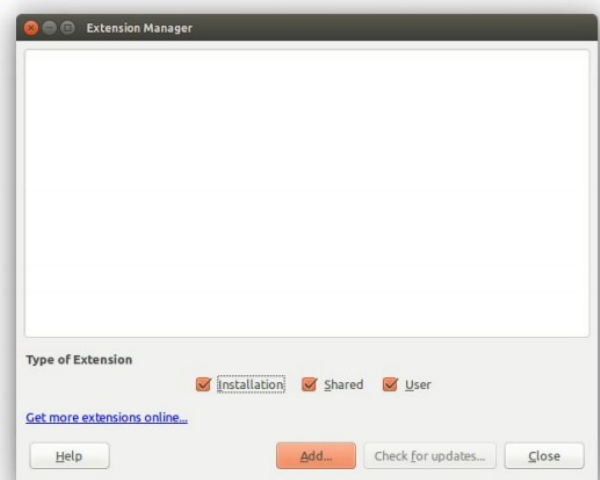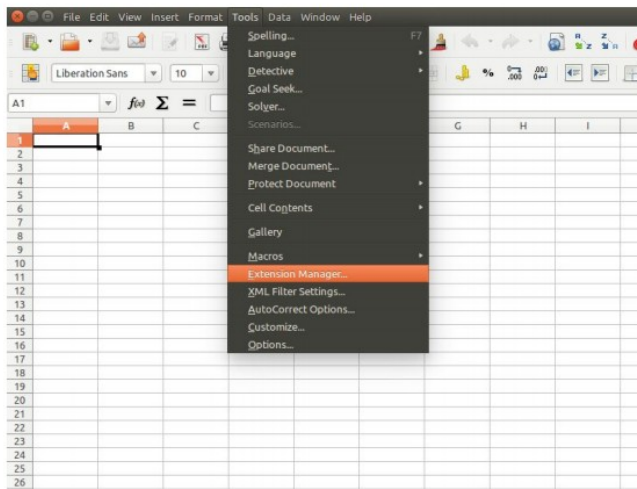# Instructions

1. Default LibreOffice Calc comes with Ubuntu 14.04 (32-bit). Download the two extensions for the "embedding" and "co-evolution" features from the author's website:
http://alfa.di.uminho.pt/~jorgemendes/software/mdsheet/latest/

2. After downloading it, the extension can be installed from within LibreOffice, via the Extension Manager (Tools > Extension Manager).

From within the Extension Manager, press "Add…" and select the "MDSheet-Basic.oxt" file. Repeat the process for "MDSheet.oxt".

Compilation

These steps were tested with Ubuntu 14.04 32-bit.

Tools needed to compile the source code:

```
# install software from the software center
sudo apt-get install zip git build-essential libmakefile-parser-perl haskell-platform libreoffice-dev

# update cabal to a more recent version
cabal update
cabal install cabal-install

# include cabal's binaries path
echo "PATH=$HOME/.cabal/bin:$PATH" >> .bashrc
source .bashrc

# install other Haskell-related dependencies
cabal install cpphs
```

Get the source code:

First, the user should get the permission to access the private repository of the author, and, then clone the source code.

git clone https://UserName:Password@bitbucket.org/SSaaPP/2ota.git
git clone https://UserName:Password@bitbucket.org/SSaaPP/mdsheet-libreoffice.git
git clone https://UserName:Password@bitbucket.org/SSaaPP/mdsheet.git
git clone https://UserName:Password@bitbucket.org/SsaaPP/mdsheet-utils.git

Set everything for compilation:

cd mdsheet-libreoffice/
create a sandbox so there is no need to install
this at the user/system level
cabal sandbox init
add local dependencies
cabal sandbox add-source ../mdsheet-utils/
cabal sandbox add-source ../2ota/
cabal sandbox add-source ../mdsheet/
install all dependencies (both local and from Hackage)
cabal install --only-dependencies

Configure:

Some system specific settings have to be set by hand. For this, a Perl script tries to figure out which are the current settings, but users have the freedom to set their own settings. These settings are mainly some required paths with header files for compilation. Note that some Perl-related warnings may arise but can be safely ignored.

./configure

Path to Office installation? [/usr/lib/libreoffice]
Path to Office SDK installation? [/usr/lib/libreoffice/sdk]
Path to Office headers? [/usr/include/libreoffice]
Path to URE installation? [/usr/lib/ure]
Path to GHC headers? [/usr/lib/ghc/include]
Path to C++ headers? [/usr/include/c++/4.8]

Build:

make

Utility Commands:

Install (only MDSheet.oxt):

make install

Uninstall (only MDSheet.oxt):

make uninstall

Run LibreOffice Calc without recovering files when errors occur:

make run

Note:
Only the "embedding" and "co-evolution" features work on latest version of Ubuntu (14.04 32-bit).