

This is Vaucanson, a C++ generic library for weighted finite state machine.

Introduction to Vaucanson

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Overview

Firstly initiated by Jacques Sakarovitch in 2000, Vaucanson is a project developed by the Ecole Nationale Supérieure des Télécommunications [1] and the EPITA Research and Development Laboratory (LRDE) [2].

The goal of this library is to enable the development of C++ programs in an abstract and general way with, at the same time, a large specialization power. Indeed, on the one hand, we can write algorithms working on every automaton with weights over any semirings and with words from any free monoids. And on the other hand, a particular algorithm can be specialized for a particular data structure implementing only a pseudo behaviour.

Yet, Vaucanson is an ongoing development project. Therefore algorithms, data structures and the general architecture are not totally stable and well tested.

Please send any question or comments to vaucanson@lrde.epita.fr, and bug reports to vaucanson-bugs@lrde.epita.fr.

Installation

Complete installation procedure can be found in `doc/INSTALL.txt`.

Here is a quick way to install Vaucanson. Type in this sequence at the command prompt:

```
./configure make sanity-check make install (as root)
```

This installation requires 220 Mo of free space and takes about 30 minutes on a modern computer.

Note that an installation is specific to the compiler used to install it. Indeed, the call to `./configure` enables some workarounds and, consequently, users must compile with the same compiler to avoid compatibility problems.

¹ <http://www.enst.fr>

² <http://www.lrde.epita.fr>

Using Vaucanson

We are sorry but we do not provide a documentation of Vaucanson.

However Vaucanson comes with several demos. Looking at them is a good way to see what Vaucanson can do and how it works. Those demos can be found in the `src/demos` directory.

See Also

There are other sources of interest in the distribution.

- Headline news about the project can be found in the file `NEWS` at the root of the source tree.
- Documentation about the XML I/O subsystem can be found in the `doc/xml` subdirectory.
- The library reference manual, generated by [Doxygen](#), is located in `doc/ref`. It comes distributed as an archive of HTML files called `ref.tar.gz`.
- Information about the test suite generation mechanism can be found in the file `src/tests/test-suites/README`.

Licence

Vaucanson is released under the GNU General Public Licence. See the file `COPYING` (at the root of the source tree) for details.

Contacts

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