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Install local VampirClient:
# Pick one of
# Linux 64bit:    vampir-7.5.0-linux-x64-setup.bin
# Mac OS X:      vampir-7.5.0-mac.dmg
# Windows 64bit: vampir-7.5.0-win-x64.exe
# Windows 32bit: vampir-7.5.0-win-x86.exe
  local$ scp home.ccs.ornl.gov:/ccs/proj/trn001/vampir/client/vampir-... .
  local$ scp home.ccs.ornl.gov:/ccs/.../client/vampir.license .
# install Vampir package [bash *.bin | install *.dmg | run *.exe]
# start Vampir (e.g. ./bin/vampir &)
# open ssh tunnel to chester (see output of VampirServer)
# Vampir -> connect to localhost:30XXX

Manual:
  scp home.ccs.ornl.gov:/ccs/proj/trn001/vampir/manual/vampir.pdf .

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Running VampirServer on chester
First shell:
  chester$ module load vampir
  chester$ vampirserver start -a <PROJ> -n 16
  chester$ ...
  chester$ Please run:
  chester$  ssh -t -L ...

Second shell:
# open ssh tunnel to the running server instance (copy from output)
  local$ ssh -t -L XX:localhost:XX <user>@home... 'ssh -L ... <user>@chester'

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Tracing:
  local$ ssh -X <user>@home.ccs.ornl.gov
  home$ ssh -X chester
  chester$ mkdir $HOME/vampir-handson
  chester$ cd $HOME/vampir-handson
  chester$ cp -r /ccs/proj/trn001/vampir/*_tracing .
  chester$ module load vampirtrace

Choose an example to get familiar with the tracing env:
  - make changes in initialize, Makefile or submit.pbs if needed
  - cannon_tracing is for self-study (no default tracing enabled)
  chester$ cd [cuda_tracing | cuda_mpi_tracing | cannon_tracing]
  chester$ source initialize
  chester$ make all
  chester$ qsub submit.pbs

Advance Topics for cannon_tracing:
  - filter all occurrences of createMatrix, initRandomMatrix and
    clearMatrix (Hints: Section 5.1; wildcards can be part of regions)
  - trace PAPI counter 'PAPI_FP_OPS' (Hint: Section 4.1)
  - change the instrumentation typ to 'manual' (Hint: Section B.1)

Manual:
  scp home.ccs.ornl.gov:/ccs/proj/trn001/vampir/manual/vampirtrace.pdf .

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