

FROM ubuntu:latest
MAINTAINER [leoatchina,leoatchina@gmail.com](mailto:leoatchina@gmail.com)
ADD sources.list /etc/apt/sources.list

installation

update system

```
RUN apt-get update -y && apt-get upgrade -y && \  
apt-get install -y software-properties-common && \  
add-apt-repository ppa:neovim-ppa/stable -y && \  
apt-get update -y && \  
apt-get install -y apt-utils gdebi-core && \  
apt-get install -y libapparmor1 libcurl4-openssl-dev libxml2 libxml2-dev libssl-dev apt-  
transport-https && \  
apt-get install -y wget curl unzip bzip2 git htop supervisor xclip silversearcher-ag && \  
apt-get install -y build-essential gfortran libcairo2-dev libxt-dev && \  
apt-get install -y libapparmor1 libedit2 libc6 psmisc rrdtool && \  
apt-get install -y neovim ctags zsh && \  
apt-get clean && apt-get purge && rm -rf /tmp/*
```

PATH

ENV PATH=/opt/anaconda3/bin:\$PATH

anaconda3

```
RUN cd /tmp && curl https://mirrors.tuna.tsinghua.edu.cn/anaconda/archive/Anaconda3-  
5.0.0.1-Linux-x86\_64.sh -O && \  
bash Anaconda3-5.0.0.1-Linux-x86_64.sh -b -p /opt/anaconda3 && rm Anaconda3-5.0.0.1-  
Linux-x86_64.sh && \  

```

重要的channel 放后面

```
conda config --add channels bioconda && \  
conda config --add channels r && \  
conda config --add channels conda-forge && \  
conda config --add channels https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/free  
conda config --set show_channel_urls yes && \  
conda clean -a -y
```

install R

```
RUN echo "deb https://mirrors.tuna.tsinghua.edu.cn/CRAN/bin/linux/ubuntu xenial/" >>  
/etc/apt/sources.list && \  
apt-key adv --keyserver keyserver.ubuntu.com --recv-keys E084DAB9  
RUN apt-get update -y && \  
apt-cache -q search r-cran-* | awk '$1 !~ /^r-cran-r2jags$/ { p = p " $1 } END{ print p }' | \  
xargs apt-get install -y r-base && \  
apt-get clean && apt-get purge && rm -rf /tmp/*
```

rice

```
RUN pip --no-cache-dir install rice
```

rstudio-server

```
ENV RSTUDIO_WHICH_R=/usr/bin/R  
RUN cd /tmp && \  
curl https://s3.amazonaws.com/rstudio-server/current.ver -o /tmp/rstudio.ver && \  
curl http://download2.rstudio.org/rstudio-server-$(cat /tmp/rstudio.ver)-amd64.deb -o  
/tmp/rstudio.deb && \  
gdebi --non-interactive /tmp/rstudio.deb && \  
apt-get clean && apt-get purge && rm -rf /tmp/*
```

install java

```
RUN apt-get install openjdk-8-jdk -y && \  
apt-get clean && apt-get purge && rm -rf /tmp/*
```

```
RUN ln -s /usr/lib/jvm/java-8-openjdk-amd64 /usr/lib/jvm/java  
ENV JAVA_HOME=/usr/lib/jvm/java
```

install something for http and https

```
RUN conda install redis redis-py celery pika -y && \  
conda clean -a -y
```

```
RUN conda install zeromq -y && \  
conda clean -a -y  
RUN apt-get install -y libzmq3-dev libtool && \  
apt-get clean && apt-get purge && rm -rf /tmp/*
```

configuration

ENV for java

```
RUN R CMD javareconf
```

config dir

```
RUN mkdir -p /etc/rstudio/  
COPY rserver.conf /etc/rstudio/  
COPY jupyter_notebook_config.py /opt/  
COPY jupyter_lab_config.py /opt/  
COPY supervisord.conf /opt/
```

users

```
RUN useradd jupyter -d /home/jupyter && echo jupyter:jupyter | chpasswd  
WORKDIR /home/jupyter  
CMD ["/usr/bin/supervisord", "-c", "/opt/supervisord.conf"]
```

share

```
EXPOSE 15672 8888 8787 80  
VOLUME ["/home/jupyter", "/mnt", "/disks", "/oss", "/work", "/data"]
```