Loquendo TTS

Multilanguage Text-to-speech Synthesizer

7

Installation Manual

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7

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What's New

Some notes about installation priorities and constraints and a paragraph on SAPI 4 support were added to Chapter 1.

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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).

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 equivalent[1]).

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 TTSDirector[2]. Enter some text, or simply some nonsense words and press button Play. You should hear a voice coming from your PC loudspeakers[3]. See the Loquendo TTS SDK User's guide for more information on TTSDirector.

[1] This may be slightly different for International Windows versions.
[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.

If your copy of Loquendo TTS requires a license key, TTSDirector will issue a “Missing license code” error message[4].

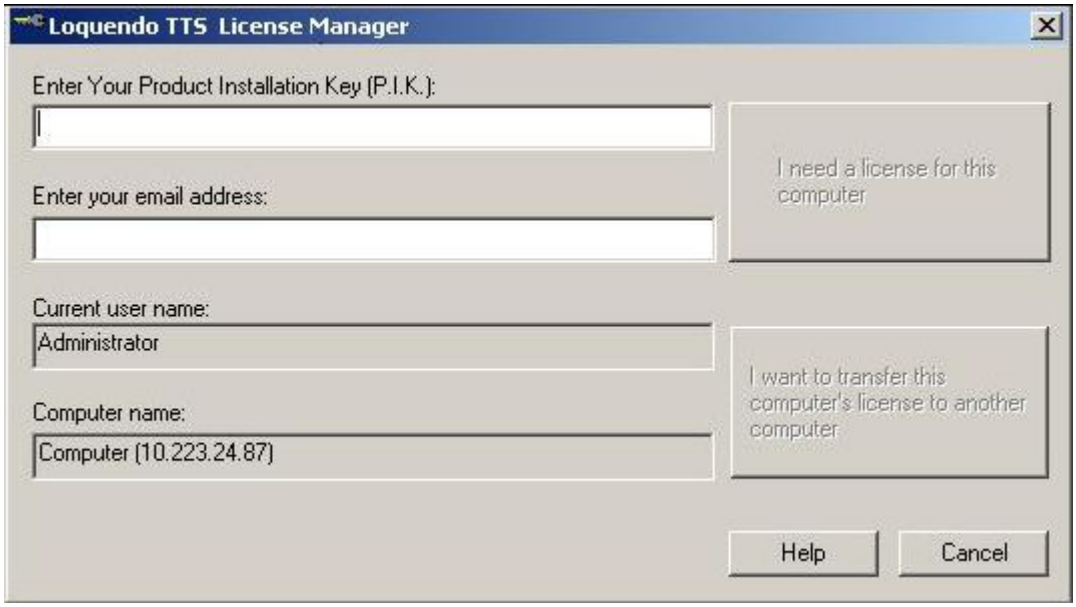
The next section of this manual will explain how to obtain a valid license code.

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.

In the Loquendo Customer Area you can download the License Request program (TTSLicense). This is a screen shot of the program[5]:



This procedure must be repeated for every PC you want to install Loquendo TTS on.

Please note that this Loquendo TTS licensing method is based on a software key and requires a network adapter be installed on your computer. If you don't have a network adapter please contact LOQUENDO sales support and ask for a parallel port plug. The program requires the following information:

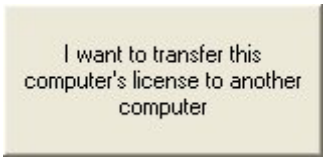
- Your Loquendo account (P.I.K.): this 18-character string should have been emailed to you. Loquendo account identifies one or more Loquendo TTS licenses with identical features (e.g. same number of ports/voices), owned by a single customer. Loquendo provides with an account code any TTS customer (if you don't have it, contact your Loquendo account manager). Please include this identifier when contacting LOQUENDO sales/technical support.
- Your e-mail address. Please be sure to spell it correctly.

As soon as all required information has been provided, in order to generate the license request file, press the button:

[4] Depending on the software version, the error message may be read by the TTS instead.
[5] This application may be subject to minor changes to its interface – this screen shot may be different

The program will prompt you to save your license request file. Please refer to http://www.loquendo.com/customerarea in order to get your license.

If you need to transfer the license to another computer, fill all the required fields and press button:



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.

1.2.1 Linux System Requirements

- Pentium 300 MHz or better;

- 128 Mb RAM or more.

Tested Platforms:

- Suse 7.3 (Kernel 2.4.10)

- Suse 8.1 (Kernel 2.4.19)

- Red Hat 7.3 (Kernel 2.4.18)

- Red Hat 9.0 (Kernel 2.4.20)

- Red Hat Enterprise 3 (Kernel 2.4.21)

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, 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)

Once Loquendo TTS has been installed on a computer, you need to run the program TTSLicense to enable it. This operation should be repeated for every computer running the software.

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.

In the Loquendo Customer Area you can download the License Request program (TTSLicense).

The program will ask you to enter some information: the Loquendo Product Installation Key (P.I.K.) is an 18-character code that you should have received by email.

Enter a valid email address (the Loquendo license will be sent to that address - be sure to spell it correctly).

Run the program TTSLicense and follow the instructions.

When you receive from Loquendo the license file “TTSLicense.txt”, put it in your LTTS directory and 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.

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.