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PlainTalk: No Custom Voices, An Explanation & Description (1/96)

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TOPIC ---

Did you ever wonder how to make your Macintosh speak what you have typed? The
technology does exist. This article answers some commonly asked questions about
PlainTalk and Text to Speech technology.

DISCUSSION --

Question: Can I record a voice or create a new voice for Text to Speech? If yes,
can I speak into the microphone to record this voice?

Answer: It is not possible for users to create PlainTalk voices by speaking into
the microphone and recording their own speech. Creating PlainTalk voices is
considerably more complex than that.

Question: In how many different voices can the Text-to-Speech/PlainTalk software
speak?

Answer: The number of different voices available depends on the number of voices
installed in the Voices folder, which is stored in the Extensions folder of your
System Folder. Any application that has Text-to-Speech capabilities, such as
SimpleText, can speak in any of the different voices in this folder.

Question: How does Text to Speech work?

Answer: Applications initiate speech generation by sending a set of words to the
Speech Manager. The Speech Manager is responsible for sending the text to a
speech synthesizer, the piece of software that manages all of the communication
between the Speech Manager and the Sound Manager.

This synthesizer is like a speech engine. It uses built-in dictionaries and

pronunciation rules to help determine how to pronounce text. The speech synthesizer uses these rules and the available PlainTalk voices to convert typed text into different kinds of sound, with different tonal qualities, to produce speech.

Synthesizers have different rules, depending on the quality of the voices that are available. Users who have more RAM and processing power may choose a higher-quality voice, which may use a higher-quality synthesizer. A higher-quality synthesizer spends more time analyzing the original text, to try and produce sound that we more easily recognize as regular speech.

Question: How many words does the Text to Speech/PlainTalk dictionary know?

Answer: Because synthesizers use a combination of pronunciation rules and dictionaries, there is not necessarily a limit to the number of words that it can pronounce. The pronunciation rules are used to speak many of the words that are sent to the synthesizer.

The speech technology is not limited to a certain number of words the dictionary "knows". The dictionary mainly handles exceptions to the rules. For example, the dictionary is probably used to store the pronunciations for the abbreviation "St.". Depending on the context, PlainTalk pronounces this as "Saint" or "Street". Likewise, "Dr." could be pronounced "Doctor" or "Drive". Other exceptions, like the difference between pronouncing the vowel sounds in the words "height" and "weight" are included here as well.

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