A **Speaker** is a collection of settings that control the behavior of the text-to-speech engine, including language and dialect, voice characteristics, speaking style, and user dictionaries.

This box displays the current speaker. All of the properties of this speaker are contained in the tabs below. To choose a new speaker from a set of stored speakers, select one from the drop-down list.

Use the controls on the  $\ensuremath{\textbf{Voice}}$  tab to change the sound of the current speaker's voice.

The **current voice** is a set of characteristics that affect how the current speaker sounds. A voice is just one property of a speaker.

This is the label for the current voice. To choose a different voice from a set of stored voices, use this drop-down list.

If you change any of the voice characteristics, such as Speed or Head size, the phrase "(modified)" will be appended to the voice label.

Click **Describe As** to view or modify the voice's age and gender classifiers. Once a voice is created, it is classified as belonging to a particular age group and gender.

Click **Store** to save your changes to the current speaker's voice. The Edit Stored Voices window will appear containing your settings.

Click **Undo Changes** to revert back to the settings that existed the last time you opened this window or selected **Store** or **Apply**.

Click **Edit Stored Voices** to access the library of stored voices. Changes you make in the Edit Stored Voices dialog will not have any effect on the current speaker, unless you happen to be changing the voice of the current speaker.

Male and female vocal tracts have physical differences that affect the voice. The **vocal tract setting** reflects some of these physical differences. Other differences between male and female voices, namely pitch and head size, are controlled independently.

The **Speed** controls the overall speaking rate of the voice, measured in words per minute.

The **Pitch** controls the pitch baseline of the voice, measured in Hertz. The actual pitch of the voice will rise above and fall below this baseline, unless you set pitch fluctuation to zero, creating a monotone voice.

The **Volume** controls the volume of the voice, measured in a linear range from zero (absolute silence) to 65535 (maximum volume).

The **Head size** affects the resonance characteristics of the voice, with larger heads producing the perception of a deeper voice. The head size is independent of the pitch and vocal tract type (male or female).

The **Pitch fluctuation** controls how much the pitch varies from the pitch baseline that was set with the **Pitch** control. A setting of zero creates a monotone.

The **Roughness** controls how rough or smooth the voice is. A rough voice tends to be "creaky."

The **Breathiness** controls how breathy the voice is, where a setting of 100 creates a whisper.

The **Features** tab contains controls that you can use set the current speaker's language, dialect, and style of speaking. This tab also contains tag processing and audio options.

**Native language and dialect** shows the native language and dialect of the current speaker. To change the current speaker's language, choose one of the available languages from the drop-down list.

**Interpret input text as** displays the language of the text being read. To change the text input language, choose one of the available languages from the drop-down list. When this entry is different from the native language, the speech will have a foreign accent.

**Style** displays the current speaker's style of talking: Normal, Whisper, or Monotone. To change the current speaker's style, choose one from the drop-down list.

The **Tag processing** controls affect the interpretation of tags for the current speaker.

Tags are special codes which you can insert into the input text to control the way the ViaVoice Outloud engine behaves. With these tags you can affect voice characteristics, word emphasis, intonation, and much more. For example:

\Acc=3\ marks the words that follows with emphasis level three.

**Spd=220**\ changes the voice speed to 220 words per minute.

\**Phf=LargeFall**\ creates "closure" intonation, as found at the end of a paragraph.

Some tags are part of the Microsoft Speech Application Programmer's Interface (SAPI). ViaVoice Outloud Tags are ViaVoice extensions to the SAPI tags.

**ViaVoice Outloud tags,** such as Hsz=n for head size, are extensions to the Microsoft SAPI tags.

 $\label{eq:click linearized} Click \ \mbox{Interpret} \ \mbox{to cause ViaVoice Outloud tags to be recognized.} For example, if "Interpret" is selected, the ViaVoice Outloud tag \Acc=3\ will produce a level three emphasis on the word that follows the tag. \\$ 

Click **Treat as unknown tags** to cause ViaVoice Outloud tags to be treated as "unknown." How "unknown" tags are processed depends on the **Unknown tags** setting.

**Unknown tags** are tags that aren't supported by Microsoft SAPI or ViaVoice Outloud. ViaVoice Outloud tags will also be treated as "unknown" if "**Treat as unknown tags**" is selected.

Click **Ignore** to cause all unknown tags to be ignored. When ignored, tags are neither interpreted nor spoken.

Click **Speak** to cause all unknown tags to be spoken, that is, read out loud. For example, the unknown tag Gab=x would be heard as "backslash gee ey bee equals eks backslash."

Audio controls the sampling rate associated with the current speaker.

Click **PC (11.025 kHz)** to optimize the speaker's sampling rate for the computer.

Click **Phone (8 kHz)** to optimize the speaker's sampling rate for the telephone.

The **Dictionaries** tab contains controls used to edit user dictionaries or to associate dictionaries with the current speaker.

**Dictionary Type** lists the three dictionary types associated with every speaker, a Roots dictionary, a Special Words dictionary, and an Abbreviations dictionary. To add or change a term in one of these dictionaries, choose one of the available dictionaries from the drop-down list and then click **Edit**.

Click **Edit** to add to or change a term in the dictionary identified in the Dictionary type box.

Use the **Identifiers** tab to view the identifiers for the current speaker. The identifiers are used by software developers.

**Description** contains the SAPI Mode name for the current speaker. To change this identifier, click **Save Speaker As** to create a new speaker.

 $\ensuremath{\textbf{GUID}}$  contains the identifier for the current speaker.

**SAPI** stands for Speech Application Programmer's Interface, an interface developed by the Microsoft Corporation.

 $\dot{\mathbf{Mode}}$ , which SAPI developers are familiar with, is synonymous with the term "speaker."

Click **Save Speaker** to save the speaker settings from all the tabs (Voice, Features, Dictionaries, Identifiers). This button is only enabled when the selected speaker is a user-defined speaker. To save the settings for a predefined speaker, you must use the **Save Speaker As** button.

Click **Save Speaker As** to save the current speaker settings under a new name.

Click **Delete Speaker** to eliminate the currently selected speaker. This button is only enabled for user-defined speakers. You cannot delete a predefined speaker.

Speaker is used to enter a name for your new speaker.

**Description** is used to enter a description for the new speaker you are creating. For example: Adult Female-Monotone or

Whispering Child

**GUID** displays an ID number that the program generates to identify the new speaker. This information is provided for software developers.

Click **Show Test Panel** to change the default test phrase or to compare the current speaker's voice with another voice of your choosing.

Click Hide Test Panel to hide the Test and Compare features. The Test button will remain.

Click **Test** to hear how the current speaker sounds using the settings on the Voices and Features tabs.

Click Hide Test Panel to hide the Test and Compare features. The Test button will remain.

Test phrase contains the phrase that will be spoken when you click the Test button.

Click **Compare** to hear how the comparison voice sounds.

**Comparison voice** displays the voice that will speak when you click the **Compare** button. To choose a new comparison voice, select one from the drop-down list.

Click **Help** to get additional help for this window.

Click **OK** to close this window.

Click this button to close this window.

Click **Apply** to save the changes you made without closing the window.

Click **Save** to save the changes you made. This button is enabled for user-defined voices only.

Click **Save As** to save this voice under a new name.

Click **Undo Changes** to revert back to the saved settings. **Undo Changes** cannot undo a change once it has been saved.

Click **Delete** to eliminate the current user-defined voice from the list of stored voices. You cannot delete a voice that is being used by one or more speakers.

**Voice label** provides a label for the collection of voice characteristics. You must provide a label in order to save a voice.

**Voice label** is used to enter a label for your voice. For example: American English Breathy Grandma or

American English Fast-talking Grandpa

**Gender** is used to describe the gender (male, female, neutral) of the voice. This setting is only a description; it has no effect on the voice itself.

Click **Male** to describe the voice as male.

Click **Female** to describe the voice as female.

Click **Neutral** to describe the voice as neither distinctly male nor distinctly female.

**Age** is used to describe the age of the voice. This setting is only a description; it has no effect on the voice itself.

Click on an age description for the voice. This setting is only a description; it has no effect on the voice itself.

Click **OK** to close this window.

 $\mbox{Click } \textbf{Cancel}$  to close this window without saving the changes.

Click **Help** to get additional help for this window.