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# **Generations® L&H® ASR Option User's Guide**

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**Release 4.02.00 for SCO UNIX v5.0.2 and 5.0.4  
Release 4.03.00 for Digital UNIX 4.0B**

**Voicetek Corporation  
19 Alpha Road  
Chelmsford, MA 01824  
978-250-9393**

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Voicetek Corporation

19 Alpha Road

Chelmsford, MA 01824

USA Telephone 978-250-9393, Fax 978-250-9378

## **Generations L&H ASR Option User's Guide**

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# Preface

## Purpose of This Manual

This manual contains an overview of the Lernout & Hauspie Antares-based Automatic Speech Recognition (ASR) 1500 for UNIX option. The Generations L&H ASR option enables you to incorporate L&H automatic speech recognition into your Generations applications.

## Audience and Prerequisites

Users of this manual need to understand ASR technologies and terminology. Users should be familiar with the Generations Application Editor and application programming.

## Related Publications

For information about installing the Generations L&H ASR option with Generations TSP, consult the following Voicetek<sup>®</sup> manual:

- *Generations Installation Guide*

For additional information about the Generations telephony server platform, consult the following Voicetek<sup>®</sup> manuals:

- *Generations TSP Base Package Release Note*
- *Generations TSP Service Console Interface Reference Manual*

For additional information about Generations cells and application development, consult the following Voicetek® manuals:

*Generations RSP and Developer Release Note*

*Generations RSP and Developer System Administration Guide*

*Generations RSP and Developer Application Development Guide*

*Generations RSP and Developer Cell Catalog*

For additional information about L&H ASR, refer to the following L&H documents:

*Lextool Reference Guide*

*Software Release Notes, Antares L&H ASR 1500*

## Manual Structure

Chapter 1 presents an introduction to the Generations L&H ASR option.

Chapter 2 provides information about Generations L&H ASR option features.

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# Chapter 1 Introduction

## OVERVIEW

The Generations<sup>®</sup> L&H<sup>®</sup> ASR option integrates the Lernout & Hauspie Antares-based Automatic Speech Recognition (ASR) 1500 system to enable large vocabulary, phonetic, speaker-independent, and continuous speech recognition within Generations applications. The L&H ASR option integrates with the following Generations platforms:

- Generations TSP 4.02.00 and RSP 4.02.01 for SCO UNIX 3.2 v5.0.2 and 5.0.4
- Generations TSP and RSP 4.03.00 for Digital UNIX 4.0B.

## OPTION COMPONENT INFORMATION

The Generations L&H ASR option includes the following components

- Generations L&H ASR option, including:
  - L&H languages
  - Default L&H ASR vocabulary mapping file  
(**/usr/vrs/parms/asr/lh/vocabmap**) for single-digit recognition. The vocabmap file is created through the Service Console Interface (SCI) menu:  
**/sci/files/vocab/antares/editidmap**
  - Application-specific L&H recognition contexts (created and installed on the VRU by the application developer)
- Dialogic Antares UNIX Development Package SDK
- Antares L&H ASR 1500 for UNIX
- *Software Release Notes, Antares L&H ASR 1500*
- L&H Lexicon Toolkit used to generate the context/grammar file for the VRU system
- *Lextool Reference Guide*

<p><b>NOTE:</b> Make sure your Generations TSP license file contains sufficient Generation L&amp;H ASR licenses.</p>
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## Chapter 2      Generations L&H ASR Option Features

### OVERVIEW

The Generations L&H ASR option performs speech recognition on the Antares 2000 board. The context (or grammar) is downloaded to the Antares board prior to enabling audio data to the Antares board. The L&H ASR option also offers a Line Echo Canceller as an additional processing block, which enables voice barge-in ASR to be performed on the Antares board. Recognition results are returned to the VRU, and then passed to the Generations application server to be processed by the Generations application.

**NOTE:** The Generations L&H ASR option is included on the Generations CD-ROM and is installed using the Generations Installation program. For instructions about installing the option software, refer to the *Generations Installation Guide*.

### FEATURES

Features of the L&H ASR option include:

- Large vocabulary, phonetic, speaker-independent, continuous speech recognition

- Support for the following languages:
  - U.S. English
  - UK English
  - Italian
  - French
  - German
  - Dutch
  - Spanish
- Supports voice barge-in (cut-through)
- Supports echo cancellation
- Supports a total of 8 recognizers (2 for each DSP) on each Antares 2000 (50 MHz) board)

<b>NOTE:</b> Set recognizers for each DSP to 1 for large grammar files.
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- Capability to perform L&H ASR and L&H Text to Speech (TTS) on the same Antares board (Antares dongle is required)
- Does not support saving an utterance to a file
- Supports user-definable contexts (grammars)

## CREATING GRAMMAR FILES

For information about creating grammar files for use with the Generations L&H ASR option, refer to the *L&H Lextool Reference Guide*.

### Using the L&H Lexicon Toolkit, Release 4.11

This section contains information for users of the L&H Lexicon Toolkit, Release 4.11 (for Digital UNIX only). If you are importing and exporting an English grammar file, complete the following steps:

1. In the Context menu, click **Import**. The Import Context dialog box appears.
2. In the Language box, choose American English Release 2.1 and click **OK**.
3. In the Context menu, click **Export**. The Export Context dialog box appears.
4. In the Format box, choose Dialogic Antares Format and click **OK**.



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