

VOICEGENIE

Preventative Maintenance for the VoiceGenie Platform

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Revision History

Version	Date	Change Summary	Author/Editor
1.0	March 13, 2003	Initial release	Rob Marchand
1.1	March 14, 2003	Added Red Hat 7.2 Information	Rob Marchand
1.2	June 22, 2003	Added VoIP Information	Rob Marchand
1.3	July 03, 2003	Minor corrections	Rob Marchand

Introduction

There are a number of performance and stability related recommendations that are relevant when deploying the VoiceGenie platform in various configurations. This document provides a summary of these recommendations.

This document applies to VoiceGenie software running on approved hardware, with the Red Hat Linux 7.2 (or later) operating system, in PSTN (Dialogic) and VoIP configurations. For Periodic Maintenance recommendations for earlier releases (particularly those based on Red Hat Linux 6.2), contact VoiceGenie Customer Support (support@voicegenie.com).

Dialogic Configurations

These recommendations apply to those systems running with Dialogic SR5.1 under Red Hat Linux 7.2, and VoiceGenie releases later than 5.8. Failure to follow these recommendations may lead to performance or stability issues.

- **Ensure that the relevant Dialogic driver patches have been installed.**
Contact VoiceGenie support (support@voicegenie.com) for information regarding which patches you require for your particular release. Please ensure that you include the output of the 'vginfo_linux.sh' command with your request. These patches correct a number of driver issues with ISDN and robbed bit configurations.
- **Turn all VoiceGenie tracing off**
VoiceGenie tracing is only intended to be used to resolve platform issues when so instructed by VoiceGenie technical support. Disabling of tracing will reduce the overall load on the system and the system will be less likely to experience problems.
- **Ensure the "savetmpfiles" property is turned off when not needed for debugging purposes.**
This property saves all intermediate files related to VoiceXML page processing, and can provide useful information for debugging of a complex application. Note this property can be set in any location in an application. To ensure this is turned off, please check the defaults.vxml file, the application root document, as well as each page in the application. If you are using savetmpfiles, be sure to periodically purge the /usr/local/phoneweb/tmp directory.
- **Use -o 10 to start up the call manager**
This option sets the timeout value for polling the VoiceGenie event queue. As in the same thread we poll for both VoiceGenie and Dialogic events, reducing the VoiceGenie event queue polling timeout gives more time for the thread to process the Dialogic events and reduces the chances of any potential Dialogic Buffer Overflow problems (which could eventually result in a kernel crash). We cannot reduce this, to a value lower than 10 - any further as this seems to be a linux thread implementation limitation. You can add this option in the /usr/local/phoneweb/config/CMGR file.
- **Turn off redundant logging of audio sent to an ASR engine.**
It is often possible (depending upon the ASR engine) to capture utterances at more than one place in the system. For example, in the BBN ASR engine, both the VoiceGenie ASR client, and the Hark ASR client component can capture utterances. To turn off utterance captures, set the "com.voicegenie.saveutterance" property to "false", or simply remove the property from your application. Engine specific logging is controlled by the "vgasrcalllog". This property allows

utterance files as well as some engine-specific event logs to be stored under the /usr/local/phoneweb/calllog directory. Note that the calllog directory contents must be periodically cleaned.

- **Enable syslog rotation**

If the syslog rotation is off, the messages file may become large. It then becomes more costly for the OS to seek to the end of the file and there is more load on the system.

Those using robbed bit configurations should be aware that 'stuck channels' may still occur with the Dialogic SR5.1 release (even when installed with currently available patches). Dialogic is working to resolve these issues prior to release of VoiceGenie 5.9.1.

Voice over IP (VoIP) Configurations

These recommendations apply to those systems running with Red Hat Linux 7.2 or Red Hat Advanced Server 2.1 configurations, and VoiceGenie releases later than 5.9.1. Failure to follow these recommendations may lead to performance or caller-perceived issues such as audio distortion.

- **Turn all VoiceGenie tracing off**

VoiceGenie tracing is only intended to be used to resolve platform issues when so instructed by VoiceGenie technical support. Disabling of tracing will reduce the overall load on the system and the system will be less likely to experience problems.

- **Ensure the "savetmpfiles" property is turned off when not needed for debugging purposes**

This property saves all intermediate files related to VoiceXML page processing, and can provide useful information for debugging of a complex application. Note this property can be set in any location in an application. To ensure this is turned off, please check the defaults.vxml file, the application root document, as well as each page in the application. If you are using savetmpfiles, be sure to periodically purge the /usr/local/phoneweb/tmp directory.

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- **Enable syslog rotation**

If the syslog rotation is off, the messages file may become large. It then becomes more costly for the OS to seek to the end of the file and there is more load on the system.

Summary

The VoiceGenie platform has been engineered for very high availability and uptimes. Adherence to these guidelines will aid in achieving this in production.