Workstation Cradle

Installation Guide

ZEBRA

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About This Document

Introduction

This guide provides information about developing applications forZebra 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.

Configurations

This guide covers the following configurations:

Configuration	Description	Device Compatibility
CRD-TC5X-1SWS-01	TC5X Workstation Docking Cradle Kit with Std Cup, HDMI, Ethernet and multiple USB Ports. Included in kit: • Cradle (CRD-TC5X-1SWS1-01), • Power Supply (i.e. PWRBGA12V50W0WW) • DC Cable (i.e. CBL-DC-388A1-01). Country specific AC line cord sold separately.	All TC5X Mobile Computers including the TC51, TC56, TC52 and TC57.

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.

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Installation

The Zebra Workstation Connect leverages Android Desktop Mode to present the user with a desktop-like interface when connecting a mobile device to an external monitor via a workstation cradle. This guide describes the necessary steps to enable Desktop Mode and utilize the features of the Zebra Workstation Connect solution.

Default Mirror Mode

After installing the Android OS **11-12-22.00-RG-U00-PRD-HEL-04 (ET56) OR 11-12-20.00-RG-U00-STD-HEL-04 (TC5ax)**, the device uses Mirror Mode as the default when the device is 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. To evaluate the features for Zebra Workstation Connect follow the steps on the section below.

Zebra Workstation Connect Installation

Users can install the Zebra Workstation Connect onto the mobile device by manually downloading the application, downloading via StageNow or XML.

Process 1: Manual Installation

1. Install the Zebra Workstation Connect APK onto the Mobile Device.

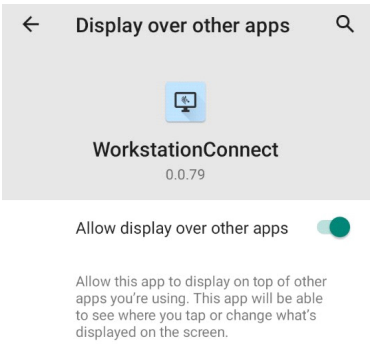
   The Zebra Workstation Connect APK is required to be installed on the mobile device and provides features that enhance the user experience on an external monitor (secondary screen).

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

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

   After the installation of the Zebra Workstation Connect APK, it is necessary to grant permission to display it over other applications. To enable this, tap and hold the Workstation Connect application icon on the mobile device screen and select the option below:

   App Info > Advanced > Display over other apps > Allowed

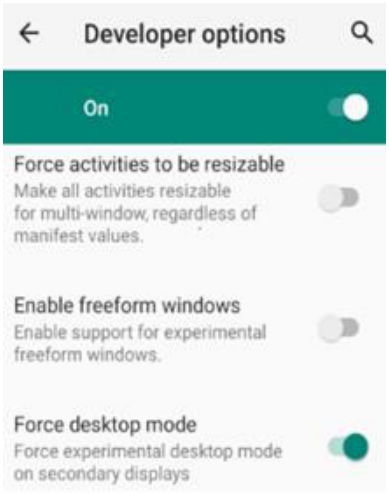


3. Enable Desktop Mode on the Mobile Device

   After the installing the Zebra Workstation Connect APK, it is required to enable the following system settings on the mobile computer:

   a. Enable Developer Options: Settings > About Phone > Build number 5 times

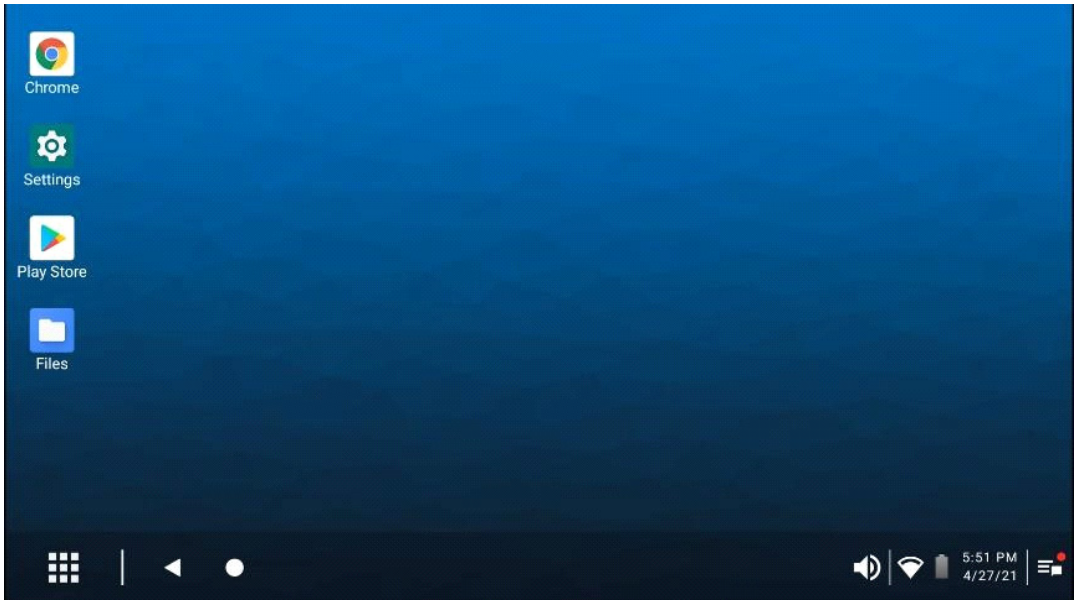
   b. Enable Desktop Mode on the Menu: Settings > System > Advanced > Developer Options



NOTE: If applications being used are not designed to be resizable, enable **Force activities to be resizable**. Reviewing the behavior of all applications is recommended 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 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.



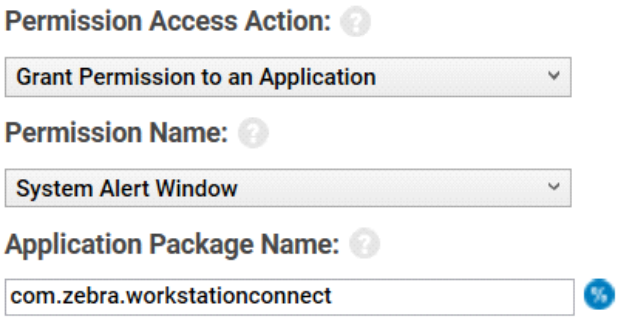
For additional information on installation and enablement using StageNow or XML, see techdocs.zebra.com/stagenow.

Process 2: Installation and via StageNow

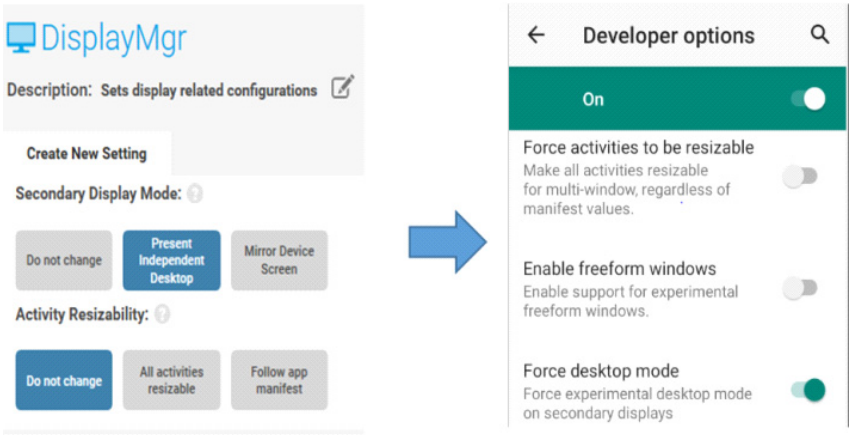
Prior to the steps below, install StageNow v.5.2.0.1032 or higher and create a StageNow profile.

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 the following link for more information about the usage of AppMgr including installing an apk on the device: techdocs.zebra.com/stagenow/3-1/csp/app/
4. Grant Zebra Workstation Connect APK permission to **Display over other apps** using AccessMgr. For more information, refer to techdocs.zebra.com/mx/accessmgr/.

   Refer to the image below for more information about the usage of AccessMgr, including granting permissions to an application:



5. Enable Desktop Mode on Mobile Device using DisplayMgr. Refer to the image below for additional information about the usage of DisplayMgr, including the enablement of Desktop Mode on the mobile device:



6. Perform a device reboot prior docking device in the workstation cradle using PowerMgr

NOTE: if an existing StageNow profile is used, the steps above can be incorporated into it, however a device reboot should be specified as the last step to happen.

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.

Process 3: Installation via XML

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

Through an application follow the steps below

1. Detect when Zebra Workstation Connect APK is installed
2. 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 -->
<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" />
  <parm name="PermissionAccessSignature"
value="MIID6TCCAtGgAwIBAgIJAJqOWgV07V6QMA0GCSqGSIb3DQEBBQUAMIGKMQswCQYDVQQGEwJVUzE
RMA8GA1UECAwITmV3IFlvcmsxEzARBgNVBAcMCkhvbHRzdmlsbGUxGTAXBgNVBAsMEE1vYmlsZSBDb21wd
XRpbmcxGzAZBgNVBAoMElplYnJhIFRlY2hub2xvZ2llczEbMBkGA1UEAwwSQ29tbW9uIEFuZHJvaWQgS2V
5MB4XDTE4MTEyOTIwNTU0OVoXDTQ2MDQxNjIwNTU0OVowgYoxCzAJBgNVBAYTAlVTMREwDwYDVQQIDAhOZ
XcgWW9yazETMBEGA1UEBwwKSG9sdHN2aWxsZTEZMBcGA1UECwwQTW9iaWxlIENvbXB1dGluZzEbMBkGA1U
ECgwSWmVicmEgVGVjaG5vbG9naWVzMRswGQYDVQQDDBJDb21tb24gQW5kcm9pZCBLZXkwggEiMA0GCSqGS
Ib3DQEBAQUAA4IBDwAwggEKAoIBAQCwA3jRXXIKoF3lU4gBU0XM7LAzAc9pyxHFbqRoy+uGXzIdPGKNQVq
yeQKT1gLnQWz7Nz+AiFbB3axfjpGZy8Z5gakp1i8avx+ZwwST++ufEs+jhKF9XJThOSc9MG5Cgk9+ByAZj
BLwg0XX+IPqTO+xcxG8BlNIDOd1Ik+99MQezGn8mfS/1MMC1ynZRC+18z9VkD+FZeFYSHU1OoFBMhCjMKY
Apa08ZuPk/+lQTfDTs+JPxjsBqy906vt+PnDnYIfobjaxeEbaDQvjRLlLKKq1OsvdcmnrKWkW72Dt5XkIc
TYHfEs6wfFrMiYhO3/gxhoqBuiHbNyIL9kKTwkMg2wfAgMBAAGjUDBOMB0GA1UdDgQWBBRXkmK7fyfhVMB
WOrUJvkSHm9IapDAfBgNVHSMEGDAWgBRXkmK7fyfhVMBWOrUJvkSHm9IapDAMBgNVHRMEBTADAQH/MA0GC
SqGSIb3DQEBBQUAA4IBAQB0BZ1Duu0U59p7U9pkdoS79GxhE8ALnYPkxeVX5ZqOBbS/BWG5t+M2EyfUc2p
NKqAqopfnBdyXcxuw0JyQBIYKmDHG+YtxqxdqBcDrfmsxk1gyVLH4mZvhCTpPeUM5LivzFGdaqm4Dm2M5X
G1BSDvclrUzoebDhg2VFJfRzYHnhZsBNVlcxQ/m8UUKmGl5sXgIHQCi4o0zrdRcWAnMqtxd0vzdRL2h6MT
h56ICiOVG8rASXBdZmN49FjwlYFfQyetwdrrmpYleTWkyQteGCy7r5zMCXcMTRawRp5R6kP/w6FNcw3fpU
s8qHlT47lhVNABQA94hkNW50Fv40xuSYOww" />
</characteristic>
```

3. Submit the following XML to MX to enable Desktop Mode on the mobile Device using DisplayMgr:

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

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

```
<!—Reboot Device-->
  <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 will be 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.