Access to Hornet

- **boot PC with USB stick**

- **start Terminal from quick-start bar at bottom**

- **ssh –X tlsws0XX@hornet.hww.de**
  where XX is your assigned user number

Hornet cannot be reached from outside unless your computer at the origin is white-listed in the HLRS firewall.

-> Need to start scp, etc, from Hornet.

H L R S

Compiling

- **need to use Cray's compiler drivers!**
  - **cc   C compiler**
  - **CC   C++ compiler**
  - **ftn   Fortran compiler**
- **compiler drivers will include and link all relevant libraries including MPI**
- **do not use gcc, icc, mpicc, etc.**

- **choose compiler by setting "*PrgEnv*"; default is Cray**
  - **module swap PrgEnv-cray PrgEnv-gcc**
  - **module swap PrgEnv-cray PrgEnv-intel**
- **Note that flags are still compiler specific**

- **Makefile: set CC=cc, CXX=CC, F77=ftn, or similar**

- **autotools: ./configure CC=cc CXX=CC F77=ftn …**

H L R S

Job submission and start

- **submitting an interactive job**
  qsub -I –l nodes=2:ppn=24 –l walltime=00:10:00 –q R_vihps0X

  request 2 nodes, each with 24 processes, for 10 minutes
  request queue R_vihps0X
  with X = 1 on Monday
  X = 2 on Tuesday, etc

- **next start application on the compute nodes**
  aprun –n 48 ./my_app   48 MPI ranks

  export OMP_NUM_THREADS=6
  aprun –n 8 –d 6 ./my_app   8 MPI ranks * 6 OpenMP

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