# openNCA Computation Engine Demonstration Installation and Test Cases

These instructions provide brief installation and testcase execution guidance.

There are two approaches presented:

- Installation from source using the pre-built package
- Installation and building package from source using devtools

# Installation from source using the pre-built package

### **Demonstration Installation**

### Open R or RStudio

openNCA Computation Engine v3.0 (commit c3d3f48) has been qualified with R-3.5.1. So, at the moment, consider R-3.5.1 as a minimum installation requirement.

### Set your default folder for installation in the R session

In the next step you will download a zip file from GitHub and extract to this folder. The default folder will then have a child "demo" folder containing the sources for installation and testcase files for demonstration use.

# Download Testcase scripts, data, and installation files to your default folder

https://github.com/tensfeldt/openNCA/raw/master/demo/demo.zip

## Execute the installation script to install openNCA Computation Engine package library from source

Load ./demo/install/openNCA $_{installpackage.R}$  and execute all of the lines. Alternatively, source the openNCA $_{installpackage.R}$  file. This script will directly download and install the openNCA library package from source.

The following illustrates downloading demo.zip and unzipping to your Downloads folder using an R script:

```
home <- Sys.getenv("HOMEPATH")
setwd(file.path(home, "Downloads"))
getwd()
unzip("demo.zip")
list.files("./demo")
source("./demo/install/openNCA_install_package.R")</pre>
```

# Installation and building package from source using devtools

# Dependencies for installation and building from source using devtools

devtools: Tools to Make Developing R Packages Easier

curl: A Modern and Flexible Web Client for R

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### Set your default folder for installation in the R session

In the next step you will download a zip file from GitHub and extract to this folder. The default folder will then have a child "demo" folder containing the sources for installation and testcase files for demonstration use.

# Download Testcase scripts, data, and installation files to your default folder

https://github.com/tensfeldt/openNCA/raw/master/demo/demo.zip

## Execute the installation script to build the openNCA Computation Engine package library

Load ./demo/install/openNCA $_{buildpackage.R}$  and execute all of the lines. Alternatively, source the openNCA $_{buildpackage.R}$  file. This script will build the openNCA library package from source.

The following illustrates downloading demo.zip and unzipping to your Downloads folder using an R script:

```
home <- Sys.getenv("HOMEPATH")
setwd(file.path(home, "Downloads"))
getwd()
unzip("demo.zip")
list.files("./demo")
source("./demo/install/openNCA_build_package.R")</pre>
```