



_STRONGER_FASTER_TOGETHER_

Google Cloud is geared for extreme

completion

inspiration

into a product.



Cloud computing, providing a powerful, flexible infrastructure to

infrastructure, you can accelerate your most extreme workloads to

- converting an idea into a discovery, a hypothesis into a cure, or

support scalable workloads. Backed by a state-of-the-art



EATINUM PLATINUM inside



Intel® Xeon® scalable Platform represents the largest set of platform advancements in a decade, providing better performance, better security and better agility for a dedicated Cloud infrastructure.

Powered by the latest Intel® Xeon® scalable Platform, the Google Cloud Platform achieves:

- · Up to 20% faster compute performance
- Up to 48% faster HPC performance
- · Almost 2x memory bandwidth for memory bound workloads
- Significantly faster workload completion and lower TCO



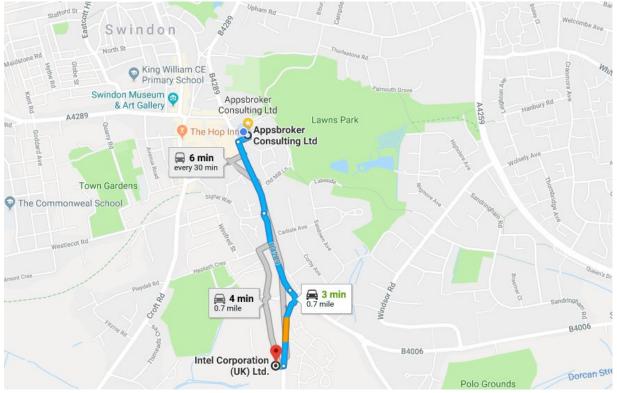
✤ appsbroker

Appsbroker is Europe's largest Google Cloud-only consultancy, with more time spent on Google Cloud Platform (GCP) projects than any other consultancy. Over 140 technical experts provide a platform and the tooling to make HPC/HTC consumption on Google Cloud a frictionless experience. Helping some of Europe's biggest businesses to make data-driven decisions, innovate and do extraordinary things.





ECCoE - Where?



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(intel)

Google Cloud

Extreme Cloud CoE Appsbroker Ltd The Square, Old Town, Swindon

800 yard walk to

Intel Corporation (UK) Pipers Way Swindon

45 minutes - Fast train from London Paddington

1 hour - Drive from London Heathrow airports

Close to Bath, Oxford and Bristol



ECCoE facility



Dedicated Meeting Rooms & Breakout Areas

- Available for ECCoE customer bookings
- Complete with Google Meet connectivity

Dedicated Intel HPC Cluster

- Running the latest Xeon scalable processors
- Direct connectivity to Google Cloud Platform
- Hybrid capability





Hardware Investment

Server Infrastructure



- 8 node Xeon scalable processor cluster
- 384 cores
- Intel Platinum 8160 Processors
- 1.4TB Memory
- 3.6TB Storage

HPC Fabric



- Intel Omni-Path technology
- 100 Gbps fabric
- Providing accelerated MPI rates between nodes

Hybrid Connectivity



- 1 Gbps Partner Interconnect
- High speed 1:1 connection to GCP
- 99.9% availability





Dedicated Team

Experts in:

Google Cloud Services

Intel technologies

HPC/HTC Schedulers / Orchestration

DevOps / Infrastructure as Code

Popular ISVs

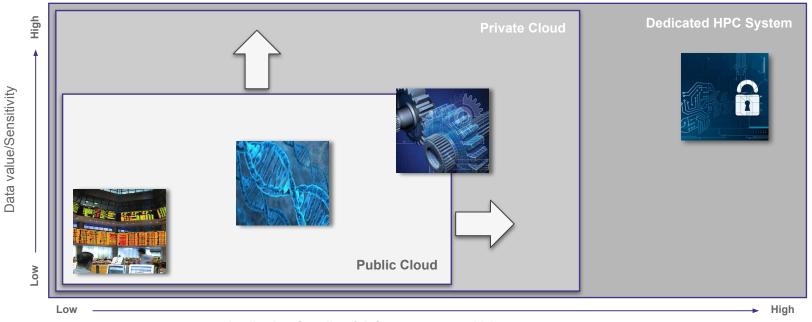
HPC / HTC training







Sample HPC workload fit for the Cloud



Application Coupling & Infrastructure sensitivity





Google Cloud & Intel technologies - see in action at ECCoE



Intel[®] Xeon[®] Scalable processors (Skylake)

Deliver optimized performance for compute-intensive workloads.



Intel[®] Xeon[®] processors, codenamed "Broadwell"

Provide ultra-high memory capacity to modernize large, in-memory database workloads.



Intel[®] Optane[™] DC Persistent Memory

Expand memory capacity while reducing memory cost per TB.



Intel[®] Parallel Studio XE Deliver faster, scalable, and portable parallel code for high-performance computing (HPC), Enterprise, Cloud and Al applications.





ECCoE workshops

3 pioneering forces in cloud computing



Cloud Google Cloud

Cloud experts

Google HPC/HTC experts will join us for deep dive capability demonstrations and advice on running your HPC / HTC workloads on Google Cloud





Hardware / ISV & Performance experts

Understand how the latest data centre technologies for on-premise and Cloud operation can transform your HPC/HTC workloads. Intel experts can join us for ISV tuning, Parallel studio optimisation etc



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Solution experts

Appsbroker have over a decade of experience building large Enterprise systems. Learn from their best practice and witness Hybrid HPC/HTC architectures in operation



ECCoE Workshops

1 day workshop - Capability demonstration or Workshop scoping

- See Hybrid HPC/HTC in action at the ECCoE suite / 'Seeing is Believing'
- Scoping day for 5 / 15 day workshops

5 day workshop - Hybrid trial

- Prove your HPC/HTC workload on Hybrid architecture
- Mini-discovery of existing system / future requirements
- HLD / TCO / Roadmap next steps

15 day workshop

- Same as 5 day plus full deep-dive discovery process
- New ISV / software stack ECCoE setup & benchmarking required / license acquisition



ECCoE Services

Code vectorisation optimisation - Intel Parallel Studio (VTune, Roofline advisor)

Solution Engineering - Google premier partner - Largest Google only partner (10 yrs)

POC - Trial your ISV software on Hybrid Cloud (1 - 3 weeks)

Production systems - Entire solutions for teams and designers

Managed Services - Support production systems, billing and governance

Training / Support:

- Google Cloud for HPC Customer Engineers
- Intel Parallel Studio / Intel Application Engineers / Intel Industry Solution Consultants
- ISV experts via ECCoE partnerships



BIG PERFORMANCE STARTS WITH A SMALL STEP



The potential for extraordinary is just one step away. Take yours today. www.extremecloud.com eccoe@appsbroker.com +44 (0) 1793 391 420





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