WebSphere® Voice Response for AIX®

Audio data collection using debugrec

This presentation will describe the new debugrec tool that is now available and how it can be used for problem determination tasks in WebSphere Voice Response.

Goals

- Give an overview of the debugrec tool

- Describe the input parameters

- Review the output file

- Summary

The goal of this presentation is to give you an overview of the debugrec tool and how it can be used for problem determination analysis. It will also provide a description of the input parameters required and how to review the output data that is created.

debugrec.ppt

Overview of debugrec

- Audio capture tool used by WebSphere Voice Response for AIX

- Alternative to the existing debugmon tool

- Works on all WebSphere Voice Response adapter types including DTNA

- Records outbound audio on left channel and inbound audio on right channel

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The debugrec tool is an audio capture tool that is used to record a part or the whole of a single telephone call. As its name implies its purpose is intended to be a debugging tool in determining whether WebSphere Voice Response has a problem in receiving or playing audio data when interacting with a caller. It will typically be run at the same time as a WebSphere Voice Response system trace is also running.

It is an alternative tool to the similar debugmon tool but takes fewer parameters. This makes it less confusing for users when trying to capture audio data for problem determination analysis.

It is designed to work with all currently supported DTXA and DTTA voice hardware adapters, and with the DTNA software only adapter.

One of the changes in debugrec compared to debugmon is that the inbound and outbound channels are now recorded as separate right and left channels in a single audio file. Previously they were recorded as separate files which made analysis slightly more difficult.

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Input parameters

- Usage: debugrec trunk_number channel_number <options>

- Options:
  - ▸ -a = debugmon adapter record (option 8/9) compatibility
  - ▸ -v = debugmon voice record (option v) compatibility
  - ▸ -t = additional debug trace output
  - ▸ -h = help (this output)

- Example:
  - ▸ debugrec 2 15

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In order to use the debugrec tool you will need to log onto the WebSphere Voice Response system as the dtuser id. In its simplest and easiest form debugrec only requires two numbers, the trunk number and the channel number for the telephone call that you want to capture.

The trunk number is in the range 1-16. The channel number is in the range 1-24 or 1-30 depending on whether the trunk is a T1 or an E1 trunk.

For example to record a call on the second trunk and the fifteenth channel, run the command: debugrec 2 15

The –a and –v options allow compatibility with the older debugmon tool and provides alternative ways to record the voice data.

The –t option lists additional adapter and device driver information before the recording is made.

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# Reviewing the data

- Output directory is saved in/tmp

- Output file names dependant on input options
  vrec_line_stereo.wav

- Can be played using commonly available programs
  such as Audacity

- May contain customer confidential information

Once the debugrec tool has been terminated a file is created by default in the /tmp directory. The output file names are dependant on whether –a, -v or no option is provided. If no option is provided as in the example before then the file name is vrec_line_stereo.wav. There are no options to change the destination directory or the file names. Typically the audio file is sent to the WebSphere Voice Response for AIX Level 2 Support team for further analysis. But as this is a standard wav file there is no encryption of the data and you can use any audio analysis tools such as Audacity to review the data as well. You should be aware that this tool can record sensitive customer information such as account numbers or passwords so care should be taken when trying to capture data for IBM to review.

Using Audacity
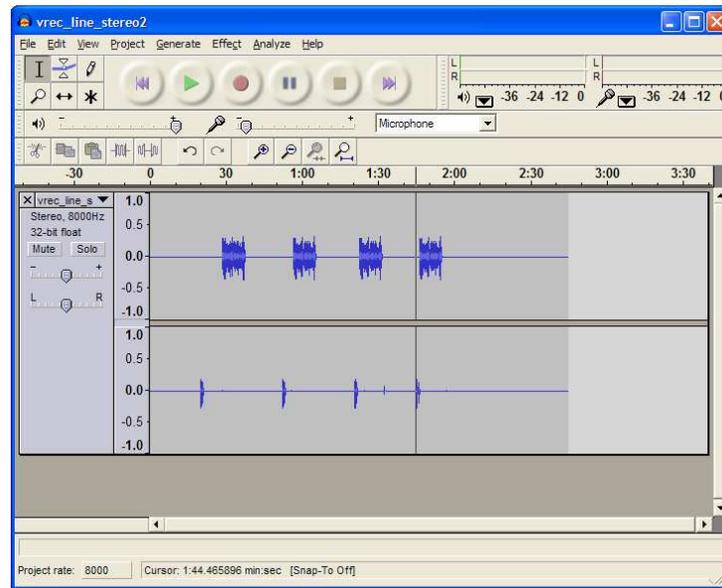
This Audacity screen shows a typical example of a recording made using debugrec. The upper audio waveform is the left channel and contains the audio data played by a WebSphere Voice Response voice prompt. The lower audio waveform is the right channel and contains the audio as spoken by the caller. Note that it is not just spoken data that is captured. DTMF tones can also be captured and verified to ensure they are within specification.

Summary

- debugrec is an alternative for debugmon

- Simple command line interface

- Used to determine if an audio problem is caused by WebSphere Voice Response or an external influence

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In summary, debugrec is an alternative tool for the older debugmon tool. debugmon still exists but the recommendation is to use debugrec instead.

It has a simple command line interface which will eliminate mistakes in collecting the audio data. With debugmon, the multitude of parameters proved confusing.

It's main use is to determine whether the problem a caller is experiencing is caused by WebSphere Voice Response not playing a voice prompt correctly or if the problem lies outside of the system such as at the telephone switch.

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