

Workstation Connect



ZEBRA

Installation Guide

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corporation, registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.
© 2021 Zebra Technologies Corporation and/or its affiliates. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements.

For further information regarding legal and proprietary statements, please go to:

SOFTWARE: zebra.com/linkoslegal

COPYRIGHTS: zebra.com/copyright

WARRANTY: zebra.com/warranty

END USER LICENSE AGREEMENT: zebra.com/eula

Terms of Use

Proprietary Statement

This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries (“Zebra Technologies”). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

Product Improvements

Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

Liability Disclaimer

Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability

In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

About This Document

Introduction

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

Configurations

This guide covers the following configurations:

Configuration	Description	Device Compatibility
CRD-EC5X-1SWS-01	<p>Workstation Docking Cradle Kit with Standard Cup, HDMI, Ethernet, and multiple USB Ports..</p> <p>Included in kit:</p> <ul style="list-style-type: none"> • Cradle • (CRD-EC5X-1SWS-02), • Power Supply (i.e. PWRBGA12V50W0WW) • DC Cable (i.e. CBL-DC-388A1-01) <p>Country specific AC line cord sold separately.</p>	EC50 and EC55 Mobile Computers
CRD-TC5X-1SWS-01	<p>Workstation Docking Cradle Kit with Standard Cup, HDMI, Ethernet, and multiple USB Ports.</p> <p>Included in kit:</p> <ul style="list-style-type: none"> • Cradle (CRD-TC5X-1SWS1-01), • Power Supply (i.e. PWRBGA12V50W0WW) • DC Cable (i.e. CBL-DC-388A1-01) <p>Country specific AC line cord sold separately.</p>	TC52, TC52x, TC57, TC57x, TC52ax, TC52x-HC and TC52ax-HC Mobile Computers
CRD-ET5X-1SWS-01	<p>Workstation Docking Cradle Kit with Standard Cup, HDMI, Ethernet, and multiple USB Ports.</p> <p>Included in kit:</p> <ul style="list-style-type: none"> • Cradle with Rugged I/O Adaptor (CRD-ET5X-1SCOM2R) • Cradle (CRD-ET5X-1SCOM1) • Power Supply (i.e. PWRBGA12V50W0WW) • DC Cable (i.e. CBL-DC-388A1-01) <p>Country specific AC line cord sold separately.</p>	ET56 Mobile Computers

Supported Peripherals

Peripherals supported by the Zebra Workstation Cradle include:

- External touch and non-touch HDMI monitor
- USB-A Keyboard

- USB-A Mouse
- USB-A Headsets and Headphones
- Zebra External Scanners (connected via USB-A):
 - DS9308, DS9908, DS8108, DS4608, DS2208, DS3608-SR, and DS9308-SR.



NOTE: For ET5X tablets, headsets can be connected via the USB-C port on the tablet. USB-A headsets or headphones connected to the USB-A ports of the communication cradle are not supported.

Service Information

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at zebra.com/support.

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

Zebra responds to calls by email, telephone or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.

Installation

This document outlines the various methods to install Zebra Workstation Connect onto a mobile device. The sections below describe installing the application manually, via the StageNow application, or via XML.

After installing the Android 11 OS specific to the mobile device being used, the device uses Mirror Mode as the default when docked in a Zebra Workstation Cradle and connected to a HDMI monitor. If Mirror Mode is the required view mode, no further actions are required.

Zebra Workstation Connect Installation

Users can install the Zebra Workstation Connect on the mobile device by downloading via StageNow and following the instructions in [Installing via StageNow](#), by utilizing XML for EMM and following the procedure outlined in [Installing via XML](#) or manually by following the steps outlined in [Manual Installation](#),

Installing via StageNow

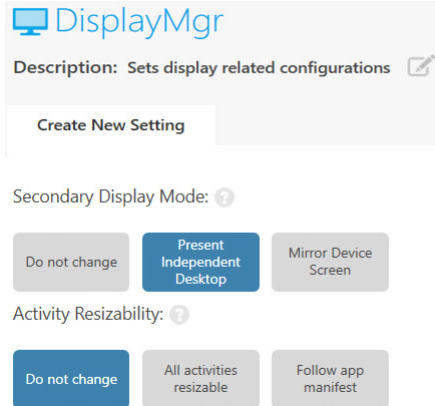
Prior to the steps below, install StageNow v.5.2.0.1032 or higher and create a StageNow profile.

1. Configure an applicable network where the Zebra Workstation Connect APK can be downloaded over Wi-Fi.
2. Download the Zebra Workstation Connect APK to a suitable location on the mobile device using FileMgr. Refer to techdocs.zebra.com/stagenow/2-2/csp/file/ for more information about the usage of FileMgr.
3. Install the Zebra Workstation Connect APK using AppMgr. Refer to techdocs.zebra.com/stagenow/3-1/csp/app/ for information about the usage of AppMgr including installing an APK on the device.
4. Grant Zebra Workstation Connect APK permission to **Display over other apps** using AccessMgr. For more information, refer to techdocs.zebra.com/mx/accessmgr/. See the image below for more information about the usage of AccessMgr, including granting permissions to an application.
5. Provide the application signature of the Workstation Connect APK and attach it to the StageNow profile. For more information on generating a signature, see developer.zebra.com/blog/generating-package-signature-use-mx

The screenshot shows a configuration screen for granting permissions. It includes the following fields:

- Permission Access Action:** A dropdown menu set to "Grant Permission to an Application".
- Permission Name:** A dropdown menu set to "System Alert Window".
- Application Package Name:** A text input field containing "com.zebra.workstationconnect.release".
- Application Signature:** An empty text input field with a red border and a red exclamation mark icon, indicating a missing or invalid signature.

6. Enable Desktop Mode on the mobile device using DisplayMgr. Refer to the image below for the DisplayMgr settings and Developer options to enable **Desktop Mode**.

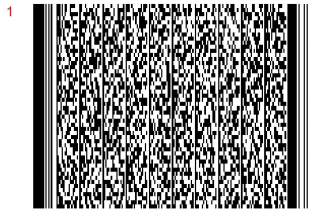


Profile Name:EnableDesktopMode_reboot
Barcode Type:PDF417

Minimum Compatible MX Version:10.2

Administrator Instructions: Scan this barcode using StageNow client to enable device desktop mode, this even reboots the device to switch from mirror mode to desktop mode

Scan Barcodes with StageNow Client:



7. Perform a device reboot prior to docking the device in the Workstation Cradle using PowerMgr.

Once the StageNow profile is created, a barcode can be generated and scanned to set-up the steps above on the mobile device.

Once the device is rebooted, docked into the Workstation Cradle, and connected to HDMI monitor, the screen of the mobile device displays the home screen and allows the user to launch and run applications. Simultaneously, the external monitor displays the home screen of Zebra Workstation Connect.

Installing via XML

Use an EMM to download and install the Zebra Workstation Connect APK on the mobile device.

Using an application, follow the procedure below.

- Detect when Zebra Workstation Connect APK is installed.
- Submit the following XML to MX to grant the Zebra Workstation Connect APK permission to Display over other apps:

```

<!--Set permission Via AccessMgr for ZWC -->
<wap-provisioningdoc>
  <characteristic version="10.4" type="AccessMgr">
    <parm name="PermissionAccessAction" value="1" />
    <parm name="PermissionAccessPermissionName"
value="android.permission.SYSTEM_ALERT_WINDOW" />
    <parm name="PermissionAccessPackageName"
value="com.zebra.workstationconnect.release" />
    <parm name="PermissionAccessSignature"
value="MIID6TCCAtGgAwIBAgIJAjQ0WgV07V6QMA0GCSqGSIb3DQEBBQUAMIGKMQswCQYDVQQG
EwJVUzERMA8GA1UECAwITmV3IFlvcmsxEzARBgNVBAcMChvbHRzdm1sbGUxGTAXBgNVBAsMEE1
vYmIsZSBDb21wdXRpbmcxGzAZBgNVBAoMElplYnJhIFRlY2hub2xvZ2llczEhMBkGA1UEAwwSQ2
9tbW9uIEFuZHZHJvaWQgS2V5MmB4XDTE4MTEyOTIwNTU00VoXDTQ2MDQxNjIwNTU00VowgYoxCzAJB
gNVBAYTA1VTMREwDwYDVQQIDAh0ZXcgWw9yazETMBEGA1UEBwwKSG9sdHN2aWxsZTEZMBCGA1UE
CwwQTW9iaWx1IENvbXB1dGluZzEhMBkGA1UECgwSWmVicmEgVGVjaG5vbG9naWVzMRswGQYDVQQ
DDBJDB21tb24gQW5kcm9pZCBLZXkwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCwA3
jRXXIKoF3lU4gBU0XM7LAzAc9pyxHFbqRoy+uGXzIdPGKNQVqyeQKT1gLnQWz7Nz+AiFbB3axfj
pGZy8Z5gakp1i8avx+ZwwST++ufEs+jhKF9XJTh0Sc9MG5Cgk9+ByAZjBLwg0XX+IPqT0+xcxG8
B1NID0d1Ik+99MQezGn8mfS/1MMC1ynZRC+18z9Vkd+FZeFYSHU10oFBMhCjMKYApa08ZuPk/+1
QTfDTs+JPxjsBqy906vt+PnDnYIfobjaxeEbaDQvjRL1LKKq10svdcmnrKwkw72Dt5XkIcTYHfE
s6wffrMiYh03/gxhoqBuiHbNyIL9kKTwkMg2wfAgMBAAGjUDBOMB0GA1UdDgQWBBRXkmK7fyfhV
MBWOrUJvkSHm9IapDAfBgNVHSMEGDAWgBRXkmK7fyfhVMBWOrUJvkSHm9IapDAMBgNVHRMEBTAD
AQH/MA0GCSqGSIb3DQEBBQUAA4IBAQB0BZ1Duu0U59p7U9pkdoS79GxhE8ALnYPkxeVX5Zq0BbS
/BW5t+M2EyfUc2pNKqAqopfnBdyXcxuw0JyQBIYKMDHG+YtxqxdqBcDrfmsxk1gyVLH4mZvhCT
pPeUM5LivzFGdaqm4Dm2M5XG1BSDvc1rUzoebDhg2VFJfRzYHnhZsBNV1cxQ/m8UUKmG15sXgIH
QCi4o0zrdRcWAnMqtxd0vzdRL2h6MTh56ICi0VG8rASXBdZmN49Fjw1YFfQyetwdrmpY1eTWky
QteGCy7r5zMCXCmTRawRp5R6kP/w6FNcw3fpUs8qH1T471hVNABQA94hkNW50Fv40xuSYOww"
/>
  </characteristic>
</wap-provisioningdoc>

```


- Submit the following XML to MX to enable Desktop Mode on the mobile device using DisplayMgr:

```
<!--Set desktop mode Via DisplayMgr-->
<wap-provisioningdoc>
<characteristic version="10.5" type="DisplayMgr">
  <parm name="SecondaryDisplayMode" value="1" />
  <parm name="ActivityResizability" value="1" />
</characteristic>
</wap-provisioningdoc>
```

- Submit the following XML to MX to perform a device reboot prior to docking the device into the Zebra Workstation Cradle:

```
<!--Reboot Device-->
<wap-provisioningdoc>
<characteristic version="10.1" type="PowerMgr">
  <parm name="ResetAction" value="4" />
</characteristic>
</wap-provisioningdoc>
```



NOTE: If other steps are implemented on the application, a device reboot is required.

Once the device is rebooted, docked into the Workstation Cradle, and connected to HDMI monitor, the screen of the mobile device displays the home screen and allows the user to launch and run applications. Simultaneously, the external monitor displays the home screen of Zebra Workstation Connect.

Manual Installation

To manually install the application, follow the steps below.

1. Install the Zebra Workstation Connect APK on the mobile device.

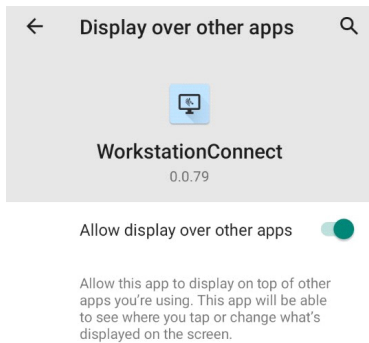
The Zebra Workstation Connect APK is required to be installed on the mobile device and provides features that enhance the user experience on an external monitor (secondary screen).

The APK (com.zebra.workstationconnect.release.apk) file can be installed on device following a standard process. For example: adb install <path to> com.zebra.workstationconnect.release.apk or save the file on the device and run it directly.

2. Grant the Zebra Workstation Connect APK permission on the mobile device.

Grant permission to deploy the APK over the other applications. To enable this, tap and hold the Workstation Connect application icon on the mobile device screen.

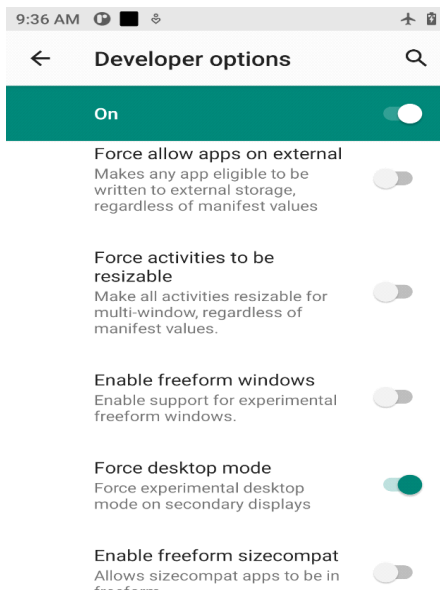
App Info > Advanced > Display over other apps > Allowed



3. Enable Desktop Mode on the mobile device.

Enable the following system settings on the mobile computer:

- a. Enable Developer Options: **Settings > About Phone > Build number 5 times.**
- b. Enable Desktop Mode on the Menu: **Settings > System > Advanced > Developer Options.**





NOTE: If the application is use is not designed to be resizable, enable **Force activities to be resizable**. It is recommended to review the behavior of all applications when utilizing Zebra Workstation Connect and enabling this option.

4. Perform a device reboot prior to docking the device into the Workstation Cradle.

Once the device is rebooted, docked into the Workstation Cradle, and connected to HDMI monitor, the mobile device displays the home screen and allows the user to launch and run applications. Simultaneously, the external monitor displays the home screen of Zebra Workstation Connect.

