



# IOS 17 VOICE CONTROL – A LEAP FORWARD

Presented by Harris Rosensweig, Director AT Services  
2024 CSUN Assistive Technology Conference  
March 22, 2024

# Session Objectives

- Describe the various disabilities Voice Control can be used for
- Understand how to use Voice Control to interact with apps, activate accessibility features, create macros and perform text-based tasks including dictation, correction, navigation and formatting
- Understand how to create custom voice commands
- Understand how to import custom vocabulary



# Persons Who Can Benefit from Voice Control

- Anyone who cannot readily use the keyboard, mouse or gestures to control an Apple device. This often includes persons with motor challenges.
- Persons who are dyslexic
- Persons who find dictating their thoughts or controlling interactions with screen elements via voice to facilitate their access to a computer

# General Characteristics of Robust Speech Recognition Technology

- Ability to dictate without pause into any text area with a high degree of accuracy
- Ability to correct recognition mistakes to lessen their likelihood in future dictations
- Ability to perform “command and control” to interact with all accessible objects on screen as if the user had full control of a mouse or finger gestures
- Ability to train existing vocabulary that is being misrecognized and add new vocabulary
- Ability to create custom voice commands to tailor the program to meet their unique needs

# Dragon NaturallySpeaking and Voice Control Comparison – 1 of 2

## ■ Dragon NatSpeak 16

- *Supported in Windows 10, 11*
- *Speaker dependent*
- *Supports English, French and Spanish*
- *Supports continuous speech recognition*
- *Supports correction of misrecognitions*

## ■ Voice Control iOS 17.4

- *Supported in iOS, iPadOS, MacOS*
- *Speaker independent*
- *Supports 8-9 languages*
- *Supports continuous speech recognition*
- *Supports correction of misrecognitions*

# Dragon NaturallySpeaking and Voice Control Comparison – 2 of 2

## ■ Dragon NatSpeak 16

- *Supports command and control functions*
- *Supports training existing vocabulary that is being misrecognized and addition of new vocabulary*
- *Supports creation of custom commands via scripting language*

## ■ Voice Control iOS 17.4

- *Supports command and control functions*
- *Ability to import vocabulary from an exported vocabulary file from another Voice Control user. No ability to train to user's voice*
- *Supports creation of custom commands facilitated by recording voice commands and gestures and via Shortcuts in Shortcuts app*

# Apple's Dictation Environment

- Siri – combination of speech recognition and artificial intelligence
- Dictation via microphone app in most apps with text fields
- Voice Control (Allows for creating custom commands tied to Shortcuts in Shortcuts app)

# Voice Control Configuration

- Located in Settings\Accessibility\Voice Control
- Voice Control Guide tutorial
- 8+ languages and language variations
- 11 different sets of voice control commands  
(navigation, gestures, dictation, editing, device, accessibility)



# Voice Control Configuration

- Adding Vocabulary (single entry and importing other persons' vocabulary lists)
- Command Feedback
  - *Show Confirmation (default)*
  - *Show Hints (default)*
- Overlays (continuous or on-demand)
- Attention Aware (Wakes Voice Control when gaze detected)

# Core Voice Control Commands

- Wake Up/Go to Sleep OR
  - *Start Listening/Stop Listening*
- Go Home (go to Home screen)
- Two finger swipe left (moves to next Home screen)
- Go Back (moves to prior screen by activating the ‘<’ in app)
- Open App Switcher
  - *Pan Right/Left to move to next/previous app*
  - *Swipe up to close app in focus*

# Core Voice Control Commands

- Open 'App name' e.g. Open 'Notes'
- Overlays
  - *Show/Hide Names – Tap 'Name'*
  - *Show/Hide Numbers – Tap '5' OR '5'*
  - *Show/Hide Grid – 5, 6, Tap 5*

# Core Voice Control Commands

- Text Editing
  - *Insert Before/After 'word'*
  - *Move Right Three*
  - *Move Left Two Words*
  - *Move Down Two Paragraphs*
- Text Deletion
  - *Delete Paragraph*
  - *Delete Next Two Words*
  - *Delete Line*

# Core Voice Control Commands

- Text Formatting
  - ‘*Replace Lunch with Dinner*’
  - ‘*Select All*’
  - ‘*Select Pizza Party*’
    - Bold that
    - Italicize that
    - Underline that
    - Capitalize that
    - Undo that

# Creating Custom Commands – 1 of 2

- Commands\Custom\Create New Command
  - *Enter a speakable phrase (name of the command)*
  - *Action*
    - Insert Text (used for boilerplated text)
    - Run Custom Gesture (tap or swipe to create)
    - Run Shortcut (from Shortcuts app)

# Creating Custom Commands – 2 of 2

- Playback Recorded Commands (iOS and iPadOS only)
  - *Rehearse actions you want to record and starting in first app*
  - *Say “Start Recording Commands”*
  - *Perform all actions*
  - *Say “Stop Recording Commands”*

# Adding Vocabulary – Single Entry

- Voice Control\Vocabulary\Entries
  - *Tap ‘+’*
  - *Type in the entry*
  - *Test the new entry*
  - *Note: there is no way to train your voice to it as you can in Dragon*



# Importing Vocabulary

- Voice Control\Vocabulary
  - *Import Vocabulary*
  - *Choose file containing exported Voice Control vocabulary from another Apple user*

# Voice Control Resources

- **Use Voice Control on your iPhone, iPad, or iPod touch**
  - <https://support.apple.com/en-us/111778#:~:text=To%20turn%20Voice%20Control%20on,%2C%20turn%20on%20Voice%20Control.%22>
- **Use Voice Control to interact with iPhone**
  - <https://support.apple.com/guide/iphone/use-voice-control-iph2c21a3c88/ios>
- **How to customize Voice Control commands on your iPhone, iPad, and iPod touch**
  - <https://support.apple.com/en-us/118275>
- **Create a custom shortcut on iPhone or iPad**
  - <https://support.apple.com/guide/shortcuts/create-a-custom-shortcut-apd84c576f8c/ios#:~:text=to%20test%20it.-,Create%20a%20new%20shortcut,Tap%20Add%20Action.>



# Voice Control Resources

- **How to customize Voice Control commands on your iPhone, iPad, and iPod touch**

- <https://support.apple.com/en-us/118275>

- **Create a custom shortcut on iPhone or iPad**

- <https://support.apple.com/guide/shortcuts/create-a-custom-shortcut-apd84c576f8c/ios#:~:text=to%20test%20it.-,Create%20a%20new%20shortcut,Tap%20Add%20Action.>

- **Use variables in Shortcuts on iPhone or iPad**

- <https://support.apple.com/guide/shortcuts/use-variables-apdd02c2780c/ios#:~:text=Add%20a%20manual%20variable%20to,name%20for%20your%20manual%20variable.>



# TCS Access Workshops

- Workshops in person or remote
- One- and two-day document accessibility workshops (Word, Excel, PowerPoint, PDF)
- One day accessibility workshop for developers of desktop/web applications
- One day accessibility workshop for app developers (mobile environment)



# TCS Access Services

- Full-service accessibility solutions company promoting equal access for all:
  - *Reasonable accommodation services consulting*
  - *Digital accessibility and usability consulting (web accessibility, document remediation)*
  - *Needs assessments at the individual or organizational level*
  - *AT product procurement, delivery, installation and configuration*
  - *One-on-one and group training*
  - *Post-training support*
  - *Workplace personal assistants*



# Questions?



# Contact Info

- To receive PowerPoint and resource materials, please email:
  - [Harris@TCSAccess.com](mailto:Harris@TCSAccess.com)
- Access various webinars on accessibility on our YouTube site:
  - [TCS Access YouTube Channel](#)



Harris Rosensweig  
Director AT Services