



Release Notes

Honeywell Development Kit 2.2

April 7 2025

Verifying Download Files

The release files for Honeywell Development Kit (DevKit) 2.2 are zip files signed with a certificate. This allows a user to verify the files they download have not been modified. After downloading the files, use the process below to verify authenticity before unzipping the files.

1. Java JDK (version 1.8 or newer) must be installed.
2. Execute the jarsigner executable against the file to verify. Example:
`jarsigner -verify Honeywell-DevKit-2.2-signed.zip`

Code Changes

Changes to code, including breaking API changes, can be found in the CHANGELOG.md file in the devkit directory, included in the DevKit zip file. Some of these changes are also included later in this document.

New Features in Honeywell DevKit

SRCOMM Support for Android Devices

Honeywell's SRCOMM protocol with SoundSense technology can be used for communications between the Android device and the headset. SRCOMM is used in place of Hands-Free Profile (HFP) or Advanced Audio Distribution Profile (A2DP) to connect the headset. SRCOMM can provide improved speech recognition. SRCOMM had previously been available only for Talkman devices.

A new parameter, **PreferSRCOMM** is added to enable SRCOMM support for Android devices. SRCOMM is disabled by default.

Hardware Requirements

An SRX3 headset with firmware version 6.09 or later is required to support SRCOMM.

Templates

When **PreferSRCOMM** is enabled the application uses the .bt2 template. This aligns with SRCOMM behavior on an A700x, however there are notable differences from previous behavior:

- These templates can now be uploaded or downloaded from VoiceConsole or Enterprise Voice. The licensing method determines template storage.
- Alpha templates need retrained for use on the Android device. The user is asked to retrain any required alpha vocabulary for the workflow.
- Templates that previously used spaces between words are now stored with an underscore (_) in place of the space.

Limitations

In addition to the limitations below, also review the SRCOMM issues in the [Issues Reported in this Release](#) section below.

The following limitations are present when using SRCOMM with this release:

- BlueStreak speech recognition is supported. Pick Up & Go (PnG) speech recognition is not supported with this release. If PnG is enabled the PreferSRCOMM parameter is ignored.
- When the Ready button is pressed and an SRX3 headset connected via HFP or A2DP, the headset disconnects and reconnects via SRCOMM. The headset plays disconnect and reconnect tones during the process. The process may take some seconds to complete and audio may play through the device while the headset is disconnected.
- The volume of the headset can only be adjusted by the plus and minus buttons on the headset. Using the device's volume buttons does not adjust the headset volume when using SRCOMM. The Voice & Audio Settings screen does not adjust audio when using SRCOMM. Settings changes from this screen are of a different volume than changes made with the headset buttons once the application is started.
- The SRX3 flip-to-mute feature is not available when using SRCOMM.
- Playback of tones such as beeps is not supported.
- VoiceNotes and Memos are not supported.
- An operator speaking over a non-priority prompt may hear a clicking noise between prompts.
- Issues that may result in the SRX3 headset becoming unresponsive and showing a solid blue LED remain under investigation. If this occurs, remove and reinsert the headset battery.

Device Support

The following changes have been made to Android operating system support:

- Support is added for Android 13 and 14.
 - Android 14 introduces the ability for users to dismiss notifications for foreground services. These notices were persistent in earlier Android OS versions.

- Android 14 register broadcasts receivers to GuidedWorkRunnerForegroundService to receive updates when the application is in the background.
- Support is ended for Android 8(O) and 9(P).

See *Android Version Notes* for additional information in DevKit help for more information.

Device Serial Number

The `GetDeviceSerialNumber()` method in `IDeviceInfo` now returns the accurate serial number of Honeywell devices. This replaces the previous implementation that used a secure unique identifier string. There are two ways to enable the true serial number use:

- Uncomment the line `"Honeywell.Firebird.WorkflowEngine.AccurateSerialNumberEnabled.Enable(container);"` in ``XplatDependencyOverrides.cs``
- Use the `OnetimeStartupSettings.config` file as follows:

```
{
  "Repositories": {
    "SerialNumberConfig": {
      "AccurateSerialNumberEnabled": "true"
    }
  }
}
```

Scanner Configuration

Support was added for Bluetooth scanner configuration and updated the scanner services to handle and apply configuration changes. Two new repositories are added:

- **ScannerConfig**: used to configure the internal scanner
- **BTScannerConfig**: used to configure a Bluetooth external scanner

The example below enables the UPC-A check digit for the internal scanner and the EAN-13 check digit for the Bluetooth scanner. Additional options can be found in DevKit help.

```
{
  "Repositories": {
    "ScannerConfig": {
      "SymbologyProp_DEC_UPCA_CHECK_DIGIT_TRANSMIT": "true"
    },
    "BTScannerConfig": {
      "SymbologyProp_DEC_EAN13_CHECK_DIGIT_TRANSMIT": "true"
    }
  }
}
```

```
}  
}
```

Device Info Screen

A new device info screen is added. It is displayed when the device info overflow menu is selected. This is a tap only menu item. Once the noise sample is completed, this screen can be closed by speaking 'Continue'.

This feature adds new RESX keys as listed below:

Key Name	Value
OverflowMenuItem_DeviceInfo	device info
OverflowMenuItem_DeviceInfoHome	Device Info
DeviceInfoWorkflowActivity_Header	Device Info
DeviceInfoWorkflowActivity_ButtonText	Continue
DeviceInfoWorkflowActivity_InitialPrompt	Device Info
DeviceInfoNoDialogueWorkflowActivity_Header	Device Info
DeviceInfoNoDialogueWorkflowActivity_ButtonText	Continue

See *Localizing the Application* in DevKit help for more details.

Security Enhancements

A security enhancement is included to avoid tapjacking attacks on Android 12 and earlier operating systems.

The following may be added in the AndroidManifest.xml file to avoid partial occlusions:

```
<?xml  
<uses-permission android:name="android.permission.HIDE_OVERLAY_WINDOWS" />  
<?xml
```

For more information, see: <https://developer.android.com/privacy-and-security/risks/tapjacking>

Developing with DevKit 2.2 And Later

This release contains a change in the default `HttpHandler` to be used by the `HttpClient` on Android.

Due to the migration for Xamarin to MAUI, the `HttpClient` was using the native Android `HttpHandler`. This cause issues with feature license validations. This Android client handler is a wrapper around the native Java HTTP client. Some unexpected behaviors have been see. For details see [Need `AndroidHttpClientHandlerType` Support in MAUI .NET Android · Issue #8470](<https://github.com/dotnet/android/issues/8470#issuecomment-1784842309>)

In `GWS.Android.csproj` there is a new use clause, `UseNativeHttpHandler` which is set to **false** by default. This ensure that the `HttpClient` uses `SocketHttpHandler` instead of the platform specific HTTP client.

This behavior can be overridden by adding the following line to `GWS.Android.csproj`:

```
```.xml
<UseNativeHttpHandler Condition="$([MSBuild]::GetTargetPlatformIdentifier('$(TargetFramework)')) == 'android'">false</UseNativeHttpHandler>
```.
```

Issues Fixed in this Release

NOTE

Resolved issues are included in the CHANGELOG.md file in the devkit directory, included in the DevKit zip file.

Issue Description	Issue ID
Full Bar Code not Scanned Scanning some bar code symbologies were capturing the full bar code when using an external or internal scanner. This is fixed with new ScannerConfig and BTScannerConfig repositories in the OneTimeStartupSettings.config file. See <i>Scanner Configuration</i> in the HVMA help for details.	VOSMB-12483

System Requirements

The following devices and software were tested for this release of DevKit.

Minimum Android Device Specifications

- **Processor:** Qualcomm Snapdragon 410 MSM8916 1.2 GHz quad-core
- **Memory:** 2GB RAM
- **Storage:** 8GB/16GB Flash
- **WLAN:** IEEE 802.11 a/b/g/n radio
- **Bluetooth:** Bluetooth Class 4.0, Bluetooth HFP (Hands-Free Profile) version 1.6
- **Operating System:** Android O (8.0)

The above are the minimum recommended device specifications. If the device does not meet or exceed these specifications, the following symptoms may occur:

- Poor audio quality
- Slow application screen responsiveness
- Delayed input entry

Hardware

The following devices were tested for this release.

Honeywell Devices

- Honeywell CT37
- Honeywell CT40
- Honeywell CT40 XP
- Honeywell CT45
- Honeywell CT45 XP
- Honeywell CT47
- Honeywell CT60
- Honeywell CT60 XP
- Honeywell ScanPal EDA57
- Honeywell A700x

Third-Party Devices

- Zebra TC8300

Headsets

- Honeywell SRX-SL Light Industrial Use Headset
- Honeywell SRX2 Wireless Headset (with Hands-Free Profile support)
- Honeywell SRX3 Wireless Headset

Scanners

- On-board scanners for Honeywell Android devices listed above
- Honeywell A730x
- Honeywell 8670 Ring Scanner

Android Device Operating System Support

Although all these combinations may not have been tested in this release, they are expected to work

- Android 10
 - Honeywell CK65
 - Honeywell CT40
 - Honeywell CT40 XP
 - Honeywell CT60
 - Honeywell CT60 XP
- Android 11

- Honeywell CK65
- Honeywell CT30 XP
- Honeywell CT40
- Honeywell CT40 XP
- Honeywell CT45
- Honeywell CT60
- Honeywell CT60 XP
- Android 12
 - Honeywell CT40 XP
 - Honeywell CT45
 - Honeywell CT47
 - Honeywell CW45
 - Honeywell ScanPal EDA57
- Android 13
 - Honeywell CT40
 - Honeywell CT45
 - Honeywell CT45 XP
 - Honeywell CT60
 - Honeywell CT60 XP
- Android 14
 - Honeywell CT37

Honeywell A700x Software Support

- A700x devices must support .NET 6.0. This requires VoiceCatalyst 4.6 ECS001 minimum, however VoiceCatalyst 4.7.1 ECS005 or later is recommended.

NOTE

Honeywell A700 series and A500 devices are not supported.

Management Server Support

- VoiceConsole 5.5 or later for A700x
- VoiceConsole 6.1 or later for Android device support

Issues Reported in this Release

Issue Description	Issue ID
SRCOMM: Headset Reconnect Log Entries Reconnecting the headset from the Headset Not Connected screen creates extraneous entries in the log file.	VOSMB-12844
SRCOMM: Headset not Recognized The application may become stuck on the No Headset screen even if a headset is attached. Workaround: Pull headset battery and reinsert.	VOSMB-12843
SRCOMM: Switching to PnG may Fail If a user has a headset connected using SRCOMM in their workflow, turns the headset off, then exits the workflow and tries to enable Pick Up & Go (PnG), the result is a headset not connected message. When the headset is turned on, it connects using SRCOMM rather than HFP. Workaround: Toggle PnG while the headset is connected. Navigate to the home screen and select Ready.	VOSMB-12840
Not All Words Shown During Training The display dialog screen may not show all words during training and the training bar may jump to 100%	VOSMB-12801
SRCOMM: Not Available for Prompts Outside Workflow SRCOMM is not available for speaking TTS prompts outside the workflow, such as the prompts from the Voice & Audio Settings screen. A2DP is used instead.	VOSMB-12793
SRCOMM: ValueIntent Vocab Lost When using SRCOMM and GetValue intent without anchor words the GuidedWorkViewModel response property updates the Spoken Value and the most recent recognized vocab is lost. Workaround: Speak the utterance again.	VOSMB-12735

Issue Description	Issue ID
<p>Select Operator Team</p> <p>Select Operator Team only appears the first time the app is used.</p> <p>Workaround: Users can access this option by pressing the Back button on the login screen.</p>	VOSMB-12723
<p>Progress Bar not Visible</p> <p>Navigating away from a screen that shows a progress bar (such as Update Train that has started, Noise Sample or Voice Training) to another screen such as Report Problem or Device Info does not show the progress bar when returning to that screen.</p>	VOSMB-12707
<p>SRCOMM: Noise Sample Prompt</p> <p>After using SRCOMM, user switches to HFP (PreferSRCOMM is changed to false) then user hits the Ready button. Instead of proceeding to the operator selection or logon screen after the headset disconnect and reconnect, the user is first prompted for a noise sample.</p>	VOSMB-12582
<p>Application Styling</p> <p>The guided Work application may not have the expected styling.</p>	VOSMB-12573
<p>SRCOMM: Headset not Functioning</p> <p>During an extended period of non-use a headset connected via SRCOMM the headset may remain connected (flashing blue) but not functioning.</p> <p>Workaround:</p>	VOSMB-12479
<p>SRCOMM: Headset Disconnect</p> <p>When a headset is connected using SRCOMM and the application is closed or killed, the headset disconnects.</p>	VOSMB-12468
<p>Some Talkman Help Options not Available</p> <p>When a user changes the operator to another operator with a different language, the Talkman Help command may not show all options.</p> <p>Workaround: Reload the task package.</p>	VOSMB-12333

Issue Description	Issue ID
SRCOMM: Vocab Training When using templates that were created with an A700x, the Talkman vocab word is prompted to be trained on Android. Workaround: Disable this vocab word in configuration or delete if the operator no longer uses an A700x.	VOSMB-12141

Previously Reported Limitations

Issue Description	Issue ID
REST Error When Switching Licensing If switching licensing from VoiceConsole to Microservices, the following REST error may be displayed in the logs: Requests cannot be sent while RESTService is disabled. Workaround: None needed. The application works as expected despite the error logged.	VOSMB-12356
Vocab Training in Wrong Language If training is started and interrupted, and a different operator signs onto the device with a different language, the new operator may be asked to train words in the original language.	VOSMB-12318
SSL Connection Errors .NET 6 and later do not support weaker ciphers that were supported in .NET Core 3.1. This is an item that was omitted from the breaking changes list in DevKit 2.0.	VOSMB-12144
VoiceConsole Site ID Android devices do not support a Site ID. If using a VoiceConsole config file from a VoiceConsole SaaS deployment, the Android devices are always imported into the site with the lowest site ID (this is usually the Default site).. Workaround: An admin with appropriate access can move the Android devices into the desired site.	VOSMB-11775

Issue Description	Issue ID
<p>"Control", "Standby", "Update Train" Missing from Vocabulary</p> <p>Applications using BlueStreak speech recognition without a tsi NuGet are missing "Control", "Standby", and "Update Train" from the vocabulary. The user is not asked to train these words and the user does not have access to the "Control" menu overflow items through voice.</p> <p>Workaround: Add the following code to the Workflow's Module Vocab class (for example SimpleAppModuleVocab in SimpleAppBusinessLogic.cs):</p> <pre data-bbox="115 600 1222 873"> public override VocabWordInfo[] AndroidVocab => new[] { VocabControl, VocabStandBy, VocabUpdateTrain }; </pre>	<p>VOSMB-11844</p>
<p>iOS App not Supported in Background</p> <p>DevKit 2.0 does not support running the application on iOS in the background or while the screen is off. When the app is in the background, prompts and commands are not processed.</p> <div data-bbox="115 1089 1222 1236"> <p>NOTE This defect was first found in an earlier version of DevKit. Honeywell has confirmed the issue exists at least as far back as DevKit 1.9.1.</p> </div> <p>Workaround: Running the app in the foreground is the only supported mode for iOS.</p>	<p>VOSMB-11147</p>
<p>Language Not Switching Properly</p> <p>When a new operator is loaded in an app using a different voice than the previous operator, the new operator may hear a mix of both languages.</p> <p>Workaround: Remove the battery and reboot the device.</p>	<p>VOSMB-11078</p>
<p>Sign Off not in Overflow Menu</p> <p>When Sign Off is disabled as a Vocab Word it is also removed from the overflow menu.</p>	<p>VOSMB-10898</p>
<p>Voice Input Disabled</p> <p>When a vocab word is disabled by pushing an ApplicationSettings.config file voice input is disabled in all workflows.</p>	<p>VOSMB-10897</p>

Issue Description	Issue ID
Disable Vocab and Alphas English Only Disabling vocab words or Alpha by pushing an ApplicationSettings.config file is only working for English	VOSMB-10896
Application Scheme Labels When an ExternalResources RESX file is pushed to the device, the application scheme lists "Microservices" instead of "Enterprise Voice". Workaround: If "Enterprise Voice" is not present in the list, select "Microservices".	VOSMB-10778
Hints Hints/response instructions are expected to work reliably for digits and alphabetic characters on Android and iOS. Other vocabulary words are not expected to work as part of hints.	VOSMB-8168
Scanning Data Can Override Priority Prompts Priority prompts can be overridden by scanning data at a screen where scanning is a valid input.	VOSMB-1415
Voice Dialogue Continues to Run During Background Activity When waiting for background spinner activity to complete, speech recognition may allow the operator to use some menu items through voice, e.g., Say Again and Help.	VOSMB-1406
Do Not Press + and - Buttons on SRX3 Headset to Unpair When unpairing your SRX3 headset from an Android device, do not press the + and - buttons simultaneously. This procedure causes known issues with TTS and speech recognition. Proper Procedure: To unpair your SRX3 headset from an Android device, go to your device Bluetooth settings, display the Paired devices screen, select the headset, and tap FORGET to unpair the headset and the Android device.	VOSMB-1448
Pressing Power Button on SRX-SL or SRX2 Headset Causes Unpairing If you press the Power button on your SRX-SL or SRX2 headset, the headset unpairs from the device. Workaround: Power off the headset and re-pair your device and headset.	VOSMB-1252

Issue Description	Issue ID
<p>"GatewayTimeout" error message from Microservices</p> <p>If the mobile application has trouble reaching the Microservices host ("GatewayTimeout") while attempting to retrieve templates it may force the user to retrain all words for that workflow.</p> <p>Workaround: If you experience this behavior close and restart the app and log in again</p>	VOSMB-971
<p>Do Not Press Next Button Quickly</p> <p>If you have untrained words and get to the template training instructions screen, if you tap the Next button in rapid succession, it can cause the application to shut down unexpectedly.</p>	VOSMB-230
<p>Audio to the Bluetooth Headset Can Fail</p> <p>In some situations, the audio no longer comes through a Bluetooth headset even though it is still paired to the device.</p> <p>Workaround: Unpair and re-pair the headset.</p>	VOSMB-28
<p>Errors while Transmitting Files to VoiceConsole</p> <p>A number of errors may appear in the device logs when transmitting logs to VoiceConsole. In spite of these errors, all log files are eventually transmitted successfully.</p>	VOSMB-570
<p>State Machine Recommendation</p> <p>Do not create a state machine where the first state goes directly into a secondary state machine and sets the next trigger for return. The app becomes unresponsive when returning from the secondary state machine and the second state never runs.</p>	VOSMB-465