

**\_BIG  
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MANCE  
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BIG BUS\_  
INESS**



# \_WELCOME TO BIG PERFORMANCE\_

Demand for extreme cloud workloads such as HPC/HTC, AI, ML and data intensive initiatives are estimated to grow by billions of dollars over the next few years, proving there is enormous potential for businesses to leverage the on-demand nature of cloud.

High-Performance Computing and High Throughput Computing (HPC/HTC) resources and data can be difficult to access at scale, and can mean data requests and results are received in days not hours.

ECCoE (Extreme Cloud Centre of Excellence) combines the reliability and enormous scale of Google's on-demand infrastructure, the world-leading Xeon Scalable (Skylake) processing CPU from Intel, and Appsbroker's unique expertise in delivering complex hybrid solutions and migrations onto Google Cloud Platform.







TIME TO  
LEAD THE WAY

EXTREME  
DEMANDS  
DEMAND BIG  
ANSWERS



\_ ECCOE IS BUSINESS-LED AND OFFERS EXECUTIVES WITH GREAT IDEAS A LOW FRICTION ENVIRONMENT TO DEVELOP THEM, PROVE THEM AND DELIVER BUSINESS TRANSFORMATION \_

\_ MIKE CONNER, APPSBROKER CEO

Commercial success now relies on fast, data-driven decisions and constant innovation. To achieve both, your computing infrastructure must be up to the challenge – offering the rapid access and response times to deliver:

- Greater R&D collaboration
- Capability when demand surges
- Ease of maintenance
- Capital/investment requirements
- Rapid access to scale and flexibility
- Fast upgrades to capabilities

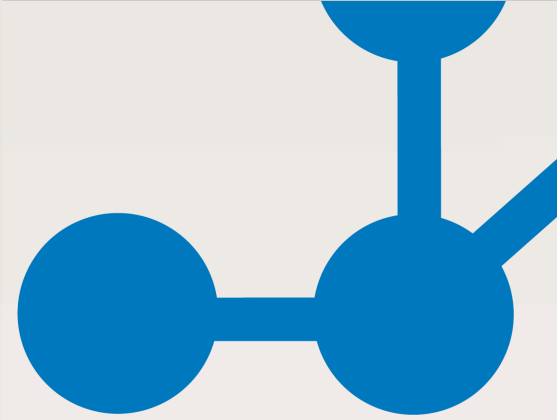
### \_ Extreme Cloud has arrived

The Google Cloud Platform responds better to extreme workloads than many existing HPC and HTC environments. And with this increased capability – financial benefits.

Unlike on-premise HPC environments that require large CapEx investments in both a data centre and the thousands of cores of compute power required, the Cloud avoids large up-front capital commitments. Instead, you benefit from moving to an OpEx model and exploiting the rapid advances in computing power.

The on-demand nature of the Cloud also means you're no longer tied into significant ongoing OpEx commitments and services – irrespective of whether you're using them.

Benefits that big businesses need to start recognising...



# ONE FACILITY

# EPIC RANGE

Our first facility is located in Swindon, UK, just one hour from London, ECCoE has been pioneered to help big businesses accelerate performance – whatever the sector. Just imagine what you could achieve.

## Working with you, we'll:

- Demonstrate how the Extreme Cloud can augment or replace your on-premise computing capabilities
- Help you understand how a better ROI could be achieved by adopting the Google Cloud Platform for high performance and data-intensive workloads
- Deliver a set of benchmarks for your standard HPC/ HTC workloads
- Prove out your workload on Google Cloud Platform with the latest Intel powered architectures
- Build you a business case with forecasting, ROI and TCO analysis, for taking a cloud-centric approach

## You'll discover how moving to Extreme Cloud services can deliver:

- Faster time to completion for improved TCO
- Higher resolution simulations for greater accuracy
- More sophisticated analysis for higher confidence in outcomes

## Excellence starts inside

- Latest tech. Always
- ISV collaboration
- Direct access to Google and Intel expertise
- Hybrid Cloud deployment optimisation
- Connected benchmarking platform
- Secure sandboxing
- Tool development and prototyping



\_FINANCIAL RISK



\_SIMULATION, CAE & CFD



\_WEATHER



\_DATA ANALYTICS & ML



\_ENERGY:  
SEISMIC RESERVOIR



\_SCIENTIFIC VISUALISATION/  
PROFESSIONAL RENDERING



\_LIFE SCIENCES:  
GENOMICS/SEQUENCING



\_DEFENCE/SECURITY



A photograph of three business professionals in a meeting. A man with glasses and a beard is leaning over a woman with blonde hair and glasses, who is pointing towards the right. Another man with glasses is in the foreground, looking towards the woman. The background is a blurred office setting.

# THREE STEPS TO EXTRAORDINARY

Discover the three simple steps that lead to  
extraordinary ideas becoming reality – faster.



1



## \_PREPARATION

1-XWEEKS

The Appsbroker experts, supported by experts from Google and Intel will work closely with you to analyse current workloads and define a scope for the workshop. Using our ECCoE Blueprint to accelerate the process, we will collect all the information and data required for the set-up of the test environments on the Appsbroker hardware and Google Cloud Platform, ensuring the hardware and software environments are optimised in preparation for the workshop.

2



## \_WORKSHOP

1-X WEEKS

All businesses are unique. We'll shape the workshop to fit your needs and challenges. This will typically include:

- Google Cloud Platform overview
- Prioritised review of current workloads
- Optimised set-up and configuration of the physical hardware and GCP/ISV software
- Overview of methodology to benchmark on both environments
- Accelerated workload benchmarking on premise
- Accelerated workload benchmarking on GCP
- Review of results and desired outcomes

3



## \_REPORT

1 WEEK

You'll receive a written report of the output data from the workshop and the benchmarking outcomes. This will include details of configurations used, methodology followed, performance observed and recommendations for next steps.

Based on this data, a roadmap will be created – clearly detailing how you can maximise business outcomes and make the shift to Extreme Cloud computing on GCP.

Appsbroker will also produce a Cost Benefit Analysis (CBA) and Total Cost of Ownership (TCO) statement to indicate the business case for Cloud versus on-premise.

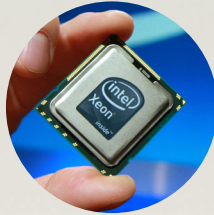


# STRONGER FASTER TOGETHER

The Extreme Cloud Centre of Excellence  
brings together three of the world's most  
pioneering forces in Cloud computing.



Google Cloud is geared for Extreme Cloud computing, providing a powerful, flexible infrastructure to support scalable workloads. Backed by a state-of-the-art infrastructure, you can accelerate your most extreme workloads to completion – converting an idea into a discovery, a hypothesis into a cure, or inspiration into a product.



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 is Europe's largest Google Cloud-only consultancy, with more time spent on Google Cloud Platform (GCP) projects than any other consultancy. Over 10 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.

# \_BIG PERFORMANCE STARTS WITH A SMALL STEP\_

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

