

```

# ----- COMPILE R-4.3.1
#=====
INSTDIR="/opt/R/v4.3.1"
MKLROOT="/opt/intel/oneapi/mkl/2023.0.0"
COMPILE="/opt/intel/oneapi/compiler/2023.0.0"
RBASE="/SOFTWARE/CODE-R/R-BASE/v4.3.1"
#-----
# Bring latest (2023) MKL Libraries into context
#-----
ln -sf ${MKLROOT}/lib/intel64/libmkl_rt.so /usr/lib/libRblas.so
ln -sf ${MKLROOT}/lib/intel64/libmkl_rt.so /usr/lib64/libRblas.so
ln -sf ${MKLROOT}/lib/intel64/libmkl_rt.so /usr/lib64/libRlapack.so
#=====
GLOBAL LINUX environment
#=====
export PATH=/usr/bin/gcc:/usr/lib/gcc:/usr/lib64/gcc:/usr/libexec/gcc:${PATH}
export PATH=/usr/local:/usr/local/lib:/usr/local/bin:${PATH}
export PATH=/usr/local/bin/cgx:/usr/local/bin/ccx:/usr/local/share:${PATH}
export PATH=/usr/bin/X11:${PATH}
export PATH=/usr/lib/java/jre/bin:/opt/gnome/bin:${PATH}
export PATH=/etc/alternatives:/usr/src:${PATH}
export PATH=/usr/src/linux/include/linux:${PATH}
export LD_LIBRARY_PATH=/lib64:/usr/lib64:/lib:/usr/lib:/usr/local/lib: ${LD_LIBRARY_PATH}
export C_INCLUDE_PATH=/usr/include:/usr/local/include/:${C_INCLUDE_PATH}
#-----
# Environment for R-Codes
#-----
export PATH=${INSTDIR}:${INSTDIR}/bin:${PATH}           # R + RScript
export PATH=${INSTDIR}/lib64/R/library:${PATH}        # R-Base modules
export PATH=${INSTDIR}/lib64/R/etc:${PATH}
export PATH=${INSTDIR}/lib64/R/bin:${PATH}
export PATH=${INSTDIR}/lib64/R/include:${PATH}        # .h files
export PATH=/usr/lib/rstudio-server/bin:${PATH}
export PATH=/usr/lib64/tcl:/usr/lib64/tcl/tk8.6:${PATH}
export PATH=${RBASE}/library/tcltk:${PATH}
export PATH=${RBASE}/src/library/tcltk:${PATH}
export LD_LIBRARY_PATH=/usr/lib64/blas:/usr/lib64/lapack:${LD_LIBRARY_PATH}
export C_INCLUDE_PATH=${INSTDIR}/lib64/R/include:${C_INCLUDE_PATH}
# ----- MPI Environment for "R"
export PATH=/usr/lib64/mpi/gcc/openmpi/bin/:${PATH}

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export LD_LIBRARY_PATH=/usr/lib64/mpi/gcc/openmpi/lib64:${LD_LIBRARY_PATH}
export C_INCLUDE_PATH=/usr/lib64/mpi/gcc/openmpi/include:${C_INCLUDE_PATH}
# ----- Libraries environment also for compilation
export LD_LIBRARY_PATH=${MKLROOT}/lib/intel64:${LD_LIBRARY_PATH} # MKL Libraries
export LD_LIBRARY_PATH=${INSTDIR}/lib64/R/lib:${LD_LIBRARY_PATH}
export LD_LIBRARY_PATH=${COMPILE}/linux/compiler/lib/intel64_lin:${LD_LIBRARY_PATH}
# Compiler Libraries

#-----
cd ${RBASE} # revert to R raw CODE area
```

```
./configure --prefix=${INSTDIR} \
  --enable-memory-profiling \
  --enable-R-profiling \
  --enable-R-shlib \
  --enable-java \
  --with-tcltk \
  --with-libpng \
  --with-jpeglib \
  --with-libpng \
  --with-readline \
  --with-lapack \
  --with-blas
```

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#=====
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# Symbolic links to more accessible LINUX area
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#=====
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```
ln -sf /opt/R/${VERSION}/bin/R /usr/local/bin/R
```

```
ln -sf /opt/R/${VERSION}/bin/Rscript /usr/local/bin/Rscript
```