

## Vestec Speech Engine for Asterisk

The best value around for enabling speech recognition with Asterisk!

## EXECUTIVE SUMMARY:

### A highly affordable and robust speech engine for most Asterisk applications

---

- Easily the best value around for enabling Speech Recognition with Asterisk
- Considerably lower price and maintenance fees than the leading competitive speech engine
- Same low price for any number of ports; no minimum licenses purchase requirement
- Higher speech recognition accuracy than the leading competitive speech engine
- 500 keywords maximum vocabulary size; sufficient for most speech applications
- Scalable client-server architecture; capable of handling several dozen ports
- Supports all major Asterisk releases and Linux distributions for both 32- and 64-bit architectures
- Currently available for American English; other European and Asian language models coming soon
- Simple installation and license activation mechanism

## PRICE COMPARISON:

Considerably lower cost than the competition

---

ENGINE PRICE	Vestec Standard Edition	Leading Competitor
Single Port	\$99	\$245
Annual Maintenance Fee	\$15	\$40
5-Port Pack	\$495	\$995

**NOTE:** The low price of “Speech Starter Kit” of the leading competitor must not be confused with the \$99 price for one port of **Vestec Standard Edition** speech engine. This is because the “Speech Starter Kit” provides only limited capabilities; full speech engine capabilities – comparable to Vestec Standard Edition – cost \$245 for a single port.

## ACCURACY COMPARISON:

Higher recognition accuracy than the competition

---

RECOGNITION ACCURACY	Vestec Standard Edition	Improvement over Leading Competitive Engine
Keywords – Native Speakers <sup>1</sup>	In the 90% range	+3.2%
Keywords – Non-Native Speakers <sup>1</sup>	In the 80% range	+3.0%
Digits – TTS Voice <sup>2</sup>	99%	+1.0%

**NOTE:** The above results are for un-tuned speech grammars using default engine settings. **Grammar tuning by the application developer typically results in improvement in recognition accuracy.**

1. Test based on human recordings of the 500 most commonly spoken English words, un-tuned grammar, and default engine settings.
2. Test based on text-to-speech engine recordings of digits, un-tuned grammar, and default engine settings.

## SCALABLE ARCHITECTURE:

Speech server can support up to several dozen ports

---

NUMBER OF PORTS	MEMORY USAGE (MB)	CPU USAGE (%)
1	54.6	1.74%
2	100.8	3.45%
4	193.2	6.45%
8	378.0	13.11%

**NOTE:** The above results were obtained using: (a) Intel Pentium D 2.80GHz CPU, (b) 1GB RAM, (c) Debian 5.0 OS, and (d) default engine settings. **Memory and CPU usage statistics are machine dependent.**

# BROAD ASTERISK & LINUX SUPPORT:

Available for major Asterisk releases and Linux distributions

---

## **ASTERISK RELEASES**

- Asterisk Release 1.4 and 1.6

## **LINUX DISTRIBUTIONS**

- RedHat Enterprise Linux 4.x and 5.x (32 and 64 bit)
- CentOS Linux 4.x and 5.x (32 and 64 bit)
- Ubuntu Linux Server 8.04 LTS (32 and 64 bit)
- Debian "stable" 5.0 ("Lenny") (32 and 64 bit)
- SUSE Linux Enterprise Server 10 and 11 (32 and 64 bit)
- OpenSUSE 10.x and 11.x (32 and 64 bit)
- Fedora Core 6 (32 bit)

## American English model, free 1<sup>st</sup> year maintenance, and additional support

---

### ACOUSTIC MODELS

- Speech engine currently supports American English
- Future support for French, German, Spanish, Italian, Portuguese, Arabic, Chinese, and Hindi acoustic models

### ENGINE MAINTENANCE

- 1<sup>st</sup> year engine maintenance (ie. bug fixes, upgrades, etc) included in engine price
- From 2<sup>nd</sup> year onwards, annual engine maintenance can be purchased from Vestec at \$15 per port

### ADDITIONAL SUPPORT

- Support for engine installation included in retail price
- Additional support – including in-depth training, grammar writing, application design, and troubleshooting – available from Vestec for separate fees