DNV·GL

ENERGY

Getting results faster

Introducing processor only licenses and Bladed Cloud

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Waiting is bad

- Large sets of Bladed simulations can take hours or days to run
- No magic bullet – these are complex simulations
- But can we make things faster?

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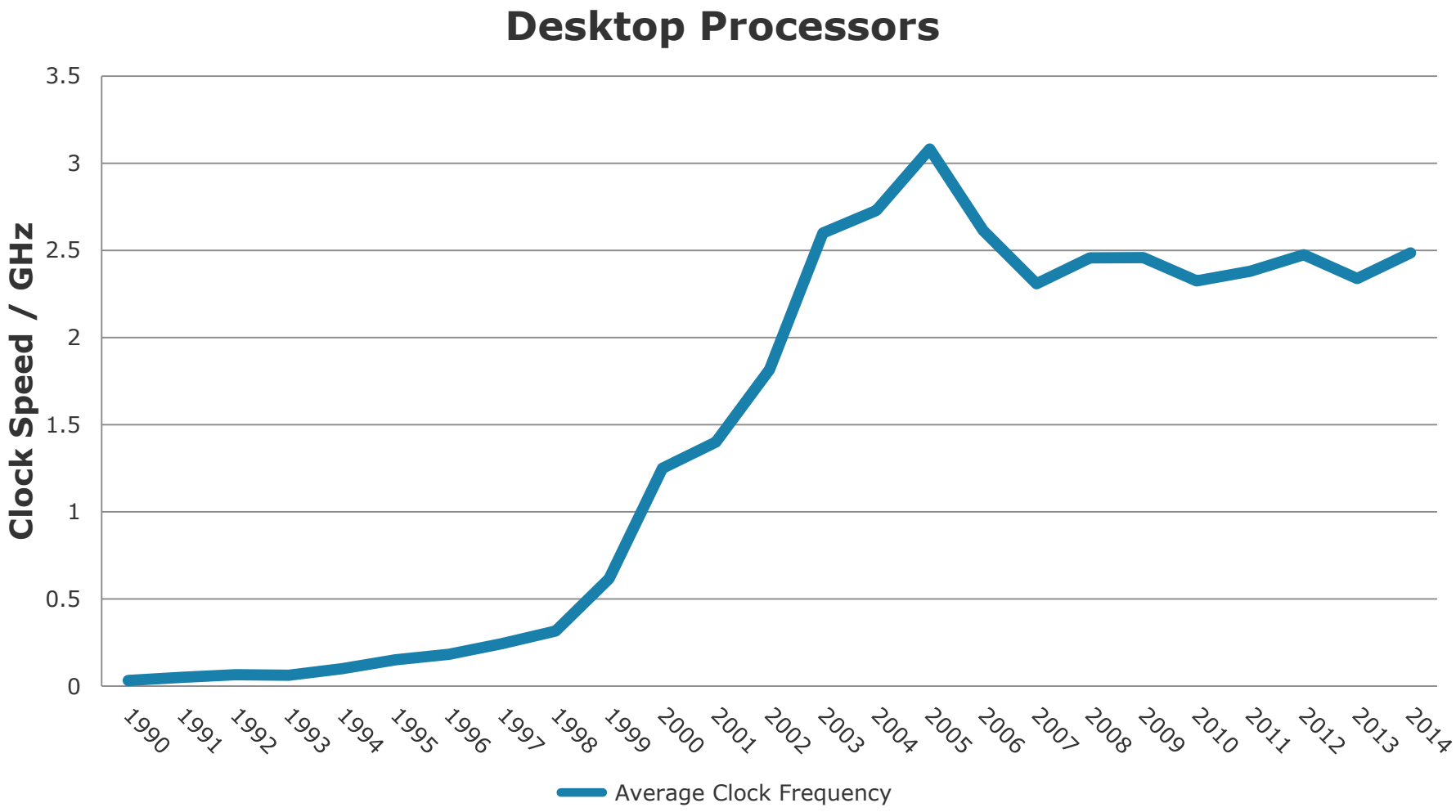
The free ride is over



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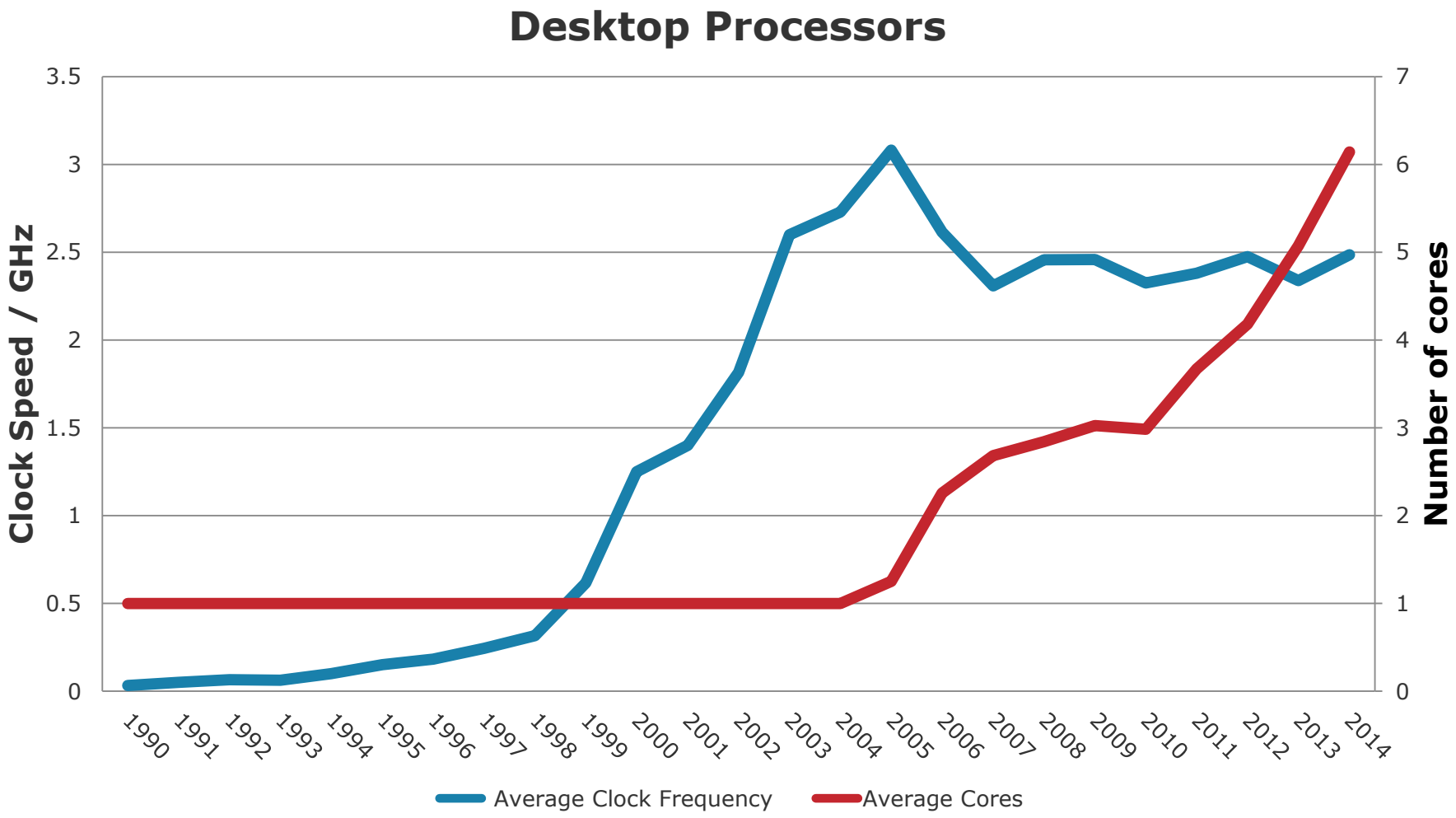
The free ride is over



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The free ride is over

Computers aren’t getting faster

But they can do more things at the same time

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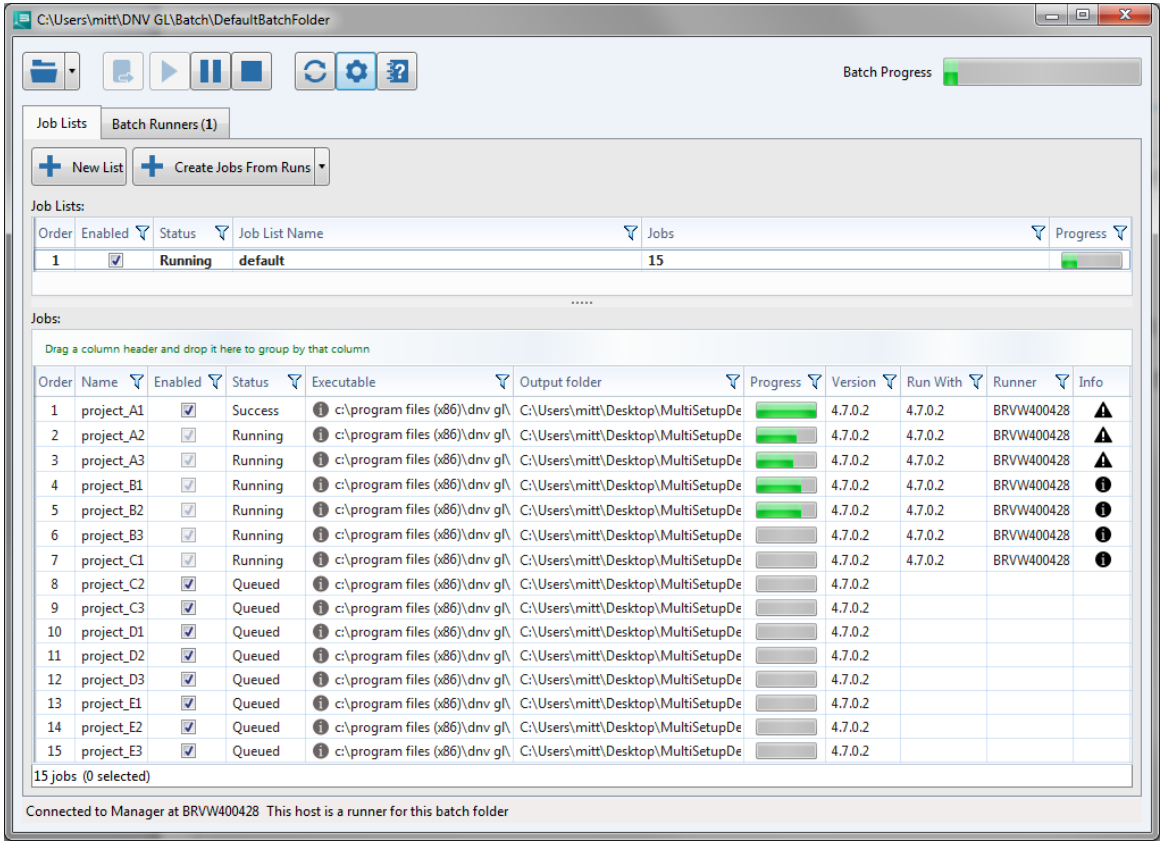
Bladed Batch



- Available in Bladed 4.5
- See it in action at http://tiny.cc/BladedVideos

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Bladed Batch

- Run multiple simulations at the same time on one PC
- Run simulations across several PCs

- *e.g. A powerful server with lots of cores runs lots of simulations at the same time*

- *e.g. All the PCs in the office run simulations in the background*

- Each simulation requires a Bladed licence
- Standard Bladed licence allows 6 simulations to be run at the same time

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Processor-only licences

Reduced-cost Bladed licences that can be used to run calculations

Cannot run user interface

Much more economical than purchasing full Bladed licences

Available **NOW** for Bladed 4.3 and later

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Processor-only licence pricing

- Additional licences are leased annually
- Requires current Bladed support contract

First 10 additional licences: €360/year

11 – 50 additional licences: €170/year

50+: €85/year

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Scaling up – reality

- Cost of hardware
- Cost of licences – Windows and Bladed
- Power
- Space
- IT Departments
- Budgets

- Idle for most of the time!

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Bladed Cloud

Run your simulations simultaneously across 100s of servers

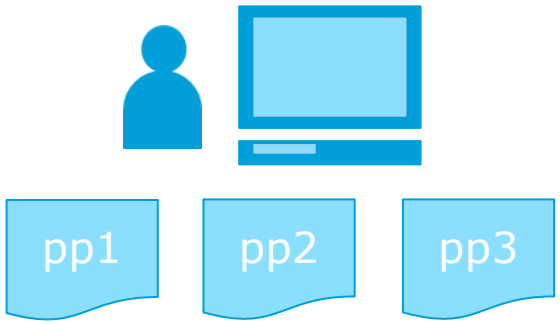
Finish sets of calculations in hours, not days

No setup or configuration

Just pay for the time that you use

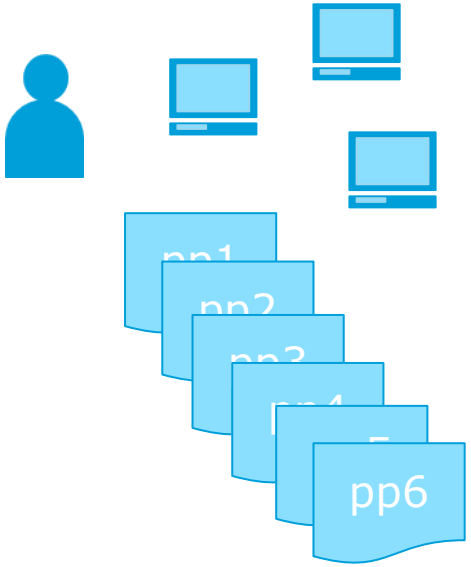
Cloud Potential

Legacy



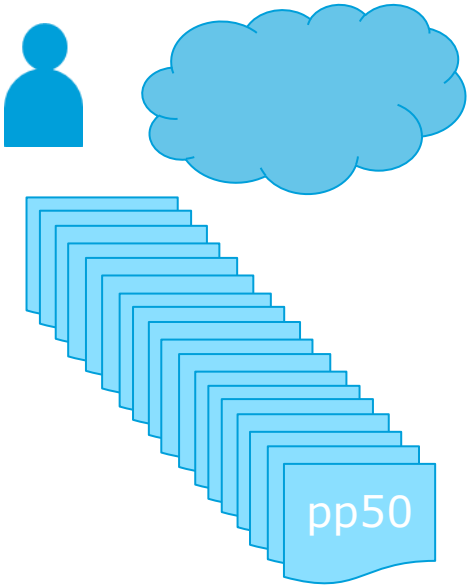
Studies take weeks/months

Current (Batch Processing)



Studies take days

Near Future (Cloud)



Studies take hours

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Next steps

- Bladed Cloud will be released with Bladed 4.8 in 2016
- May extend support to older Bladed releases – according to demand

Future work:

- Pre Processing → Simulation → Post Processing all in the cloud
- Share data and results to allow collaboration on projects

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Conclusion

Take advantage of modern cheap parallel computing

Batch

Run many jobs at the same time

Processor Only Licences

Economical to run Bladed calculations on many of your own PCs

Bladed Cloud

Run Bladed calculations across hundreds of other PCs

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Questions?

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