

Loquendo TTS

Multilanguage Text-to-speech Synthesizer

7

Installation Manual

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7

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What's New

The “Tested Platforms” list for Linux has been updated.

Contents

1	Installation and License Key	7
1.1	Windows.....	7
1.1.1	System Requirements	7
1.1.2	Installation.....	7
1.1.3	License Key	8
1.1.4	Uninstall	8
1.1.5	SAPI 4 support.....	8
1.2	Unix/Linux	8
1.2.1	Linux System Requirements.....	9
1.2.2	Installation.....	9
1.2.3	License Key	9
1.2.4	Uninstall	10
1.2.5	A minimal C sample for Loquendo TTS: HelloTTS.....	10
1.2.6	Note for Linux Red Hat Enterprise 3 users.....	10

1 Installation and License Key

In the next paragraph we will explain the Loquendo TTS installation procedure, and how to obtain a valid Loquendo TTS License Key (if needed).

The same procedure may be applied to any Loquendo TTS distribution type: Engine, SDK, Language or Voice.

Please note that the Engine must be installed first. Language or voice distributions cannot be installed without installing an Engine before.

It is mandatory to have system administrator rights in order to install the Loquendo TTS distributions.

For a single Voice distribution, no more than a coding flavour (Telephony, High Quality or Small Footprint) can be installed. Note that the Telephony Voices require The Full Engine Distribution.

Language and Voice distributions from version 7.3.0 are not compatible with Engine distributions with version number lower than 7.3.0, and viceversa (with the exception of some old Voice distributions, which are still compatible with Engine versions from 7.3.0; the not compatible voices are signaled by the set-up program).

Should a Loquendo TTS setup procedure fail, one or more log files are produced. Log files are localized in the hard disk root (C:\) and are named LTTS_7-<module>.log (where <module> = EngineFull, English, SDK, Spanish, etc.). They may help to possibly diagnose the most part of setup failures.

1.1 Windows

The next paragraph explains how to install this Loquendo TTS distribution software in the Windows Platform and how to obtain a Loquendo TTS Windows license key (if needed).

Pay attention: you must install a Loquendo TTS Engine as the first distribution, before all the other Loquendo TTS distribution types (SDK , Languages and Voice). The installation procedure is common to all the Loquendo TTS distribution types. SDK, Languages and Voices distributions can be installed independently (but an Engine is always necessary).

1.1.1 System Requirements

- Pentium 300 MHz or better;
- 128 Mb RAM or more;
- Any Windows version equal or following to 2000 (like: 2000, XP, Server 2003). Windows versions NT 4.x, 9x, ME are not supported.

1.1.2 Installation

Run the setup program of the product: a standard Windows installation procedure will begin. The installation procedure, as usual, will allow the choice of a destination path for the Loquendo TTS SDK (the default path should be ...Program Files\Loquendo\LTTS7 or equivalent¹).

¹ This may be slightly different for International Windows versions.

As soon as the installation procedure has successfully finished, you should run one of the Windows applications just installed, to test the environment. Try for instance TTSDirector². Enter some text, or simply some nonsense words and press button Play. You should hear a voice coming from your PC loudspeakers³. See the Loquendo TTS SDK User's guide for more information on TTSDirector.

If your copy of Loquendo TTS requires a license key, TTSDirector will issue a "Missing license code" error message⁴.

The next section of this manual will explain how to obtain a valid license code.

1.1.3 License Key

To obtain a valid license key for your copy of Loquendo TTS, you should access the Loquendo Customer Area on the WEB.

Please refer to <http://www.loquendo.com/customerarea> in order to get your license.

If you need to transfer the license to another computer, you should access the Loquendo Customer Area on the WEB and use the tool for transfer license.

This will remove your license from your computer and create a "License transfer request" file. Again, refer to <http://www.loquendo.com/customerarea> in order to send back your license to Loquendo. This license will be immediately available for a new TTS license request from another computer.

1.1.4 Uninstall

To complete remove Loquendo TTS for your computer, simply execute the standard Windows "Add/Remove Programs" procedure in the Control Panel. If your copy of Loquendo TTS includes **voices and/or languages**, you should **remove them first**. As soon as all the additional voices/languages have been removed, you can safely remove the Loquendo TTS Engine.

Occasionally the Loquendo TTS uninstall procedure may report that some elements could not be removed. A possible reason: something has changed in the Loquendo TTS directory after set-up (e.g. custom lexicons), and the uninstall procedure was unable to delete it. In this case you can manually remove it.

1.1.5 SAPI 4 support

Note that, in order to use the Microsoft SAPI 4 interface, the Microsoft SAPI 4 run time files are necessary. These files could be missing in some Windows Operating Systems versions: in this case, please install them from the LoquendoTTS Engine distribution, running the included "spchapi.exe".

1.2 Unix/Linux

The next paragraph explains how to install this Loquendo TTS distribution in a Unix/Linux Platform and how to obtain a Loquendo TTS Unix license key.

² From the Start Menu, select Loquendo, Loquendo TTS 7, Loquendo TTS 7 Director

³ Your PC must be equipped with a Multimedia audio board (and relative Windows drivers) for this.

⁴ Depending on the software version, the error message may be read by the TTS instead.

1.2.1 Linux System Requirements

- Pentium 300 MHz or better;
- 128 Mb RAM or more.

Tested Platforms:

- Red Hat 9.0 (Kernel 2.4.20)
- Red Hat Enterprise 3 (Kernel 2.4.21)
- Red Hat Enterprise 5.1 (Kernel 2.6.18)

1.2.2 Installation

Pay attention: you must install a Loquendo TTS Engine as the first distribution, before all the other Loquendo TTS distribution types (SDK , Languages and Voice). The installation procedure is common to all the Loquendo TTS distribution types. SDK, Languages and Voices distributions can be installed independently (but an Engine is always necessary).

To install this Loquendo TTS distribution extract the files from your <distribution>.tar.gz using the command `tar -xzf <distribution>.tar.gz` and in the directory <distribution> run the `install.sh` bash file.

The script asks an installation directory (default: `/opt/Loquendo/LTTS7`); in this directory you must have read, write and execution permission, otherwise the installation will end prematurely.

The next section of this manual will explain how to obtain a valid license code.

1.2.3 License Key

Loquendo TTS uses a license key to protect itself against illegal copying.

The license is host-based: each computer has a different license key.

You can license your product inserting the serial number or via the customer area procedure.

1.2.3.1 Licensing using the serial number (only for Multimedia Engine)

Once Loquendo TTS has been installed on a computer, you need to run the program `TTSLicenseSN` `/opt/Loquendo/LTTS7/bin/TTSLicenseSN` and insert your serial number.

1.2.3.2 Licensing via Customer area Procedure (for Multimedia and Full Engine)

To obtain a valid license key for your copy of Loquendo TTS, you should access the Loquendo Customer Area on the WEB.

Please refer to <http://www.loquendo.com/customerarea> to get your license.

When you receive from Loquendo the license file pay attention to "TTSLicense.txt" and the path where it has been deployed. Check that the LTTS configuration file `default.session` contains the key:

```
"LicenseFile" = "/opt/Loquendo/LTTS7/TTSLicense.txt"
```

File "default.session" gives specifications for Loquendo TTS parameters. Verify that LicenseFile path reflect the path of your TTSLicense.txt file.

1.2.4 Uninstall

To uninstall Loquendo TTS, run the `uninstall.sh` bash file.

1.2.5 A minimal C sample for Loquendo TTS: HelloTTS

With `HelloTTS.c` (available only in the SDK distributions) you can build an executable that sends samples to the audio board:

```
> cd samples/c/HelloTTS
> make
> cd ../../../../bin
```

Try an installed voice (for example "Susan") with:

```
> ./HelloTTS Susan
```

If you need to move the executable in another directory, in order to find the configuration file `default.session` you may set the environment variable `LTTS7_DEFAULTSESSION`. For example:

```
setenv LTTS7_DEFAULTSESSION /opt/Loquendo/LTTS7/bin/default.session
```

In some environment it may happen that when you start the application it returns the error:

`libLTTS7Util.so: cannot open shared object file.`

In this case the environment variable `LD_LIBRARY_PATH` may be set (or extended) to allow run time linkage.

In the C shell type:

```
setenv LD_LIBRARY_PATH [INSTALL_DIR]/LTTS7/bin
```

In the Bourne shell, type:

```
LD_LIBRARY_PATH=[INSTALL_DIR]/LTTS7/bin
export LD_LIBRARY_PATH
```

[INSTALL_DIR] is the place where you have installed LTTS7 (/opt/Loquendo by default).

1.2.6 Note for Linux Red Hat Enterprise 3 users

Loquendo TTS libraries are compiled for a 32-bit environment: if you try to build a 64-bit application linking a 32-bit library the linker will give an error. For example:

```
> cd bin; gcc -I../include ../samples/c/HelloTTS/HelloTTS.c -Wl,--  
rpath,/opt/Loquendo/LTTS7/bin libLoqTTS7.so -o HelloTTS  
libLoqTTS7.so: could not read symbols: Invalid operation  
collect2: ld returned 1 exit status
```

To inform the compiler that you need to build a 32-bit application you must compile with the option "-m32". For example:

```
> cd bin; gcc -m32 -I../include ../samples/c/HelloTTS/HelloTTS.c -Wl,--  
rpath,/opt/Loquendo/LTTS7/bin libLoqTTS7.so -o HelloTTS
```

If the compiler gives you the error:

```
/usr/bin/ld: cannot open crt1.o: No such file or directory  
collect2: ld returned 1 exit status
```

it probably means that your machine doesn't have the 32-bit version of crt1.o (/usr/lib/crt1.o) installed but only the 64-bit version (/usr/lib64/crt1.o).

You may have it installing the package "Compatibility Arch Development Support".

To install the package:

System Settings -> Add/Remove Applications

select "Compatibility Arch Development Support" under the "Development" section.