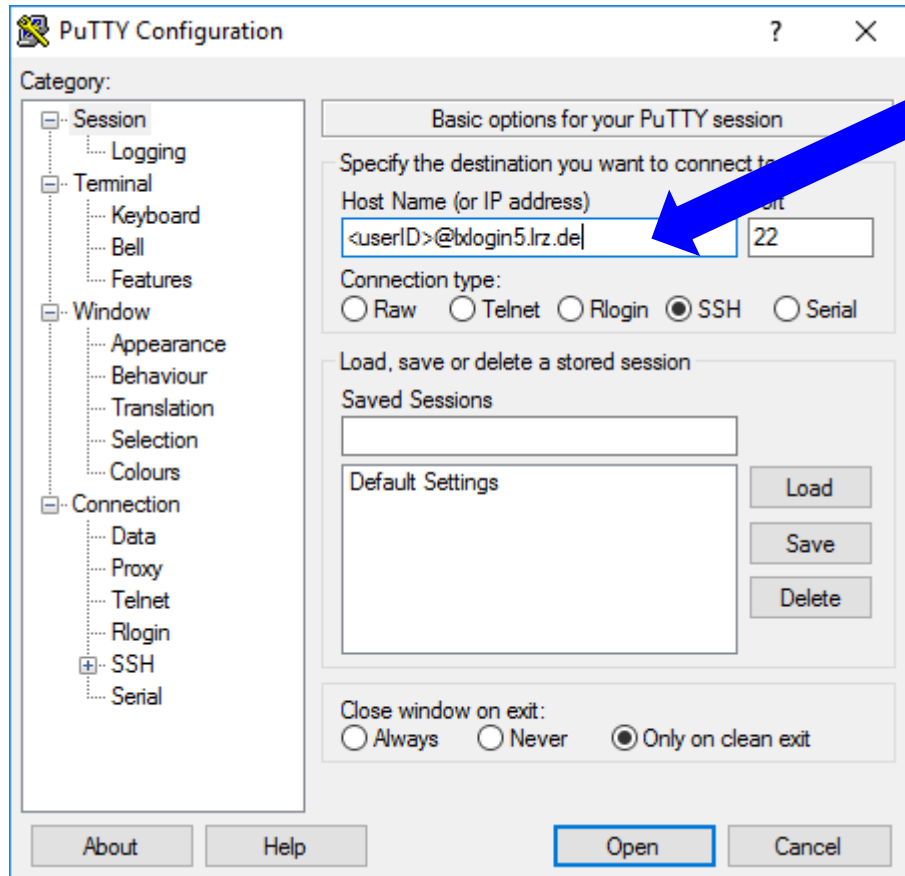


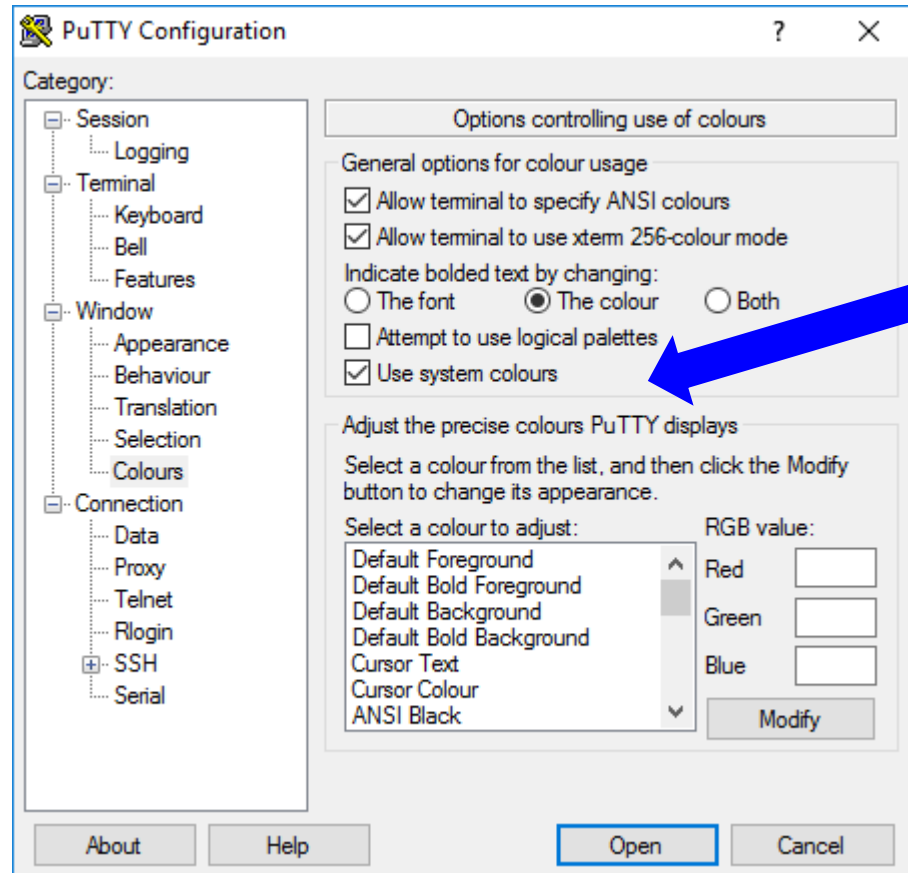
1. Login to LRZ Linux Cluster:

Start PuTTY GUI ...



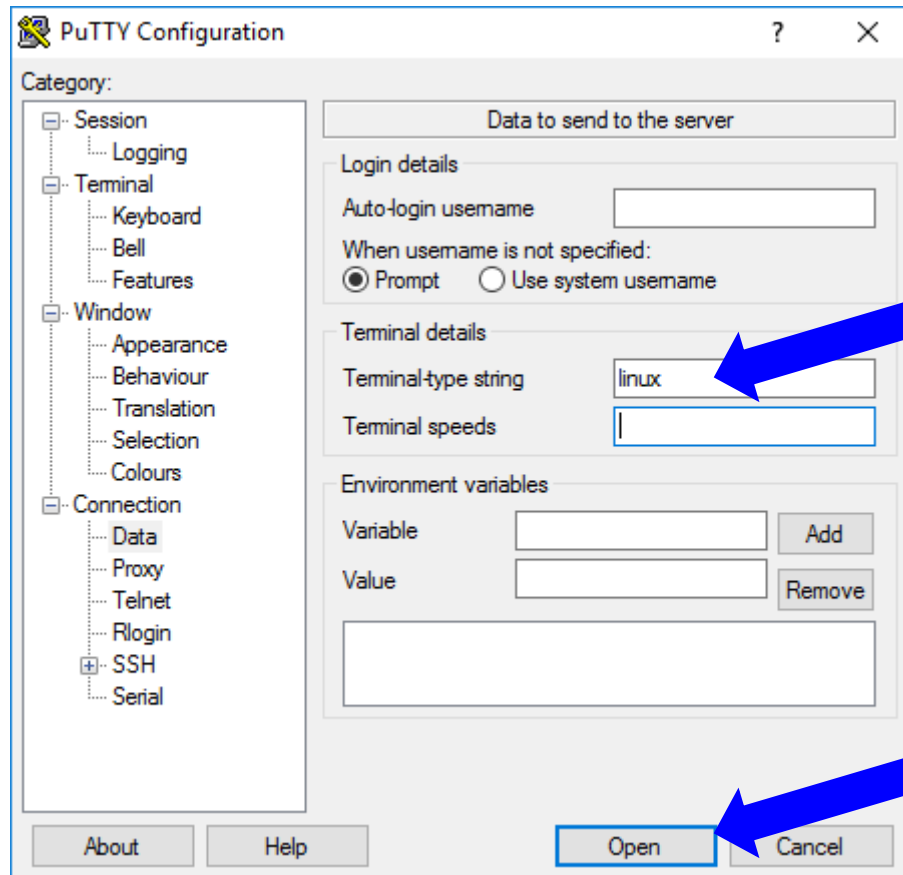
... enter your user name
and the LRZ Linux Cluster Login
Node name ...

... Change to *Colours* in *Window* Section ...



... and click on
Use system colours ...

... Change to *Data* in *Connection* Section ...

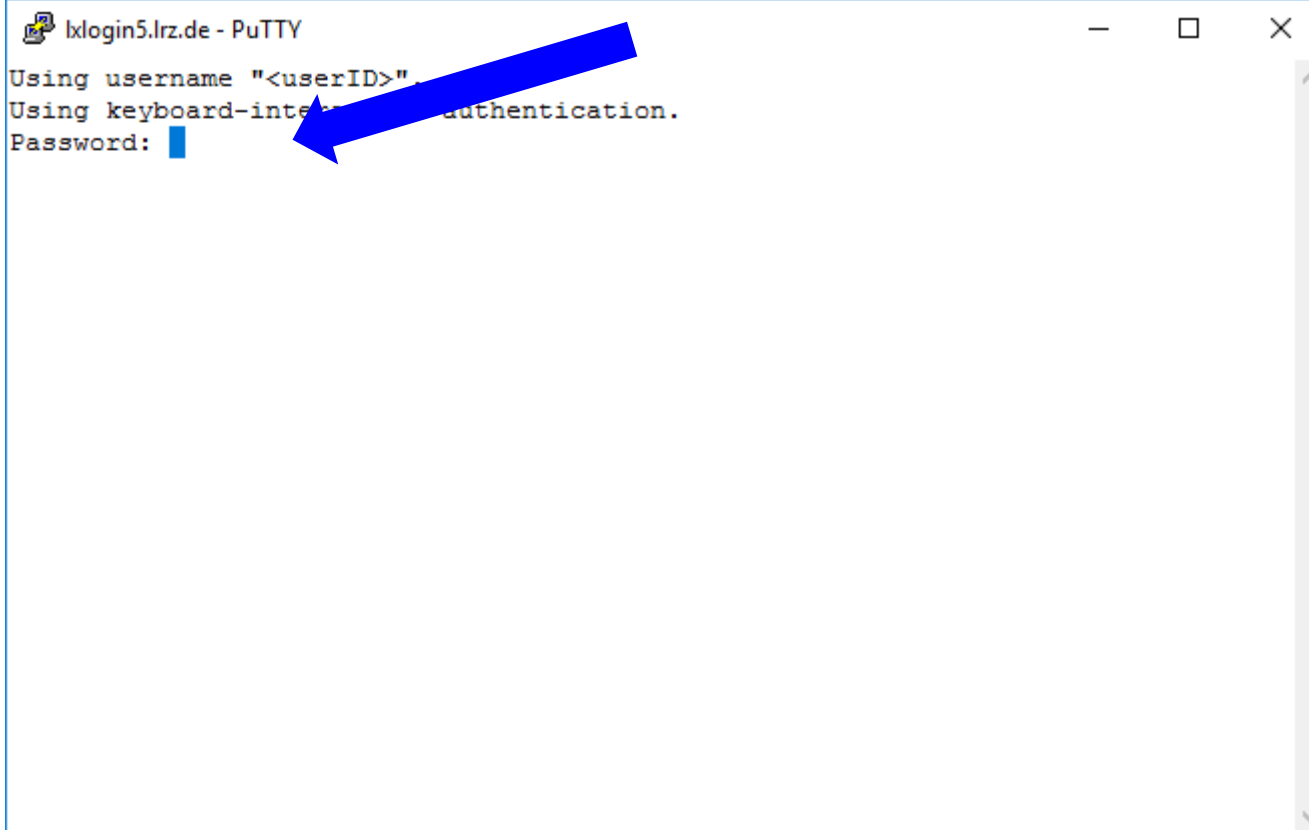


... Enter in *Terminal-type string*
linux ...

... remove *Terminal Speed* ...

... *Open* ...

... enter your *SSH Password* of your Linux Cluster Account ...



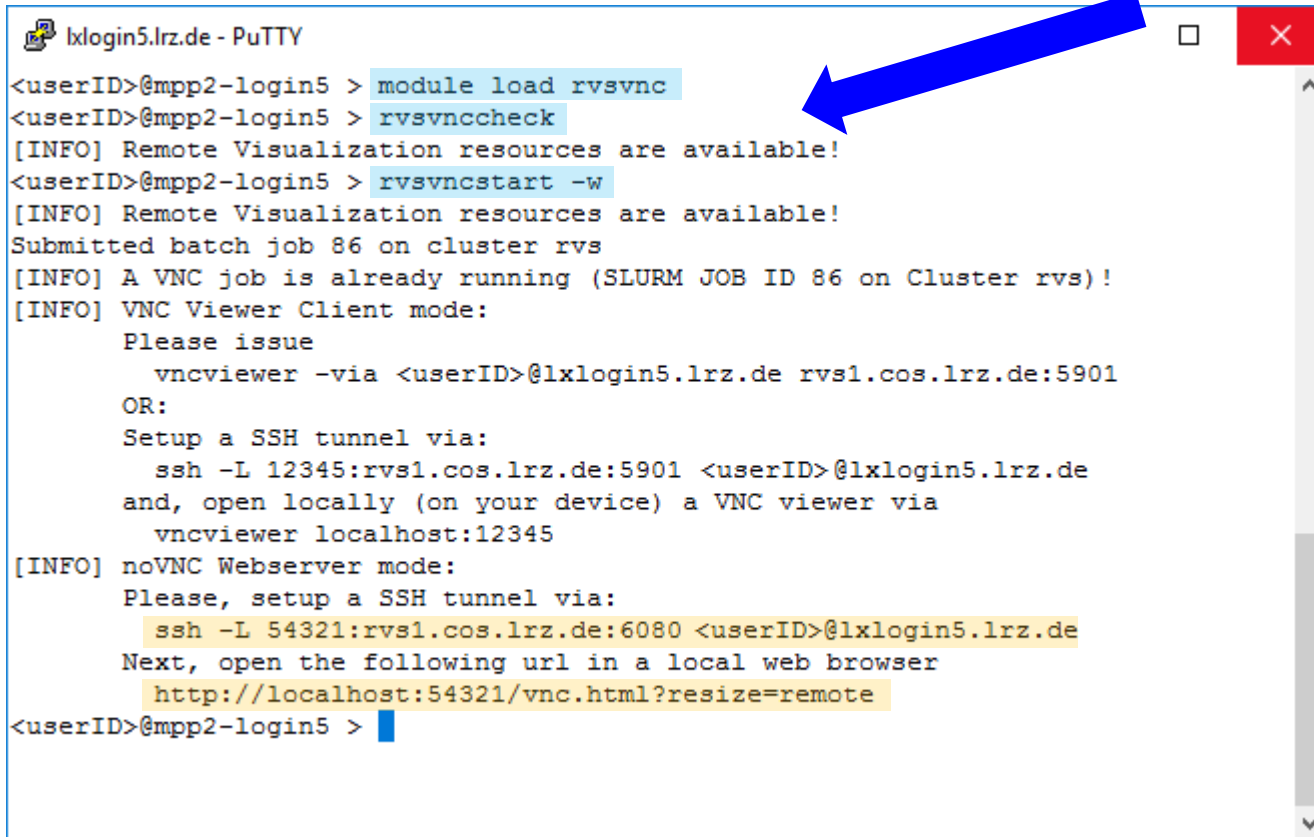
A screenshot of a PuTTY terminal window titled "lxlogin5.lrz.de - PuTTY". The window contains the following text: "Using username "<userID>".", "Using keyboard-interactive authentication.", and "Password: █". A blue arrow points from the top right towards the "Password:" prompt.

```
lxlogin5.lrz.de - PuTTY
Using username "<userID>".
Using keyboard-interactive authentication.
Password: █
```

2. Start Remote

Visualization Job:

... start the Remote Visualization (RV) job ...



```
lxlogin5.lrz.de - PuTTY
<userID>@mpp2-login5 > module load rvsvnc
<userID>@mpp2-login5 > rvsvnccheck
[INFO] Remote Visualization resources are available!
<userID>@mpp2-login5 > rvsvncstart -w
[INFO] Remote Visualization resources are available!
Submitted batch job 86 on cluster rvs
[INFO] A VNC job is already running (SLURM JOB ID 86 on Cluster rvs)!
[INFO] VNC Viewer Client mode:
Please issue
vncviewer -via <userID>@lxlogin5.lrz.de rvs1.cos.lrz.de:5901
OR:
Setup a SSH tunnel via:
ssh -L 12345:rvs1.cos.lrz.de:5901 <userID>@lxlogin5.lrz.de
and, open locally (on your device) a VNC viewer via
vncviewer localhost:12345
[INFO] noVNC Webservice mode:
Please, setup a SSH tunnel via:
ssh -L 54321:rvs1.cos.lrz.de:6080 <userID>@lxlogin5.lrz.de
Next, open the following url in a local web browser
http://localhost:54321/vnc.html?resize=remote
<userID>@mpp2-login5 >
```

... Load module ...

... Check for Resources ...

... Start the RV job ...

When starting the **first time**, you are asked to **set a VNC password!**

Please set a reasonable one (NOT EMPTY)!

You can **change** it anytime you want by issuing ***vncpasswd*** on a Login Node.

3. Open the SSH Tunnel:

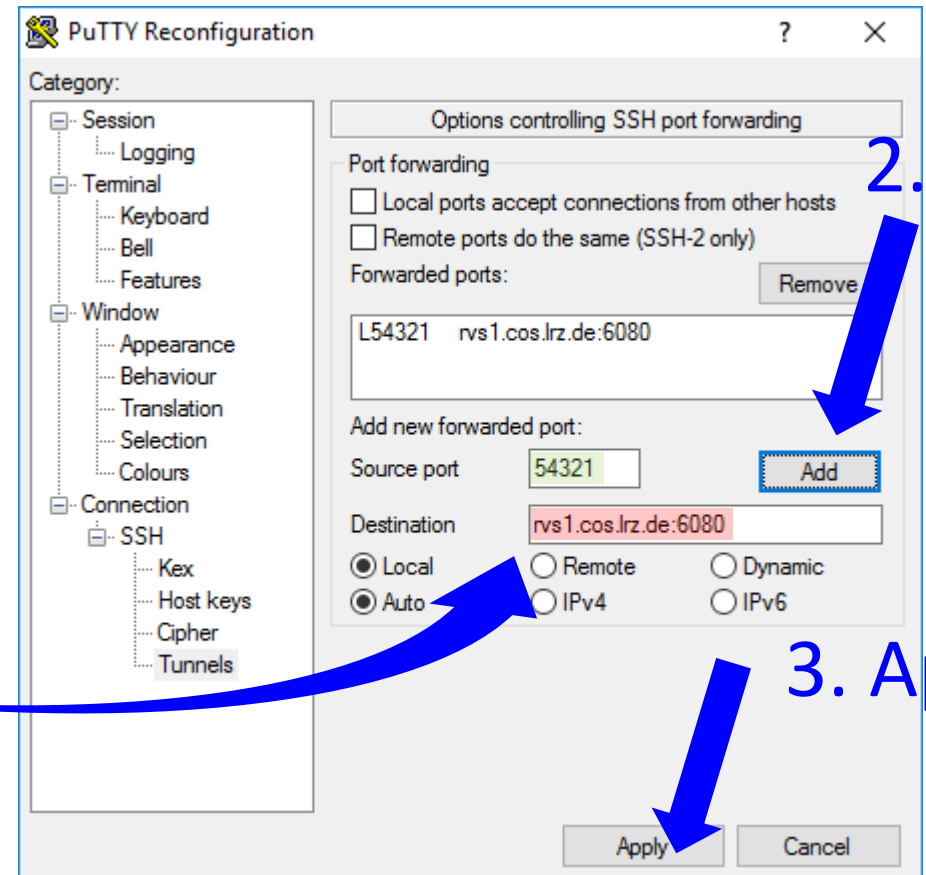
... open a SSH Tunnel ...

```
lxlogin5.lrz.de - PuTTY
<userID>@mpp2-login5 > module load rvsvnc
<userID>@mpp2-login5 > rvsvnccheck
[INFO] Remote Visualization resources are available!
<userID>@mpp2-login5 > rvsvncstart -w
[INFO] Remote Visualization resources are available!
Submitted batch job 86 on cluster rvs
[INFO] A VNC job is already running (SLURM JOB ID 86 on Cluster rvs)!
[INFO] VNC Viewer Client mode:
Please issue
vncviewer -via <userID>@lxlogin5.lrz.de rvs1.cos.lrz.de:5901
OR:
Setup a SSH tunnel via:
ssh -L 12345:rvs1.cos.lrz.de:5901 <userID>@lxlogin5.lrz.de
and, open locally (on your device) a VNC viewer via
vncviewer localhost:12345
[INFO] noVNC Webserver mode:
Please, setup a SSH tunnel via:
ssh -L 54321:rvs1.cos.lrz.de:6080 <userID>@lxlogin5.lrz.de
Next, open the following url in a local web browser
http://localhost:54321/vnc.html?resize=remote
<userID>@mpp2-login5 >
```

1. Enter the port value

... Right-click on PuTTY window bar

→ *Change Settings ...*



2. Add

3. Apply

4. Start the Webbrowser:

... Open a Browser (Firefox/Chromium) ...

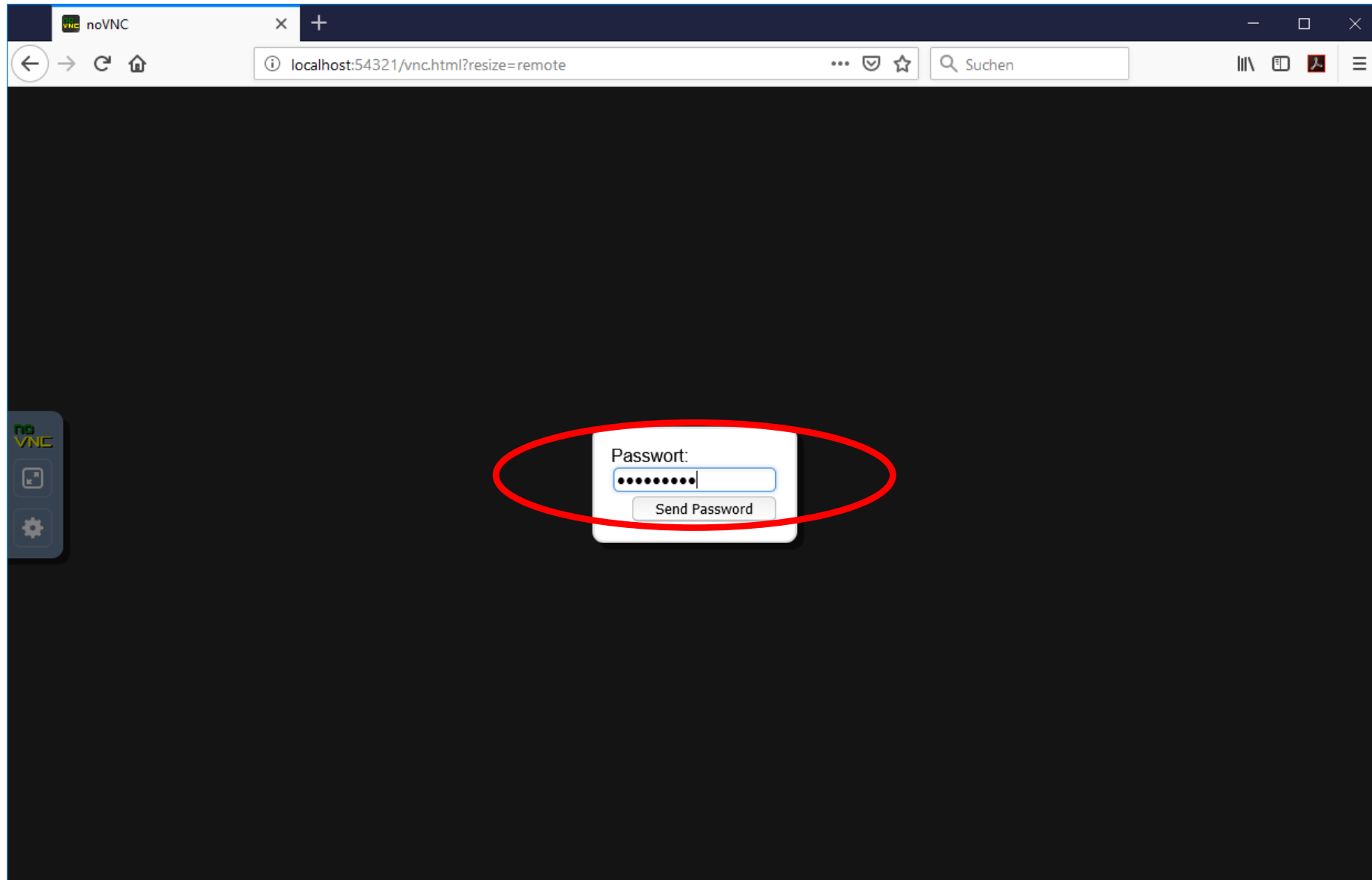
```
lxlogin5.lrz.de - PuTTY
<userID>@mpp2-login5 > module load rvsvnc
<userID>@mpp2-login5 > rvsvnccheck
[INFO] Remote Visualization resources are available!
<userID>@mpp2-login5 > rvsvncstart -w
[INFO] Remote Visualization resources are available!
Submitted batch job 86 on cluster rvs
[INFO] A VNC job is already running (SLURM JOB ID 86 on Cluster rvs)!
[INFO] VNC Viewer Client mode:
Please issue
  vncviewer -via <userID>@lxlogin5.lrz.de rvs1.cos.lrz.de:5901
OR:
Setup a SSH tunnel via:
  ssh -L 12345:rvs1.cos.lrz.de:5901 <userID>@lxlogin5.lrz.de
and, open locally (on your device) a VNC viewer via
  vncviewer localhost:12345
[INFO] noVNC Webservice mode:
Please, setup a SSH tunnel via:
  ssh -L 54321:rvs1.cos.lrz.de:6080 <userID>@lxlogin5.lrz.de
Next, open the following url in a local web browser
  http://localhost:54321/vnc.html?resize=remote
<userID>@mpp2-login5 >
```



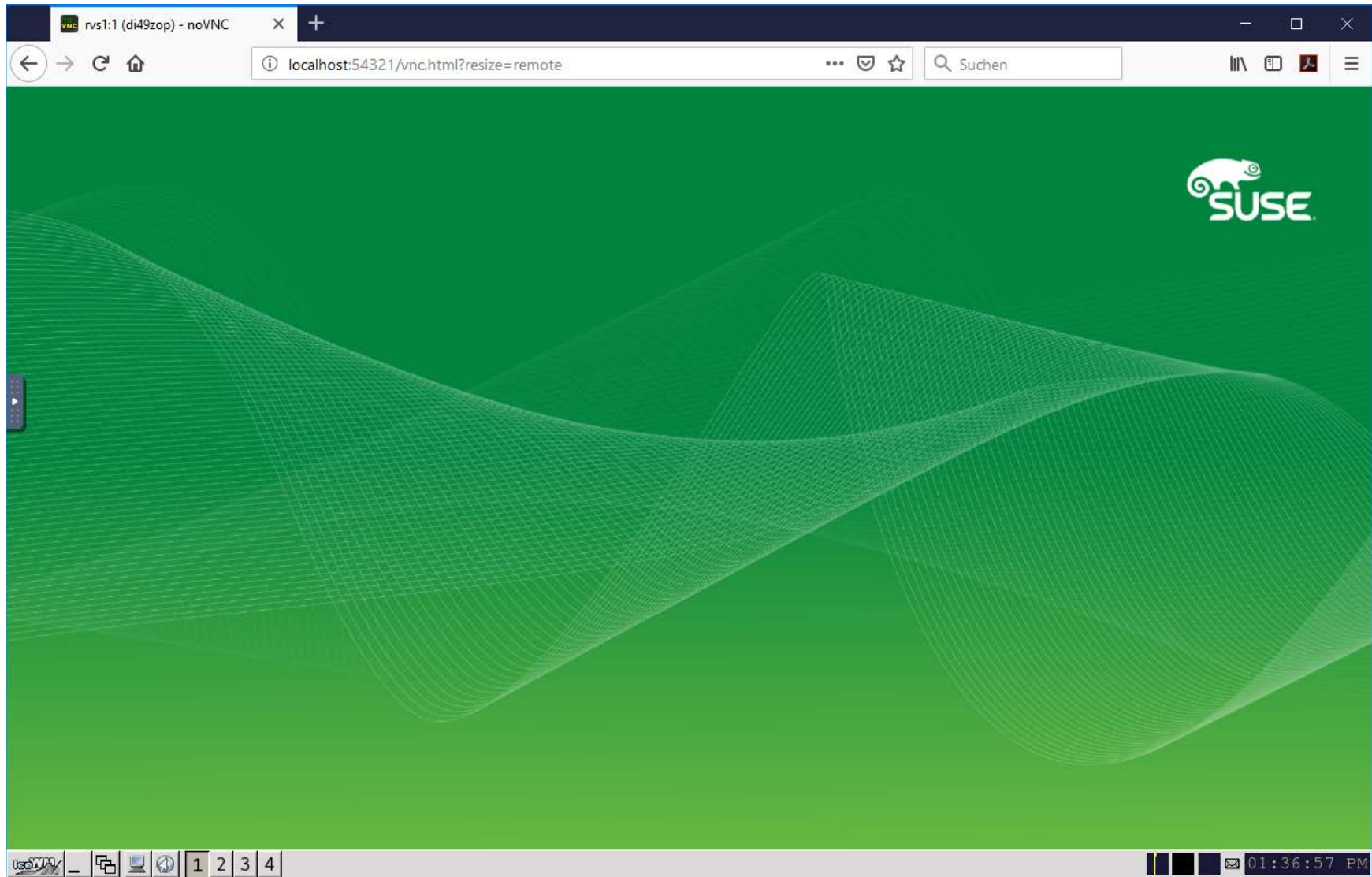
1. Copy URL to your browser ...

2. Connect

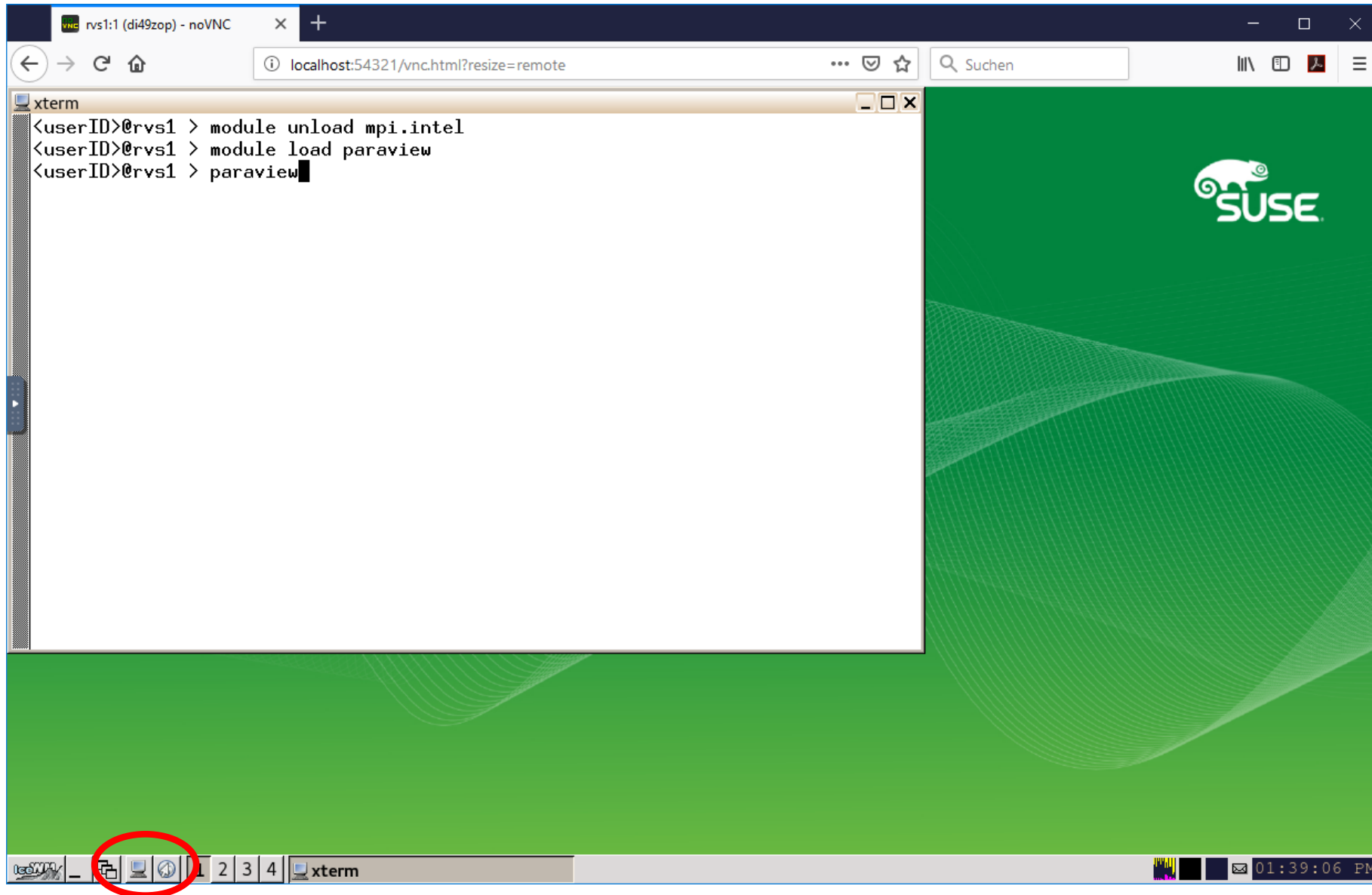
... Enter your VNC Password ... (the none-empty set before)



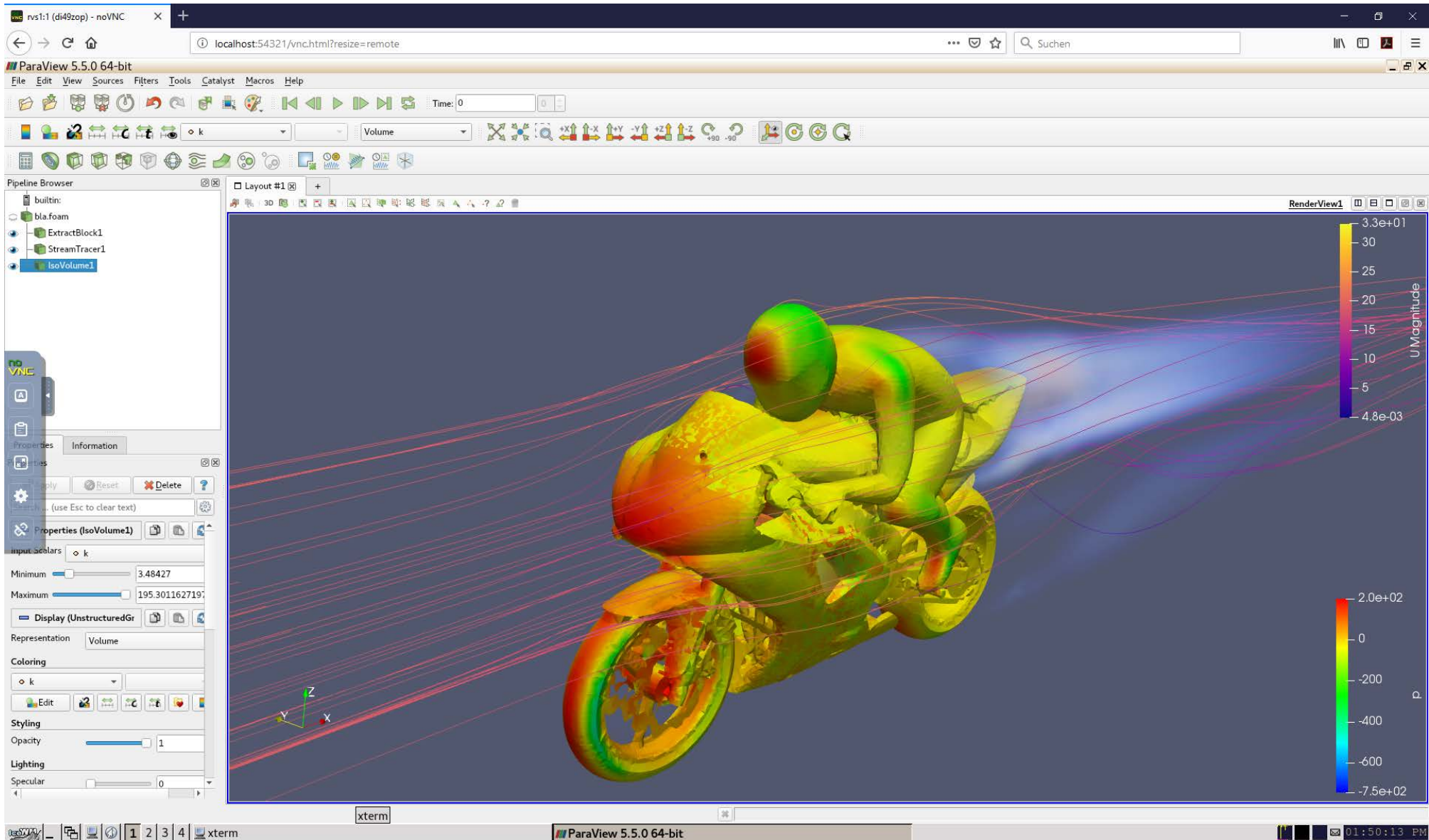
... Ready to work!



Open Console; Use Env Module system; Start your programs



For instance, Paraview ...

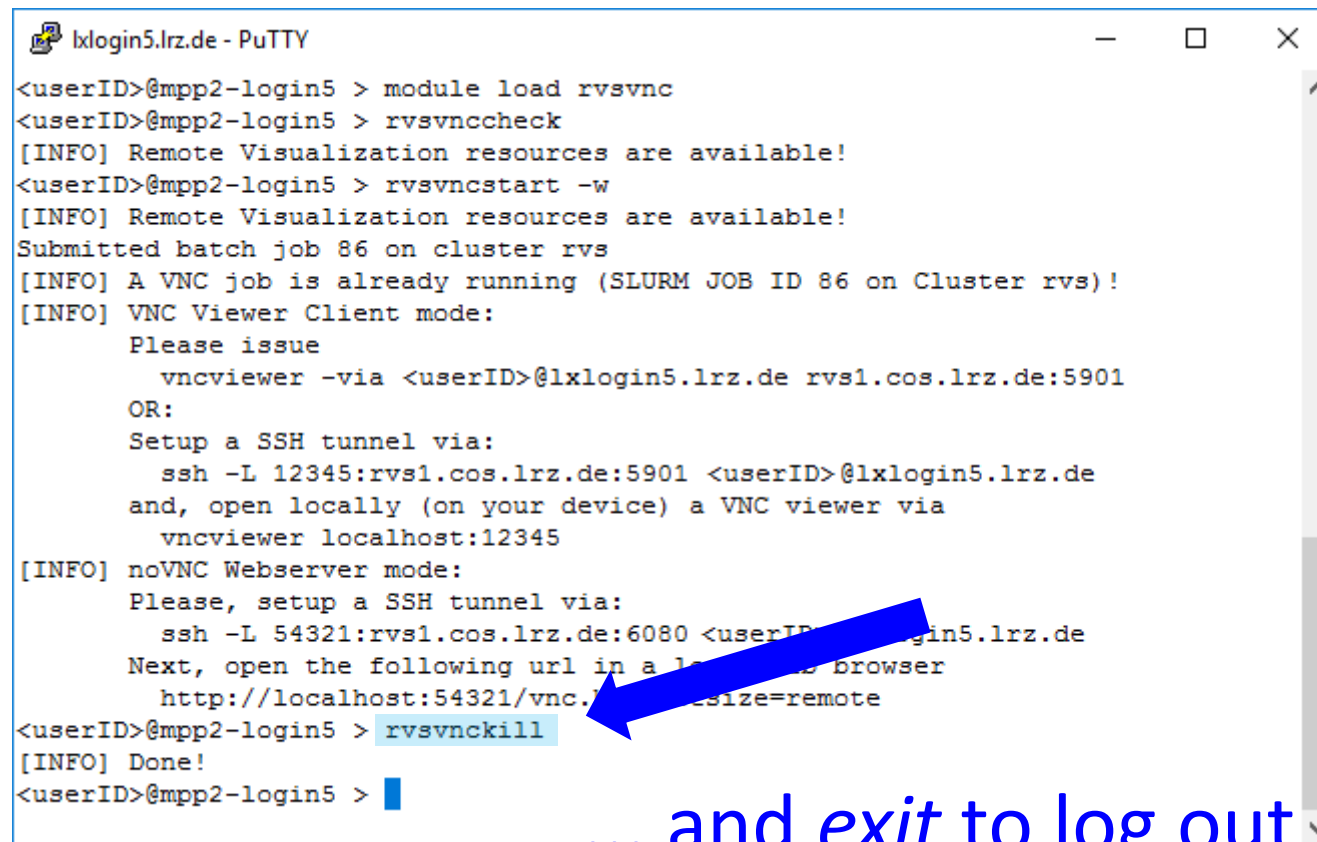


5. Kill the RV Job and Logout:

When you finished ...

... close your Browser ...

... issue *rsvsnckill* inside the PuTTY window



```
lxlogin5.lrz.de - PuTTY
<userID>@mpp2-login5 > module load rsvsnc
<userID>@mpp2-login5 > rsvsnckcheck
[INFO] Remote Visualization resources are available!
<userID>@mpp2-login5 > rsvsnckstart -w
[INFO] Remote Visualization resources are available!
Submitted batch job 86 on cluster rvs
[INFO] A VNC job is already running (SLURM JOB ID 86 on Cluster rvs)!
[INFO] VNC Viewer Client mode:
Please issue
    vncviewer -via <userID>@lxlogin5.lrz.de rvs1.cos.lrz.de:5901
OR:
Setup a SSH tunnel via:
    ssh -L 12345:rvs1.cos.lrz.de:5901 <userID>@lxlogin5.lrz.de
and, open locally (on your device) a VNC viewer via
    vncviewer localhost:12345
[INFO] noVNC Webservice mode:
Please, setup a SSH tunnel via:
    ssh -L 54321:rvs1.cos.lrz.de:6080 <userID>@lxlogin5.lrz.de
Next, open the following url in a browser
    http://localhost:54321/vnc.
<userID>@mpp2-login5 > rsvsnckkill
[INFO] Done!
<userID>@mpp2-login5 >
```

... and *exit* to log out

AOB

I NEED MORE TIME!!!!!!

DECISION MUST BE DONE BEFORE THE RV JOB IS ISSUED
ONCE THE TIME IS OVER, THE JOB IS KILLED!

The Default RV job length is 2 hours.

If you need more, use the *--time=* flag of *rvsvncstart*, e.g.:

```
rvsvncstart --w --time=06:00
```

for 6 hours.

Maximum is 2 days. But who can live without sleep?!