

VTune Server Intel® VTune™ Profiler

Formerly
Intel® VTune™ Amplifier

Heinrich Bockhorst

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Vtune Server Agenda

- Why is a Vtune server useful
- How to use on Cosma
- Demo

Why VTune Server is useful

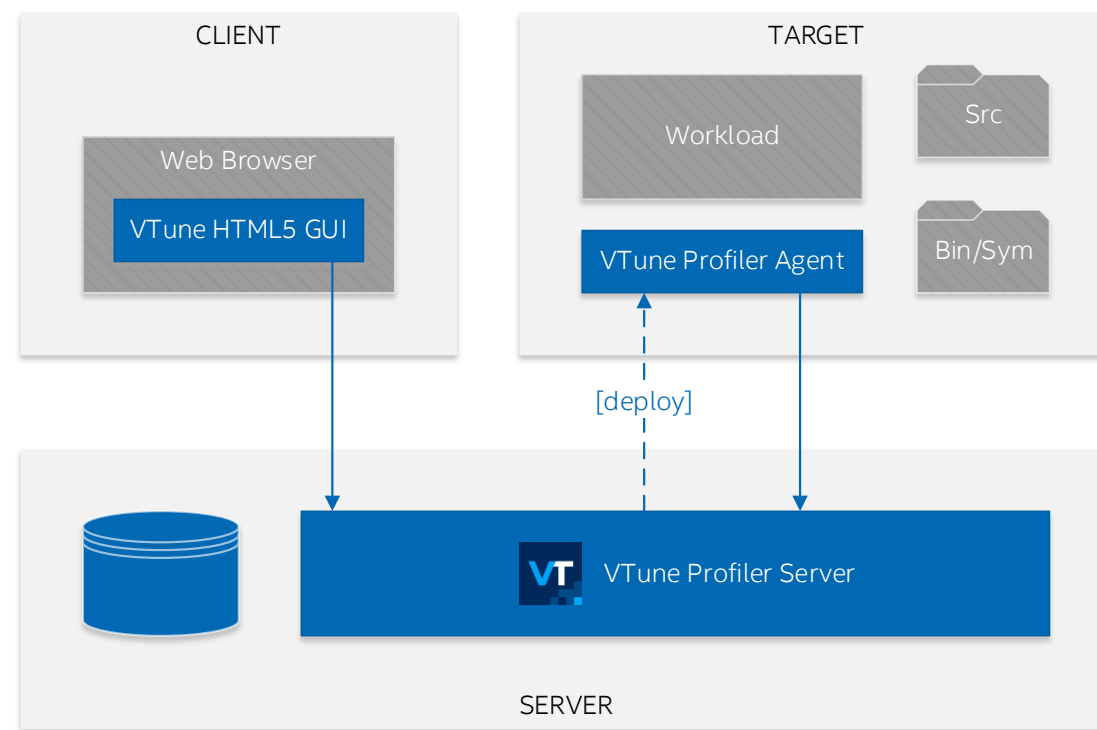
- Running application on a remote (batch) system
- X11 connection is necessary to run remote GUI
is possible at Durham

VTune Server:

- Run Vtune GUI in your Browser and save resources
- No X11 connection necessary to run the GUI

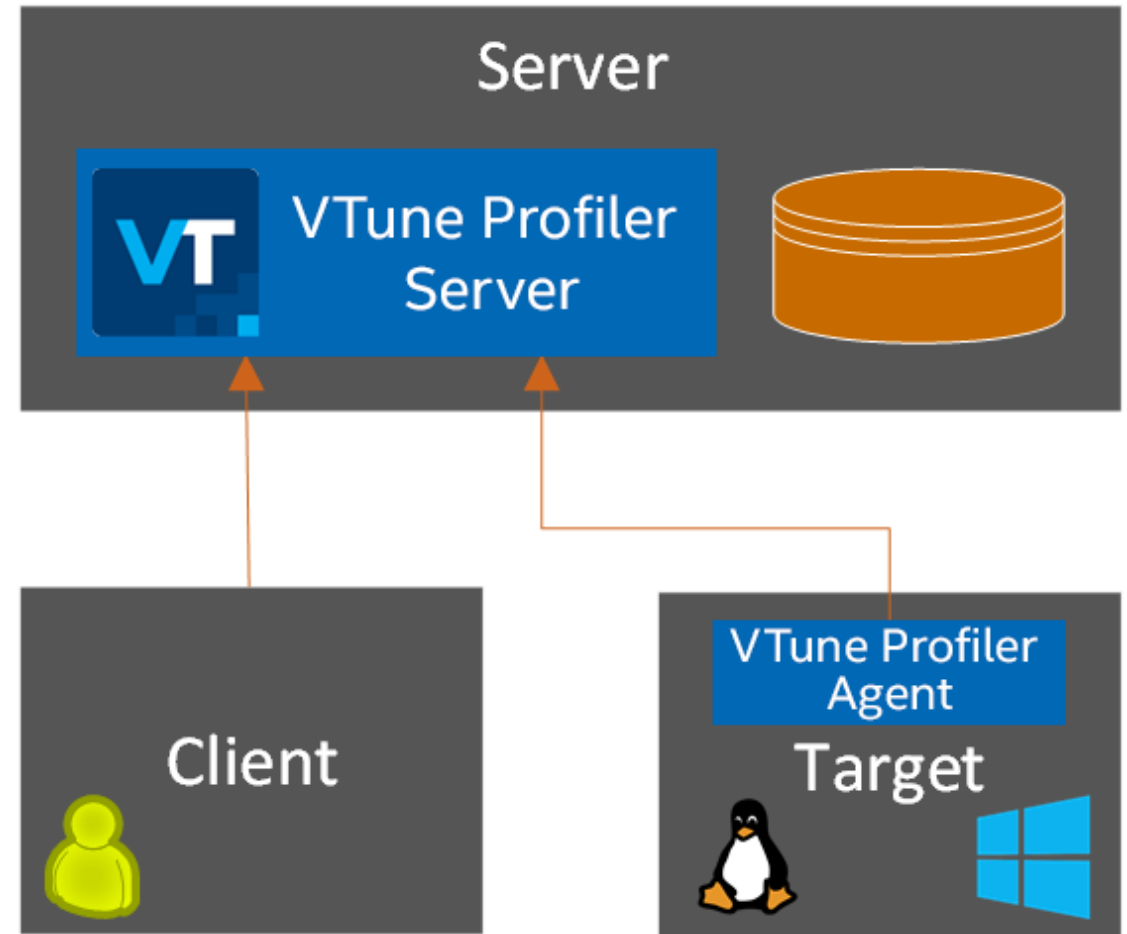
Glossary

- Server: Machine running Intel® VTune™ Profiler core services
- Target: Machine to be profiled, running VTune Profiler collectors
- Client: Machine that the user is logged into



Minimal Footprint

- No install on Client
- Minimal installation on Target
- Remote profiling for Windows and Linux



VTune Server on Cosma part I

- Make a tunnel from your workstation/laptop e.g.

```
$ ssh -L 127.0.0.1:55001:127.0.0.1:55001 cosma
```

- Port **55001** is just an example you need to select a different port since it is just one port per user!
- Allocate node e.g.:

```
$ salloc -p cosma7-shm -A do009 -t 10
```

- Extend tunnel to compute node (e.g. mad02)

```
$ ssh -L 127.0.0.1:55001:127.0.0.1:55001 mad02
```

VTune Server on Cosma part II

- Start vtune server on compute node:
`$ vtune-backend --web-port=55001 --enable-server-profiling`
 - It will provide a web address like:
Serving GUI at <https://127.0.0.1:55005/>
 - Open now a browser window on your local computer and open the address from above. Ignore the security warning and proceed.
- ➔ Vtune GUI will open now in your browser!