

# Workstation Connect



**ZEBRA**

## **Administrator's Guide**

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# About This Document

## Introduction

This guide provides information about developing applications for Zebra Workstation Connect.



**IMPORTANT:** If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: [zebra.com/support](https://zebra.com/support).

## Configurations

This guide covers the following configurations:

Configuration	Description	Device Compatibility
CRD-TC5X-1SWS-01	Workstation Docking Cradle Kit with Std Cup, HDMI, Ethernet and multiple USB Ports. Included in kit: <ul style="list-style-type: none"><li>• Cradle (CRD-TC5X-1SWS1-01),</li><li>• Power Supply (i.e. PWRBGA12V50W0WW)</li><li>• DC Cable (i.e. CBL-DC-388A1-01).</li></ul> Country specific AC line cord sold separately.	TC52ax Mobile Computers

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When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software/firmware type or version number

## About This Document

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# System Administrator Configurations

This document outlines the steps necessary to create a StageNow Profile and generate barcodes that enable specific configurations on the mobile device to be extended to the desktop via Workstation Connect. The following sections describe barcodes that enable the administrator to disable USB storage, configure user access to settings, install/uninstall, launch and enable/configure applications.

System and application configurations on the mobile computer are applied to the Zebra Workstation Connect, these options include:

- Disable USB storage to prevent the usage of USB Flash drives connected to the Workstation Cradle.
- Restrict the end user to access to Settings on the mobile device.
- Restrict the end user ability to launch applications.
- Enable/Disable applications on the mobile device.
- Install/Uninstall applications on the mobile device.
- Launch applications on the mobile device screen.

The configurations above are applicable to both the mobile device and on the external monitor. These configurations can be implemented on the device via StageNow following the instructions in this section.

## Steps to Create a StageNow Profile/Barcodes

To create a StageNow profile or barcode, download StageNow:  
[zebra.com/us/en/support-downloads/software/utilities/stagenow.html](https://zebra.com/us/en/support-downloads/software/utilities/stagenow.html)

To complete the profile and create a barcode:

1. Login to StageNow with administrator credentials.
2. Click **Create New Profile** on the Home page.
3. Select the appropriate MX version from the installation wizard window.
4. Select **Xpert Mode** from the wizard list and click **Continue**.
5. Enter the profile name and start.
6. Select the appropriate setting from the settings list and click to add.
7. Complete the profile and create a barcode as required.
8. Scan the barcode using the StageNow Client on the device to stage the device.

## StageNow Barcode Descriptions

The following sections describe barcodes that enable the administrator to disable USB storage, configure user access to settings, install/uninstall, launch, and enable/disable applications.

### Disable USB Storage

The mobile computer supports functionality to block USB external storage through StageNow. The administrator can choose to restrict external storage from USB, which is not allowed to be connected to the device. This action blocks USB storage without interfering with other types of USB peripherals such as a keyboard, mouse, or headset. This option is presented on the figure below.

For additional information, refer to [techdocs.zebra.com/mx/usbmgr/](https://techdocs.zebra.com/mx/usbmgr/)

The screenshot shows the 'Manage USB configuration' settings page. It includes a 'Create New Setting' button and a 'Save Setting for Re-use' checkbox. Below are four sections, each with three buttons: 'Do not change', 'Enable', and 'Disable'. The 'USB External Storage Usage' section has the 'Disable' button highlighted in blue. The other sections are 'USB Module Usage', 'USB ADB Usage', and 'Access device storage from PC via USB'. There is also a partially visible 'Access device storage from PC via USB UMS' section at the bottom.



## StageNow

Profile Name:Disable\_UsbExternalStorageUsage

Barcode Type:PDF417

Minimum Compatible MX Version:10.2

Administrator Instructions: Scan this barcode to disable USB external Storage Usage at the device, USB devices won't get detected

Scan Barcodes with StageNow Client:



## Restricting User Access to Settings

The mobile computer supports functionality to restrict access to settings via a menu, taskbar, or an application to the user through the Stage Now application. The administrator can choose to restrict all settings on the application or a subset of them. These changes are reflected on the settings of the application when the user opens the application directly on device or from Zebra Workstation Connect on the external monitor as well. This option is presented on the following images.

For additional information, refer to [techdocs.zebra.com/mx/appmgr/](https://techdocs.zebra.com/mx/appmgr/).

**AppMgr**

Description: Perform application (APK) management

Create New Setting

☐ Save Setting for Re-use

Action:   
 Disable Application

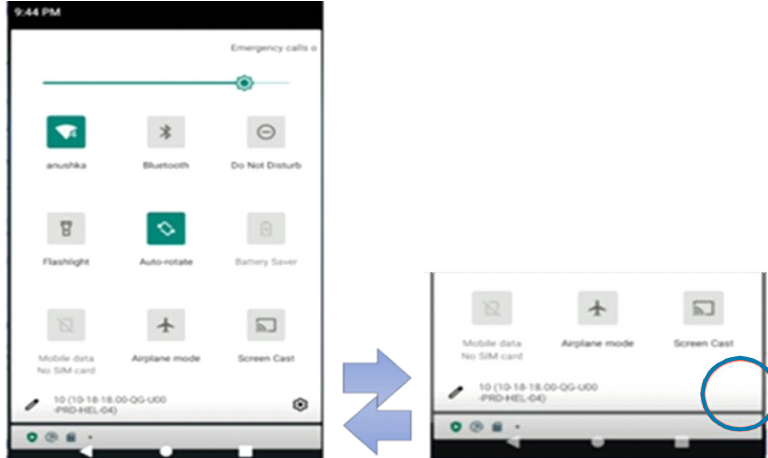
Package Name:   
 com.android.settings

Protected List Action:   
 Do nothing

Access to App Info Action:

Examples of the restricted Settings are presented below:

- Restrict the user's access to settings by hiding the Settings Icon on the notification:



**StageNow**

Profile Name:Hide\_Settings\_IconOnNotificationPanel  
 Barcode Type:PDF417

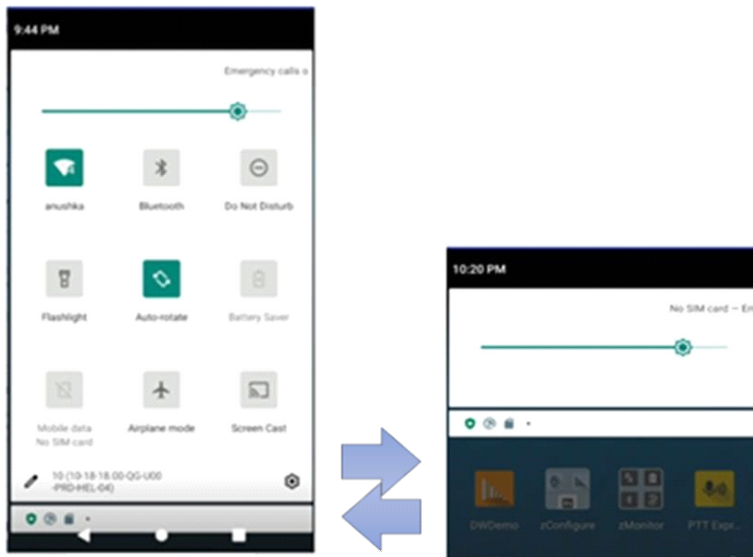
Minimum Compatible MX Version:10.2

Administrator Instructions: Sacn this barcode to Hide Settings icon on device Notification panel

Scan Barcodes with StageNow Client:



- Restrict user access to settings by disabling Quick Settings on the notification panel:



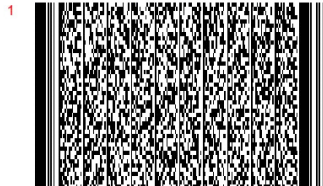
StageNow

Profile Name:Disable\_QSettingsIconOnNotificationPanel  
Barcode Type:PDF417

Minimum Compatible MX Version:10.2

Administrator Instructions: Scan this barcode to Disable quick Setting icons on device Notification panel

Scan Barcodes with StageNow Client:



## Restricting User Access to Launch Applications

The mobile computer supports the functionality to create a StageNow barcode using the AccessMgr settings operation mode as single user with Allow List. In **Add packages**, add the package name to the allow list to ensure that the added applications are only installed onto the device, and other applications are not able to be installed.



**NOTE:** Allow List applies to user applications only; it has no effect on system applications that come pre-installed on the device.

To control aspects of system applications, refer to [techdocs.zebra.com/mx/appmgr/](https://techdocs.zebra.com/mx/appmgr/).

Allow List is used to control whether a user is permitted to install an application, but it cannot control whether an application can be installed using AppMgr. Allow List can also be used to control whether a user application can be launched once it is installed. These changes are pushed directly onto the mobile device or from Zebra Workstation Connect to the external monitor.

For additional information, refer to [techdocs.zebra.com/mx/accessmgr/](https://techdocs.zebra.com/mx/accessmgr/)

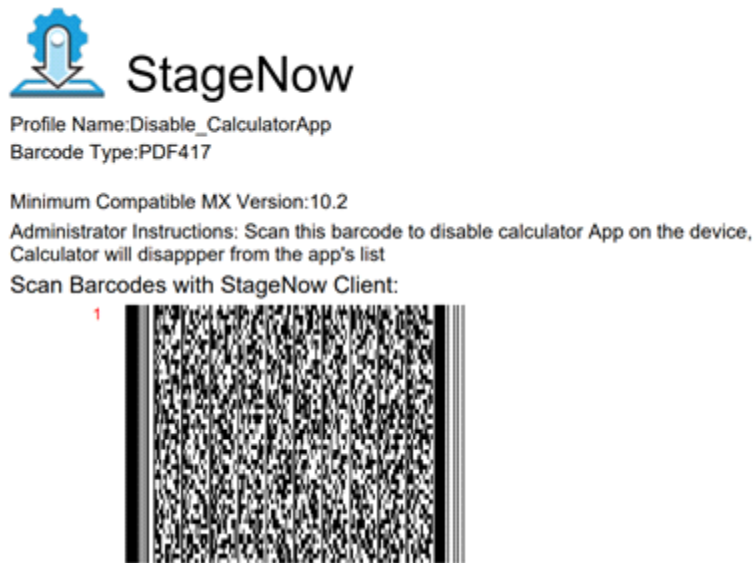


### Enable or Disable Applications on the Mobile Device

The mobile computer supports the functionality to create a StageNow barcode using AppMgr settings with the option to enable or disable applications on the mobile device. From the application action option with application package name, generate and scan the barcode using the StageNow client on the device to observe that the specific application is disabled. These changes are pushed directly onto the mobile device or from Zebra Workstation Connect to the external monitor.

For Example: Disable Calculator

With AppMgr, use the package name of any application to disable it. In this case for the calculator application, use com.google.android.calculator with the **Disable Application** option, or scan the barcode below.



Similarly, enable the calculator using the **Enable Application** option with the package name in the setting. Scan the barcode below to enable the calculator application on the device.



The settings application (com.android.settings) can also be disabled from the application list if users should not be permitted to have access to the settings on the device.

For additional information, refer to [techdocs.zebra.com/mx/appmgr/](https://techdocs.zebra.com/mx/appmgr/).

### Install/Uninstall Applications on the Mobile Device

The mobile computer supports the functionality to create a StageNow barcode using AppMgr settings with the option to install or uninstall applications on the mobile device. From the application action option with application package name, generate and scan the barcode using the StageNow client on the device to observe that the specific application is installed.



**NOTE:** In the scenario above, the APK should be copied or previously installed on the mobile device.

Use the FileMgr settings to bring the APK onto the device by connecting to a network and using AppMgr to install the APK.

For additional information on FileMgr, refer to [techdocs.zebra.com/mx/filemgr/](https://techdocs.zebra.com/mx/filemgr/)

In addition, the mobile computer supports the functionality to create a StageNow barcode using AppMgr settings with the ability to uninstall an application from the **Application Action** options. Using the application package name, generate and scan the barcode using the StageNow client on the device to ensure that the application is uninstalled. These changes reflect directly on the mobile device or from the Zebra Workstation Connect to the external monitor.

For additional information on installing and uninstalling applications on the mobile device, refer to [techdocs.zebra.com/mx/appmgr/](https://techdocs.zebra.com/mx/appmgr/).

### Launch Applications on the Mobile Device Screen

The mobile computer supports the functionality to create a StageNow barcode using AppMgr settings with available options to Launch an application from Application action options with application name, generate and scan the barcode using StageNow client on the device to see that the application is launched.

For additional information on installing and uninstalling applications on the mobile device, refer to [techdocs.zebra.com/mx/appmgr/](https://techdocs.zebra.com/mx/appmgr/)



**NOTE:** Application launches on mobile terminal side, not on the external monitor side.

## Zebra Workstation Connect Customization Administrator Configurations

Zebra Workstation Connect allows users to customize several of its features on the desktop home screen to control and tailor the environment presented to the end user. Configurable settings include:

- Set-up the external monitor orientation
- Set-up the external monitor resolution
- Configure status icons presented on the taskbar
- Configure the wallpaper utilized on the Home Screen
- Configure shortcuts to be presented to the user on the desktop Home Screen
- Configure the disposition of applications when the device is undocked from Zebra Workstation Cradle
- Configure the disposition of applications when the device is docked in the Zebra Workstation Cradle

## Enterprise Mobility Management (EMM) Support for the Remote Configuration of Zebra Workstation Connect

The Zebra Workstation Connect Desktop Launcher APK is available through the Google Play Store, and supports full production deployment, configuration, and activation using standard EMM tools. EMM tools can configure Zebra Workstation Connect via Android Managed Configurations. The configurations and the steps to implement them are described in this section.



**NOTE:** This section describes an EMM tool developed by Zebra. In a standard Enterprise Mobility Management (EMM) set up, the user interface driven by the Application Restriction schema would differ from the images below.

Administrator configurable settings include desktop orientation and resolution, status icons, desktop backgrounds, and application behavior.

**Figure 1** Zebra EMM Tool

Specify	Title	Value	Description
<input type="checkbox"/>	Desktop orientation	Landscape (no rotation)	Select the orientation of content displayed on an external monitor
<input type="checkbox"/>	Desktop resolution	1920x1080	Select the resolution of content displayed on an external monitor
<input type="checkbox"/>	Configure status icons	Edit	Open to configure the display of status icons on the desktop taskbar
<input type="checkbox"/>	Configure desktop shortcuts	Edit	Open to configure shortcuts on the desktop
<input type="checkbox"/>	Configure wallpaper	Edit	Open to configure wallpaper image and control manual configuration
<input type="checkbox"/>	Application behaviors	Edit	Open to configure various non-default application behaviors

## Desktop Orientation

Zebra Workstation Connect offers a method for the administrator to control the orientation on secondary screen (external monitor).

**Figure 2** Administrator Configurable Settings

The screenshot shows the 'McTool, Version 4.4 - app\_restrictions.xml' window. It features a 'Show Hidden Write Managed Configurations' checkbox at the top left. Below it is a table with columns 'Specify', 'Title', 'Value', and 'Description'. The table lists several configuration options: Desktop orientation (set to 'Landscape (no rotation)'), Desktop resolution (set to '1920x1080'), Configure status icons, Configure desktop shortcuts, Configure wallpaper, and Application behaviors. Each option has an 'Edit' button next to it. At the top right and bottom right of the table are buttons for 'Save', 'Load', 'Clear', and 'Quit'.

Specify	Title	Value	Description
<input type="checkbox"/>	Desktop orientation	Landscape (no rotation)	Select the orientation of content displayed on an external monitor
<input type="checkbox"/>	Desktop resolution	1920x1080	Select the resolution of content displayed on an external monitor
<input type="checkbox"/>	Configure status icons	Edit	Open to configure the display of status icons on the desktop taskbar
<input type="checkbox"/>	Configure desktop shortcuts	Edit	Open to configure shortcuts on the desktop
<input type="checkbox"/>	Configure wallpaper	Edit	Open to configure wallpaper image and control manual configuration
<input type="checkbox"/>	Application behaviors	Edit	Open to configure various non-default application behaviors

Configurable options include:

- Landscape (no rotation)
- Portrait (90 degrees left)
- Landscape Inverted (180 degrees)
- Portrait Inverted (270 degrees)

## Desktop Resolution

Zebra Workstation Connect offers a method for the administrator to control the resolution on a secondary screen (external monitor) by selecting a specific resolution from the dropdown.



**NOTE:** Do not use the administrator configuration of **Orientation and Resolution of External Monitor** when using **Mirror Mode** to avoid inconsistent/unexpected behavior. Do not switch back to **Mirror Mode** from **Desktop Mode**.



**NOTE:** In **Mirror Mode**, the supported resolutions may be limited to the resolutions supported by the mobiledevice device, since both must be set to match. Supported resolutions may also be limited by the capabilities of the attached external monitor.

**Figure 3** Configure Desktop Resolution

This screenshot is similar to Figure 2, but the 'Desktop resolution' dropdown menu is expanded, showing a list of available resolutions: 1920x1080, 1920x1200, 800x600, 1024x600, 1024x768, 1280x720, 1280x800, and 1280x1024. The '1920x1080' option is currently selected.

Specify	Title	Value	Description
<input type="checkbox"/>	Desktop orientation	Landscape (no rotation)	Select the orientation of content displayed on an external monitor
<input type="checkbox"/>	Desktop resolution	1920x1080	Select the resolution of content displayed on an external monitor
<input type="checkbox"/>	Configure status icons	Edit	Open to configure the display of status icons on the desktop taskbar
<input type="checkbox"/>	Configure desktop shortcuts	Edit	Open to configure shortcuts on the desktop
<input type="checkbox"/>	Configure wallpaper	Edit	Open to configure wallpaper image and control manual configuration
<input type="checkbox"/>	Application behaviors	Edit	Open to configure various non-default application behaviors

## Status Icons Configuration

Zebra Workstation Connect enables the administrator to configure which icons are shown on the **Status** area of the taskbar. By default, the following status icons are displayed on the taskbar: battery, Bluetooth, Cellular, Ethernet, VPN, Wi-Fi. The administrator can select whether to show or hide each status icon on the taskbar as presented on the image below.

**Figure 4** Status Icon Configuration Options

Specify	Title	Value	Description
<input type="checkbox"/>	Battery	Show	Select whether to display Battery status
<input type="checkbox"/>	Bluetooth	Show	Select whether to display Bluetooth status
<input type="checkbox"/>	Cellular	Show	Select whether to display Cellular status
<input type="checkbox"/>	Ethernet	Show	Select whether to display Ethernet status
<input type="checkbox"/>	VPN	Show	Select whether to display VPN status
<input type="checkbox"/>	Wi-Fi	Show	Select whether to display Wi-Fi status

## Desktop Home Screen Shortcut Configuration

To edit an application shortcut, select the edit application shortcut option from the dropdown.

**Figure 5** Configure Application Shortcuts

Specify	Title	Value	Description
<input type="checkbox"/>	App Shortcuts	Edit appShortcut[1]	Specify app shortcuts by entering the package name and activity name for each shortcut
<input type="checkbox"/>	Shortcut sorting	Alphabetical	Select the sort order for the shortcuts on the desktop

Next, enter the mandatory package name and an activity name for each shortcut. If it is preferred to have no shortcuts on the desktop launcher, leave this field blank. To sort the applications, select alphabetical or time/date added from the dropdown.

**Figure 6** Edit an Application Shortcut

JB Edit Add app[2]

Specify

Title Value Description

Package name Enter the package name or leave blank for no icons

Activity name Enter the activity name or leave blank for no icons

Done Cancel

Done Cancel

## Configure the Home Screen Background

The administrator can change the **Desktop Wallpaper** to any supported image file stored on the device, including any downloaded to the device by the administrator by using the device path and file name of the image file to set as **Desktop Wallpaper**.



**NOTE:** The recommended maximum background resolution is 4000 x 2500.

**Allow or Disallow User Control:** Zebra Workstation Connect allows the administrator to configure whether the user is allowed to set the **Wallpaper**.

**Figure 7** Wallpaper Configuration

JB Edit Configure wallpaper

Specify

Title Value Description

Wallpaper Enter the device path and file name of the image file to set as desktop wallpaper or leave blank for default wallpaper

User control Allow Select whether device user can change the wallpaper manually through desktop UI

Done Cancel

Done Cancel

## Application Orientation Configuration

Zebra Workstation Connect allows administrators to configure the criteria that is used to determine the automatic handling of applications when the device is docked or undocked from a supported cradle or dock.

**Figure 8** Edit Application Behavior

Specify	Title	Value	Description
<input type="checkbox"/>	Package name	<input type="text"/>	Specify the package name of the app
<input type="checkbox"/>	On Docking	<button>Edit</button>	Specify the docking criteria for the application
<input type="checkbox"/>	On Undocking	<button>Edit</button>	Specify the undocking criteria for the application

- a. Specify the docking criteria for the application by giving the **Action** and the **Window State**. Next, select the **Action** of the application. The available actions are:

- Stop
- Launch
- Move



**NOTE:** The application then launches in the foreground.

**Figure 9**

Specify	Title	Value	Description
<input type="checkbox"/>	Action	Stop	Select action of the application
<input type="checkbox"/>	Window state	Minimize	Select how application would look like when launched or moved. Only applies to the Launch and Move actions

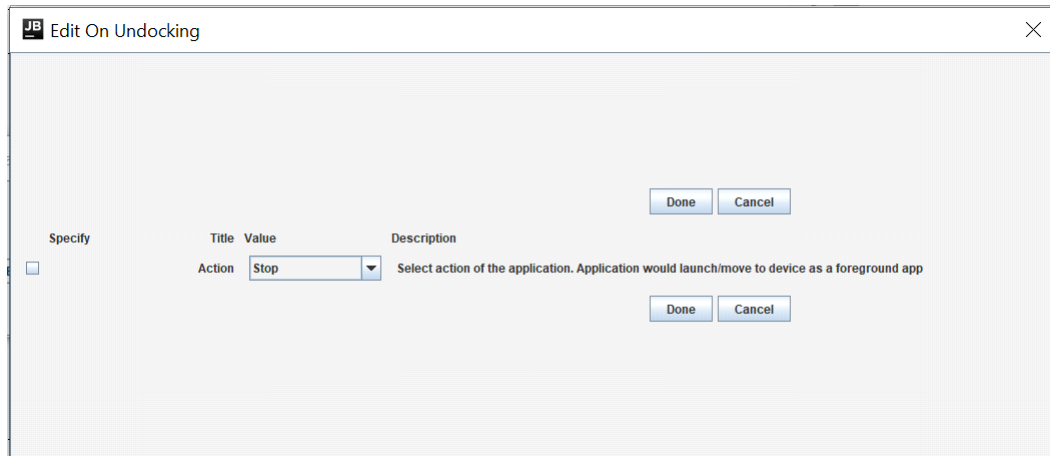
- b. Configure how the application looks when launched or moved by selecting its **Window State**. This setting only applies to **Launch** and **Move** actions.



**NOTE:** If the docking criteria is not specified by the administrator, the default docking behavior for all applications keeps the application on the mobile device screen and presents the corresponding icons on the taskbar.

- c. Set the undocking criteria for the application by only specifying the **Action**. The **Window State** is not required because the default application state is set to **Maximize**. If the undocking criteria is not specified by the administrator, the default undocking behavior for all applications remains set to **Minimize**.

**Figure 10** Undocking Criteria



The image shows a dialog box titled "JB Edit On Undocking" with a close button (X) in the top right corner. The dialog contains a table with three columns: "Specify", "Title Value", and "Description". There is a checkbox in the "Specify" column. The "Title Value" column contains the text "Action" followed by a dropdown menu showing "Stop". The "Description" column contains the text "Select action of the application. Application would launch/move to device as a foreground app". There are two sets of "Done" and "Cancel" buttons, one above the other.

Specify	Title Value	Description
<input type="checkbox"/>	Action Stop	Select action of the application. Application would launch/move to device as a foreground app



