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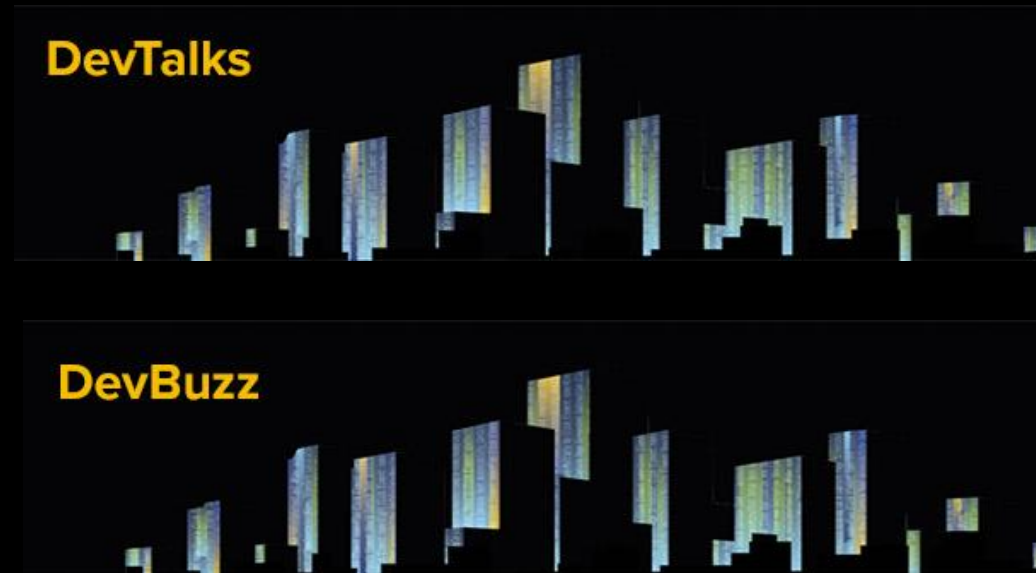
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Upcoming Events

Zebra DevTalks Community Day – May 19



Zebra DevCon2021

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November 2021 | Madrid, Spain

DevTalk – What's new in Mobility DNA

Darryn Campbell

SW Architect, Zebra Technologies

17 March 2021

DevTalk - What's New in Mobility DNA

Agenda

- Overview
- Device Central: Smart Leash
- Stage Now 5.0: Lifeguard Update Integration
- Alert (Panic) button
- Bluetooth Scanner Notifications
- New DataWedge Features:
 - Wake up and Scan
 - Edge Detection / Full Document Capture
 - Signature Presence Detection
 - Use Multiple scanners interchangeably
- MX 10.1 Enhancements
- MX 10.2 Enhancements
- MX 10.3 Enhancements
- Cloud-based device tracker
- Enterprise Browser
 - Term based licensing
 - Enterprise Application Configurator

DevTalk - What's New in Mobility DNA

Overview

- Techdocs: <https://techdocs.zebra.com/mdna/> (list of what is new in Mobility DNA)

The screenshot displays the Zebra TechDocs website for Mobility DNA. The page has a header with the Zebra logo, 'TechDocs', and 'Mobility DNA' tabs. Below the header is a section titled 'LATEST MOBILITY DNA FEATURES'. It contains three feature highlights, each with a video thumbnail and a text description:

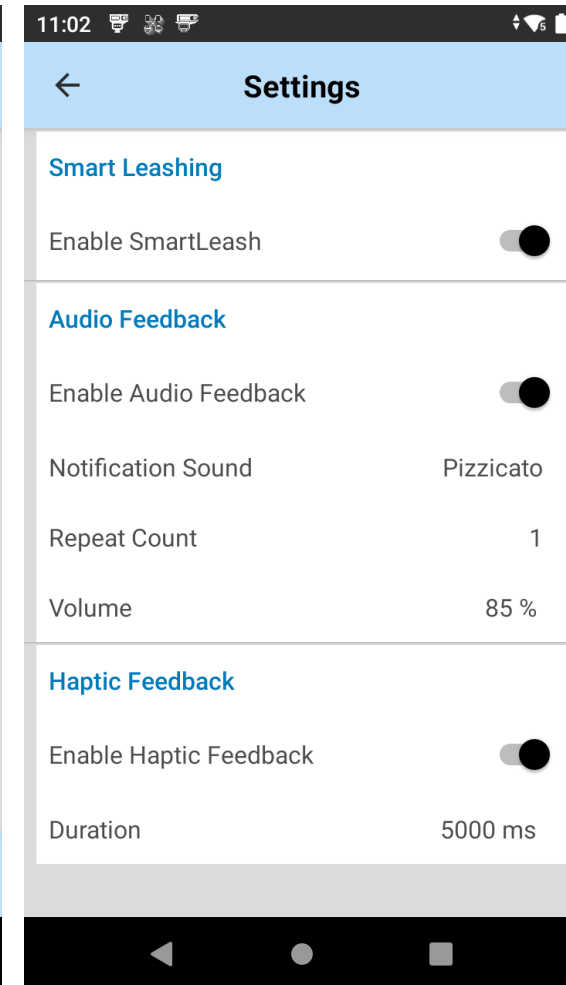
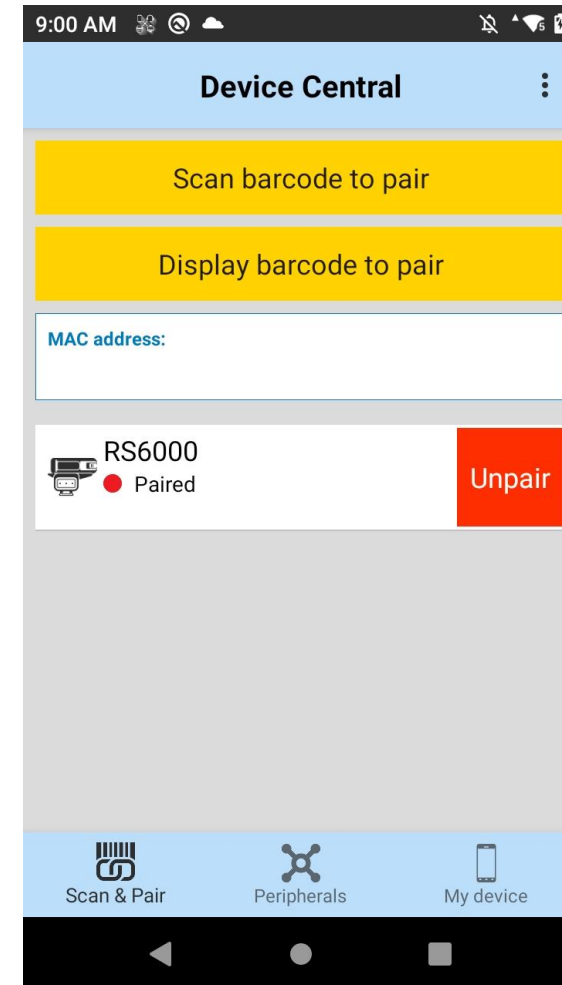
- Device Central Smart Leash Keeps Peripherals Close at Hand**
New in Zebra Device Central 3.1
The new 'Smart Leash' feature in Zebra's Device Central device management system notifies the device user when a peripheral they've been using moves out of an area, helping ensure that the peripheral is not lost or left behind. Device Central is a server-based enterprise monitoring and management system for tracking Bluetooth devices in an organization.
[Learn More](#)
- Detect the Presence of a Signature**
New in Zebra DataWedge 8.2
With DataWedge, detect the presence of a handwritten signature to automatically check for delivery confirmation. DataWedge provides the capability for any application on the device to acquire data from various input sources, manipulate data based on basic or custom rules, and output data to the app.
[Learn More](#)
- Smart Repository Simplifies Download, Installation of Lifeguard Updates**
New in Zebra StageNow 5.0
With integration of Zebra's Smart Repository of Lifeguard updates, admins can easily and quickly deploy updates applicable to their specific devices. StageNow is a tool that provides an easy way to stage, set up and mass deploy Zebra's Android mobile computers.
[Learn More](#)

Each feature highlight includes a video thumbnail with a play button icon. The first thumbnail shows a mobile app interface with the text 'Never lose a peripheral with Smart Leash ...'. The second thumbnail shows a person holding a device with the text 'Detect the presence of a signature (for del...'. The third thumbnail shows a person's hands with the text 'StageNow 5.0 integrates with Lifeguard R... upgrading and downgrading devices is now simpler, more personalized and'.

DevTalk - What's New in Mobility DNA

Device Central: Smart Leash

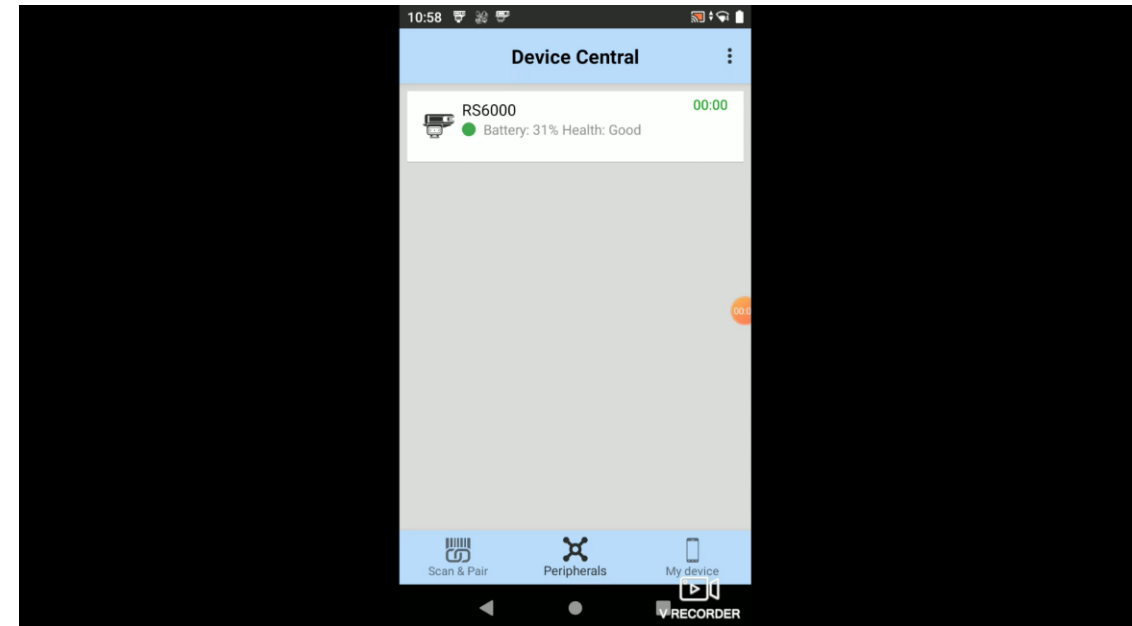
- New Feature of Device Central 3.1
- Docs: <https://techdocs.zebra.com/devicecentral/3-1/guide/usage/#smartleash>
- Receive an alert when the device and connected peripheral move out of range



DevTalk - What's New in Mobility DNA

Device Central: Smart Leash

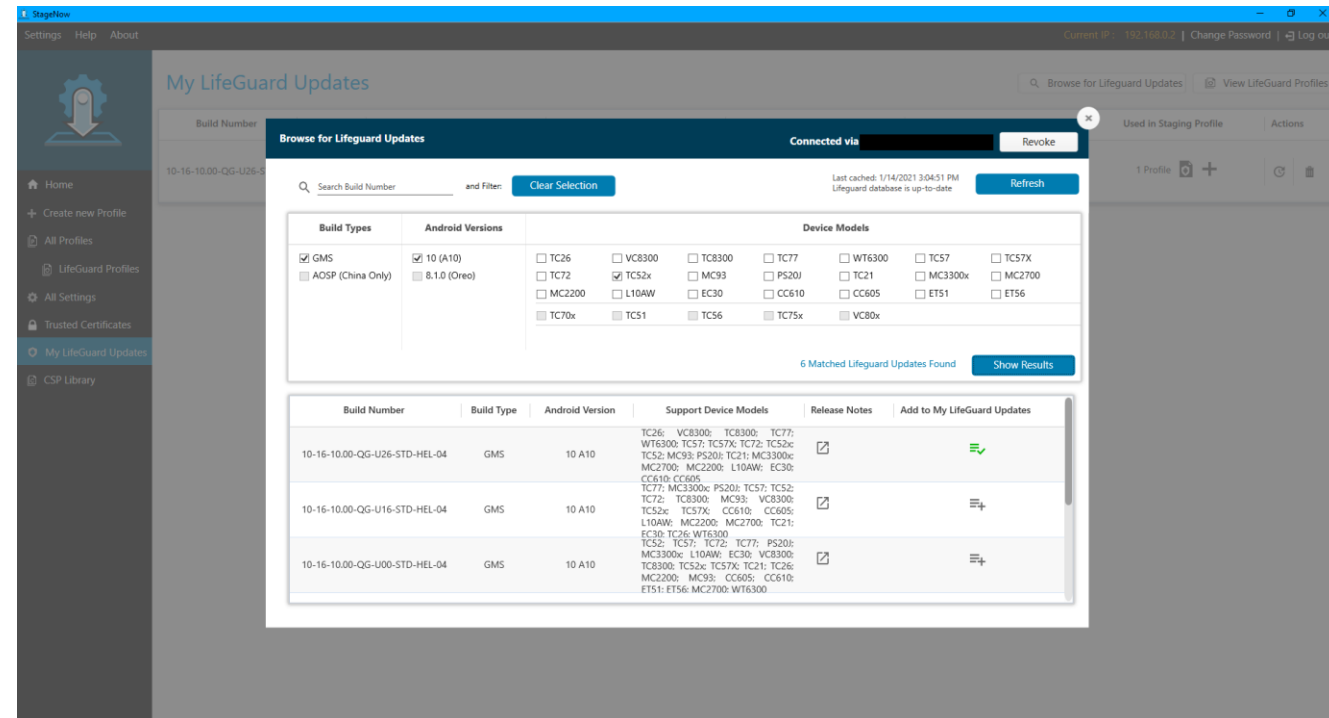
- Video Demo:
 - Screen recording of TC52 connected with RS6000
 - TC52 is taken out of range of RS6000 (about 20m)
 - Device emits an audio alert & vibrates when it is out of range
 - Device presents notification to user
 - Device is brought back in range of RS6000
 - Notification is cleared and RS600 reports as connected.
- YouTube video: <https://youtu.be/p1flfjS-C7o>



DevTalk - What's New in Mobility DNA

Stage Now 5.0: Smart Profiles (Lifeguard Update Integration)

- New feature in StageNow 5.0
- Docs: <https://techdocs.zebra.com/stagenow/5-0/smartprofile/>
- View available updates for your device(s)
- Easily create profiles to update your device(s)
- Supports Android Oreo+



DevTalk - What's New in Mobility DNA

Stage Now 5.0: Smart Profiles (Lifeguard Update Integration)

- Live Demo with Stage Now

StageNow

Settings Help About

Current IP: 192.168.0.2 | Change Password | Log out

Home

Create new Profile

All Profiles

LifeGuard Profiles

All Settings

Trusted Certificates

My LifeGuard Updates

CSP Library

My LifeGuard Updates

Build Number

10-16-10.00-QG-U26-S

Browse for Lifeguard Updates

Connected via [redacted] Revoke

Search Build Number and Filter: Clear Selection

Last cached: 1/14/2021 3:04:51 PM
Lifeguard database is up-to-date Refresh

Build Types	Android Versions	Device Models																												
<input checked="" type="checkbox"/> GMS <input type="checkbox"/> AOSP (China Only)	<input checked="" type="checkbox"/> 10 (A10) <input type="checkbox"/> 8.1.0 (Oreo)	<table><tbody><tr><td><input type="checkbox"/> TC26</td><td><input type="checkbox"/> VC8300</td><td><input type="checkbox"/> TC8300</td><td><input type="checkbox"/> TC77</td><td><input type="checkbox"/> WT6300</td><td><input type="checkbox"/> TC57</td><td><input type="checkbox"/> TC57X</td></tr><tr><td><input type="checkbox"/> TC72</td><td><input checked="" type="checkbox"/> TC52x</td><td><input type="checkbox"/> MC93</td><td><input type="checkbox"/> PS20J</td><td><input type="checkbox"/> TC21</td><td><input type="checkbox"/> MC3300x</td><td><input type="checkbox"/> MC2700</td></tr><tr><td><input type="checkbox"/> MC2200</td><td><input type="checkbox"/> L10AW</td><td><input type="checkbox"/> EC30</td><td><input type="checkbox"/> CC610</td><td><input type="checkbox"/> CC605</td><td><input type="checkbox"/> ET51</td><td><input type="checkbox"/> ET56</td></tr><tr><td><input type="checkbox"/> TC70x</td><td><input type="checkbox"/> TC51</td><td><input type="checkbox"/> TC56</td><td><input type="checkbox"/> TC75x</td><td><input type="checkbox"/> VC80x</td><td></td><td></td></tr></tbody></table>	<input type="checkbox"/> TC26	<input type="checkbox"/> VC8300	<input type="checkbox"/> TC8300	<input type="checkbox"/> TC77	<input type="checkbox"/> WT6300	<input type="checkbox"/> TC57	<input type="checkbox"/> TC57X	<input type="checkbox"/> TC72	<input checked="" type="checkbox"/> TC52x	<input type="checkbox"/> MC93	<input type="checkbox"/> PS20J	<input type="checkbox"/> TC21	<input type="checkbox"/> MC3300x	<input type="checkbox"/> MC2700	<input type="checkbox"/> MC2200	<input type="checkbox"/> L10AW	<input type="checkbox"/> EC30	<input type="checkbox"/> CC610	<input type="checkbox"/> CC605	<input type="checkbox"/> ET51	<input type="checkbox"/> ET56	<input type="checkbox"/> TC70x	<input type="checkbox"/> TC51	<input type="checkbox"/> TC56	<input type="checkbox"/> TC75x	<input type="checkbox"/> VC80x		
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6 Matched Lifeguard Updates Found Show Results

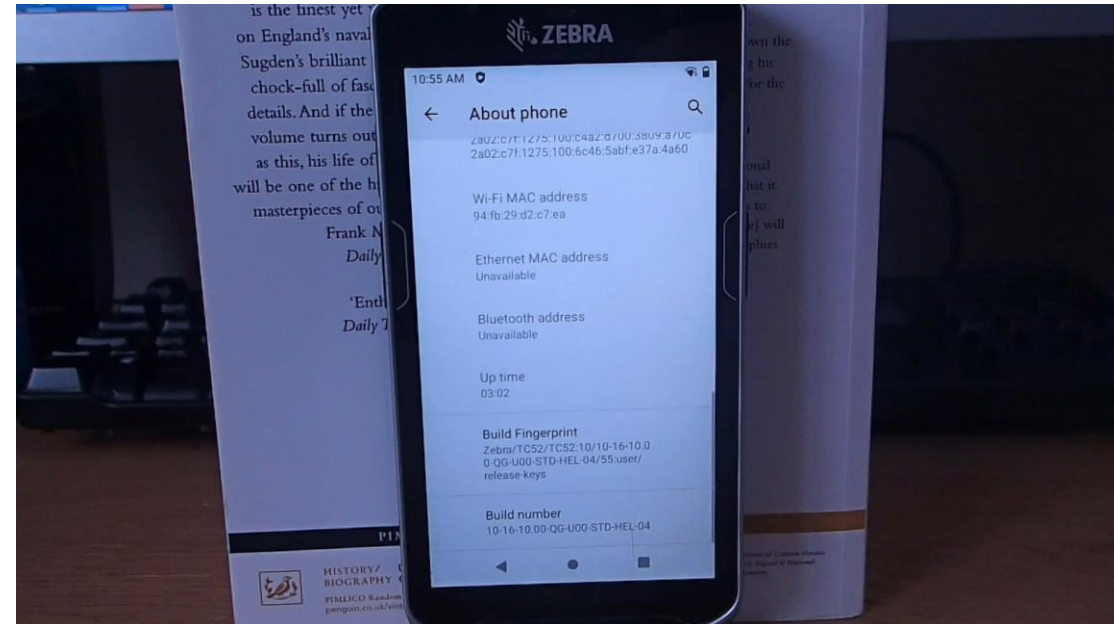
Build Number	Build Type	Android Version	Support Device Models	Release Notes	Add to My LifeGuard Updates
10-16-10.00-QG-U26-STD-HEL-04	GMS	10 A10	TC26: VC8300: TC8300: TC77: WT6300: TC57: TC57X: TC72: TC52x: TC52: MC93: PS20: TC21: MC3300x: MC2700: MC2200: L10AW: EC30: CC610: CC605		
10-16-10.00-QG-U16-STD-HEL-04	GMS	10 A10	TC77: MC3300x: PS20: TC57: TC52: TC72: TC8300: MC93: VC8300: TC52x: TC57X: CC610: CC605: L10AW: MC2200: MC2700: TC21: EC30: TC26: WT6300		
10-16-10.00-QG-U00-STD-HEL-04	GMS	10 A10	TC52: TC57: TC72: TC77: PS20: MC3300x: L10AW: EC30: VC8300: TC8300: TC52x: TC57X: TC21: TC26: MC2200: MC93: CC605: CC610: ET51: ET56: MC2700: WT6300		

ZEBRA TECHNOLOGIES

DevTalk - What's New in Mobility DNA

Stage Now 5.0: Smart Profiles (Lifeguard Update Integration)

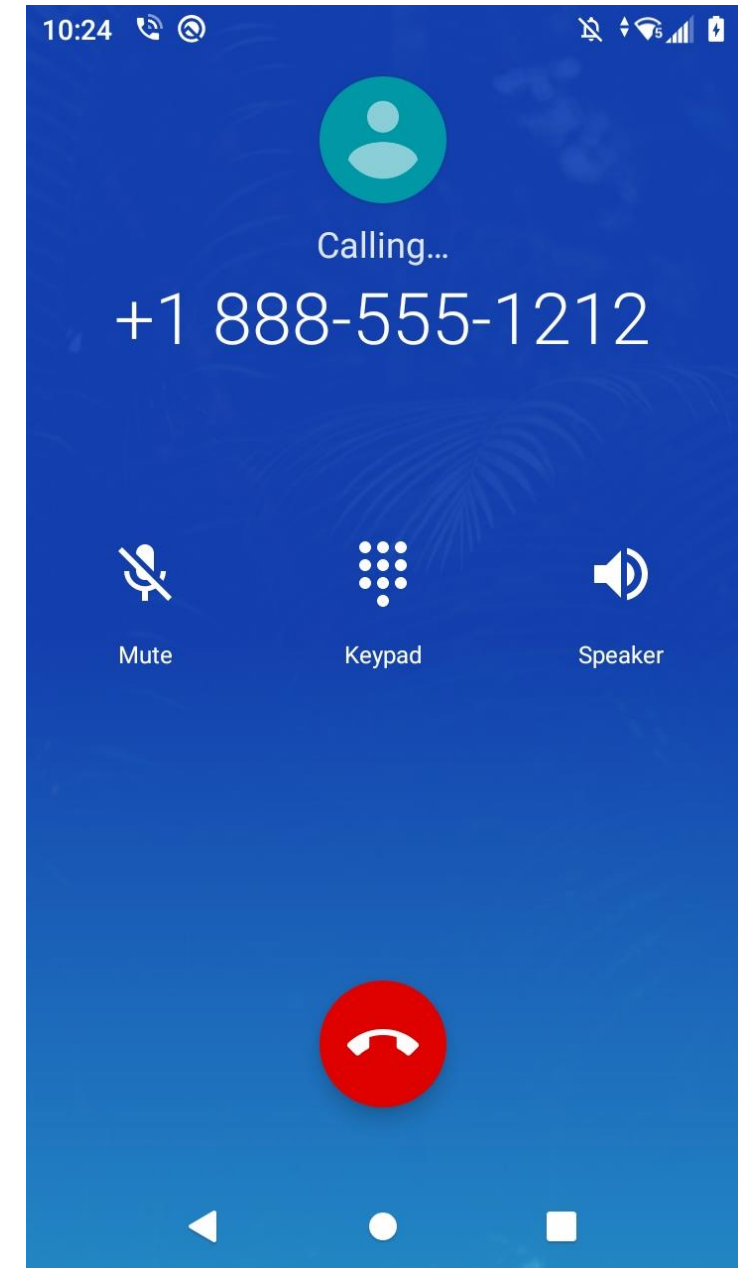
- Video Demo:
 - TC52 updating to 10-16-10.00-GQ-U26-STD-HEL-04
 - First updates to Baseline (full update)
 - Then performs a delta update to LG26
 - Downloads updates from StageNow client (same subnet)
 - OS Update automatically applies
 - Android system updates
 - Device restarts
 - System update installs
 - Device starts – update is applied.
- YouTube video: <https://youtu.be/WwF6IEbbZgY>



DevTalk - What's New in Mobility DNA

Alert (Panic) button

- New feature in MX 10.2
- Docs: <https://techdocs.zebra.com/stagenow/latest/stagingprofiles/#alertbutton>
- Designate a key to perform a specific action when it is long-pressed.
- Use case: Discretely call for help with a single button action
- Screenshot shows rear button of a TC57 device configured to invoke Android intent:
 - `Android.intent.action.CALL`
 - URI: <tel:+18885551212>
 - This is the example in the documentation
 - Device is configured and button is long-pressed
 - Example is designed for WAN devices



DevTalk - What's New in Mobility DNA

Alert (Panic) button

- 3 Steps:
- Specify button as a wake-up source
- Remap the key to a key code
- Define the Intent to invoke when the key is long pressed
- YouTube video from docs team:
<https://youtu.be/WcVLvjBBDmE>

The image displays three overlapping screenshots of the Mobility DNA configuration interface, illustrating the steps to configure an Alert (Panic) button.

PowerMgr Screenshot: Shows the 'Create New Setting' dialog. The 'OS Action' is set to 'Do Nothing'. The 'Port Control Action' is set to 'Do Nothing'. The 'Configure Auto Power' section has 'Do Nothing' selected. The 'Heater Action' is set to 'Do Nothing'. The 'Enable/Disable Doze Mode' section has 'Do not change' selected. The 'All Wake-Up Sources' section has 'Turn on' selected.

KeyMap Screenshot: Shows the 'Create New Setting' dialog. The 'Action' is set to 'Remap a key'. The 'Choose a key to modify' dropdown is set to 'Rear Button'. The 'Key behavior' dropdown is set to 'Send key-code'. The 'Key-code' dropdown is set to 'None'. The 'Advanced' checkbox is unchecked.

Intent Screenshot: Shows the 'Create New Setting' dialog. The 'Mode' is set to 'Schedule sending of Intent on key presses'. The 'Key Identifier' dropdown is set to 'Rear Button'. The 'Keep Device Awake' checkbox is checked. The 'Action' dropdown is set to 'StartActivity'. The 'Android Action Name' is set to 'android.intent.action.CALL'. The 'MIME Type' is empty. The 'Package Name' is empty. The 'Class Name' is empty. The 'URI' is set to 'tel:+18885551212'.

DevTalk - What's New in Mobility DNA

Alert (Panic) button

- Demo on TC57
- Device configured to invoke Android intent:
 - Android.intent.action.CALL
 - URI: <tel:+18885551212>
 - This is the example in the documentation
 - Device is configured and button is long-pressed



StageNow

Profile Name:AlertButton

Barcode Type:PDF417

Minimum Compatible MX Version:10.2

Scan Barcodes with StageNow Client:

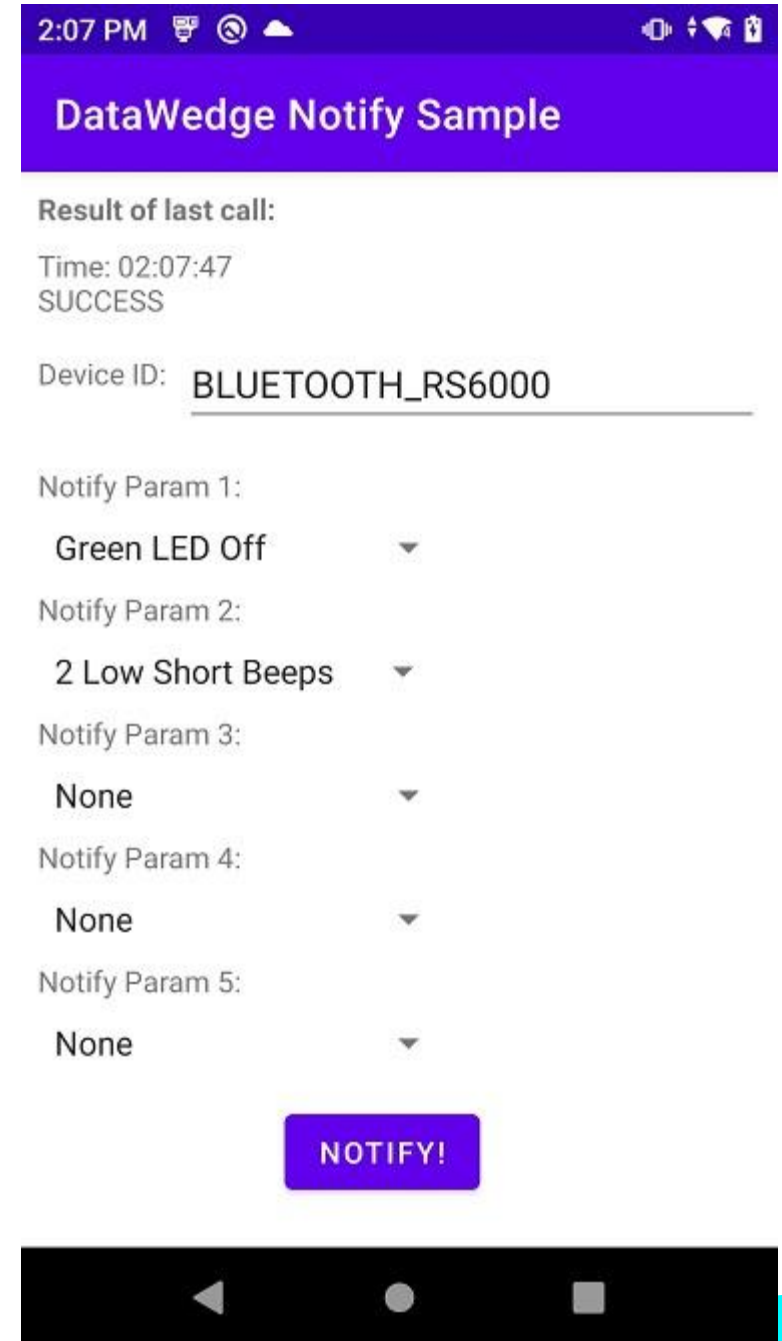
1



DevTalk - What's New in Mobility DNA

Bluetooth Scanner Notifications

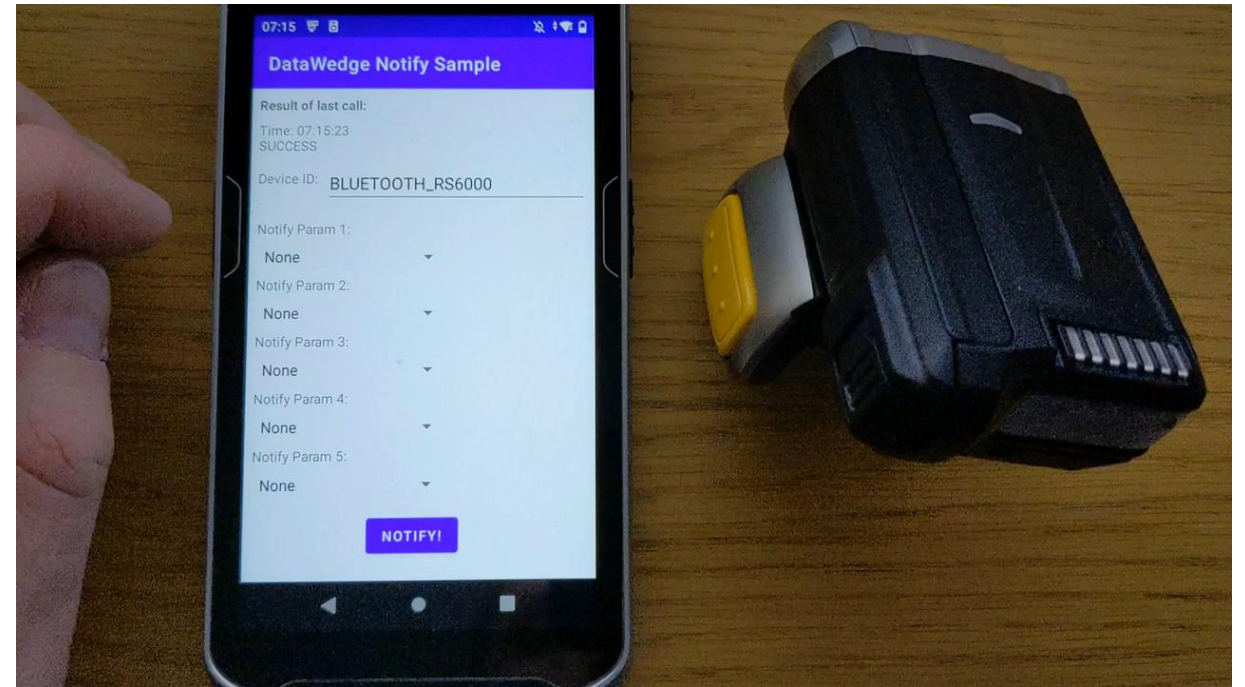
- New Intent-based API introduced in DataWedge 8.2
- Docs: <https://techdocs.zebra.com/datawedge/latest/guide/api/notify/>
- Allows programmatic control over the connected Bluetooth scanner's LEDs, beeper and vibrate function
- Supported scanners:
 - RS6000
 - RS5100
 - DS3678
- Replaces EMDK Notification API: <https://techdocs.zebra.com/emdk-for-android/8-0/api/reference/com/symbol/emdk/notification/package-summary.html>
- Unofficial sample app: <https://github.com/darryncampbell/DataWedge-Notify-Sample>



DevTalk - What's New in Mobility DNA

Bluetooth Scanner Notifications

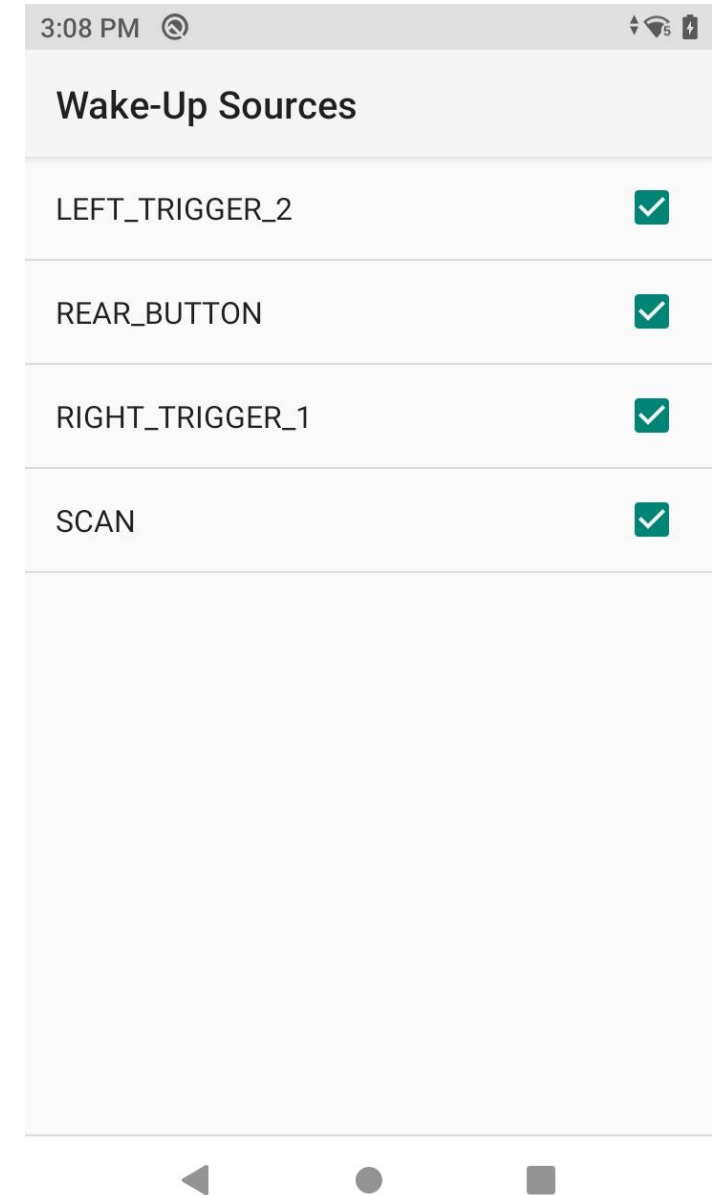
- Demo
 - TC52 running unofficial sample app:
<https://github.com/darryncampbell/DataWedge-Notify-Sample>
 - Connected to RS6000
 - Sample written in Kotlin but API is Intent-based so largely language agnostic
 - Choose from pre-defined beeper sequences
 - Stack up to 5 notifications (one of which may be an LED command)
- YouTube: <https://youtu.be/9lAqXa-aLeA>



DevTalk - What's New in Mobility DNA

New DataWedge Features: Wake up and Scan

- New feature in DataWedge 8.1
- Docs: Part of <https://techdocs.zebra.com/datawedge/8-2/guide/input/barcode/#readerparams>
- Enhancement to existing 'Wake-up sources feature'
- Used to trigger scanning when the device is in a suspended / screen-off state. **No need to separately wake the device up.**
- User presses the scanner: **Device is woken up and starts scanning automatically**
- Wakeup sources are configurable via Power Manager (or through device UI [*Right*])



DevTalk - What's New in Mobility DNA

New DataWedge Features: Wake up and Scan

- Wakeup sources are configurable via Power Manager [*Below*] (or through device UI)

Wake-up Key Identifier

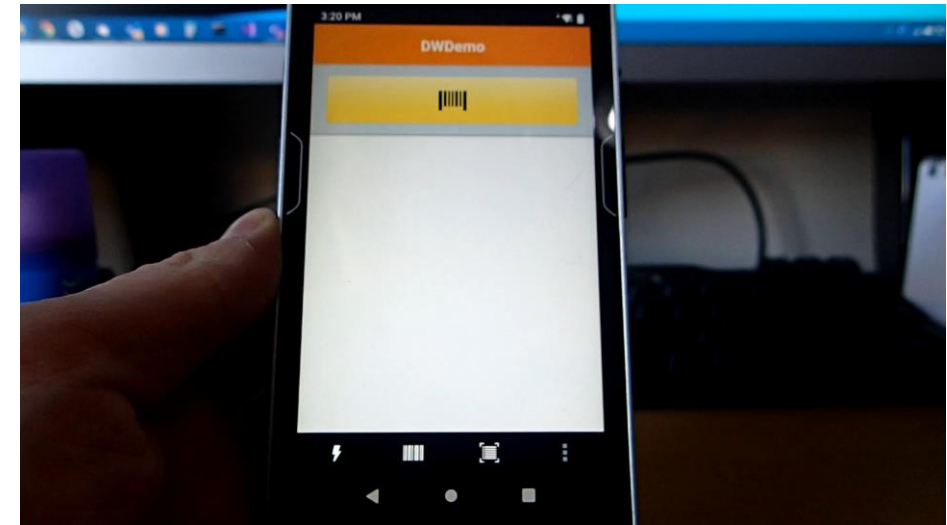
Used to select an individual device button to allow or prevent the device from waking from power-saving modes when the button (if so equipped) is pressed. Use this parameter when selecting an Action using the Wake-up Individual Action parameter.

Parm Name: WakeUpKeyIdentifier				
Option	Name	Description	Note	Requires
1	BUTTON_L1	Selects the button on the device's upper-left side.		MX: 9.2+
2	BUTTON_L2	Selects the button on the device's lower-left side.		MX: 9.2+
3	BUTTON_R1	Selects the button on the device's upper-right side.		MX: 9.2+
4	BUTTON_R2	Selects the button on the device's lower-right side.		MX: 9.2+
5	GUN_TRIGGER	Selects the button on the device's gun or grip trigger (if so equipped).		MX: 9.2+
6	REAR_BUTTON	Selects the button on the back or outward-facing side of the device (if so equipped).		MX: 9.2+
86	Custom	Allows use of a custom key identifier. See Custom Wake-up Key Identifier parameter.		MX: 9.2+

DevTalk - What's New in Mobility DNA

New DataWedge Features: Wake up and Scan

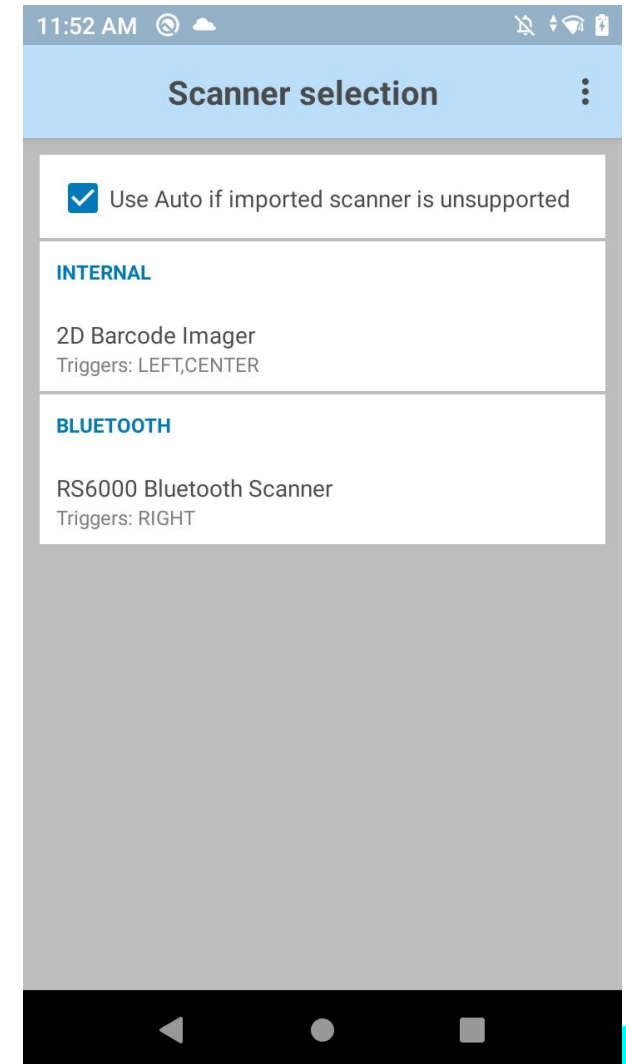
- Demo:
 - Pre-loaded DataWedge demo app
 - **Without** “Trigger Wakeup and Scan” reader param: Scanning **does not happen** with screen off
 - **With** “Trigger Wakeup and Scan” reader param: **Device is woken up** and scanning can happen
- YouTube: <https://youtu.be/b0psXg80vlg>



DevTalk - What's New in Mobility DNA

New DataWedge Features: Use Multiple Scanners Interchangeably

- New Feature in DataWedge 8.2
- Use different device triggers to trigger different scanners
- Docs: <https://techdocs.zebra.com/datawedge/latest/guide/input/barcode/#scannerselection>
- Use case:
 - Have the left trigger use the imager and the right trigger use the camera
- Use case:
 - Control the Bluetooth scanner using a trigger on the Android device [*Right*]
- New “Scanner selection” menu is available under barcode input
 - Map hardware triggers to different scanners
- **Not to be confused with scanner auto selection**, whereby the internal imager will be automatically selected with a BT scanner disconnects.



DevTalk - What's New in Mobility DNA

New DataWedge Features: Use Multiple Scanners Interchangeably

- Demo
 - TC52 connected to RS6000 scanner
 - By default left trigger on TC52 will activate the RS6000 scanner
 - Scanner selection modified to associate left trigger with Internal imager and RS6000 with right trigger
 - Both triggers now control individual scanners
 - DW Demo states the source of the scan
 - [Original video brightness is quite low, sorry!]
- YouTube: <https://youtu.be/zNU8FMjmKJ0>



DevTalk - What's New in Mobility DNA

New DataWedge Features: NG SimulScan Document Capture

The following features enhance NG SimulScan Document capture. **The ability to create custom templates is rolling out soon.**

- Edge Detection / Full Documentation capture
 - Capture full page documents and crop to content. No longer rely on 'anchor barcodes'
 - <https://techdocs.zebra.com/datawedge/latest/guide/input/barcode/#documentcapture>
 - Feature teaser video: <https://youtu.be/Dl8pxsTJdtI>
- Signature presence detection
 - Detect whether a signature was present in a specified area
 - Note: This is not the signature decoder, this is the Signature area of a NG SimulScan document
 - <https://techdocs.zebra.com/datawedge/latest/guide/programmers-guides/content-provider/#parameters>
 - Feature teaser video: <https://youtu.be/4vS5Y2q9Vkg>

DevTalk - What's New in Mobility DNA

New DataWedge Features: NG SimulScan Document Capture

The following features enhance NG SimulScan Document capture. **The ability to create custom templates is rolling out soon.**

- Read specific barcodes from multi-barcode form
 - Define criteria or pattern for barcodes to capture (e.g. length / symbology)
 - Coming early 2021
 - Feature teaser video: <https://youtu.be/5Kr8h-Cke6k>

DevTalk - What's New in Mobility DNA

MX 10.1 Enhancements

- DataWedge “token” mechanism to restrict access to APIs
- Auto-rotation control
- EKB language selection
- File upload
- OS Streaming upload / download & authentication
- Battery saver control (off / on / automatic)
- RFID regional support: Ukraine, Morocco, Anguilla
- Show Battery percentage
- Worry-Free WiFi enhancements

DevTalk - What's New in Mobility DNA

MX 10.2 Enhancements

- Beacon Manager – use with Device Tracker to locate a device which has been switched off
- Keypad tone configuration
- Bluetooth Manager pairing enhancements (single peripheral type at a time, silent pairing rules)
- Smart Leash configuration
- Adaptive brightness
- Intent: Send an Intent when a key is pressed
- Alert button action
- Keep device awake
- Feature-based licensing
- Touch panel menu option
- 802.11k
- 802.11mc (Fine Time Measurement - FTM)

DevTalk - What's New in Mobility DNA

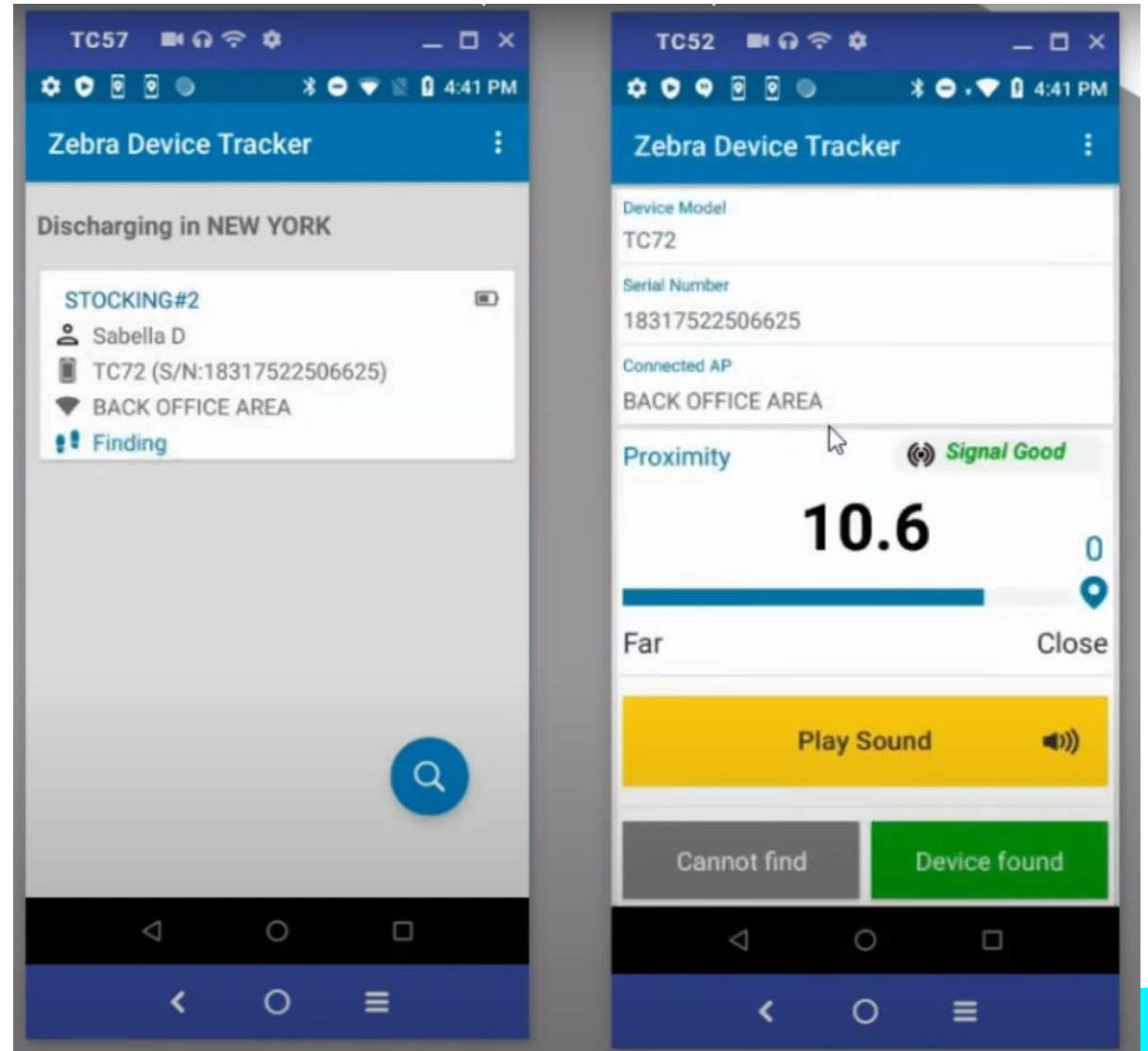
MX 10.3 Enhancements

- Prevent applications from upgrading / downgrading
 - Teaser promo video: <https://youtu.be/t7J8e2rVcMM>
- Clear device Bluetooth pairings
- DHCPv6
- NFC logging
- Touch mode panel
 - Quickly switch between glove / stylus / finger / screen protector on or off
 - Teaser promo video: https://youtu.be/kRHkg0JGj_Q
- More to come...

DevTalk - What's New in Mobility DNA

Cloud Based Device Tracker

- Find missing or misplaced devices
- Client application to find another device via WiFi, Bluetooth proximity, BLE and audible tones.
- Server-based Management console to designate a device as missing and assign another device to find it.
- Missing device could be off (BLE beacon is enabled)
- <https://www.zebra.com/us/en/support-downloads/software/productivity-apps/device-tracker.html>
- <https://techdocs.zebra.com/devicetracker/4-1/guide/about/>
- Feature teaser video: <https://youtu.be/MzCWdLUhEPY>



DevTalk - What's New in Mobility DNA

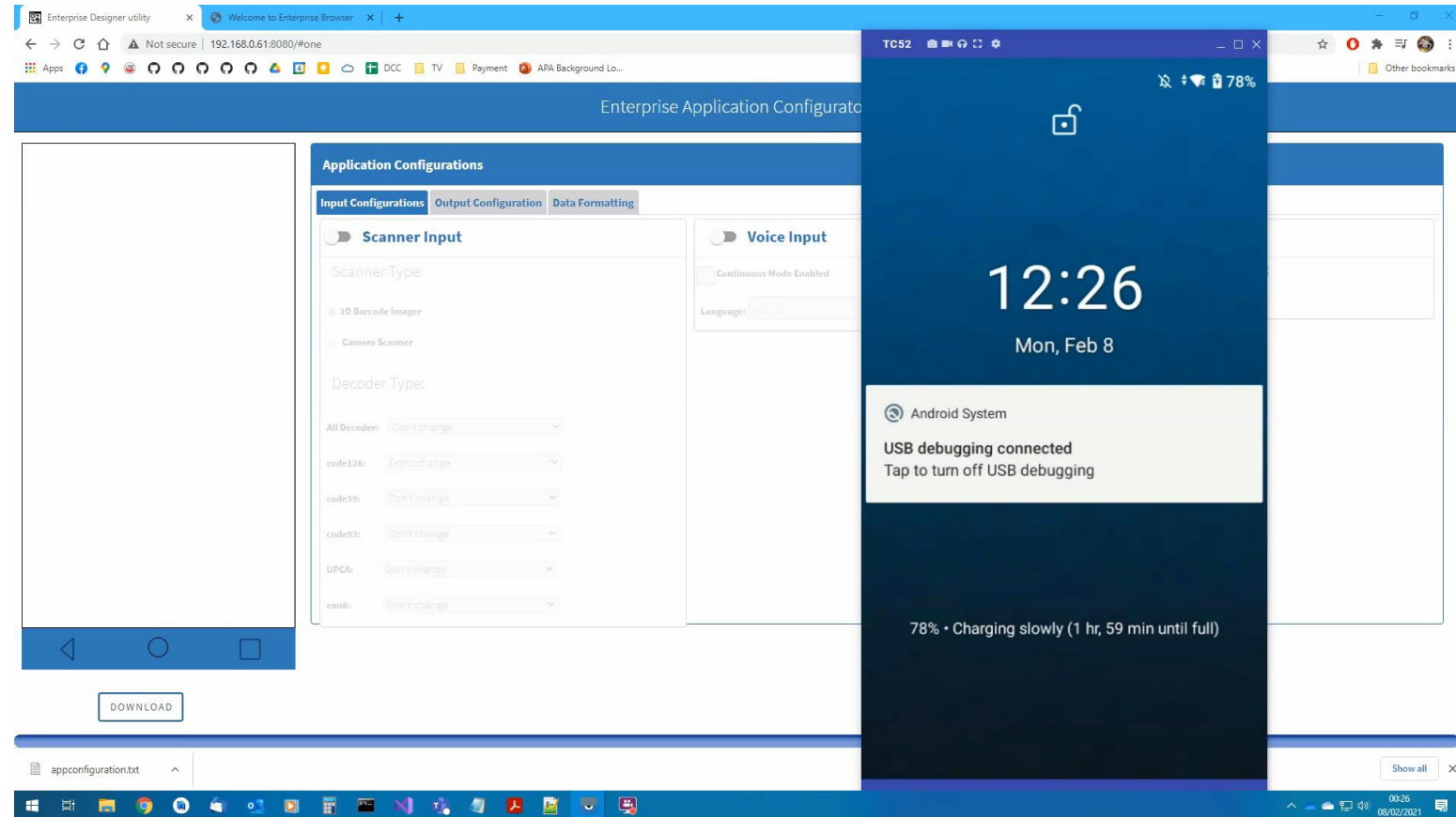
Enterprise Browser: New Features in 3.0.6

- Docs: <https://techdocs.zebra.com/enterprise-browser/3-0/guide/about/#newinv30>
- New Device API:
 - Disable Android navigation bar
- New WebView API:
 - Enable / Disable “pinch to zoom”
- New Database API
 - Restored the previously removed API
 - Exposes on-device API to access SQLite database
 - Alternative to [Web SQL Database API](#)
- Licensing enhancements (<https://techdocs.zebra.com/enterprise-browser/3-0/guide/licensing/>):
 - Apply & activate licenses for itself and the MDNA bundle in a single step
 - Term-based licensing (1, 3 or 5 year terms). 90-day trial. Note: EB comes with 30-day trial out of the box.

DevTalk - What's New in Mobility DNA

Enterprise Browser: Enterprise Application Configurator

- Enhancement to the 'DOM Injection' concept
- Dom Injection:
 - Add enterprise features to your existing web app.
- EAC:
 - Add enterprise features to your existing web app **without writing code**.
- “Beta” release
- YouTube: <https://youtu.be/hb-4ETOU38>



DevTalk - What's New in Mobility DNA

Resources

- YouTube playlist of videos shown in this presentation: <https://www.youtube.com/playlist?list=PLj8D9Diz5FBpGdMyEw0oSuLyquBYO3CjX>
- New Mobility DNA features: <https://techdocs.zebra.com/mdna/>
- All Mobility eXtensions: <https://techdocs.zebra.com/mx/>
- TechDocs: <https://techdocs.zebra.com/>



Questions?

<http://developer.zebra.com>



Zebra Developer Community – LinkedIn Group



@ZebraDevs

BACKUP

DEVICES BUILT BY US APPS BUILT BY YOU

BUILD ON THE PLATFORMS YOU KNOW ON DEVICES PURPOSE-BUILT FOR THE ENTERPRISE

Enterprise software development needs to be specialized; but developers need control and flexibility to customize solutions. As an Enterprise Developer, Zebra has your technical needs covered!



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