Honeywell

Release Notes Honeywell Development Kit 1.3

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Verify Downloaded Files

The release files for Honeywell Development Kit (DevKit) 1.3 and VoiceExtensions 1.2 are zip files signed with a certificate. This allows a user to verify that 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-1.3.0-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.

New Features in Honeywell DevKit

New Device-Dependent Templates for Highest-Quality Voice Recognition

New template types differentiate between the devices used for the Guided Work application. Templates created using one type of device and operating system may not perform as well on different types of devices and/or operating systems, due to different audio paths. The application handles changing template extensions, ensuring the highest-quality voice recognition for the devices and operating system being used:

TEMPLATE FILE EXTENSION	WHEN USING
b.SRXAND_2	Android and an SRX headset
b.NSRXAND_2	Android and a non-SRX headset
b.SRXIOS_2	When using iOS and an SRX headset
b.NSRXIOS_2	When using iOS and a non-SRX headset

TEMPLATE FILE EXTENSION

WHEN USING...

bt2

SRComm in any environment (currently only A700x)

Operators need to retrain templates when the application is updated to version 1.3.

Honeywell SRX3 Wireless Headset Support

Guided Work DevKit 1.3 supports the SRX3 Wireless Headset for use with Android and A700x devices.

Base Picking Workflow

The new Base Picking workflow is a module/workflow that is distributed with DevKit, as a starting point for partners to build a customized picking workflow.

Record Memo Intent

A new intent is added that allows a user to record memos during an assignment.

Review Memos Intent

A new intent is added that allows users to review memos and notes that they recorded during an assignment.

Record Notes Intent

A new intent is added that allows a user to record voice notes and type text notes on a single screen during an assignment step.

GetValue, GetFloat, and GetLongValue Intents Replace GetDigits Intent

The GetDigits intent is replaced with three new intents:

- GetValue: Used for entering a series of characters or digits.
- GetFloat: Used for entering floating-point numeric values.
- GetLongValue: Used for entering a long series of alphanumeric characters. A dialogue is used that allows the value to be spoken in groups of characters.

Numerous properties are added that support these new intents.

Leave Workflow Intent

A new intent is added to completely leave the workflow and go back to the home screen.

Long-Value Entry Documentation

Documentation on the functionality of a Long-Value Entry is added to the Guided Work DevKit and the Guided Work Application *User Guide* online help.

Custom Help Argument Added to Intents

Custom help is added as an argument to intents. The device says this custom help when the operator selects Help in the overflow menu or the operator speaks "Control Help".

Menu Intent Handles Multiple Lines

Items on a menu screen adjust properly when text spans multiple lines.

Guided Work Visual Studio Extension

Guided Work Visual Studio Extension and instructions for setting up your own project are added to the DevKit.

.NET Core Support for Visual Studio

Instructions for installing .NET Core cross-platform development for Visual Studio are added to *Getting Started*.

Honeywell A700x Support

Guided Work DevKit 1.3 supports the Honeywell A700x device. The A700x VoiceArtisan Getting Started Guide is provided in the Guided Work DevKit.

VoiceLink Sample Workflow Split Into Parts for A700x Support/Optimal Size

The VoiceLink sample workflow module is split into two parts, and a third part is added to support A700x.

The Android/iOS GuidedWorkRunner code that was in the main module (VoiceLinkModule) is moved to another project (VoiceLinkGWRunnerModule). The code that remains in the VoiceLinkModule is the platform-independent state machine portion of the code.

In addition to the reference in the Android/iOS module, VoiceLinkModule is referenced in the module that works on A700x (VoiceLinkArtisanModule). This split results in a smaller A700x application (VAD file) size, due to the removal of unneeded Android dependences, like Xamarin.Forms. If you want an optimally sized VAD, take this approach.

New BasePicking Sample Workflow

A new BasePicking sample workflow module is provided. The code in the BasePicking module is the platform-independent state machine portion of the code.

BasePickingResources.resx Added to Translation List

BasePickingResources.resx is added to the list of files that need to be created so that all prompts are translated correctly.

Artisan Resources Files Added to Translation List

LAppArtisanResources.resx, BasePickingArtisanResources.resx, and VoiceLinkArtisanResources.resx are added to the list of files that need to be created so that prompts are translated correctly. These files need to be translated only for A700x applications.

NuGet Repos Automatically Configured

The NuGet source repos are automatically configured in VisualStudio. Instructions for configuring the NuGet repos in VisualStudio are removed.

Tabbed View Improvements

Tabs may be any type of view instead of only stacklayouts.

Vocabulary Recognition Sensitivities Able To Be Set

A new ThresholdService allows voice recognition thresholds to be set on a word-by-word basis.

Added Ability to Pass Prompts with Spell Tags for Phonetic Responses

Added the ability to pass prompts that contain spell tags to Guided Work, so that operators may speak responses phonetically. For example, instead of speaking "Aye Bee See One Hundred Twenty Three", an operator may speak "Alpha Brave Charlie one two three".

Update Train Enhanced with Multiple Word Lists

The Update Train option is enhanced so that an operator can select from multiple lists of words to update train—current vocabulary, all vocabulary, or untrained words.

Automatic Lease Release at Home Screen

When enabled in the Settings, the device lease will be automatically released when the operator navigates to the device Home screen.

Speech Recognition Guidance

A "Speech Recognition Guidance" section is added to the Guided Work DevKit Configuration Guide. The same information is added to the Guided Work Application Troubleshooting online help.

System Requirements

The following devices and software are supported for this release of DevKit.

Android Devices

Minimum Device Specifications

- Processor: Qualcomm Snapdragon 410 MSM8916 1.2 GHz quad-core
- Memory: 2GB RAM
- Storage: 8GB/16GB Flash
- WLAN: EEE 802.11 a/b/g/n radio
- Bluetooth: Bluetooth Class 4.0, Bluetooth HFP (Hands-Free Profile) version 1.6
- Operating System: Android M (6.0.1)

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 are supported for this release.

Mobile Devices

- Honeywell Dolphin CT40
- Honeywell Dolphin CT50
- Honeywell Dolphin CT60
- Honeywell CK65
- Honeywell ScanPal EDA50
- Honeywell ScanPal EDA70

Headsets

- Honeywell SRX-SL Light Industrial Use Headset with firmware version 5.13 or greater
- Honeywell SRX2 Wireless Headset (with Hands-Free Profile support) with firmware version 4.05
- Honeywell SRX3 Wireless Headset with firmware version 6.06

Scanners

- Honeywell CT40 On-board Scanner
- Honeywell CT50 On-board Scanner
- Honeywell CT60 On-board Scanner
- Honeywell EDA50 On-board Scanner
- Honeywell EDA70 On-board Scanner
- Demo level for the Honeywell 8670 Wireless Ring Wearable Scanner

Firmware

- Android M (6.0.1)
 - Honeywell Dolphin CT50 Internal Build number: 71.11.17(0285)

- Android N (7.1.1)
 - Honeywell Dolphin CT40 Internal Build number: 84.00.12(0093)
 - Honeywell Dolphin CT60 Internal Build number: 84.00.16(0135)
 - Honeywell ScanPal EDA50 Internal Build number: 207.01.10.0010
 - Honeywell ScanPal EDA70 Internal Build number: 209.01.10.0010
- Android O (8.1.0)
 - Honeywell Dolphin CT40 Internal Build Number: 86.00.08(0074)
 - Honeywell Dolphin CT60 Internal Build Number: 86.00.07(0068)
 - Honeywell Dolphin CK65 Internal Build Number: 86.00.10(0089)

Honeywell A700x Series Devices

Minimum Device Specifications

• Honeywell VoiceCatalyst: Version 4.1.3

Hardware

The following devices are supported for this release.

Mobile Devices

• Honeywell A700x series (includes A710x, A720x and A730x)

NOTE

Honeywell A700 series and A500 devices are not supported.

Headsets

Honeywell SRX3 Wireless Headset version 6.6

Issues Fixed and Included in This Release

The following issue reported in version 1.2 were fixed in this version.

ISSUE DESCRIPTION

Fixed layout bug on low resolution devices

On low-resolution devices, the input box was shrunk down, making it impossible to see what the user was typing. This issue is fixed.

General Considerations and Limitations

Mobile Application Limitations

No Speaker-Independent Option

Speaker independent is no longer an option in the Guided Work Voice and Audio settings. The application uses speaker-dependent recognition. An improved speaker-independent recognition will be released in a future version.

VOSMB-1517

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

Problem Reports Do Not Upload if Honeywell Logging Enabled

If Honeywell logging is enabled for additional logging, problem reports do not updoad to Microservices.

Workaround: Disable Honeywell logging before sending a problem report to Microservices.

VOSMB-1285

Voice Dialogue Continues to Run During Background Activty

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

Unable to Exit Error Screen with VoiceLink

Entering an invalid host address can cause an indefinite processing (spinner icon) state, with VoiceLink.

Workaround: Close the Guided Work Application and enter a valid host address.

VOSMB-1353

Headset Limitations

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 simultaeously. This procedure causes known issues with TTS and voice 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

Application Considerations

Changed Xamarin. Forms and Acr. User Dialogs NuGet Library Initialization

Moved Android initialization of Xamarin.Forms and Acr.UserDialogs into Honeywell.GuidedWork NuGets. Android applications must no longer call Xamarin.Forms.Init or Acr.UserDialogs.Init.

Updated Xamarin. Forms NuGet Requires Changes to .csproj Files that reference it.

The required version of Xamarin. Forms is updated to version 4.3.0.991211. Any projects with explicit Xamarin. Forms references need to update to the new version, which is referenced in the example module projects (e.g., VoiceLink, LApp).

Class Name Changes

The following class names are changed, and any code that references these classes needs to be changed to reference the renamed classes:

- Honeywell.Firebird.CoreLibrary.IDeviceInfo class changed to Honeywell.Firebird.CoreLibrary.IUnstructuredDeviceInfo.
- GuidedWork.GuidedWorkResources.GetResourceByType changed to GuidedWork.EmbeddedResourceUtil.GetResourceByType`.
- IFirebirdAppBootstrap changed to IAppBootstrap.

Class Namespace Changes

The GuidedWorkRunner.PhoneticUtil class is moved to GuidedWork.PhoneticUtil.

If you use that class, you need to change the namespace from GuidedWorkRunner to GuidedWork.

Removed Types

The IPortablePath and PortablePath types are removed. Use System.IO.Path instead.

The unused IFileExtensions symbol and all derived types are removed.

Do Not Use TranslateExtension class for A700x Modules

Workflow modules that are built into optimally sized A700x VADs can no longer use the Honeywell.Firebird.CoreLibrary.Localization.TranslateExtension class. Use the Honeywell.Firebird.CoreLibrary.Localization.Translate class instead. Neither the LAppModule nor VoiceLinkModule examples use TranslateExtension any more.

VoiceConsoleComm Code is Moved to its Own NuGet Package

Applications that need VoiceConsoleComm code must explicitly reference the Honeywell.GuidedWork.VoiceConsoleComm NuGet. The VoiceLinkGWRunnerModule and the GWS.Android/iOS apps provided in this version of DevKit do this as an example.

Continued Limitations

The following limitations were reported previously and continue to be in effect.

Application goes into landscape from Photo Intent

Exiting the camera view in the photo intent while in landscape mode will cause the application to be in landscape mode, which is not supported and may cause issues.

Workaround: Rotate the device to portrait mode before or after exiting the camera view.

VOSMB-992

Capitalized words added to the workflow's ModuleVocab list directly will not be loaded as a trained template

Capitalized words added to the workflow's ModuleVocab list directly will not be loaded as a trained template. Instead the Bluestreak recognizer will attempt to create a Speaker Independent template for it.

Workaround: If adding trained words to the ModuleVocab.cs files they must start with a lowercase letter.

VOSMB-976

"GatewayTimeout" error message from Microservices

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.

Workaround: If you experience this behavior close and restart the app and log in again VOSMB-971

Changing Site on Device Does Not Affect VoiceConsole

If you have selected a VoiceConsole instance as the server on the mobile device and select one of the sites, the device will remain associated with that site even if you change sites again in the mobile application. To move a device to a different VoiceConsole site, move the device within VoiceConsole.

VOSMB-900

Shut Down Application if Not Responsive

If you are using the mobile app with a VoiceLink implementation, the app may try multiple times to send data to VoiceLink when it should not. This can cause VoiceLink performance issues. If while using the app, it becomes unresponsive except for a spinner indicating background processing, shut down the app and restart it to prevent the app from trying to send data multiple times.

VOSMB-641

Do Not Press Next Button Quickly

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.

VOSMB-230

Restart After Changing Recognizer

If you switch between BlueStreak and the Android recognizer, restart the application. Otherwise, the application may exhibit some odd behavior.

VOSMB-103

Audio to the Bluetooth Headset Can Fail

In some situations, the audio no longer comes through a Bluetooth headset even though it is still paired to the device.

Workaround: Unpair and re-pair the headset.

VOSMB-28

Errors while Transmitting Files to VoiceConsole

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.

VOSMB-570

Cannot Retrieve Templates

If you create a user with the name of the point character (.) in the Microservices application scheme, any templates trained under that name will not be retrieved. Do not use . as a user name.

VOSMB-567

Number of Templates Trained Greater than Expected

If you place a device in Standby mode while training templates, as you near the end of training, the total number of templates trained will be greater than the number to be trained. For example, the text on the screen may show 126 of 125.

Workaround: Do not put the device in Standby mode while training templates.

VOSMB-563

DevKit Limitations

State Machine Recommendation

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 will become unresponsive when returning from the secondary state machine and the second state will never run.

VOSMB-465

Do Not Remove Device when in Debug

When a device is attached via USB to a computer and the application is run through Visual Studio in debug mode, do not remove the device from the dock. If you do, the application may shut down.

VOSMB-572

Welcome Screen Cannot be Branded

With this release, you are unable to change the Honeywell-branded welcome screen.

VOSMB-527