

# Introduction

YellowDog's breakthrough workload management platform is used by partners across the computing industry, from processor and systems vendors through to the world's largest cloud computing providers. To these enterprises the platform delivers unrivalled ease-of-use, cost benefits, scalability and speed as it seamlessly provisions and schedules computing workloads across on-premise systems and the cloud.

This capability can have an even more dramatic impact for teams at a much earlier stage, and a top cloud-computing engineer has suggested that 50% of all tech start-ups should start their development by exploiting the advantages that YellowDog's platform brings.

It is to bring the benefits of that capability within immediate reach of many of the UK's top start-ups, that YellowDog is partnering with SETsquared and making this unique offer to SETsquared's community. Here, we lay out more information that will help you decide if you could be a strong fit to take advantage of this opportunity.

## 1 Size & Stage Of Development

It could be that you are just getting your first funding and are focused on product development, or you may already be a scale-up and working through how to deliver seamlessly to an ever-increasing number of customers while keeping the build-out of every aspect of your organisation in balance. What matters to us is that you are doing something which is a breakthrough in your sector, something which will change lives, enhance our protection of the environment, or change an industry. Those are the impactful journey's we are most keen to find and support through this initiative.

So, tell us what is so special about what you are doing and who it will effect and how.

### 2 Industry

The following is a good guide of what industry you might be in, but we will be delighted if you come from a completely different area of compute-intensive endeavour:

- Life Sciences and Healthcare Drug Discovery, Genomics, Molecular Dynamics
- Automotive/Aerospace Computational Fluid Dynamics, Digital Twin
- Financial Services/Insurance Portfolio Risk Analysis, Credit Risk Analysis, FRTB
- Electronic Design Automation
- Logistics planning
- Meteorology
- Computational modelling/simulation
- AI/Machine Learning



# 3 Use Case & Application Type

There are no fixed rules here, but some factors are good indicators, including:

- **Compute-Intensive** Whether virtual screening of millions of target compounds, or modelling the design of the latest chip or electric vehicle, you will be focused on something truly compute intensive. In general, workloads that require large amounts of computing power are ideal for YellowDog. These workloads can constitute jobs that are loosely or tightly coupled.
- **Cloud** you may already have on-premise server rooms, but it is clear to you that if you can access them efficiently, the benefits of cloud-computing are fundamental to your future, whether in a cloud computing or hybrid model
- Application Development You are specialists in your sector, which could be anything from breakthrough cancer treatments to AI, but to gain the advantages of cloud computing you are finding that you are having to bring in or internally develop expertise is cloud optimisation for your application. This might be in Kubernetes because you have been told that optimisation here will bring performance and cost benefits, even if it simultaneously worries you that you will be forever locked into managing the impact of versions of Kubernetes or being locked into one cloud provider. You would rather just focus on your application and have it run anywhere, with any cloud provider and with any combination of cloud providers or on-premise systems.
- Workload Schedulers If you use or are considering using workload schedulers that is a very good indicator that YellowDog is for you. Likely schedulers you are using or considering would include:
  - Slurm
  - Univa
  - PBS
  - IBM LSF
  - IBM Symphony
  - Tibco
  - DataSynapse/GridServer

#### **Next Steps**

If the guidance above has given you great confidence that you should seriously be considered for one of these awards, you are only two small steps from success:

- 1. Register for the Yellowdog Lunchtime Briefing event on the 15<sup>th</sup> June 12:30 14:00
- 2. Yellowdog will select a number of companies from those that attend to be awarded

If you are unable to attend the briefing, please reach out to Lydia Green <u>lydia.green@setsquared.co.uk</u> to express your interest.