

# Installation of BxJsontools (devel)

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**Version:** 0.1

In this document we propose an installation procedure for the BxJsontools C++ library, master branch, pre version 0.1.0, on top of Xubuntu 16.04 LTS (Xenial Xerus) for a system (64-bits).

BxJsontools is used by the [Vire](#) library for the SuperNEMO experiment.

## Contents

<a href="#">Links</a>	1
<a href="#">Download</a>	1
<a href="#">Installation</a>	1
<a href="#">Setup BxJsontools</a>	2

## Links

- [Cadfael](#) (SuperNEMO Wiki)
- [Cadfaelbrew](#) repository (GitHub)
- [BxJsontools](#) repository (GitHub)
- [Vire](#) repository (SuperNEMO Wiki)

## Download

```
$ mkdir -p /opt/sw/BxJsontools/Source
$ mkdir -p /opt/sw/BxJsontools/Binary
$ cd /opt/sw/BxJsontools/Source
$ git clone https://github.com/fmauger/bxjsontools.git
```

## Installation

1. Create a build directory and start a brew ([Cadfaelbrew](#)) session:

```
$ cd /opt/sw/BxJsontools/Binary
$ mkdir -p /opt/sw/BxJsontools/Binary/build.d
$ cd /opt/sw/BxJsontools/Binary/build.d
$ brewsh
```

2. Build/install:

```
$ cmake \
-DMAKE_INSTALL_PREFIX="/opt/sw/BxJsontools/Binary/install-0.1.0" \
-DBXJSOONTOOLS_WITH_BOOST=ON \
-DBoost_DIR="/opt/sw/SuperNEMO-DBD/Cadfaelbrew" \
/opt/sw/BxJsontools/Source/bxjsontools
$ make -j4
$ make test
$ make install
...
```

### 3. Check:

```
$ LANG=C tree -L 1 /opt/sw/BxJsontools/Binary/install-0.1.0
/opt/sw/BxJsontools/Binary/install-0.1.0
|-- bin
|-- include
|-- lib
'-- share

$ /opt/sw/BxJsontools/Binary/install-0.1.0/bin/bxjsontools-query --version
0.1.0
```

## Setup BxJsontools

In your `.bashrc` script, add:

```
export BXJSOONTOOLS_BASE_DIR=/opt/sw/BxJsontools

function do_bxjsontools_010_setup()
{
    if [ -n "${BXJSOONTOOLS_INSTALL_DIR}" ]; then
        echo "WARNING: BxJsontools is already setup !" >&2
        return 1
    fi
    export BXJSOONTOOLS_INSTALL_DIR="${BXJSOONTOOLS_BASE_DIR}/Binary/install-0.1.0"
    export PATH="${BXJSOONTOOLS_INSTALL_DIR}/bin:${PATH}"
    echo "NOTICE: BxJsontools is now setup !" >&2
    return 0;
}
export -f do_bxjsontools_010_setup

# Special aliases:
alias bxjsontools_setup="do_bxjsontools_010_setup"
```

To setup the BxJsontools library from a terminal, run :

```
$ bxjsontools_setup
```

Check the `bxjsontools-query` utility:

```
$ which bxjsontools-query
/opt/sw/BxJsontools/Binary/install-0.1.0/bin/bxjsontools-query
```