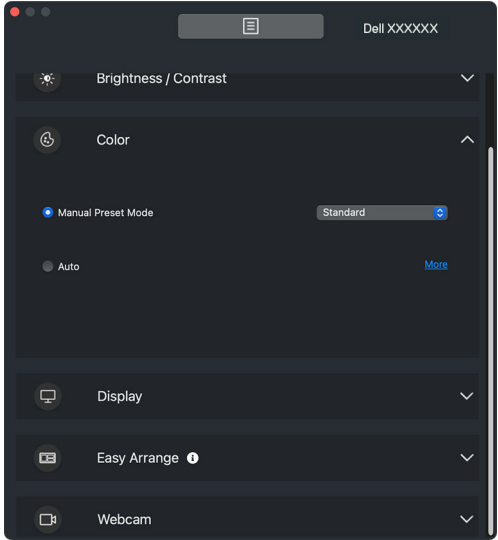


 **NOTE:** The Auto function is available on monitors equipped with an ambient light sensor.



Color

Change color preset to suit user preferences on the screen. For additional settings, click **More**.

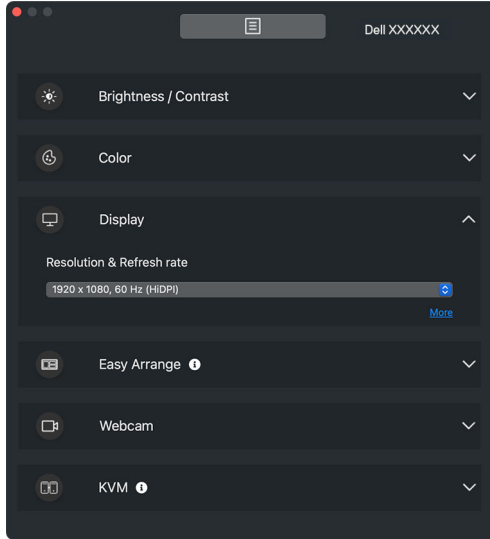



 **NOTE:** For more information, see [Setting the monitor color preset mode](#).



Display

Allows you to adjust resolution and refresh rate of the selected monitor. For additional settings, click **More**.



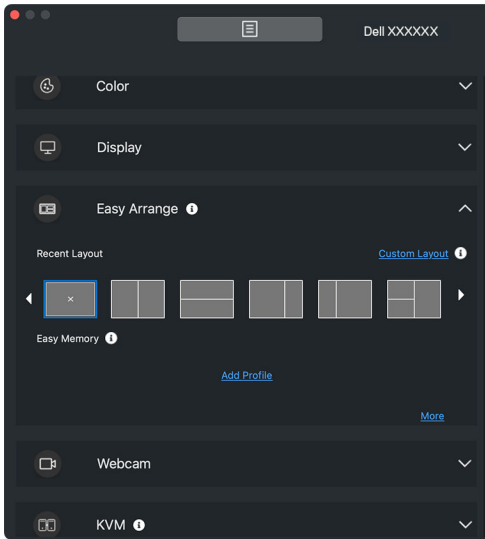
 **NOTE:** Dell Display and Peripheral Manager matches customized System Preferences applied on your Mac.



Easy Arrange

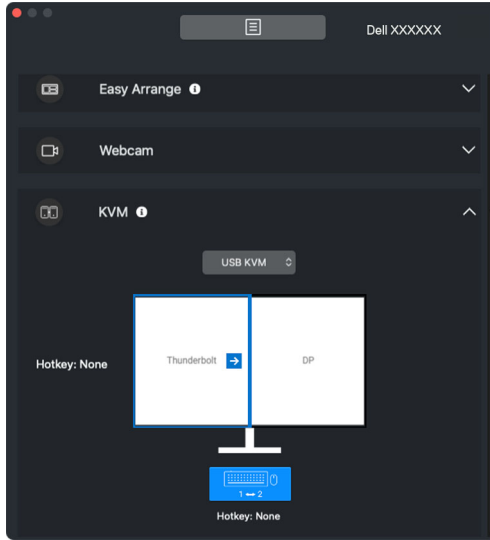
A list of recommended or recently used layouts and easy memory profiles is displayed for quick selection, as shown in the following image. The **Custom Layout** function allows you to save the current window arrangement on screen as a custom layout.

Hover the mouse over the profile(s) listed on **Recent Layout** to select your profile and apply on the monitor.



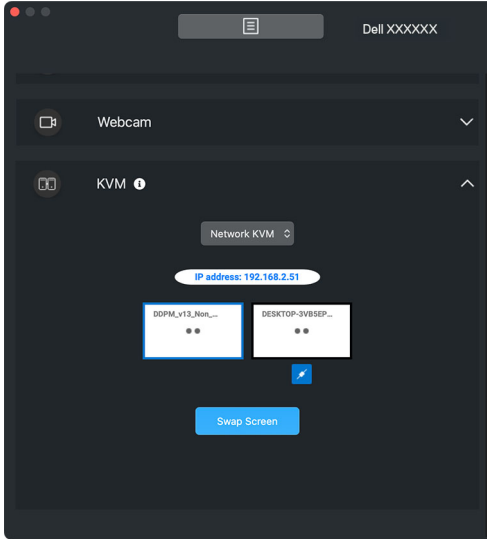
KVM

After setting up the KVM, you can switch keyboard and mouse between computers. See [Setting up the USB KVM](#) to use the **Setup wizard**.



Network KVM

From the **KVM** tab, select **Network KVM** from the drop-down menu. This menu provides quick access features according to current Network KVM status. See [Setting up the Network KVM](#) section to use the **Setup wizard**.

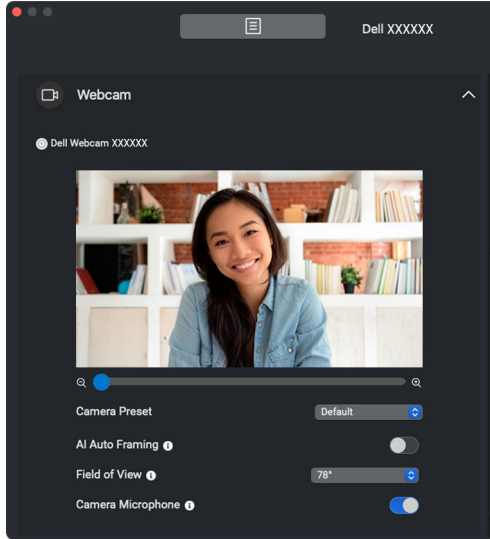


Feature	Function	Description
No Setup	Setup now	Click Setup Now to bring up Network KVM setup.
Single Display	Switch PC	When PBP is off, click Switch PC to switch video input between computers.
	Swap screen	When PBP is on, swap the video input by one of the following methods: <ul style="list-style-type: none">• Move the cursor to the monitor block and click the arrow that appears.• Drag and drop one monitor block to another monitor block.
Multiple Displays	Swap screen	<ul style="list-style-type: none">• Move the cursor to the computer block and click the arrow that appears.• Drag the computer icon to arrange horizontal position.



Webcam

When more than one webcams are connected to the computer, select the webcam from the model drop-down list to configure the webcam.



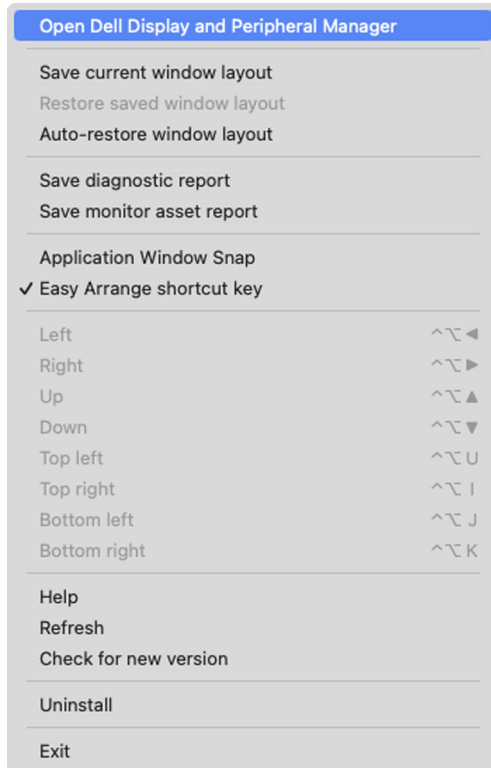
Feature	Function	Description
Quick access to DDPM	Shortcut key to launch Menu Launcher	Ctrl+Shift+D
	Select monitor when multiple monitors are connected	<ul style="list-style-type: none"> • When more than one monitors are connected to the computer, select the monitor from the model drop-down list to configure the monitor. • When the monitor is selected from the UI, the selected monitor screen will be dimmed momentarily, showing a monitor icon with the model name on the screen to indicate the physical screen selected. • Press Ctrl + Shift + D to bring up the Menu Launcher of the monitor where the mouse pointer is currently located.
	Select webcam when more than one webcams are connected	<ul style="list-style-type: none"> • When more than one webcams are connected to the computer, select the webcam from the model drop-down list to configure the webcam. • When the webcam is selected from the UI, the webcam preview window will be OFF momentarily, showing a webcam icon with the model name on the screen to indicate the webcam selected. • Press Ctrl + Shift + D to bring up the Menu Launcher of the webcam where the mouse pointer is currently located.



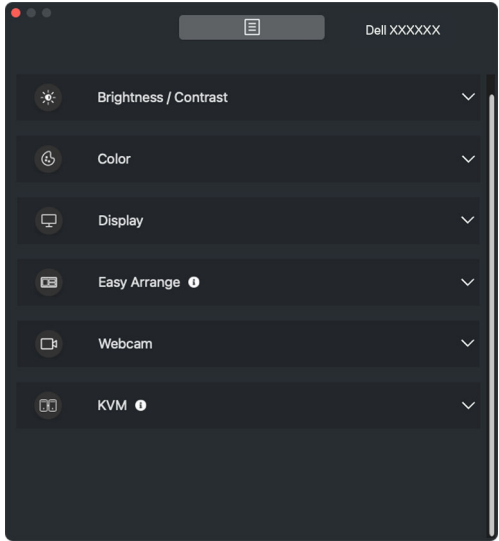
Main menu

Launch the Dell Display and Peripheral Manager by one of the following methods:

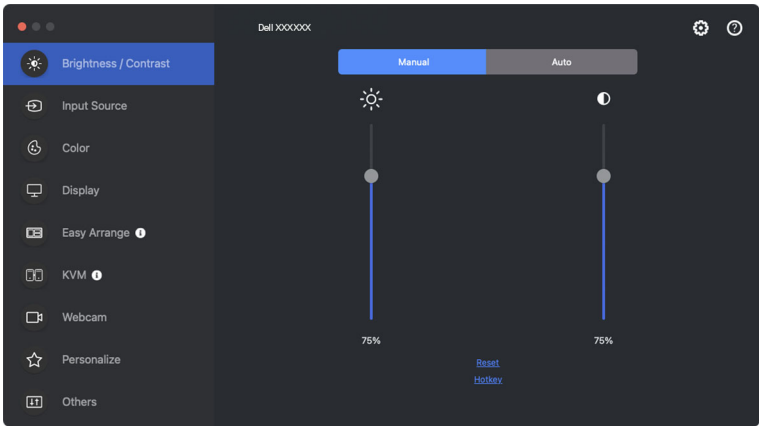
- Right-click the **DDPM** icon from system tray and select **Open Dell Display and Peripheral Manager**.



- Click the **DDPM** icon from system tray to launch the **Menu Launcher**. To access more features, click the menu icon on the **Menu Launcher** to launch the main menu.

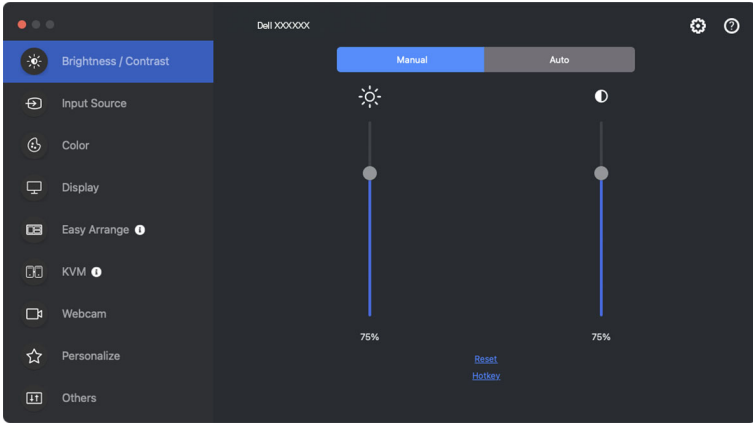


The menu system provides a set of menu and submenu to adjust the DDPM features.




Adjusting the brightness and contrast


On the Dell Display and Peripheral Manager menu, access the **Brightness/Contrast** menu to change the brightness and contrast levels.




Feature	Function	Description
Brightness/ Contrast	Manual	Adjust the brightness and contrast of the monitor manually.
	Schedule	Adjust the brightness and contrast gradually according to day/night profile that you have configured.
	Auto	<ul style="list-style-type: none"> Automatically adjust the brightness or color temperature by monitor ambient light sensor when corresponding option is enabled. You can specify one primary monitor to sync brightness and/or color temperature to other monitors.
	Hotkey	Assign shortcut key to adjust brightness and contrast.
	Synchronize between monitors	Enable this function to apply the brightness, contrast, and color preset control to the connected monitors.



 **NOTE:** The synchronization of monitor control is available only when two or more monitors with the same brightness/contrast unit are connected.

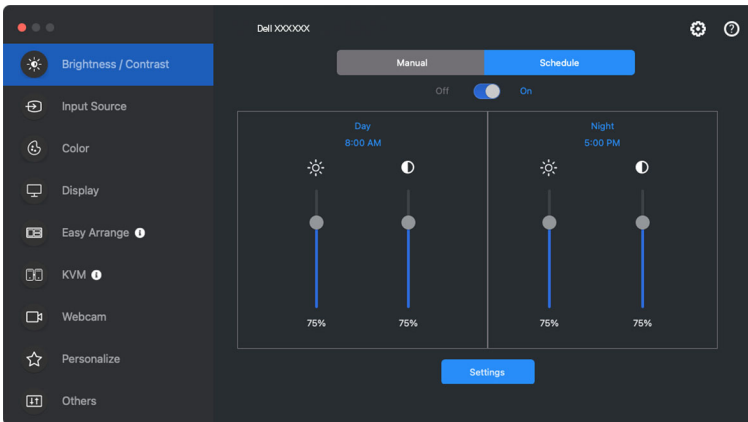
 **NOTE:** The minimum value of contrast setting is set to 25% to maintain the visibility on the screen.

 **NOTE:** Manual adjustment of **Brightness** and **Contrast**, **Auto Brightness**, and **Auto Color Temperature** functions are disabled when **Smart HDR** is activated and HDR content is displayed.

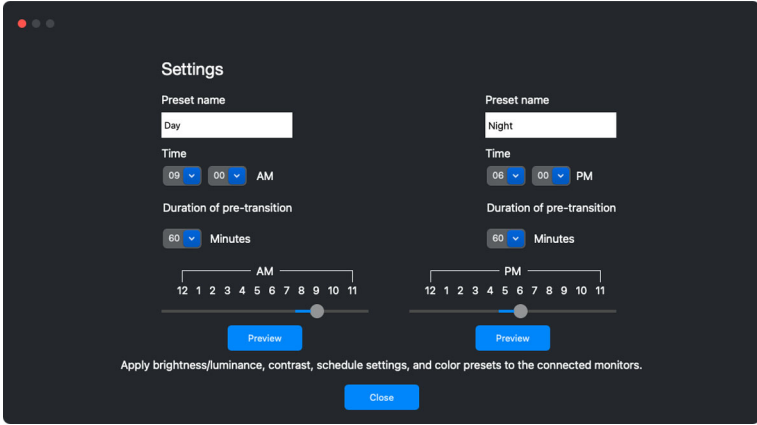
Setting the schedule for brightness and contrast


Select the **Schedule** tab to set the brightness and contrast schedule according to day/night profile that you have configured.

1. Select the **Schedule** tab in the **Brightness/Contrast** menu. Adjust the brightness and contrast level by moving the sliders up or down. Click **Settings** button to configure the profile timing or preview the profile transition effect.

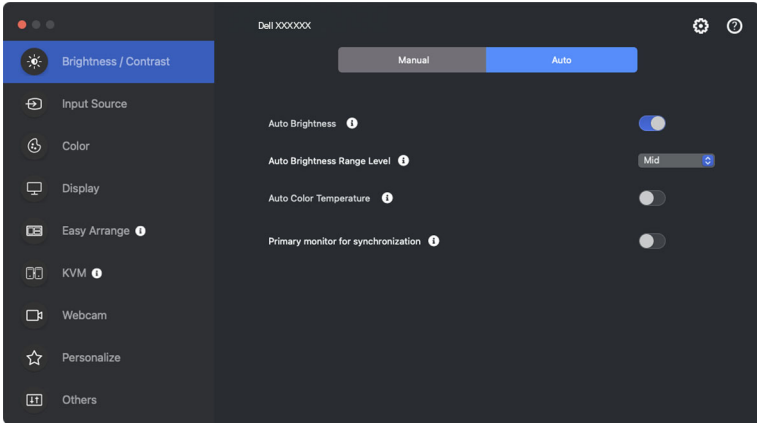


2. Adjust the starting time and duration for **Day** and **Night** time. Click **Close** to save and exit the menu.



 **NOTE:** The schedule function is available on monitors that are not equipped with an ambient light sensor.

Setting the Auto function for brightness and contrast



Feature	Function	Description
Auto	Auto Brightness	Turns on the Auto Brightness and the monitor Brightness setting automatically adjust according to the ambient light.
	Auto Brightness Range Level	When Auto Brightness is turned on, adjust the Auto Brightness Range Level of the Auto Brightness . NOTE: When Auto Brightness is turned off, this function is not available.
	Auto Color Temperature	Turns on Auto Color Temperature and the monitor RGB color settings automatically adjust according to the ambient light.
	Primary monitor for synchronization	Turns on Primary monitor for synchronization if you have multiple Dell monitors that support this function connected, and you want the other monitors to adjust their Brightness or RGB settings according to the ambient light condition detected by the primary monitor. NOTE: When Auto Brightness and Auto Color Temperature are both turned off, Primary monitor for synchronization is not available.

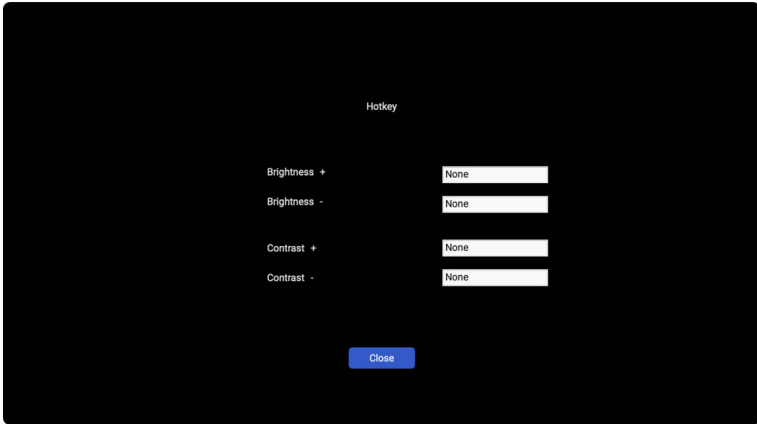


NOTE: The Auto function is available on monitors equipped with an ambient light sensor.



Assigning shortcut keys

Click **Hotkey** in the **Brightness/Contrast** menu, assign shortcut key to adjust brightness and contrast.



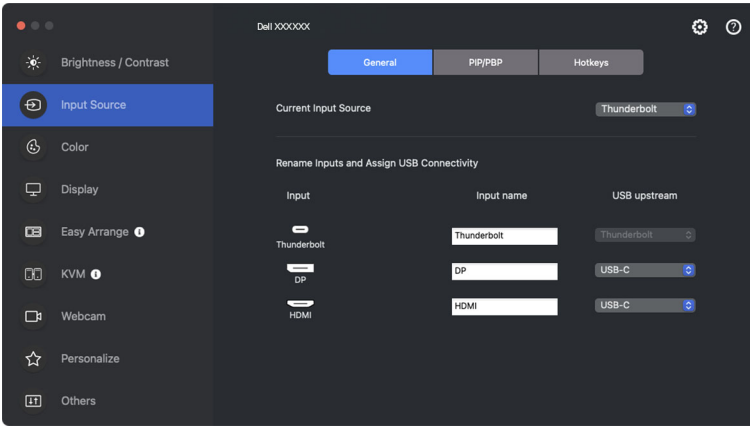
If multiple monitors are connected, the configured hotkeys will be synchronized across the monitors. To trigger the brightness/contrast or luminance adjustments, move the mouse over the desired monitor.




Managing multiple video inputs

The **Input Source** menu allows you to manage multiple video inputs that are connected to your Dell monitor. This makes it easy to switch between inputs while you work on multiple computers.

Under **General**, all of the video input ports available on your monitor are displayed. You can assign each input a name and an USB upstream port.

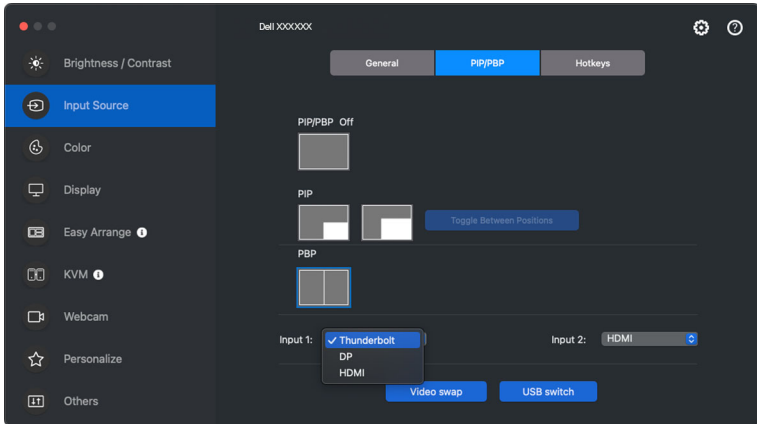


 **NOTE:** For more information, see your monitor user guide for the available inputs.

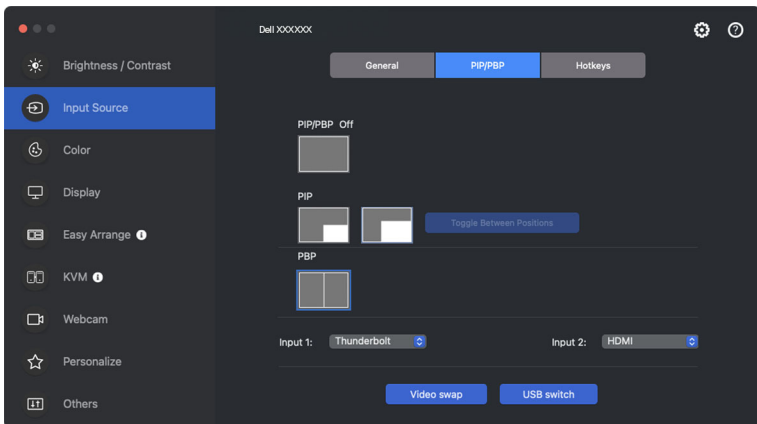


Configuring the PIP/PBP mode

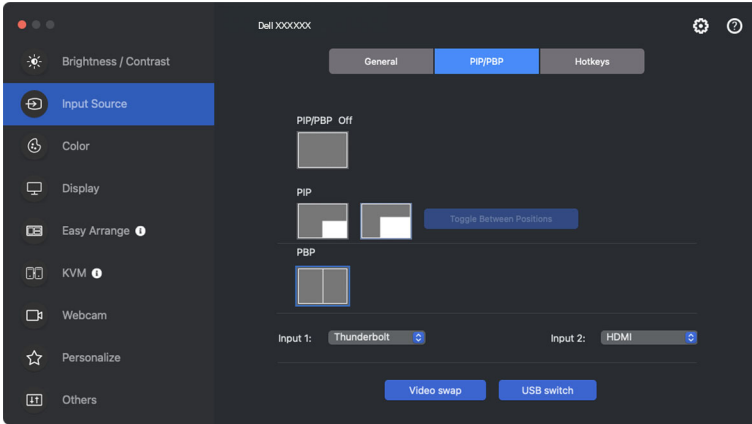
1. Click **PIP/PBP** to enable the split screen function on supported models.
2. Click **Toggle Between Positions** to change the PIP position.
3. From the **Input 1** drop-down list, select the main input, followed by selecting the sub-input from the **Input 2** drop-down list to change the main or sub inputs.




4. Click **USB switch** to switch the USB upstream port that is associated with active input sources.



5. Click **Video swap** to swap input sources.

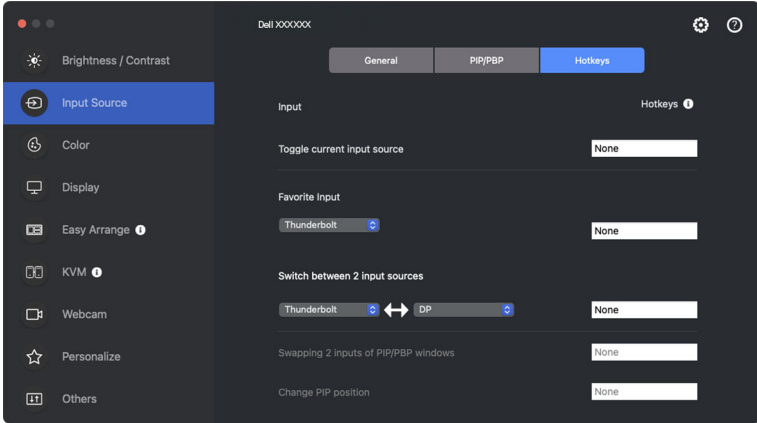


 **NOTE:** For more information, see your monitor user guide for the available PIP/PBP functions.

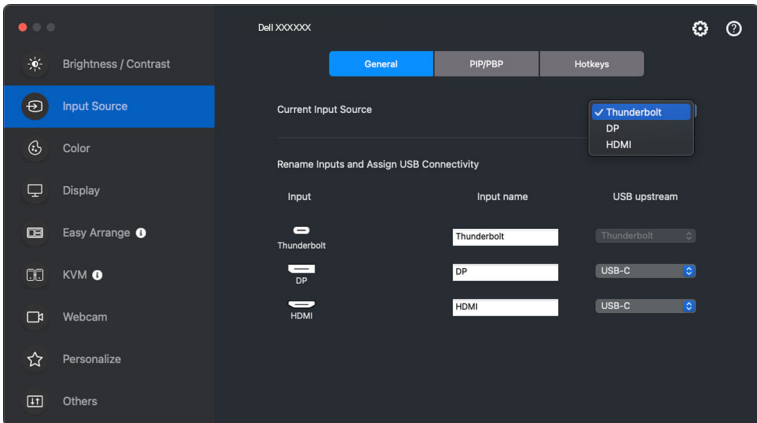


Assigning shortcut keys

You can assign shortcut keys for quick access to the **Input Source** functions.



Alternatively, switch the input source from the **Current Input Source** drop-down list.



Feature	Function	Description
Hotkeys	Toggle current input source	Configure your preferred hotkey (for example, Ctrl+Shift+2) to toggle the input sources.
	Favorite Input	Configure your preferred hotkey to toggle to your favorite input source.
	Switch between 2 input sources	Configure your preferred hotkey (for example, Ctrl+Shift+3) to toggle between the two frequently used input sources.
	Swapping 2 inputs of PIP/PBP windows	Configure your preferred hotkey (for example, Opt+8) to swap the PIP/PBP main and sub-input.
	Zoom In/Out PBP 4 windows	Configure your preferred hotkey to zoom in/out the PBP window.
	Change PIP position	Configure your preferred hotkey (for example, Opt+7) to change the position of PIP.
	Underscan	Configure your preferred hotkey to enable or disable underscan.

NOTE: The underscan function is supported only on the following models:

- **Dell U4320Q**
- **Dell U4323QE**



NOTE: For more information, see your monitor user guide for the available PIP/PBP functions.



NOTE: If there are multiple monitors connected, the configured hotkeys will be synchronized across the monitors for ease of use. To trigger the function for the selected monitor, move the mouse to the monitor and press the hotkey.



Setting the monitor color preset mode

The **Color** menu allows you to associate any preset mode with an application. When **Auto** mode is enabled, Dell Display and Peripheral Manager automatically switches to the corresponding preset mode whenever the associated application is activated. The preset mode assigned to a particular application may be the same on each connected monitor, or it can vary from one monitor to another.

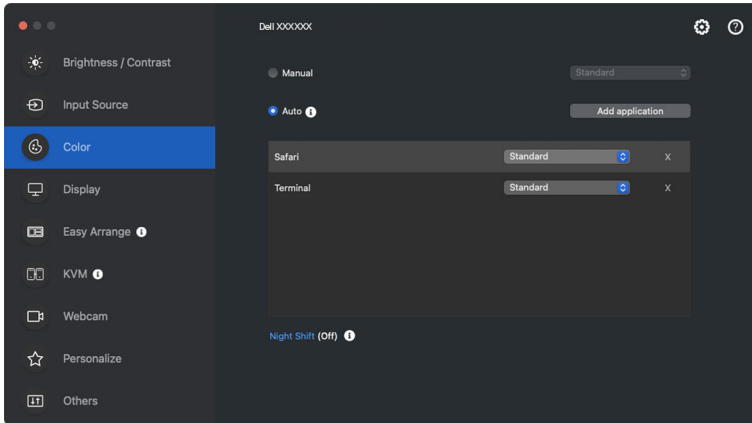
To add a new application to the assignment list, go to **finder** to search for the application, drag it from the **Finder** and drop to the current list. Choose the preset from the preset mode drop-down list to associate the preset to the application.

Feature	Function	Description
Color	Manual	Select the preset mode manually from the user interface.
	Auto	<ul style="list-style-type: none">• Enable this feature to activate the preset mode automatically when the associated application is selected as the active window.• Click the drop-down list to assign a preset mode to an application.
	Night Shift	Access Night Shift feature to shift the color temperature to show comfortable colors on your display.

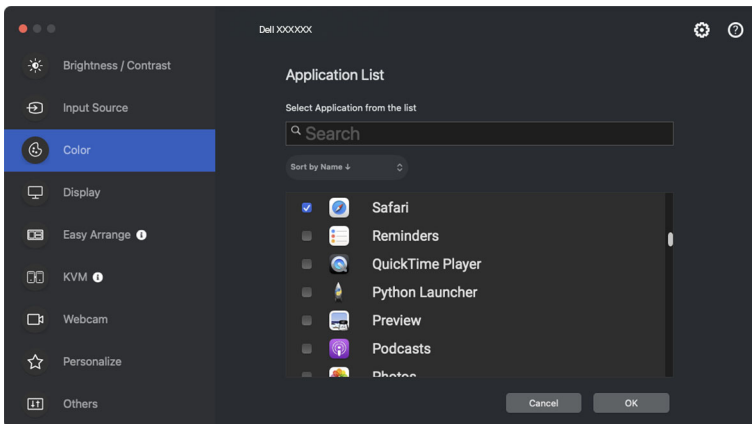


Auto change color preset when using specific application

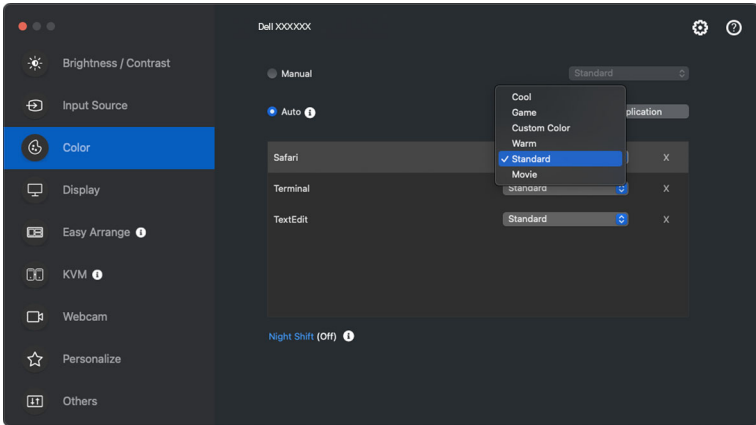
1. Select **Auto**.
2. Click **Add application**.




3. Type the name of the desired application in the search field. Select desired applications and click **OK**.



4. Select desired color preset when using the application.



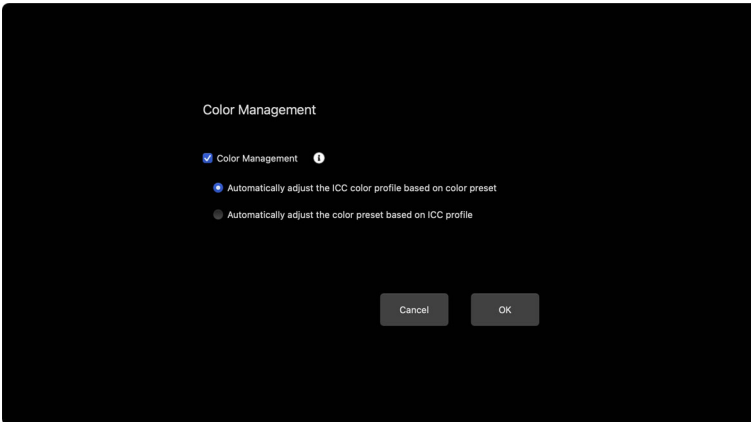
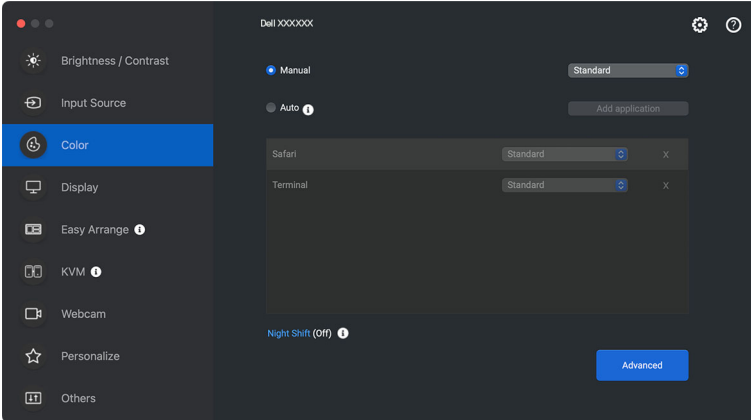
 **NOTE:** **Preset Mode** assignments for batch files, scripts, shortcuts, and non-executable files such as zip archives or packed files are not supported.



Color management

This feature provides the optimum color experience by matching the color space of the monitor with the International Color Consortium (ICC) profile.

On the supported Dell models, **Color Management** options are available by pressing **Advanced** button in the **Color** menu. You can choose **Automatically adjust the ICC color profile based on color preset** or **Automatically adjust the color based on ICC profile**.



Automatically adjust the ICC color profile based on color preset

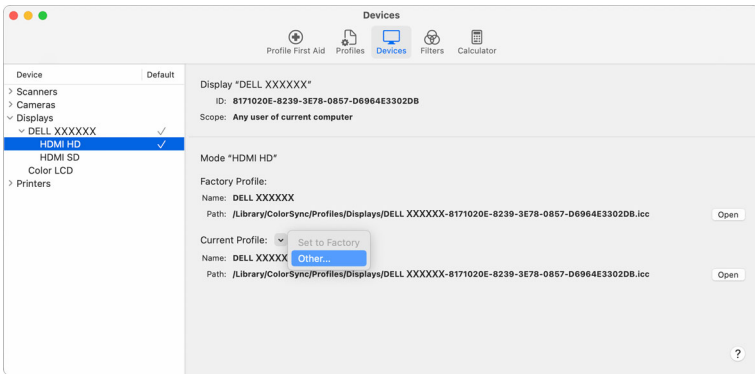
The corresponding ICC profile in Mac is changed when you change the color preset from the monitor OSD menu.

Automatically adjust the color based on ICC profile

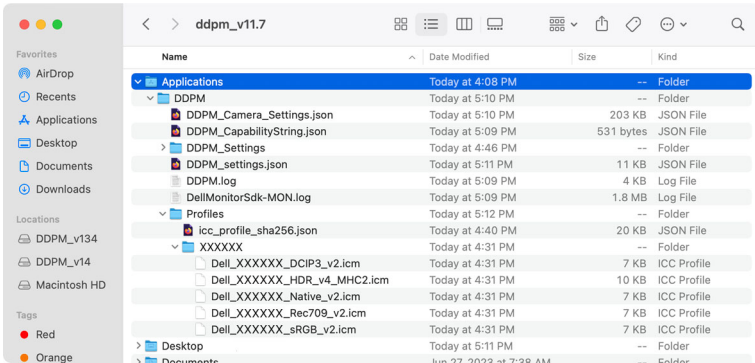
The corresponding color preset is set in the monitor when you change the ICC profile in Mac. You can click the ICC profile link to add the color profile installed for the monitor.

Changing the ICC/ICM profile in Mac

1. Open the **ColorSync Utility** app in Mac. Find the current display, click **Current Profiles** drop-down list, and select **Other...**



2. Select the profile (.icm file) you wish to apply.

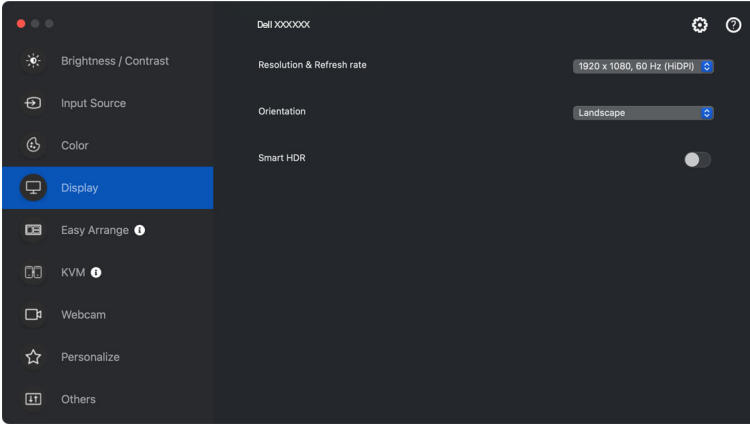


3. DDPM will apply the corresponding color preset to your monitor OSD.




Adjusting monitor display settings

On the DDPM menu, select **Display** to change common monitor settings.



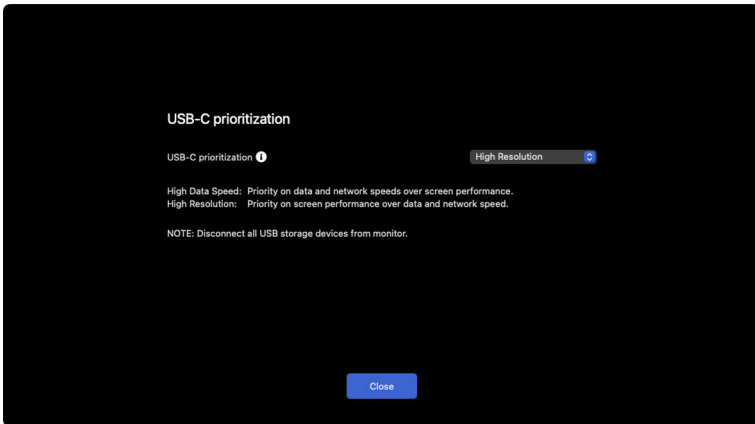
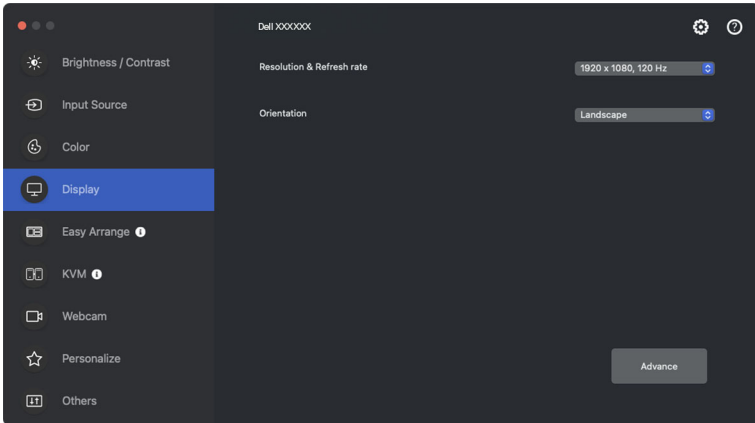
Feature	Function	Description
Display	Resolution & Refresh rate	Adjust the resolution and refresh rate of the display setting.
	Orientation	Change the orientation of the monitor operating system display. NOTE: For monitors that support changing orientation from DDPM, the monitor OSD orientation setting will change accordingly.
	Smart HDR	Turn on/off HDR of the monitor and the display settings.


 **NOTE:** The Smart HDR option is only available for monitor that supports this function.



USB-C prioritization

From the **Display** menu, press **Advance** to set the preferred **USB-C prioritization** option.




 **NOTE: USB-C prioritization** is only available for monitors that support this function.



Organizing windows with Easy Arrange

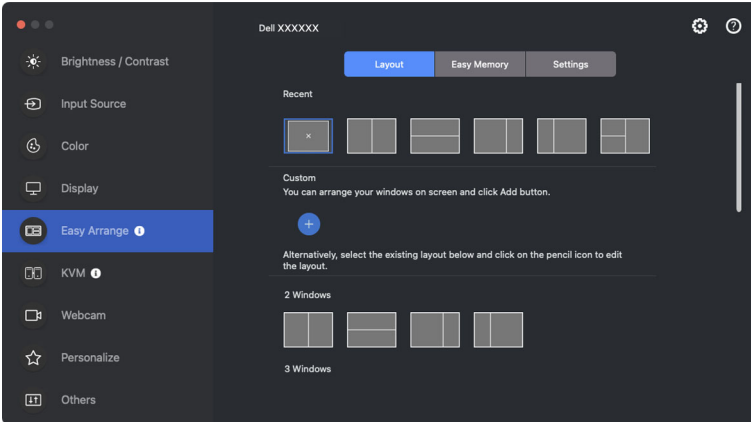
The **Easy Arrange** menu simplifies the way applications windows are displayed on your monitor. This feature requires permission to be provided explicitly to DDPM to arrange the application.

 **NOTE:** When using **Easy Arrange** for the first time, the application will request access to **Accessibility** privileges on your Mac. Click **Open System Preferences** and follow the on-screen instructions to enable **Accessibility**.

Layout

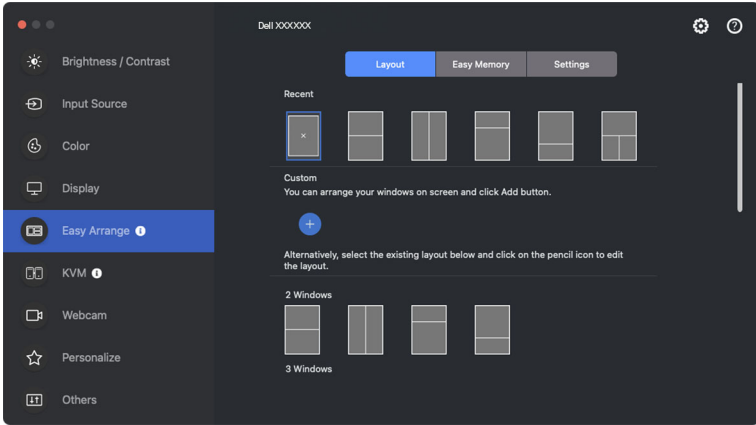
To organize the windows:

1. Select any of the predefined layouts to virtually divide the screen into multiple zones.
2. Drag the application to your selected zone to position the application in the zone. The application snaps to the selected zone.



Landscape mode of the **Easy Arrange** layouts



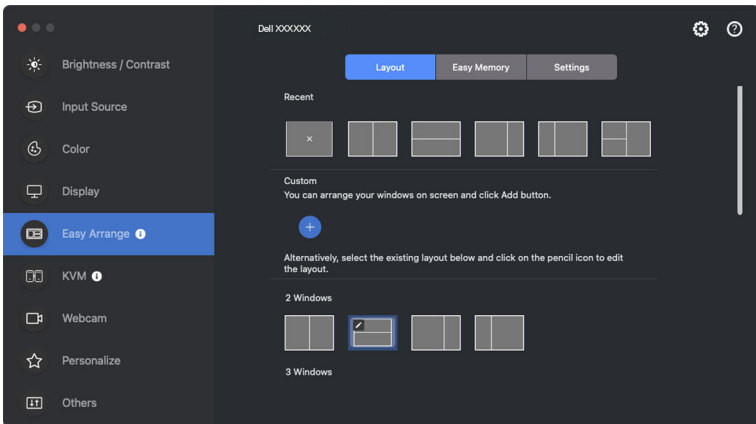


Portrait mode of the **Easy Arrange** layouts are displayed when you rotate the monitor

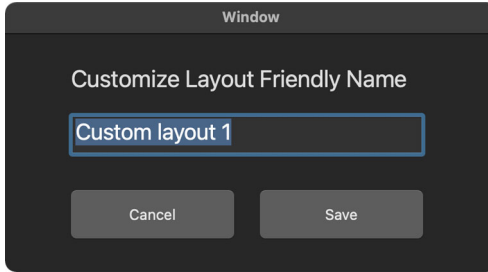
Customize layout

You can add a new customize layout to your preference. Perform the following steps to add a new customize layout:

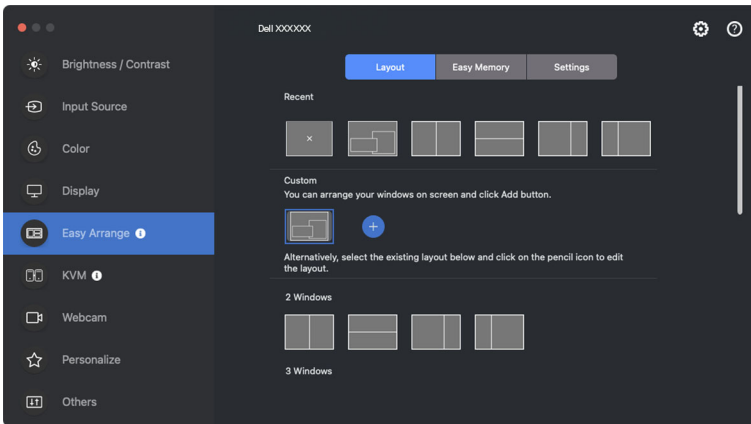
1. Arrange the windows on your screen, then click the **+** icon. The layout will be set according to your windows arrangement.



2. On the save dialog, choose an layout name for the new layout.

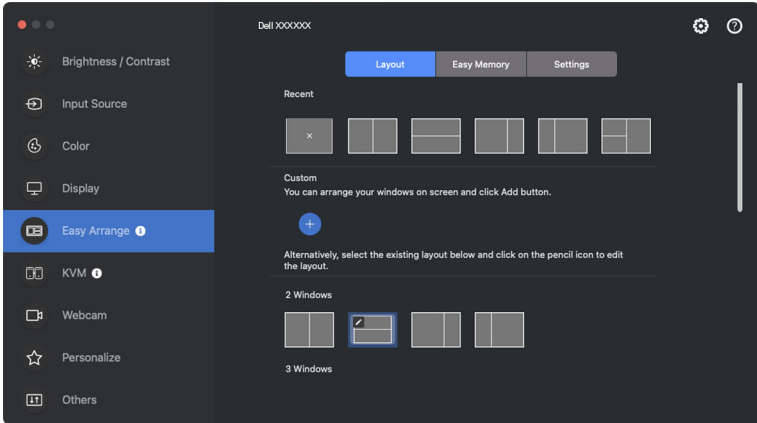


3. Click **Save** to complete customization.

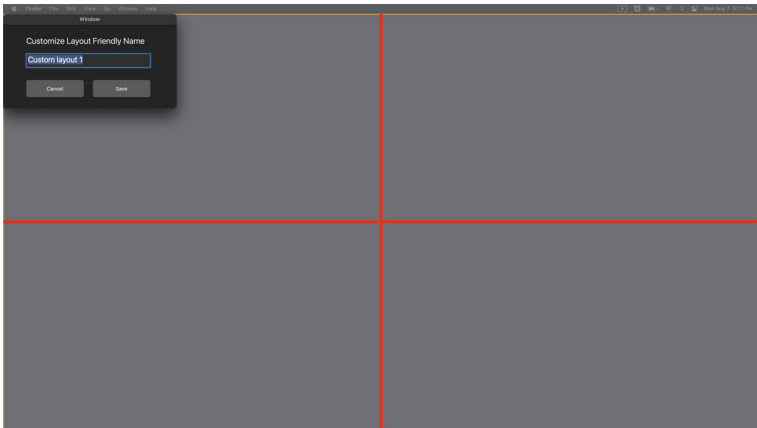


You can also edit any existing layout to your preference. Perform the following steps to customize an existing layout:

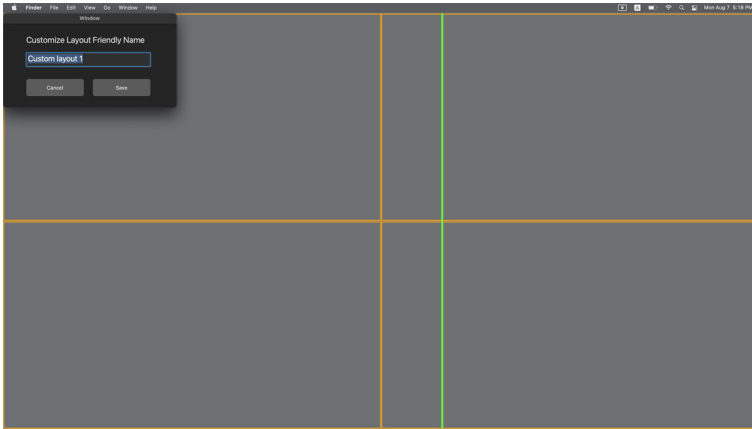
1. Hover the mouse pointer over the layout to be customized, and click the pen icon.



2. The layout with RED grid lines appear on screen. Press on the RED grid line to adjust the partition size.



3. The RED grid line changes to GREEN line as you drag the line to adjust the partition size. Release the line when done.




4. Click **Save** on the dialog box shown on top left corner to save the custom layout.



Easy Memory

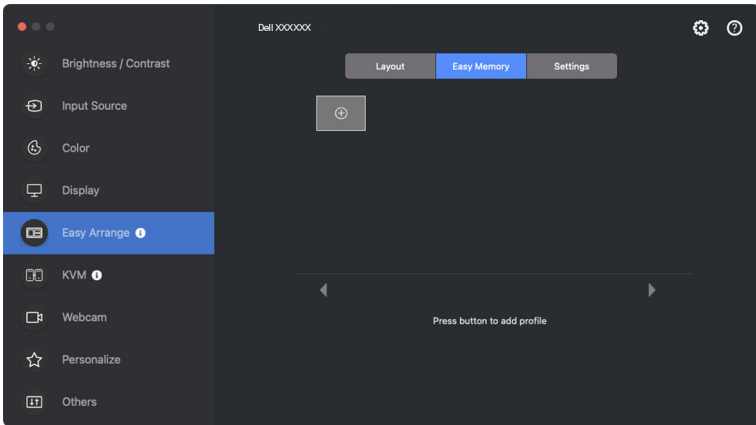
Easy Memory allows you to save application or files in their respective partition into different profiles and restore them manually, by scheduled time or at system start-up.

The process of restoring other apps is called automation. Automation process requires permission to be provided explicitly to DDPM to launch the app.

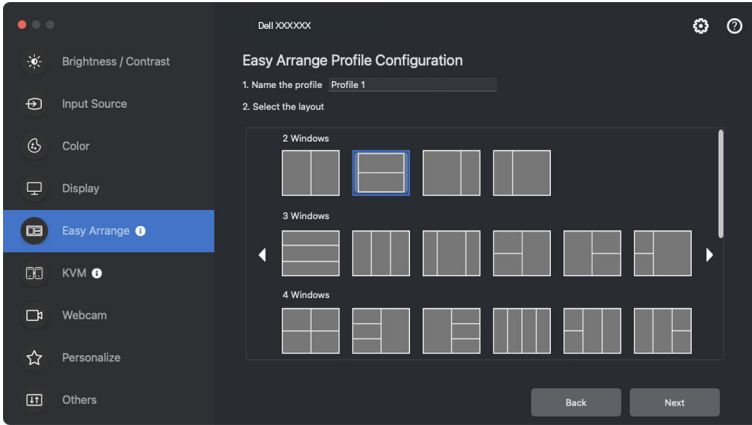
 **NOTE:** For each app added to the **Easy Memory** for the first time, you will have to explicitly provide automation permission to DDPM. The system will display the permission dialog and you must click **OK** in this dialog. Clicking **Don't Allow** will cause DDPM to be prohibited from launching the app on its own.

To create and launch a profile:

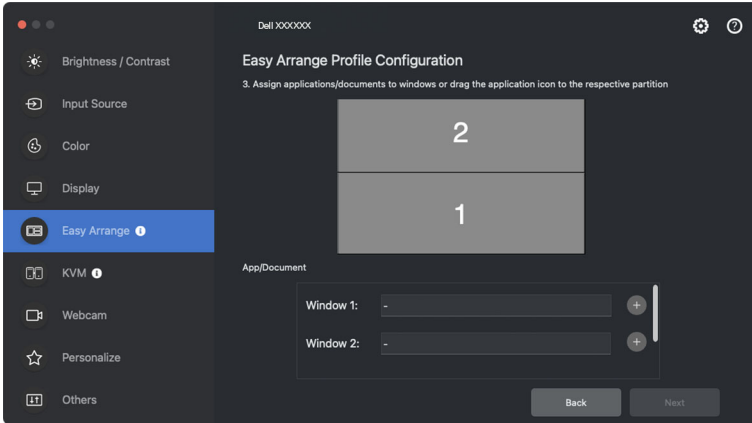
1. Click the **+** icon to create a new profile.



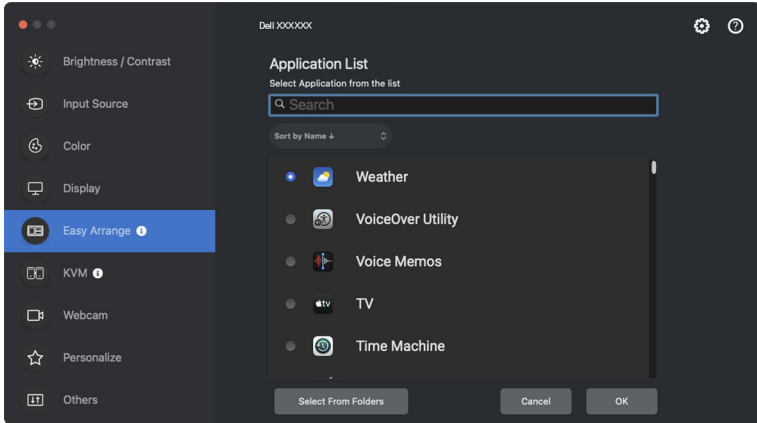
2. Each layout has a default profile name. You may change the name. Select the layout. Click **Next**.



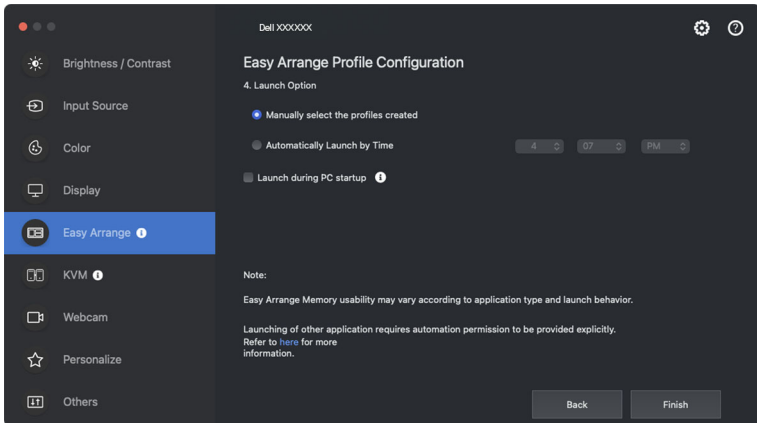
3. Assign an application or a file to each window. You can drag an application or a file into the window directly. Alternatively, click the **+** to bring up the Applications List.



4. Search for the application or browse the list to select the application. click **Select From Folders** to select your file. Click **OK** to add it to the selected window.



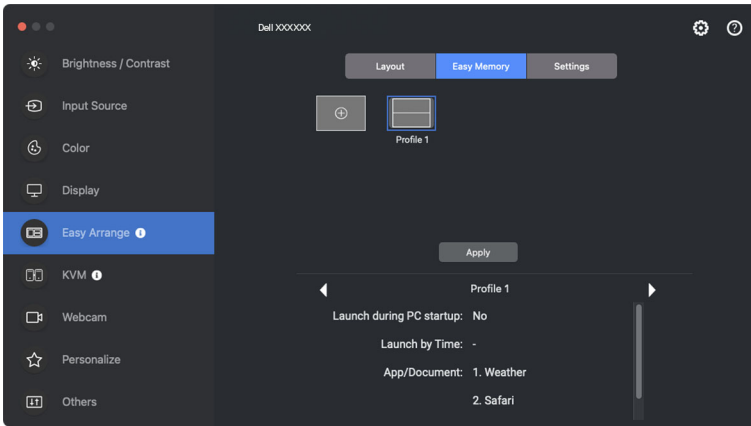
5. Select one of the launch options provided. Click **Finish**.



6. The profile created will be shown on the **Easy Memory** menu.




7. To apply a profile, select the profile to view the summary of the configuration, then click **Apply** to activate the profile.



Easy Arrange Memory usability may vary according to application type and launch behavior. **Easy Memory** works with general productivity apps such as Microsoft Office, Adobe, Web browsers and more.

Easy Memory might not be able to perform a window partition at launch if any of the following takes place:

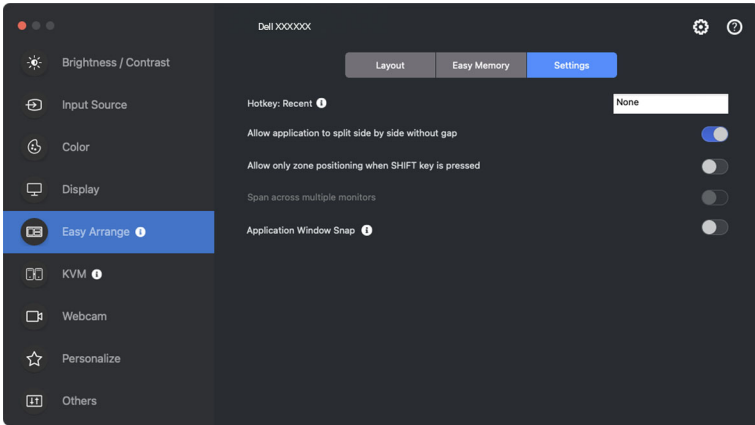
- App displays a pop-up dialog box upon launch (i.e., login screen, error dialog, or unsaved files)
- App is launched in full screen mode
- Files are opened as individual tabs within the app
- Overlapping **Easy Arrange** layouts

 **NOTE:** Associate the file to open with a supported application for a better experience.




Settings


Configure the personal preferences.



Feature	Function	Description
Easy Arrange	Hotkey: Recent	Assign a hotkey to access recently used layout quickly.
	Allow application to split side by side without gap	Enable this function to allow applications to snap side by side without a gap.
	Allow only zone positioning when SHIFT key is pressed	Enables the Easy Arrange menu by pressing the Shift key
	Span across multiple monitors	If you are using multiple monitors in an array or matrix, the Easy Arrange layout can be applied across all the monitors as one desktop. You need to align your monitors properly to make it effective.
	Application Window Snap	Enables the placement of an application on a screen. For more information, see Using the Application Window Snap .



 **NOTE:** If an application window cannot fit in the zone that is defined by **Easy Arrange**, the application may not be displayed properly.

 **NOTE:** The Span across multiple monitors can be enabled only for all connected monitors that have the same physical size, resolution, scaling settings, and are placed side by side.

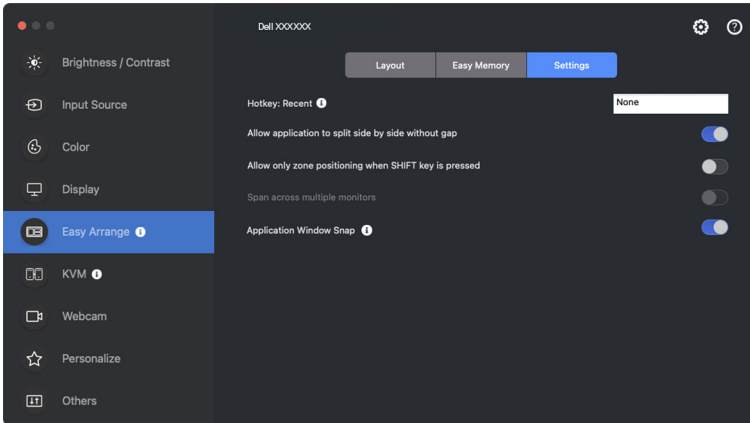
Using the Application Window Snap

The **Application Window Snap** is designed to enable application placement on any screen quickly. When this function is enabled in Dell Display and Peripheral Manager, dragging the application triggers a floating menu that contains recently-used **Easy Arrange** layouts. Drop the application to any one of the listed layouts to perform window placement.

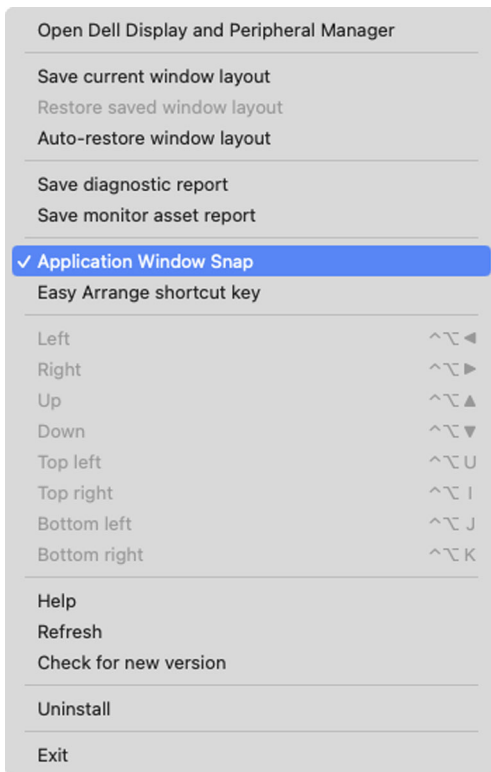
When this function is turned on, it replaces the **Easy Arrange** option such that the user can snap their application conveniently to the respective monitor and zone in the four most recently used **Easy Arrange** layouts.

You can enable this feature by one of the following methods:

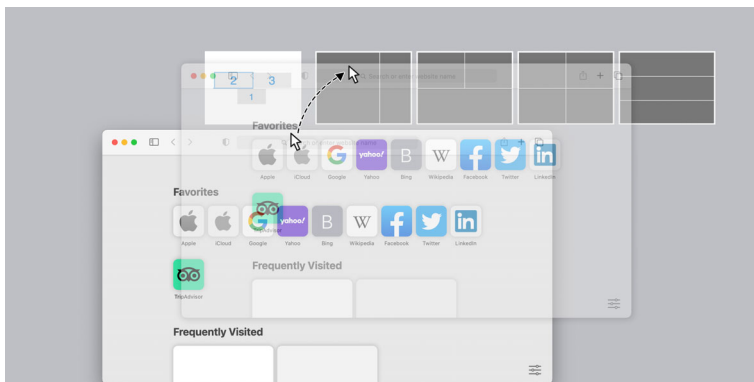
- Launch Dell Display and Peripheral Manager, go to **Easy Arrange** menu, and enable the **Application Window Snap** function.



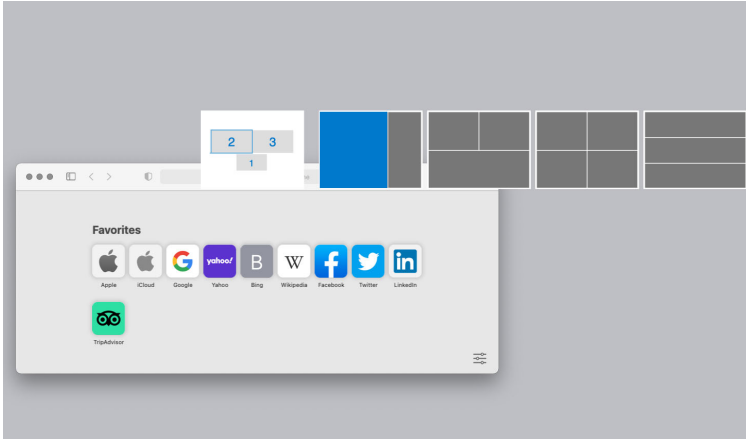
- Right-click the DDPM icon on the status bar, and select **Application Window Snap** to enable the function.



- Drag the application window and drop it into one of the zones on the floating menu.



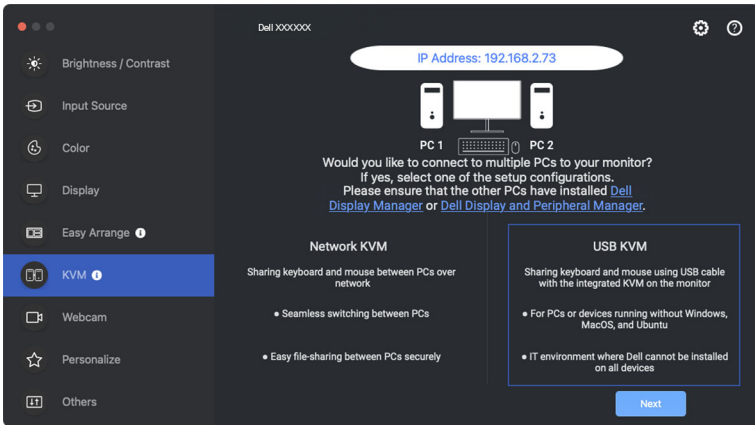
- The application will be snapped into the selected zone.



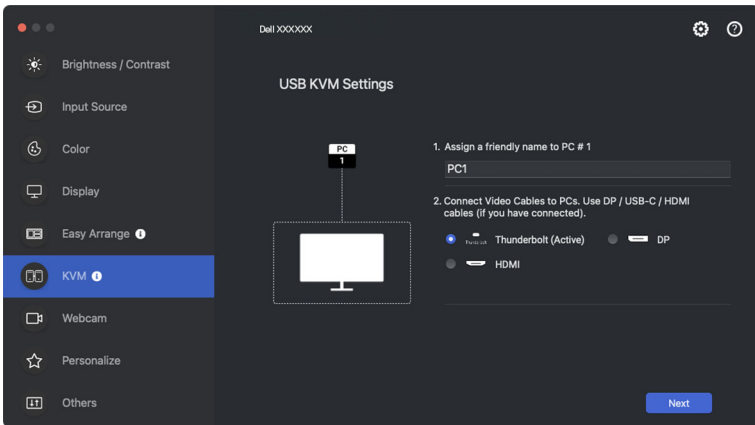
Setting up the USB KVM

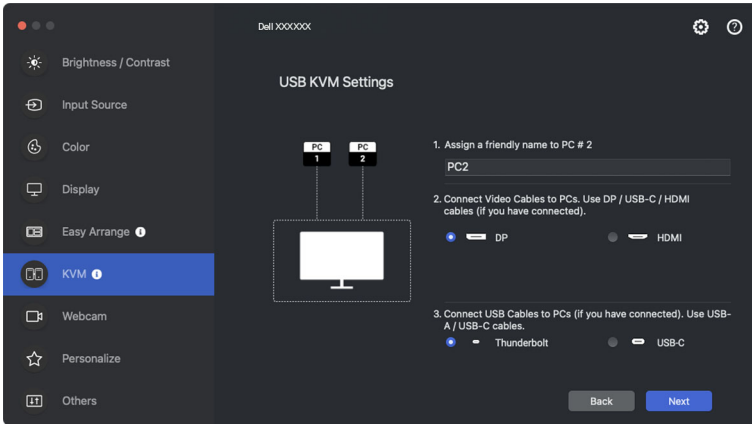
Monitors with USB KVM support allow connected computers to share keyboard and mouse during setup.

To setup, select **USB KVM**, click **Next**, and follow the on-screen instructions to set up the computers that are connected to the monitor.

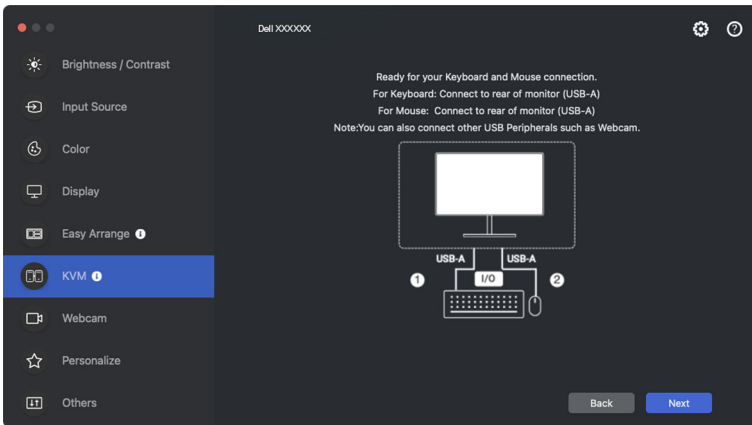


1. Pair the input sources with USB connections and assign preferred names.

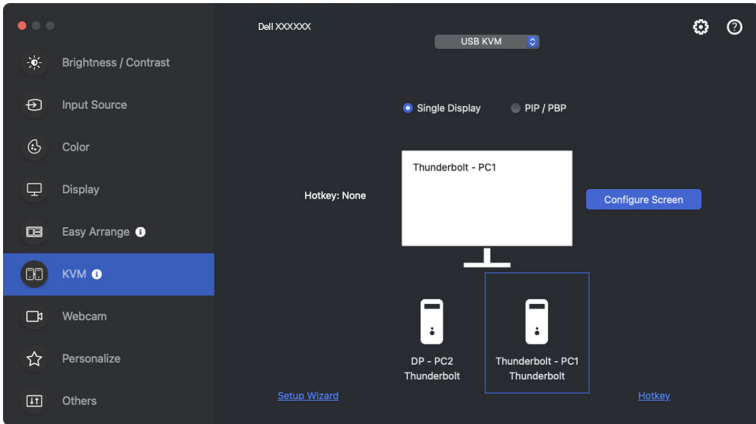
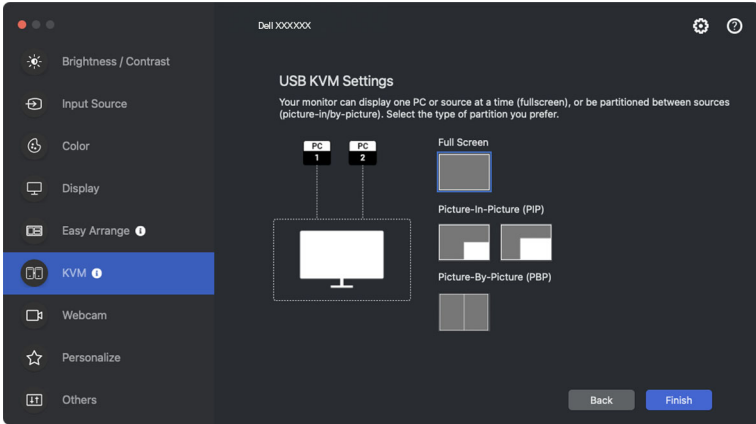





2. Connect keyboard and mouse to the monitor.



3. Select a preferred screen partition, and then click **Finish** to save and exit USB KVM setup.

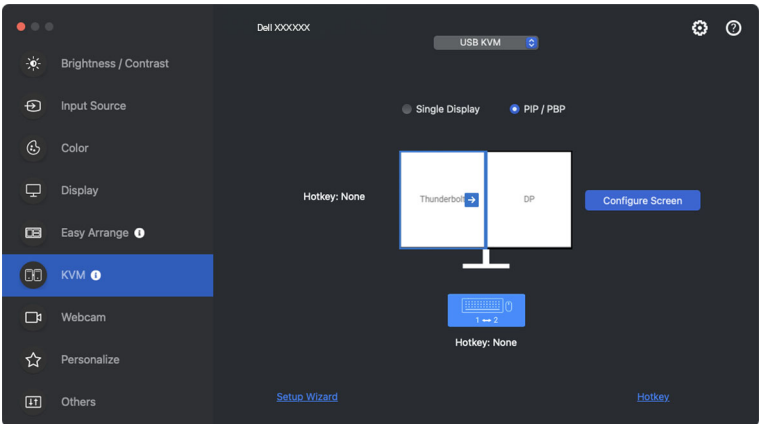
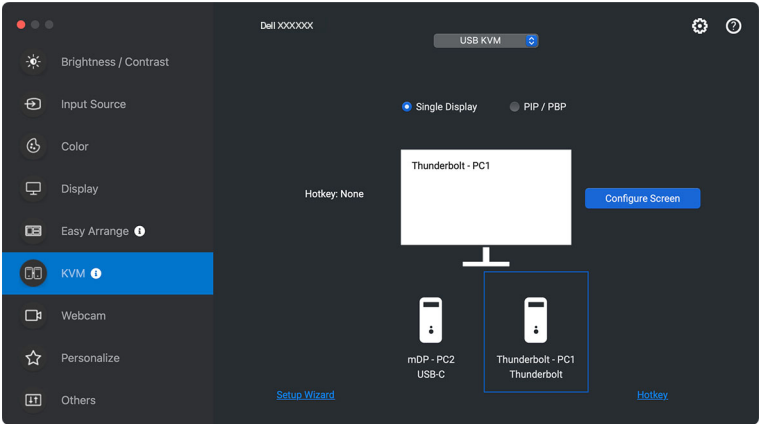


 **NOTE:** Dell Display and Peripheral Manager communicates with your monitor even when the monitor is displaying video from another computer. You can install Dell Display and Peripheral Manager on the computer you frequently use and control input switching from it. You may also install Dell Display and Peripheral Manager on other computers connected to the monitor.



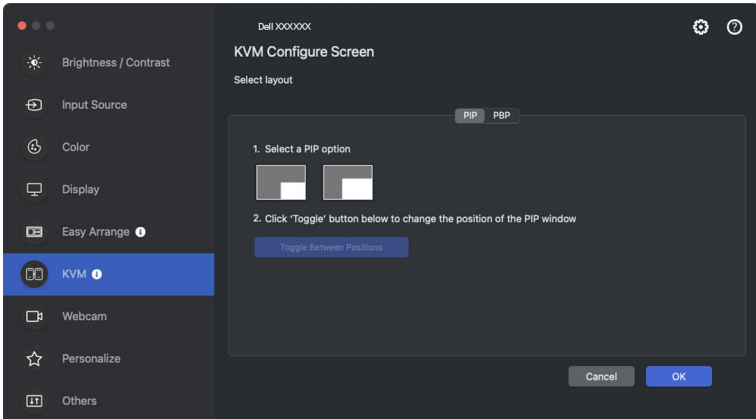
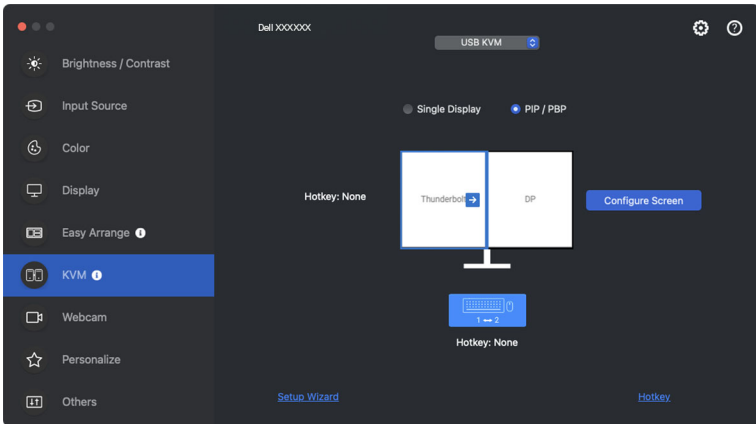
Changing USB KVM configuration

You can change the **USB KVM** configuration after completing the KVM setup either by running the setup instructions again or changing the screen configuration by clicking **Configure Screen**.

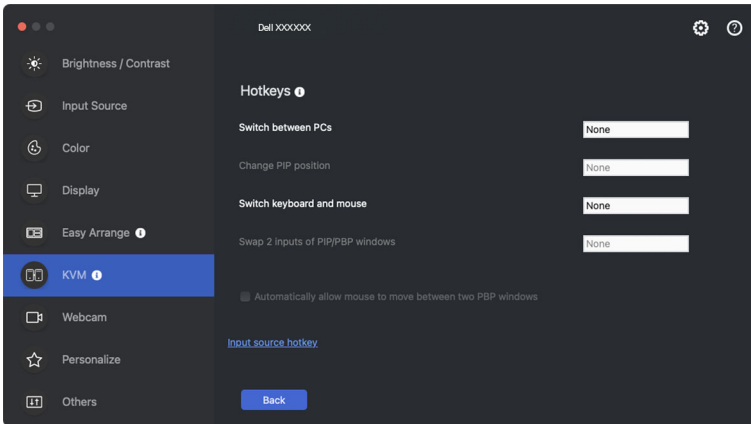
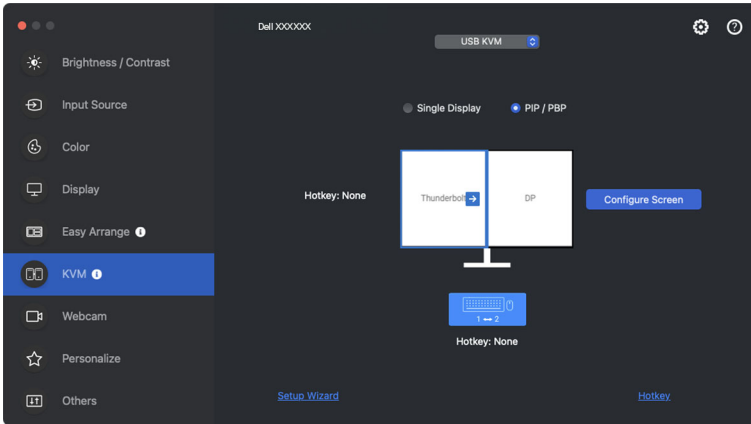



Feature	Function	Description
Single Display	Change video input	Change current video input by clicking the desktop computer icon or press hotkey .
PIP/PBP	Video swap	Swap video input of main/sub by clicking the arrow or press hotkey (only available in PIP or PBP side by side layout).
	USB switch	Click the keyboard and mouse icon or press hotkey to toggle USB upstream port of active input sources.

1. Click **Configure Screen** to enter the **KVM Configure Screen** page and change the screen layout.



2. Click **Hotkey** to enter the **Hotkeys** page and configure KVM hotkeys.



 **NOTE:** Only relevant hotkeys in accordance with your screen configuration will be displayed.



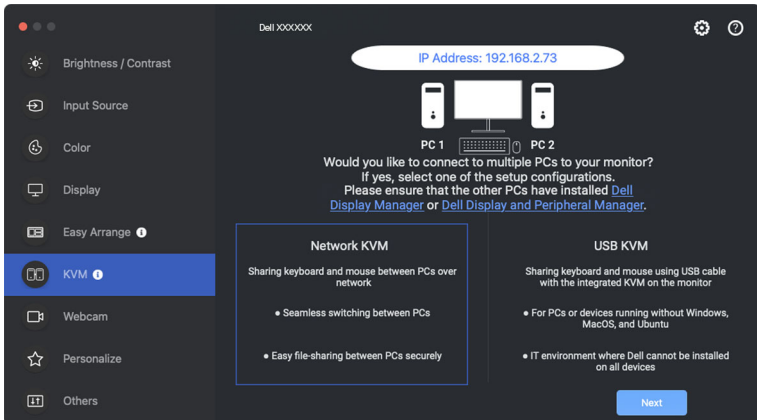
Setting up the Network KVM


For monitors that support the **Network KVM** function, any computer can share its connected keyboard and mouse with other computers that are connected to the same network. It also allows file transfer between computers through the network. This feature requires permission to be provided explicitly to DDPM.

The **Network KVM** is available in the KVM wizard. Click the **Network KVM** block and follow the on-screen instructions to setup **Network KVM**.

- ✎ **NOTE:** Network KVM supported monitors list is the same as the DDPM compatibility list. Visit the Dell support website and refer to the DDPM compatibility support model.
- ✎ **NOTE:** When using **Network KVM** for the first time, the application requests access to **Accessibility** privileges from the Mac. Click **Open System Preferences** and follow the on-screen instructions to enable **Accessibility**.
- ✎ **NOTE:** Disconnect **Network KVM** before switching to another user. **Network KVM** will reconnect to the current cluster when **Network KVM** is turned on, when the computer wakes from suspension, when connecting to a supported monitor, or when network configuration changes. Access data for each user is saved separately.
- ✎ **NOTE:** **Network KVM** disconnects automatically and will not continue with connection if **Apple Universal Control** is enabled.

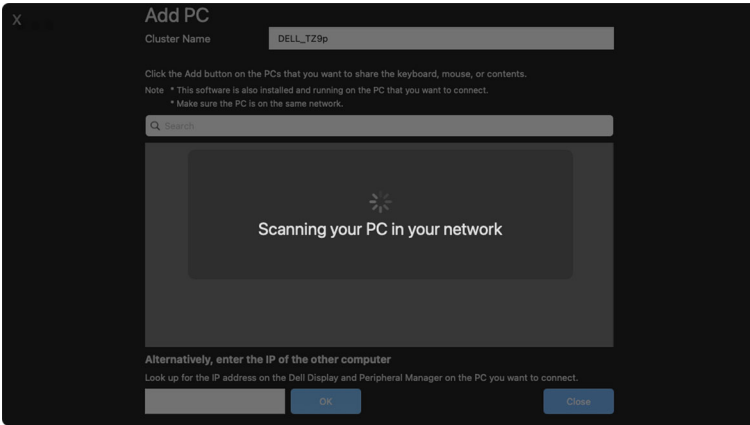
1. Click the **Network KVM** block to start the setup.



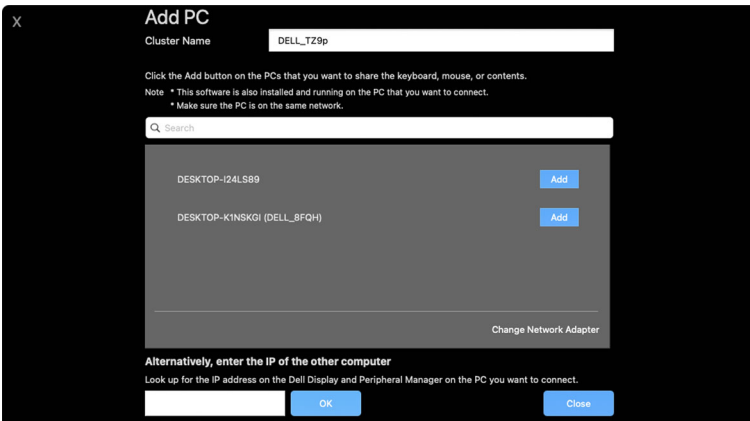
 **NOTE:** If DDM or DDPM is not installed on the target computer, click **Dell Display Manager (Windows)** or **Dell Display and Peripheral Manager (Mac)** to access Dell support page to download the application for the intended computer. Ensure that you complete all items on the checklist.

2. Network KVM scans for all computers that are in the same subnet to determine the best mode for the setup.

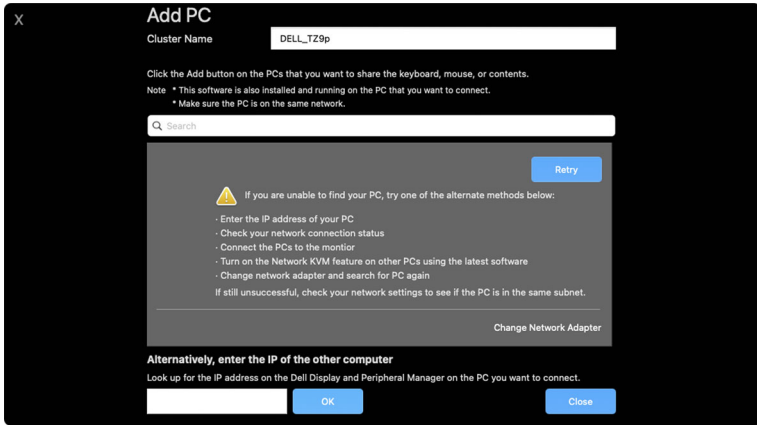
- If there is only one monitor available, and all computers in the subnet are connected to it, **Network KVM** selects **Single Display** mode and connects them automatically. Proceed to the **Single Display mode**.




- If there are computers in the subnet that are connected to different monitors, **Network KVM** displays the **Add PC** page. Click **Add** to connect the computer.

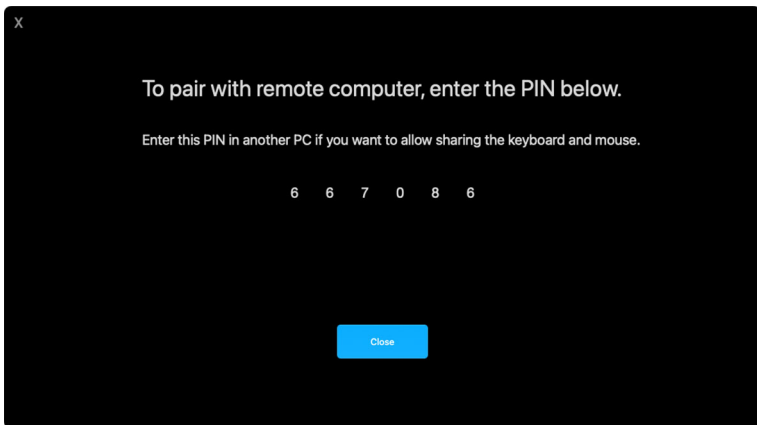


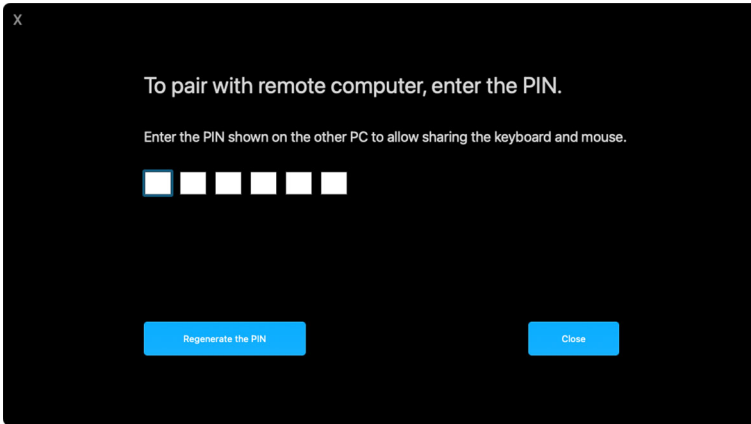
- If the scan does not identify any available computers, follow the on-screen instructions for troubleshooting, then click **Retry** to initiate another scan.



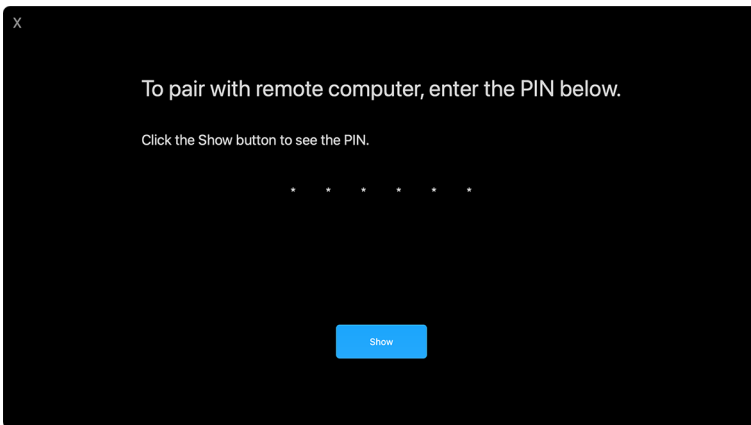
 **NOTE:** If the computer you wish to add is still not found, click **Change Network Adapter** to change scanning adapter. You can also click **Enter IP** to manually input IP to establish connection.

3. When connecting to a computer with a different monitor for the first time, a PIN appears on the remote computer that your are connecting to. Enter the PIN on the local computer to continue the connection process.





 **NOTE:** If the local computer is connected to another remote computer, the screen prompts user to click **Show** to display the PIN code.




4. When the remote computer is connected, the computer is shown as **Added**.



5. Network KVM selects best mode of setup depending on status of connected computers.

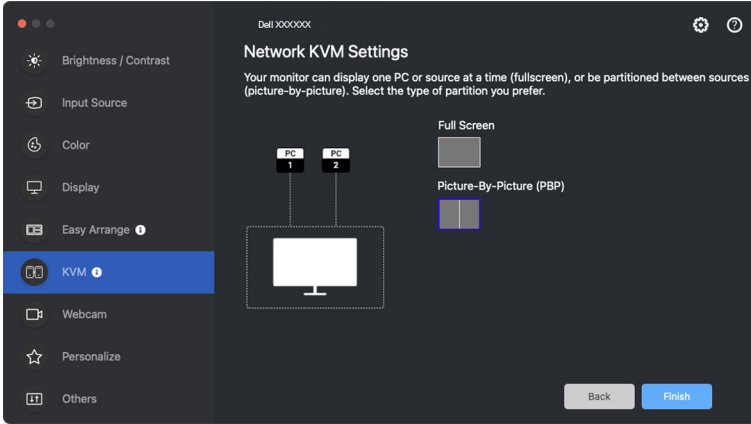
Computer and monitor connection	Description
All computers are connected to the one and only monitor.	The Network KVM setup sets in the Single Display mode.
Connects to a computer which is not logged-in.	
Connects to a computer which is connected to more than one Network KVM supported monitor.	The Network KVM setup sets in the Multiple Display mode.
Connects to a computer which is connected with another monitors	

 **NOTE:** You must be logged in to control remote computers.



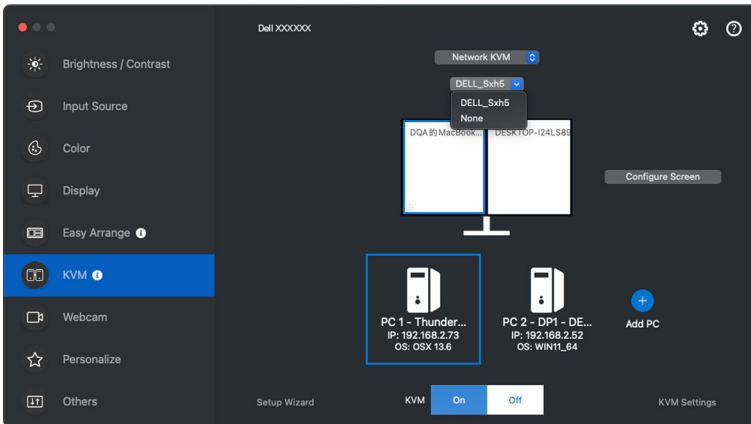
Single Display mode

For **Single Display** mode, select a preferred PBP layout and click **Finish** to complete the setup.



NOTE: Network KVM supports full screen and PBP, but does not support PIP.

Network KVM automatically saves up to five recently used clusters. Select a recent cluster from the drop-down list to resume or edit previously saved cluster.




NOTE: For managing recent clusters, see [Setting up the Network KVM configuration](#).



Using the Network KVM

The connected computers act as one **Cluster** to run KVM functions. Each **Cluster** may contain up to a maximum of four computers.

Feature	Function	Description
Cluster	Keyboard and mouse sharing	Share keyboard and mouse input with connected computers, but only one computer is in control at any given time. NOTE: When using a high DPI mouse, you may experience delayed response from remote computers due to bandwidth limitations. NOTE: Certain key combinations, function keys, specialized keys, and touchpad gestures are not supported for controlling remote computers.
	Mouse crossing	The mouse can cross to other connected computers. The crossing point can be determined using the KVM settings.
	Clipboard sharing	Allows you to copy clipboard text, image, or files to other connected computers.* NOTE: Cut and Paste is not supported on remote computers.
	Drag and drop	Allows you to drag and drop text or files to other connected computers.*

 **CAUTION: Dell Display and Peripheral Manager enables secure content and file sharing between computers with end-to-end encryption. However, it does not function as anti-malware software, providing no scanning or protection against malicious files during transfers. It is strongly recommended to install anti-malware or other security tools before utilizing File and Content Transfer in Network KVM. If you prefer not to share files between computers, you can navigate to KVM Settings > Manage Cluster to turn off this feature.**

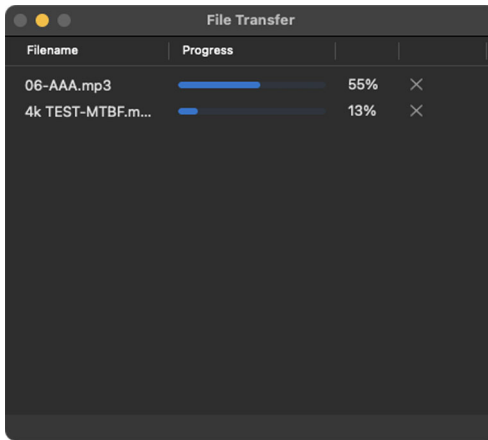


NOTE: The established **Cluster** may not resume connection after **Network KVM** is turned back on from the off state, after the main computer is wake from suspension, or after connecting to a supported monitor. In this case, you may manually switch the cluster from the drop-down list, or you may manually connect the offline computer from the **Network KVM** main page.

*See the below table for supported Copy and Paste and Drag and Drop actions.

	Copy and Paste	Drag and Drop
Text (editor)	Supported	Supported
File (folder)	Supported	Supported
Image (editor)	Supported	Not supported
File (editor)	Supported	Supported

When copying files to another computer, a **File Transfer** dialog appears. You can track current transfer progress, view error, or cancel the transfer.




NOTE: Filename with characters that are forbidden under OSX are not supported, which includes “: / 0x00(NUL)”.



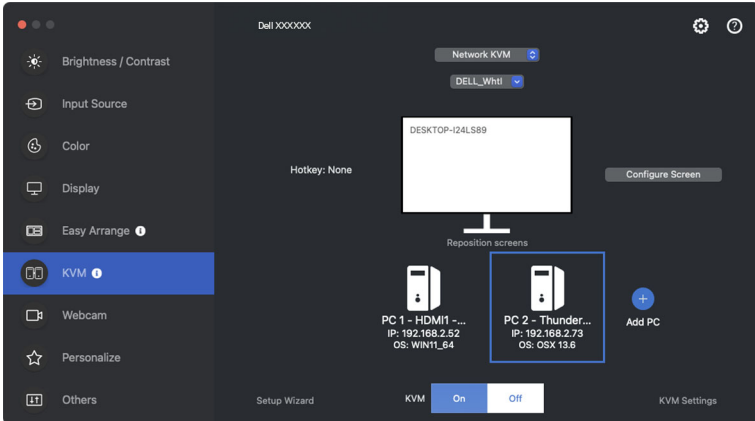
Cluster overview

Network KVM displays current cluster overview after KVM setup is complete.

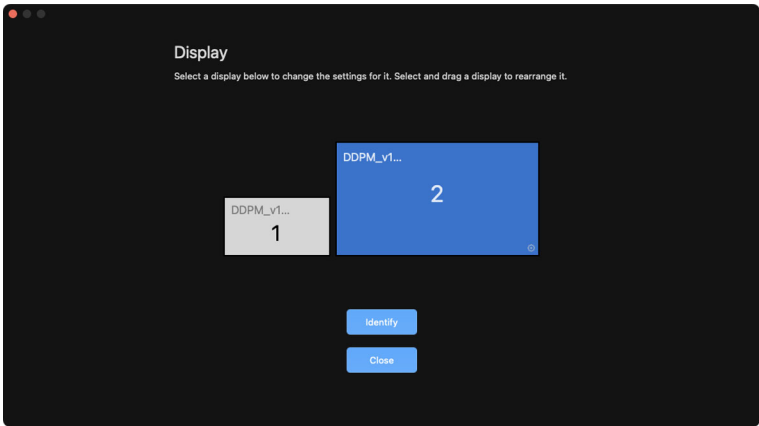
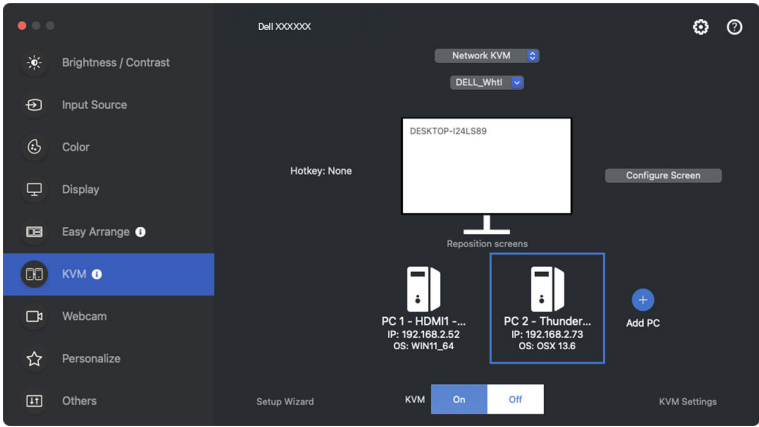
 **NOTE:** **Network KVM** overview may vary depending on the type of KVM setup.

Single Display (PBP Off)

- Click **Configure Screen** to enter the **KVM Configure Screen** page and change the screen layout.



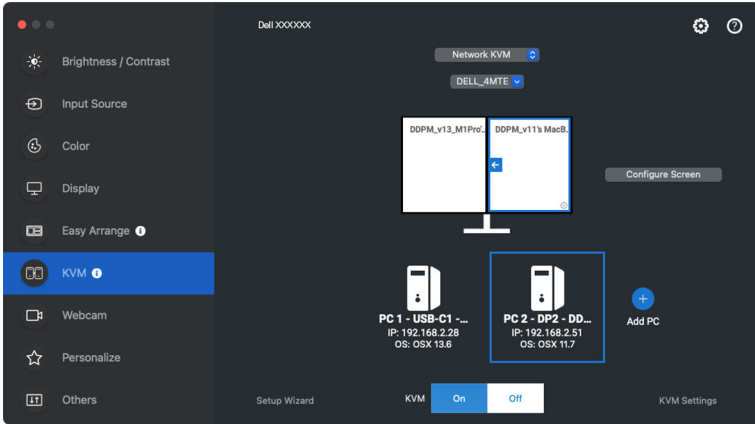
- Click **Reposition screens** to enter the **Display** page and swap computer positions.




Feature	Function	Description
Reposition screens	Swap screen	Drag and drop the monitor block to arrange horizontal position. The blue, enlarged block is the monitor that is connected to the currently active computer.
	Identify	Click Identify to show the assigned designation number of each computer connected to the monitor.



Single Display (PBP On)

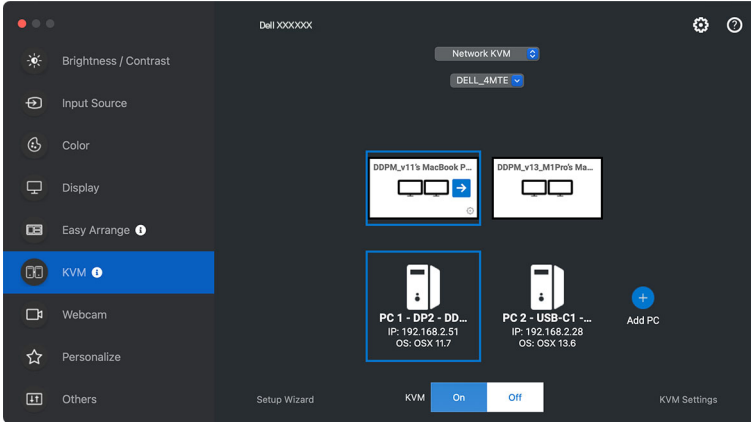


Feature	Function	Description
Single Display	Video swap	<ul style="list-style-type: none"> Move the cursor to the monitor block and click the arrow that appears. Drag and drop one monitor block to another monitor block.




 **NOTE:** For switching computer hotkey, see [Setting up the Network KVM configuration](#).



Multiple Displays

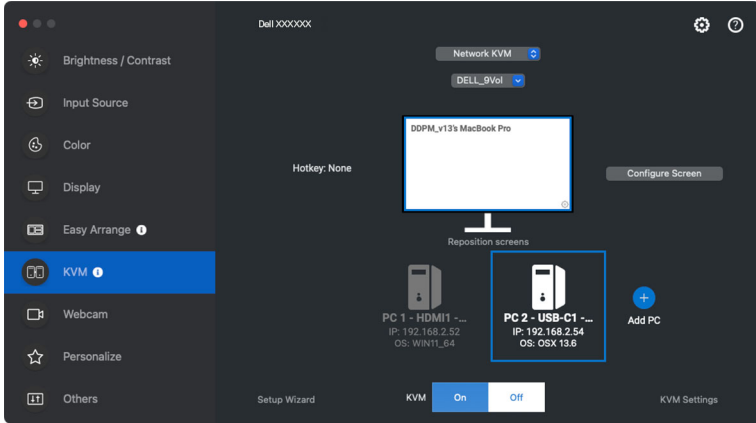


Feature	Function	Description
Multiple Displays	Swap screen	<ul style="list-style-type: none"> Move the cursor to the monitor block and click the arrow that appears. Drag and drop one monitor block to arrange horizontal position.

-  **NOTE:** Review the display settings on each computer in your operating system to assess the layout of multi-displays and settings.
-  **NOTE:** You can connect and control up to four computers in a **Network KVM** setup.
-  **NOTE:** If **DDPM** is unable to read PBP position through DDC/CI, **Network KVM** automatically selects multiple displays setup, which arranges computers in horizontal positions instead of monitor PBP positions.



System overview



Information of all computers on a cluster is displayed at the bottom of the **KVM** menu. The local computer has a blue border. The connected computers are shown in white, while disconnected computers are shown in gray.

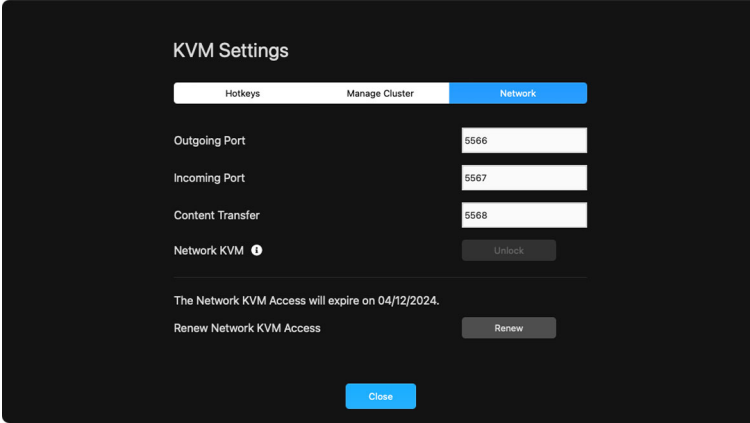
Feature	Function	Description
System overview	Connect	<ul style="list-style-type: none"> Right-click the computer block to display menu, then click Connect to reconnect a disconnected computer. Click the connect button to reconnect a disconnected computer.
	Disconnect	<ul style="list-style-type: none"> Right-click the computer block to display menu, then click Disconnect to disconnect a connected computer. Click the disconnect button to reconnect a disconnected computer.
	Delete	Right-click the computer block to display menu, then click Delete to remove the computer from the cluster.
	Switch PC	In the Single Display mode with PBP Off, click Switch PC to switch video input between computers.



Setting up the Network KVM configuration

You can change the **Network KVM** configuration by using the **KVM Settings** on the bottom-right of the **KVM** menu.

Network

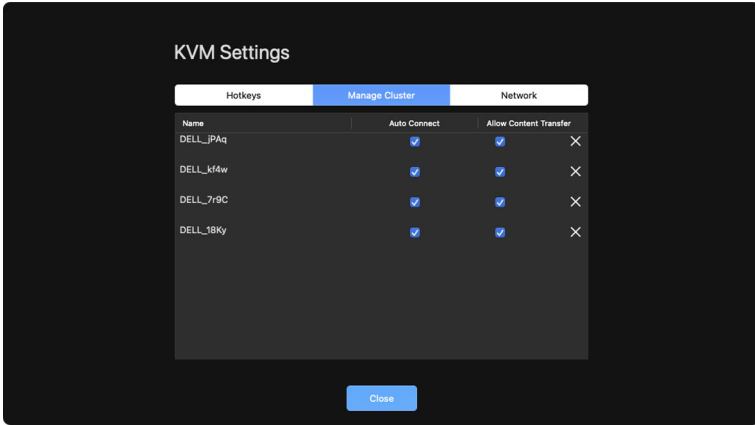


Feature	Function	Description
Network	Ports (Outgoing Port, Incoming Port, Content Transfer)	Allows you to setup network and file transfer ports. The port number must be between 1024 and 49151. Each port must be distinct from all others.
	Network KVM	When Network KVM detects abnormal activities, it automatically locks the network feature for security purposes. Toggle the switch to unlock.
	Network KVM Access expiry date	To enhance security, Network KVM expires the access files every year. After your access expires, you must setup the cluster again.
	Renew Network KVM Access	For security purposes, if your access is compromised, you can renew the access. After renewing the access, you will have to authenticate your remote computers again.




Manage cluster

You can change the configuration of five most-recent clusters.

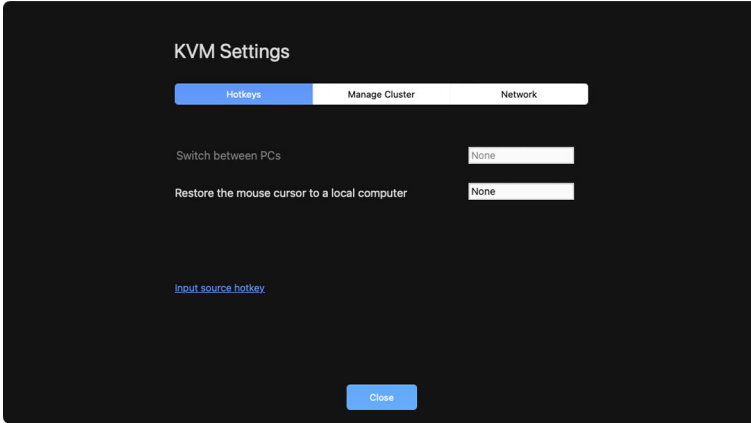


Feature	Function	Description
Manage cluster	Rename cluster	Click the name or the pencil button to edit cluster name.
	Delete cluster	Click the delete button to delete cluster.
	Auto Connect	Select the check-box to automatically resume cluster at DDPM startup.
	Allow Content Transfer	Select the check-box to allow sharing clipboard and files.


 **NOTE:** The settings for content transfer and auto connect follow the cluster creator's initial setting and can be modified in **KVM settings**. The settings are synced with other connected computers in the same cluster.



Hotkeys



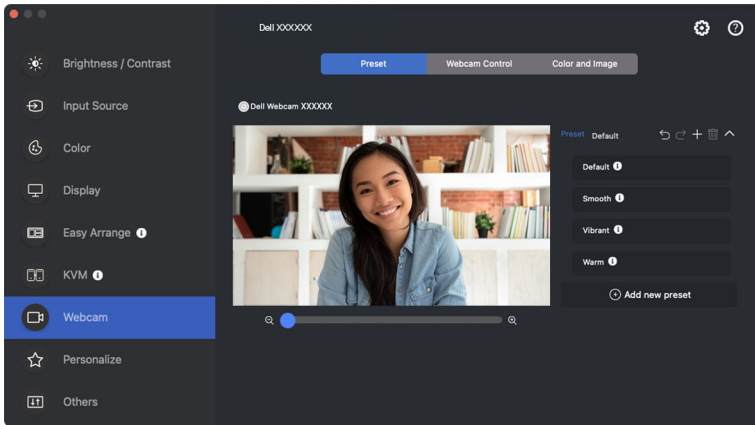
Feature	Function	Description
Hotkeys	Switch between PCs	Press this hotkey to switch between the computer sources in Single Display mode.
	Restore the mouse cursor to a local computer.	Move the control back to the primary monitor of the computer which the keyboard is connected. The mouse pointer returns to the center of the primary monitor. NOTE: If the primary monitor of the computer is not active, Network KVM will switch the monitor input source to the computer.
	Input source hotkey	Assign hotkey to switch input sources.

 **NOTE:** Hotkey settings in Network KVM sync automatically with all connected computers in the cluster.



Using the Webcam


Configuring Webcam



Feature	Function	Description
Camera selection and preview	Camera selection	<ul style="list-style-type: none">• Select the connected cameras.
	Preview window	<ul style="list-style-type: none">• View camera images in real time.
	Zoom	<ul style="list-style-type: none">• Zoom in and zoom out camera preview.
Webcam Control	Camera Preset	<ul style="list-style-type: none">• You can select a preset that suits your style depending on how you want the image to appear on the camera from the options provided. You can also create a custom preset.



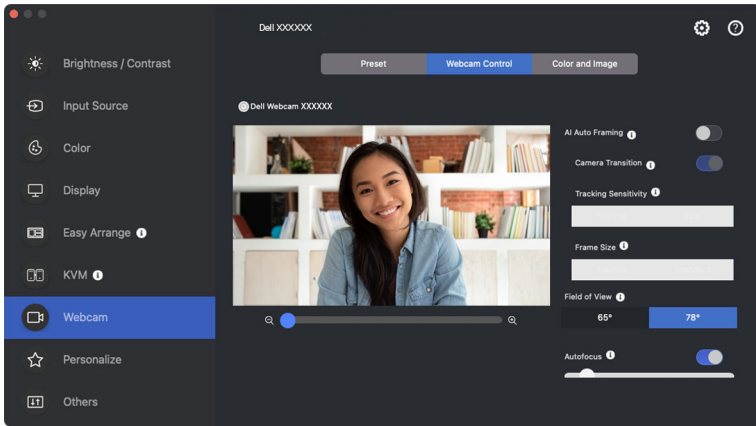
Webcam Control	AI Auto Framing	<ul style="list-style-type: none"> • Always stay focused. The AI Auto Framing keeps you at the center of the picture no matter where you move. • The AI Auto Framing settings (not available on WB3023) are: <ul style="list-style-type: none"> • Camera Transition: ON or OFF. • Tracking Sensitivity: Normal or Fast. • Frame Size: Narrow or Standard. <p>NOTE: AI Auto Framing is available on the following models:</p> <ul style="list-style-type: none"> • Webcam: WB7022 and WB5023. • Monitor: U3223QZ, U3223KB, U3223KBA, and P-series monitors.
	Field of View	<ul style="list-style-type: none"> • You can set the viewing angle by adjusting your field of view to 65°, 78° or 90° if available.
Microphone	Camera Microphone	<ul style="list-style-type: none"> • You can switch on or off the built-in microphone for clear communication optimized for personal workspace. <p>NOTE: Camera Microphone is available on the following models:</p> <ul style="list-style-type: none"> • Webcam: WB5023 and WB3023

 **NOTE:** When using **Camera** for the first time, the application will request access to **Camera** privileges on your Mac. Click **Open System Preferences** and follow the on-screen instructions to enable **Camera**.



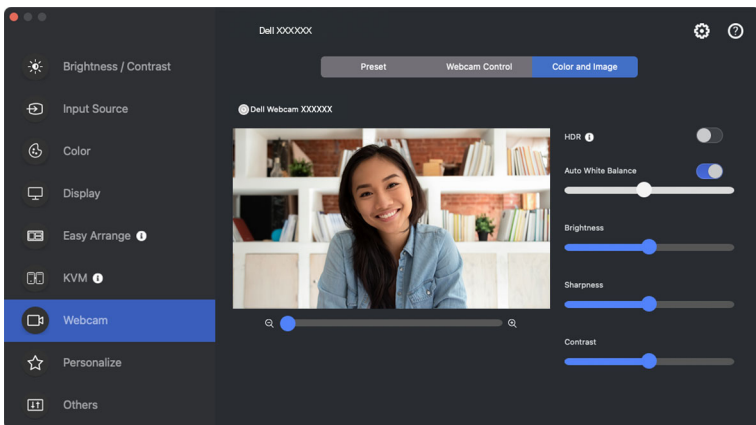
Webcam Control

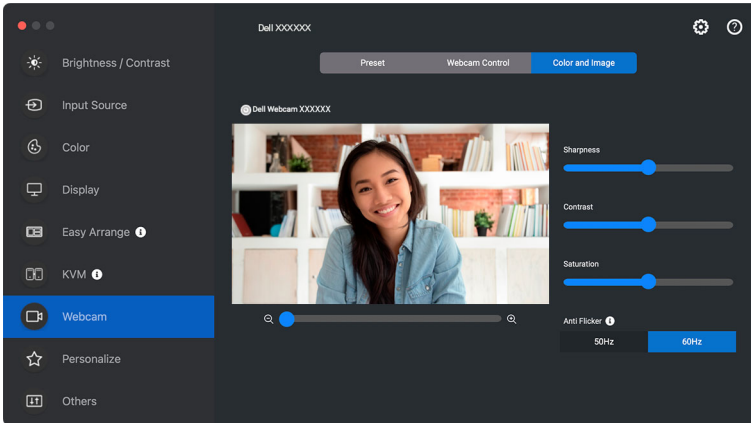
You can adjust **AI Auto Framing** and its sub-settings (if available), **Field of View**, Zoom, **Autofocus**, **Priority**, and Camera switch from the **Webcam Control** section of the user interface.



Color and Image

It is possible to adjust the automatic correction for optimal image quality at various lighting conditions using **HDR** (High Dynamic Range). Other settings like **Auto White Balance**, **Brightness**, **Sharpness**, **Contrast**, **Saturation**, and **Anti Flicker** for the Dell Webcam makes it easier to get an image of your choice. The user interface is simple and intuitive to achieve this.





NOTE: AI Auto Framing (if available) and **HDR** features are available on all supported Dell Displays and Dell Webcams connecting to the Mac using any type of USB cable, except for the following model that must be connected to the Mac using the USB 3.0 cable:

- Webcam: WB7022

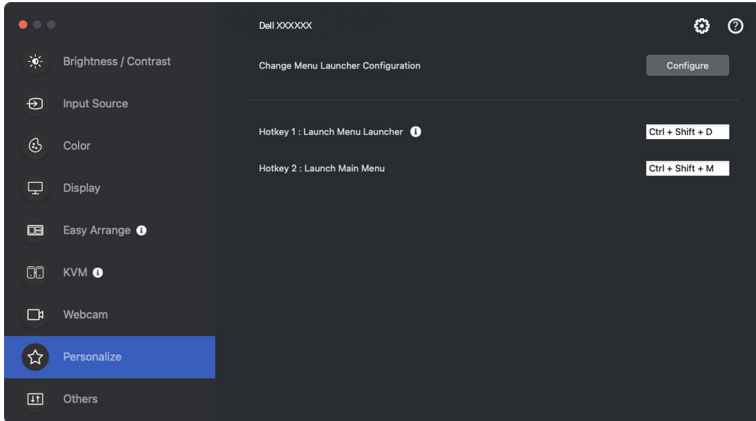
When using Camera for the first time, the application will request access to **Camera** privileges on your Mac. Click **Open System Preferences** and follow the on-screen instructions to enable **Camera**.



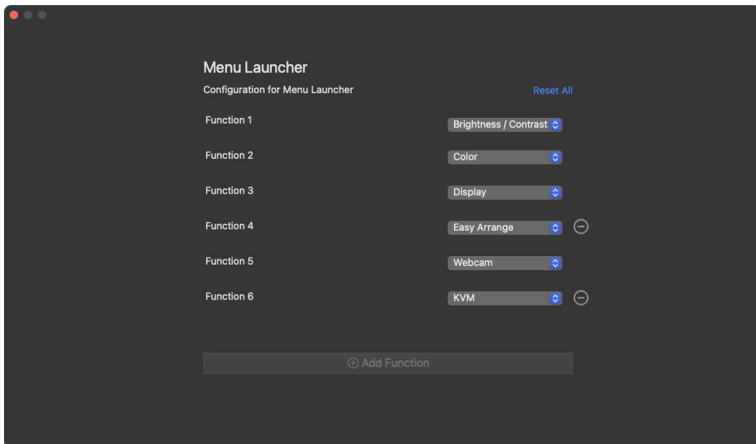
Personalize settings

Changing Menu Launcher configuration

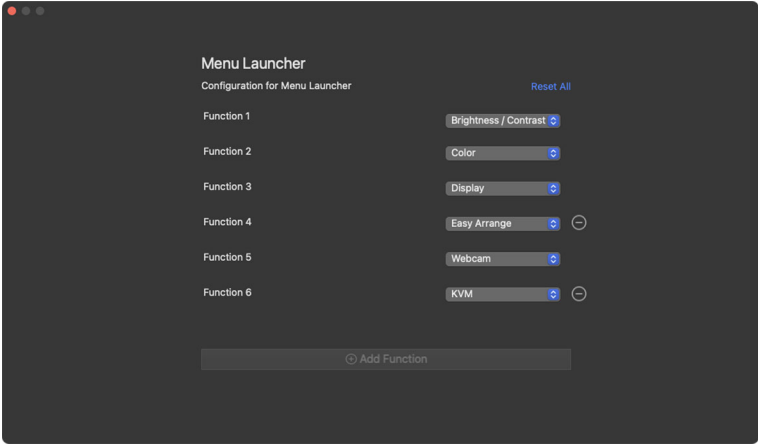
1. Click **Configure** to change the quick access function on **Menu Launcher**.



2. Select function from the drop-down list. Click **Add Function** to add more functions to the **Menu Launcher**.

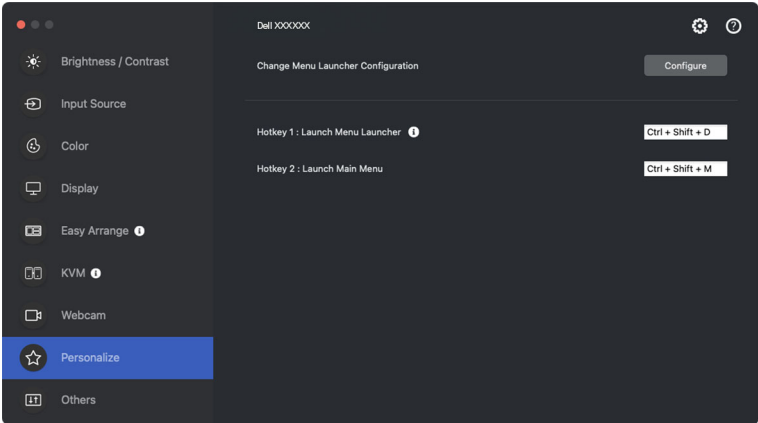


3. Click **Reset All** to reset the functions of **Menu Launcher**.



NOTE: The available functions may differ depending on the configuration of your monitor.

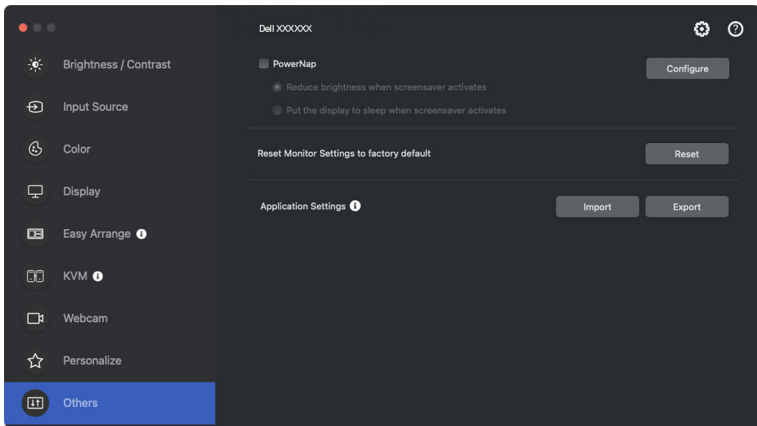
Changing Launch DDPM Hotkey configuration



Feature	Function	Description
Personalize	Launch Menu Launcher	Press Ctrl+Shift+D to bring up the Menu Launcher of the monitor where the mouse pointer is currently located.
	Launch Main Menu	Press Ctrl+Shift+M to bring up the Main Menu of the monitor where the mouse pointer is currently located.

Applying energy conservation features

On supported Dell models, PowerNap energy conservation options are available in **Others** menu. You can choose to set the brightness of the monitor to the minimum level, or to put the monitor to sleep when the screen saver is activated.

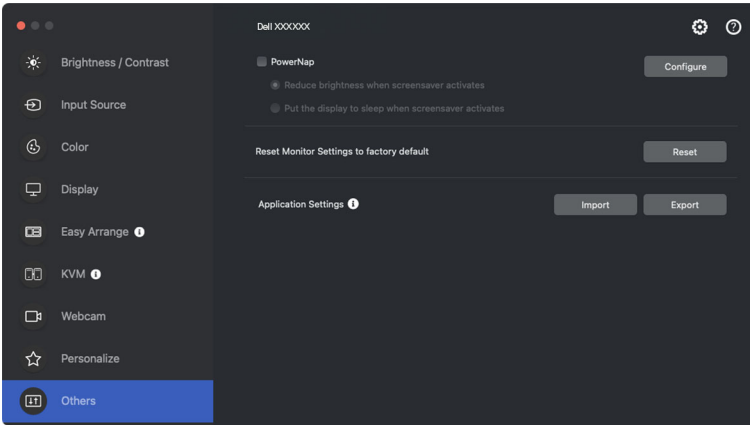


NOTE: **PowerNap** option is disabled in PBP or PIP to prevent disruption of the normal activities.



Resetting monitor settings

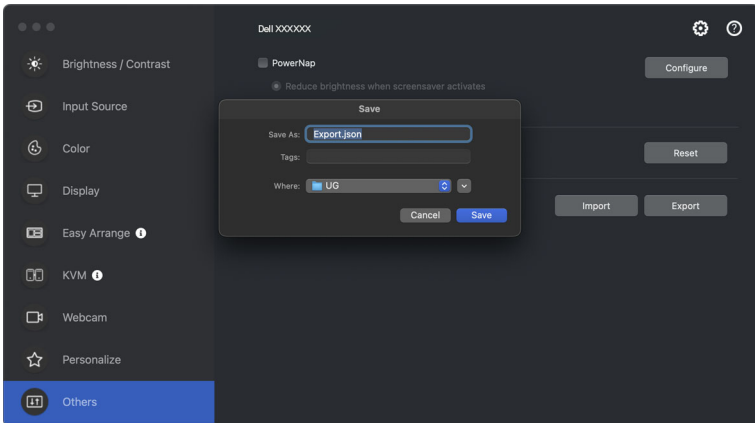
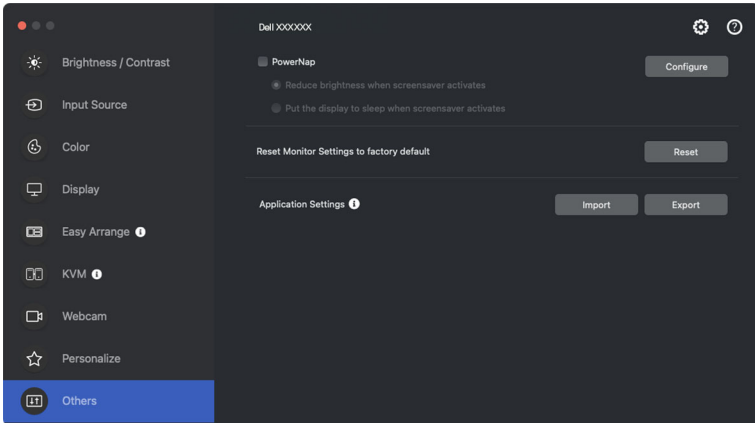
Click **Reset** to reset all monitor settings under **Others** menu.

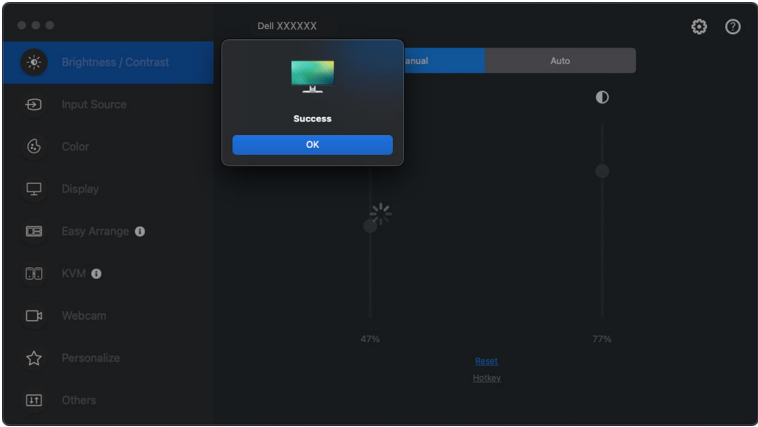


Import/Export application settings

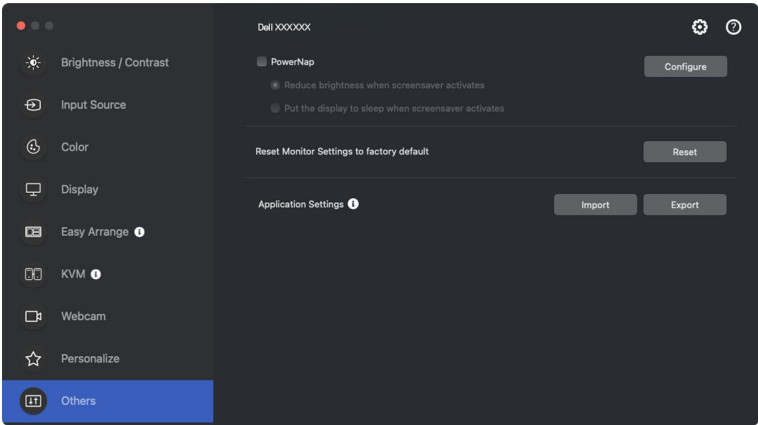
You can use this function to export the monitor settings from one monitor and import into another monitor of the same model.

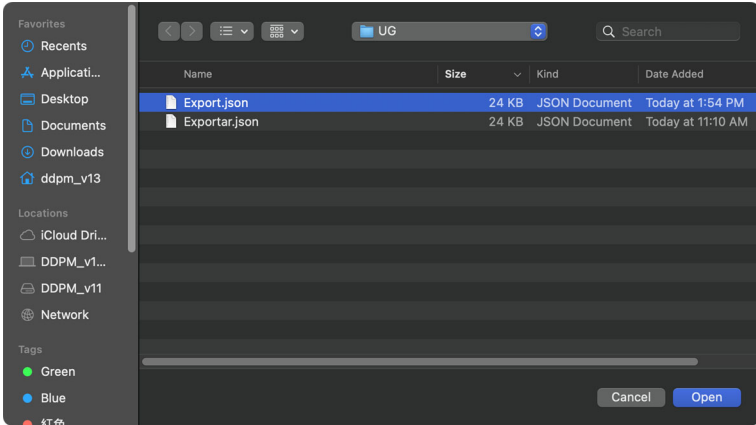
1. Click **Export** to store a copy of the application and monitor settings of selected monitor to a file, and click **OK** when export is successful.





2. To import the settings from a previously exported file, click **Import** and select the file. The monitor settings will be applied to all of the connected displays of the same model.



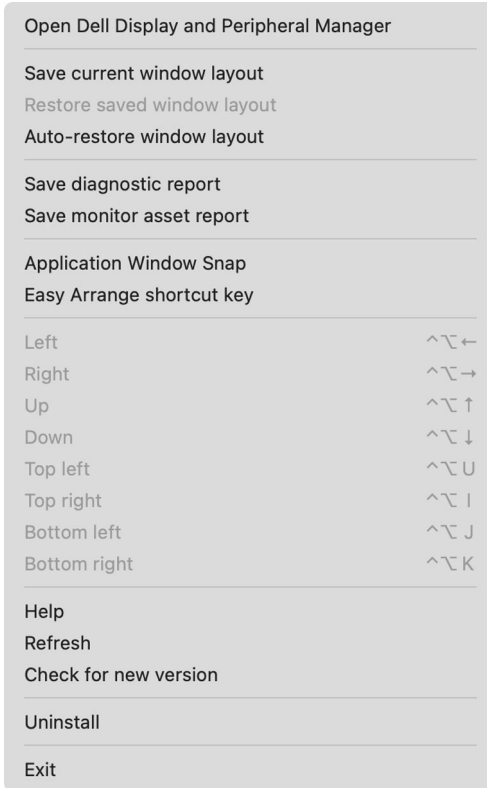


3. DDPM will restart after the file is imported.

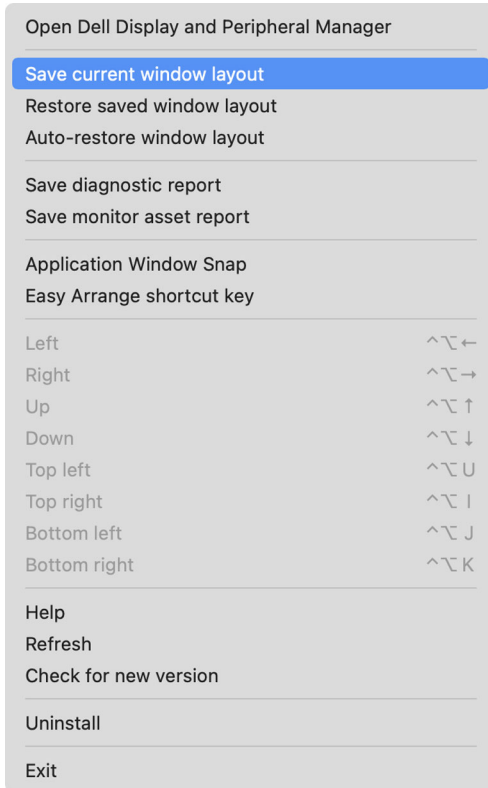


Restoring application positions

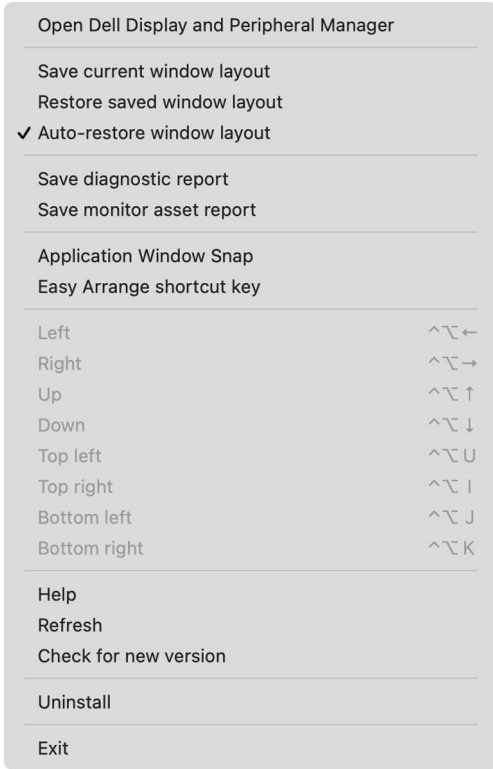
Dell Display and Peripheral Manager can help you restore application windows into their positions when you reconnect your computer to the monitor(s). Access this feature by right-clicking the Dell Display and Peripheral Manager icon in the system tray.



To go back to a favorite layout, first select **Save current window layout** and then **Restore saved window layout**.

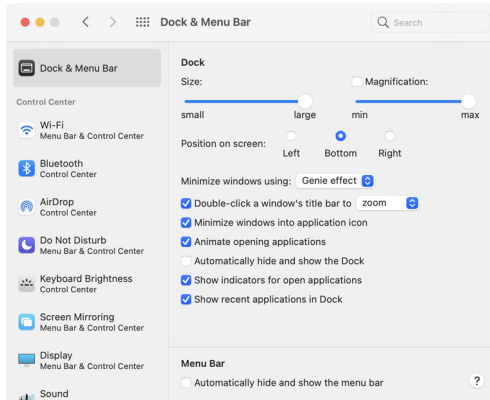


If you choose **Auto-restore window layout**, your application windows positions are tracked and remembered by Dell Display and Peripheral Manager. Dell Display and Peripheral Manager automatically places the application windows into their original positions when you reconnect your computer to your monitor(s).




 **NOTE:** If **Auto-restore window layout** is disabled, go to **System Preferences - Dock & Menu Bar**, enable **Minimize windows into application icon**.





You may use monitors with different models or resolutions in your daily routine, and you may apply different window layouts on them. Dell Display and Peripheral Manager registers the monitor you have reconnected and restore application positions accordingly.

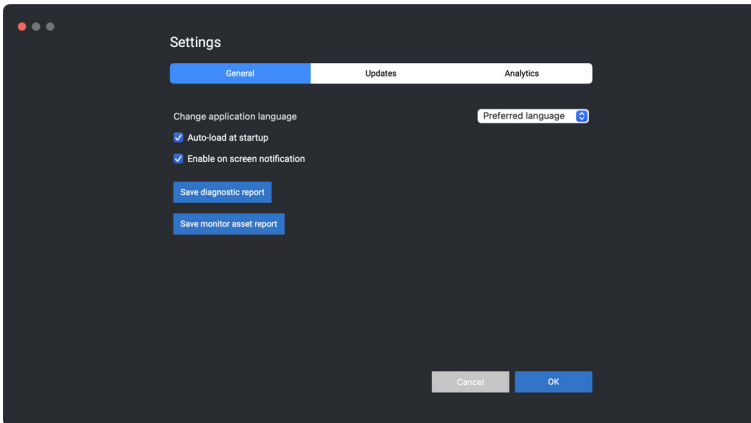
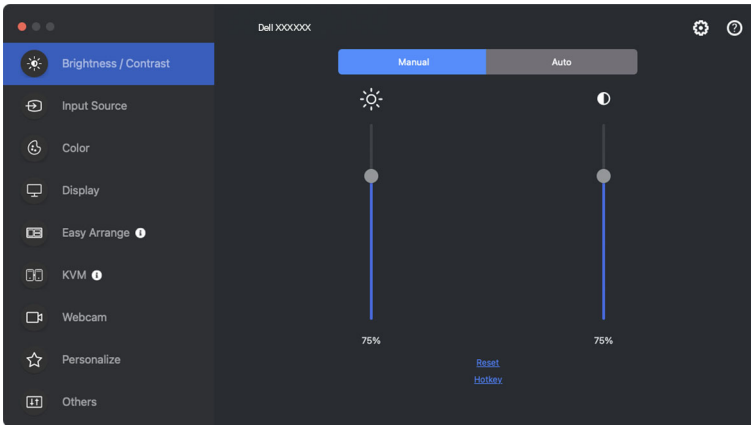
In case you need to replace a monitor in a monitor matrix configuration, you can save the window layout before replacement and restore the layout after a new monitor is connected.

 **NOTE:** You should keep your applications running in order to benefit from this feature. Dell Display and Peripheral Manager does not launch applications. Use **Easy Memory** for frequently used tasks.



Additional settings

There are additional settings available under **Settings**. Click **Settings** icon on the upper right corner of the menu to make changes.

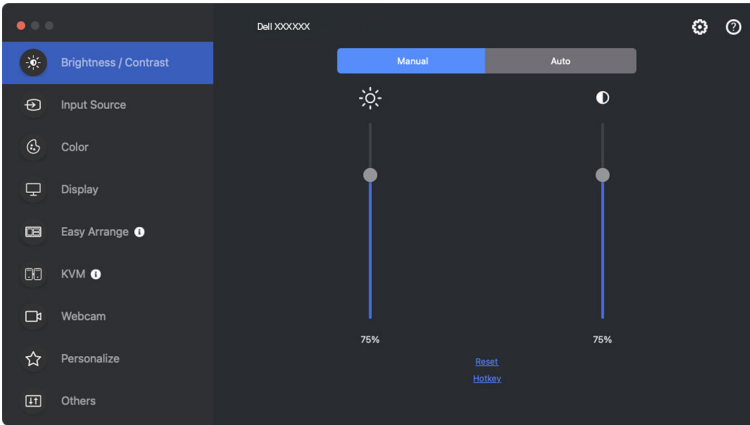


Feature	Function	Description
General	Change application language	Change your preferred language from the list.
	Auto-load at startup	Launch DDPM when the computer starts up.
	Enable on screen notification	Allow DDPM to show notification message.
	Save diagnostic report	Click Save diagnostic report to save the diagnostic report. The report contains system and monitor related information along with DDPM runtime logs.
	Save monitor asset report	Click Save monitor asset report to save monitor asset report. The report contains monitor Extended Display Identification Data (EDID) information for all connected monitors.

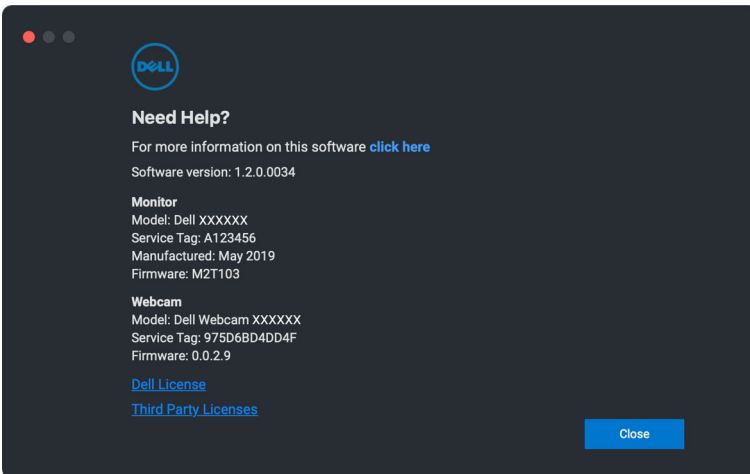


Help

There are additional software and monitor information available in **Help**. Click the “?” icon to access the **Help** screen.

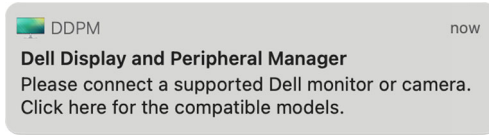


You can obtain software information by clicking **click here**. You can also obtain model name, service tag, manufactured date, and firmware information of the monitor or the webcam. Click **Close** to exit the **Help** screen.

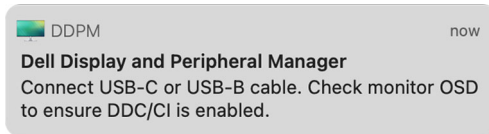


Troubleshooting

If Dell Display and Peripheral Manager does not work with your monitor or webcam, it will display the following icon and message in the status menu.



Click the DDPM icon, Dell Display and Peripheral Manager shows a more detailed error message.



Please note that Dell Display and Peripheral Manager only works with selected Dell-branded monitors or webcams. If you are using monitors or webcams from other manufacturers, Dell Display and Peripheral Manager does not support them.

Dell monitors and webcams not supported by Dell Display and Peripheral Manager

Dell Display and Peripheral Manager may not work with the following monitors or webcams:

- Dell monitor or webcam models not included in Dell Display and Peripheral Manager for Mac supported list. For more information, see <https://www.dell.com/support/ddpm>
- Monitors, webcams and accessories not listed in Dell Display and Peripheral Manager for Mac support list. Virtual and wireless monitors do not support DDC/CI
- Mac models earlier than year 2018
- macOS earlier than 11



Unable to detect supported Dell monitor or webcam

If Dell Display and Peripheral Manager cannot identify or establish communication with a compatible Dell monitor or webcam, follow these steps to troubleshoot:

1. DDPM will not work if the external monitor is set to **Use as Mirror for Built-in Retina Display**. Change the Display settings to set external monitor to Use as either **Main Display** or **Extended display**.
Display Settings is available at Apple menu > System Preferences > Displays.
2. If connecting HDMI cable not working, switch to use HDMI and USB upstream cable. Launch DDPM again.
3. Check the monitor OSD to ensure **DDC/CI** is enabled.
4. Remove any docking stations or cable extenders or converters between the monitor and the graphics port. Some low-cost extenders, hubs or converters may not support DDC/CI properly and can fail Dell Display and Peripheral Manager. Update the driver of such device if the latest version is available.
5. Check if the webcam is detected under USB section in System Information
6. Wait for a few seconds after unplugging the webcam before re-connecting it to the computer.
7. Restart your system.

Unable to connect to Network KVM

If you encounter difficulty connecting to a remote computer through **Network KVM**, follow these troubleshooting steps:

1. Check the **Firewall** page in **System Settings**. If firewall is enabled, click **Options...** and ensure that **DDPM** is added to the list and is set to **Allow incoming connections**.
2. Ensure that **DDPM** is allowed to communicate through the anti-virus firewall.
3. Reach out to your network administrator and confirm that all network ports (default 5566, 5567, 5568) are open for both inbound and outbound communication.



Network KVM switches to another cluster

Network KVM unexpectedly switches to another cluster during normal use. This is because **Network KVM** binds the connected monitor to a cluster when:

- user creates a cluster.
- user selects a cluster.

For optimum usage, **Network KVM** attempts to resume connection with the cluster that has the highest priority. If connection fails, **Network KVM** goes down in order and attempts to connect with another cluster. When this happens, you can manually select the cluster you wish to use from the KVM menu.

Compatibility between DDPM application installed on your system

DDPM is backward compatible with previous version. Recommended to always use the latest DDPM version.

Getting more information about troubleshooting

You can **Save diagnostic report** or **Save monitor asset report** to provide more information to Dell service center for troubleshooting.

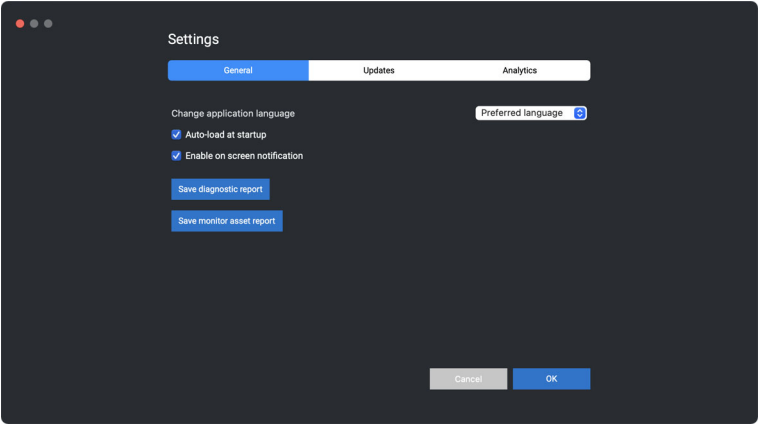
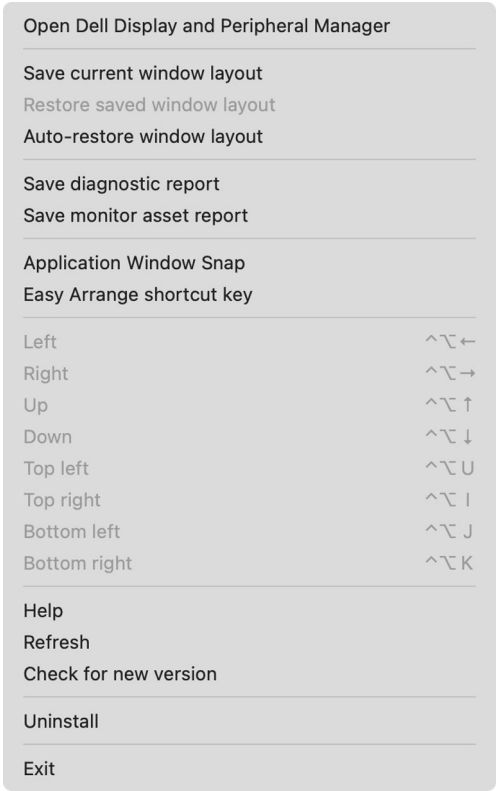
Save diagnostic report

Right-click DDPM icon and select **Save diagnostic report** or click the **Save diagnostic report** button from **Settings**. The report contains system and monitor related information along with DDPM runtime logs.

Save monitor asset report

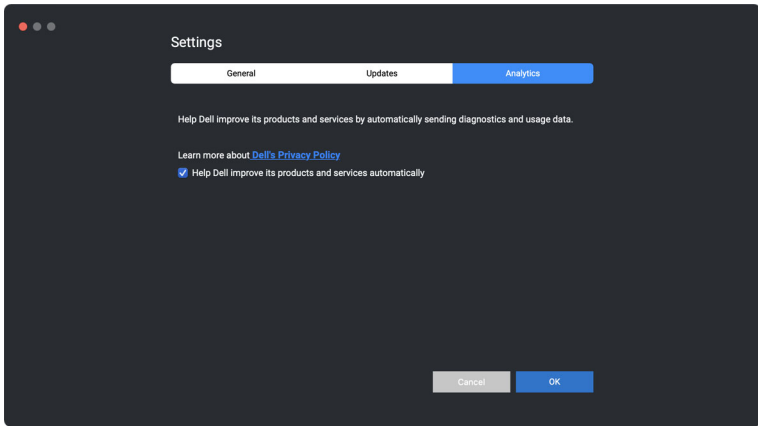
Right-click DDPM icon and select **Save monitor asset report** or click the **Save monitor asset report** button from **Settings**. The report contains monitor Extended Display Identification Data (EDID) information for all connected monitors.





Improve DDPM

Check the **Help Dell improve its products and services automatically** if you consent to provide diagnostic and usage data to Dell server automatically. This data helps to improve Dell products and services.

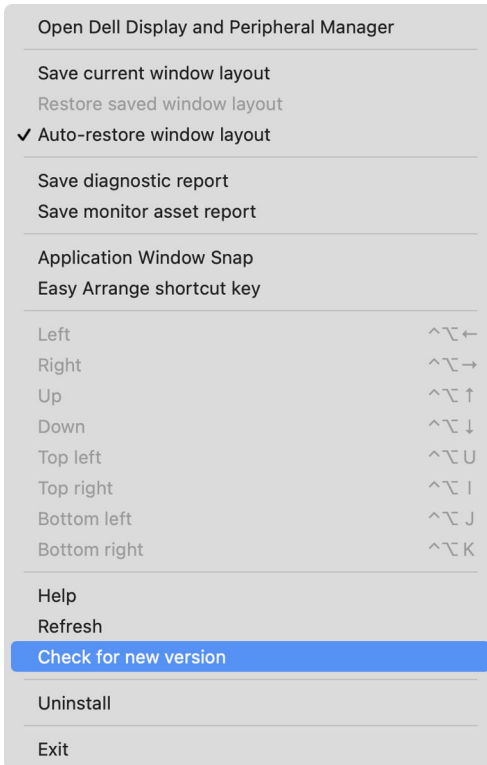


Updating DDPM software, monitor and webcam firmware

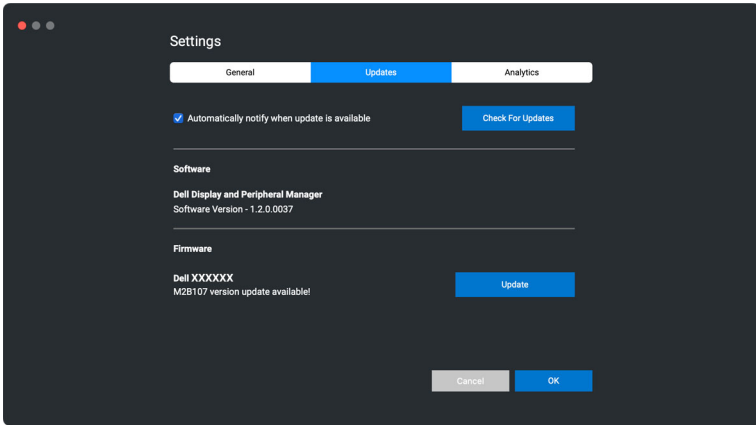
If your computer is connected to the Internet, you will be prompted to upgrade to a newer version of DDPM software, monitor firmware or webcam firmware when the updated version is available. It is recommended to download and install the latest DDPM application, and monitor or webcam firmware.

Updating DDPM software

You can check for new DDPM version by right clicking the Dell Display and Peripheral Manager icon and select **Check for new version**.

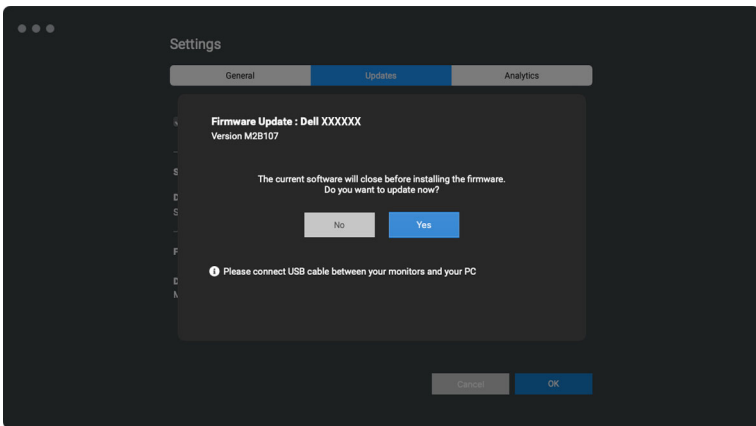


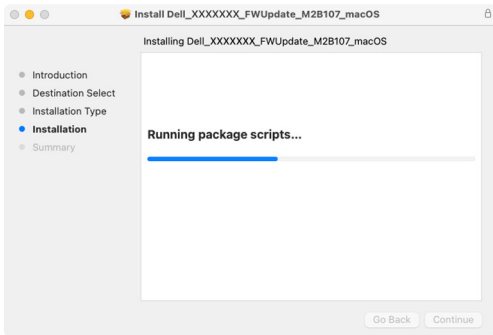
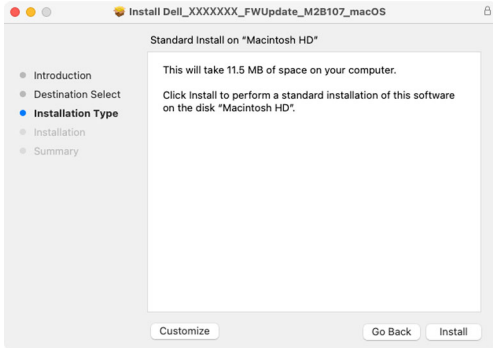
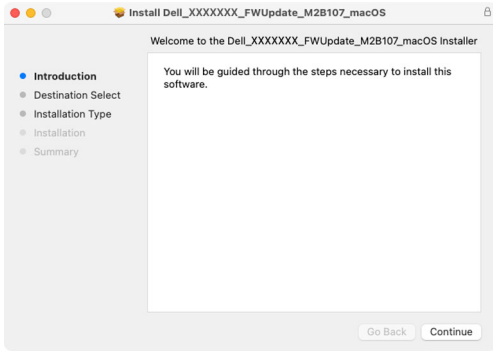
Click **Update** in **Settings** to update the DDPM software or device firmware.
You can also check for new version by clicking **Check For Updates** in **Settings**.



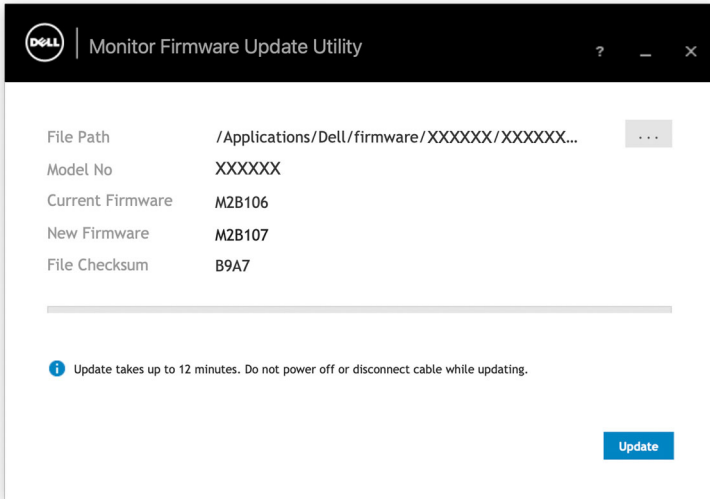
Updating the monitor firmware

1. Click **Update** to download the pkg file. After download is complete, a dialog box appears to prompt for confirmation. Follow on-screen instruction to disconnect all other monitors before clicking **Yes**.

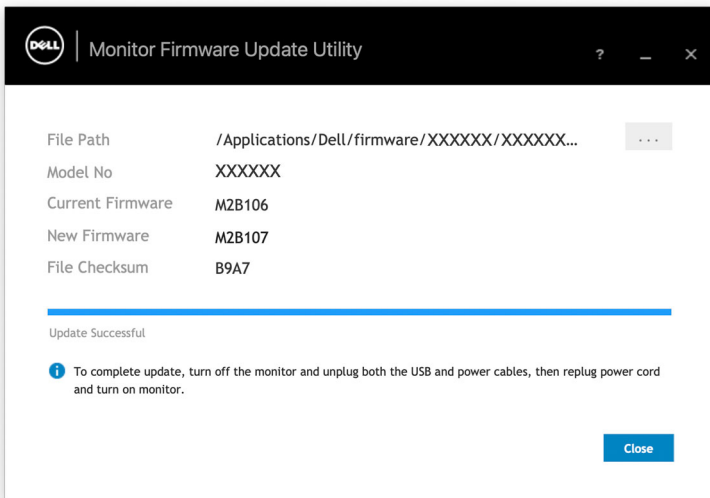




2. The **DDPM** will close, and **Monitor Firmware Update Utility** will appear after you confirm to update firmware. Click **Update** to start firmware update.

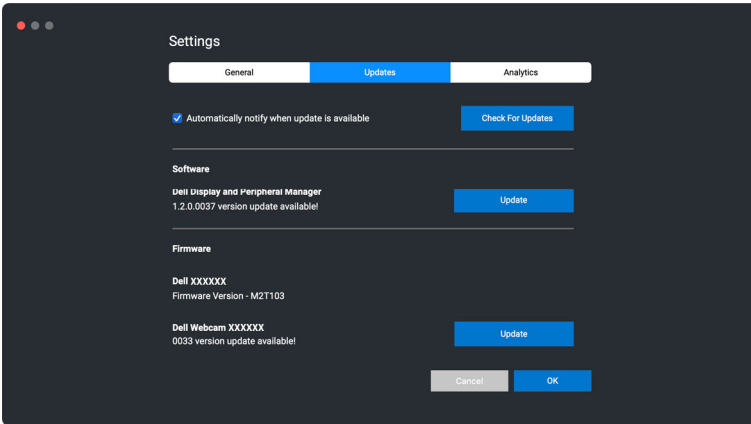
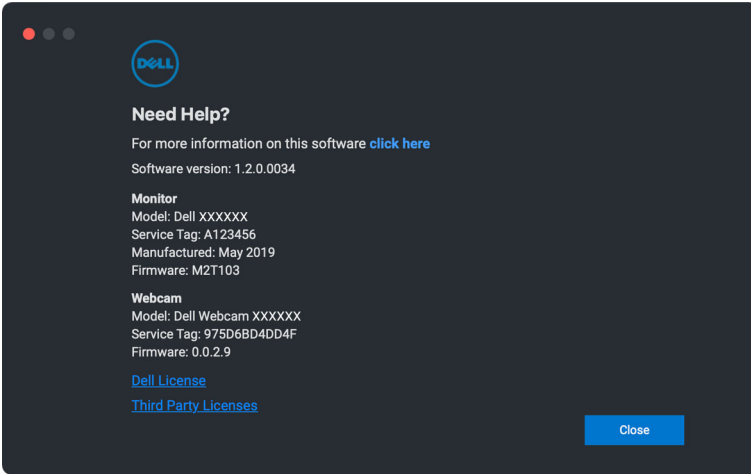


3. After the update is complete, click **Close** to exit **Monitor Firmware Update Utility** and reboot the monitor.



Updating the webcam firmware

Webcam firmware version can be found in **Help** dialog. Webcam firmware can be upgraded in **Settings** dialog. You can click **Update** to download and update Dell Webcam firmware immediately.



Uninstalling DDPM software

You can uninstall DDPM by right clicking the Dell Display and Peripheral Manager icon and select **Uninstall**.

