Honeywell

Honeywell Development Kit 1.3.1 Release Notes

8/19/2020

Verifying Download Files

The release files for Honeywell Development Kit (DevKit) 1.3.1and VoiceExtensions 1.2 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-1.3.1-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

Pick Up & Go Speech Recognition

Pick Up & Go (PnG) speech recognition has been added as an alternative to BlueStreak speech recognition.

- BlueStreak speech recognition: Users must train templates.
- Pick Up & Go speech recognition: Users do not have to and cannot train templates. If a user has trouble using Pick Up & Go, the user should use BlueStreak instead. When Pick Up & Go is being used, the retrain option is not present.

The following languages are supported for the Pick Up & Go recognizer.

Language Identifier	Description	Language Identifier	Description
ar-SA	Arabic (Gulf)	hu-HU	Hungarian (Hungary)
bg-BG	Bulgarian (Bulgaria)	id-ID	Indonesian (Indonesia)
cs-CZ	Czech (Czechia)	it-IT	Italian (Italy)
da-DK	Danish (Denmark)	ja-JP	Japanese (Japan)
de-DE	German (Germany)	ko-KR	Korean (Korea)
el-GR	Greek (Greece)	nl-NL	Dutch (Netherlands)
en-AU	English (Australia)	nn-NO	Norwegian (Norway)
en-GB	English (United Kingdom)	pl-PL	Polish (Poland)
en-IN	English (India)	pt-BR	Portuguese (Brazil)
en-US	English (United States)	pt-PT	Portuguese (Portugal)
es-ES	Spanish (Spain)	ru-RU	Russian (Russia)
es-MX	Spanish (Mexico)	sv-SE	Swedish (Sweden)
fa-IR	Persian (Iran)	th-TH	Thai (Thailand)
fi-FI	Finnish (Finland)	tr-TR	Turkish (Turkey)
fr-CA	French (Canada)	zh-CN	Chinese (China, Mandarin)
fr-FR	French (France)	zh-HK	Chinese (Hong Kong, Cantonese)
he-IL	Hebrew (Israel)	zh-SI	Chinese (Sichuan Province of China)

Simplified Pattern

A new pattern can be followed when creating a workflow that makes creation and configuration of the state machine much simpler. There is a new Simplified Module included that is an example of how to use this pattern.

Language Selection within Application

This release provides an easier way to switch languages within the Guided Work Solutions application by simply navigating to the "Language" settings within the flyout menu and selecting a language from the list.

- Languages that are supported for Pick Up & Go display the option to select Pick Up & Go or Default Bluestreak Recognizer on language selection.

This release also provides a simpler way to add a language to the Language menu by adding the Locale Code to the list in the LanguageAvailabilityService.cs file.

Automatic Operator settings

It is now easier to manage operator settings. All that is required of the workflow is to set the current operator when sign in is complete and clear the operator when signing off.

There are examples for using this feature in LApp (LAppStateMachine.cs) and BasePicking (BasePick-ingStateMachine.cs)

Support for VoiceConsole Report Problem

VoiceConsole's Report Problem feature is supported when Guided Work Solutions is connected to a VoiceConsole instance. VoiceConsole must be version 5.2 or greater.

Support for Enterprise Voice Operator Settings

Operator settings can now be stored and retrieved from Enterprise Voice when Microservices is selected as the application scheme.

Noise Sample Intent

A new intent is added to allow the workflow to initiate a noise sample without user intervention.

Prompt Only Intent

A new intent is added to prompt the user with a message. The workflow continues after the message.

Support for Android 9

Support has been added for voice recognition when the application is in the background in Android 9.

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:** 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 were tested for this release.

Devices

- Honeywell Dolphin CT40
- Honeywell Dolphin CT50
- Honeywell Dolphin CT60
- Honeywell Dolphin CN80
- Honeywell Dolphin CN80G
- Honeywell CK65
- Honeywell ScanPal EDA51
- Honeywell ScanPal EDA71
- Honeywell A700x

Demo level support:

- Zebra WT6000
- Zebra TC51

Headsets

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

Scanners

- Honeywell CT40 On-board Scanner
- Honeywell CT50 On-board Scanner
- Honeywell CT60 On-board Scanner
- Honeywell EDA51 On-board Scanner
- Honeywell EDA71 On-board Scanner
- Demo level for the Honeywell 8670 ring scanner

Demo level support:

- Honeywell 8670 Ring Scanner

Android Device Operating System Support

- Android M (6.0.1)
  - Honeywell Dolphin CT50
- Android N (7.1.1)
  - Honeywell Dolphin CT40
  - Honeywell Dolphin CT60
- Android O (8.1.0)
  - Honeywell Dolphin CT40
  - Honeywell Dolphin CT60
  - Honeywell Dolphin CK65
  - Honeywell ScanPal EDA51
  - Honeywell ScanPal EDA71
- Android P (9)
  - Honeywell Dolphin CT40
  - Honeywell Dolphin CT60
  - Honeywell CK65

Honeywell A700x Software Support

- VoiceCatalyst 4.2 or greater

NOTE
Honeywell A700 series and A500 devices are not supported.

Issues Fixed and Included in This Release

The following issues reported in version 1.3 were fixed in this version.

Issue Description	Issue ID
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
Problem Reports Do Not Upload if Honeywell Logging Enabled If Honeywell logging is enabled for additional logging, problem reports do not upoad to Microservices.	VOSMB-1285
Restart After Changing Recognizer If you switch between BlueStreak and the Android recognizer, restart the application.	VOSMB-103

Issue Description	Issue ID

Otherwise, the application may exhibit some odd behavior.

General Considerations and Limitations

Mobile Application Limitations

Issue Description	Issue ID
Alpha Characters in Response Expression Hints Using alpha characters in response expression hints can cause issues with the dialogue.	VOSMB-1966

Headset Limitations

Issue Description	Issue ID
Flip-to-Mute Does Not Function As Expected The Flip-to-Mute feature of the SRX3 headset functions as Flip-to-Standby. The application displays the standby screen and recognition may still occur even though the mute icon is displayed.	VOSMB-1936

Application Concerns

Add Pick Up & Go NuGets

To add Pick Up & Go languages you must add the NuGet using Visual Studio. Refer to the DevKit help for the procedure.

After adding the desired languages for Pick Up & Go, add the language to the LanguageAvailabilityServices.cs file. Use the language-LOCAL format when adding languages (i.e., en-US for United States English).

NoiseSampleActivity Intent

This feature activates a noise sample via an intent There are no operator preparation activities required, such as downloading templates. If trying to use this intent with a workflow that was created with an earlier version of devkit a new activity will have to be added to the workflows wfa.json file:

```
  {
    "WfaReferenceName": "NoiseSampleCompositeWorkflowActivityWithReturnActivity",
    "Name": "{WorkflowName}ReturnFromOperPrep",
    "Actions": [
      {
        "Type": "PushReplaceNavigation",
        "Params": {
          "Destination": "{WorkflowName}ProcessingWorkflowReturnFromOperPrepActivity"
        }
      }
    ]
  }
```

ConfigCategoryName Property

The ConfigCategoryName property from the ConfigRepository class has changed from protected to public. This property has also been added to the IConfigRepository interface. You will need to adjust any ConfigRepository classes in your app accordingly.

.NET Framerwork No Longer Supported

The Honeywell.GuidedWork NuGet no longer supports .NET Framework. This was primarily available for unit test projects targeting .NET Framework. If you add unit tests that need symbols from that NuGet, use .NET Core as the unit test project type instead. A side-effect of this change is that DevKit no longer requires .NET Framework (4.6.2) to be installed. The .NET Core requirement for A700x is the only requirement for any non-Xamarin framework.

Config Repositories

Some changes have been made in the way that config repositories are registered. You will need to make these changes to workflow module code. Using LAppModule as an example:

Change the line that registers the config repository:

```
Context.Container.Register<ILAppConfigRepository, LAppConfigRepository>();
```

to:

```
RegisterConfigRepository<ILAppConfigRepository, LAppConfigRepository>();
```

Change the line that registers the workflow model singleton:

```
RegisterWorkflowModelSingleton<ILAppModel, LAppModel>(Context.Container, nameof(LAp-
pModel));
```

to:

```
RegisterWorkflowModelSingleton<ILAppModel, LAppModel>();
```

You can then remove the lines that explicitly registered with the ConfigurationDataService in LAppModel.cs:

```
ConfigurationDataService.RegisterRepository<ILAppConfigRepository>("LAppConfig");
```

If you don't make the changes for your workflows, entries in your OnetimeStartupSettings.config file will not be applied and you will see messages in your log files like: [WARN] ConfigurationDataService - [1] Repository LAppConfig not registered, configurations were not applied

WorkflowObject.MenuItemsProperties.AllowBy Key

`WorkflowObject.MenuItemsProperties.AllowByKey` has been changed to `WorkflowObject.MenuItemsProperties.SelectionMethod` which is an enum of 3 different selection types.

- **IndexOnly** allows a user to speak the index or name of an item.
- **OptionsOnly** reads through the list and the user can respond "yes" or "no" to each item.
- **Both** allows the user to speak the index or the name or speak the options command to have the list read one by one.

Previously Reported Limitations

Issue Description	Issue ID
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
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
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 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

Issue Description	Issue ID
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
"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
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
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	VOSMB-563

Issue Description	Issue ID

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.

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