

SHINING A LIGHT ON MARINE CONSERVATION.

Background

The beaches of Northern Australia are important nesting grounds for marine turtles. The increasing use of artificial light poses a significant threat to these vulnerable creatures.

Pendoley Environmental (Pendoley) is a marine conservation consultancy using custom technology to monitor the brightness of the night sky. By combining this work with light modelling techniques, Pendoley scientists are predicting the impacts of artificial light on marine life.

Challenges

There is a rapidly increasing demand for Pendoley's unique expertise. Pendoley's software was not optimised and difficult to parallelise, resulting in overly long run-times on in-house systems. This was impeding progress and affecting the resolution of results.

Solutions

We provided Pendoley scientists with a tailored high performance computing (HPC) solution which enabled them to run projects simultaneously without resource constraints.

We ensured that on-demand HPC resources were aligned with varying project demands, all while prioritising the resolution of results.

Our HPC Experts ensured that Pendoley's code was optimised for performance.

Results

With our tailored HPC solution, Pendoley scientists were able to scale, delivering better results, faster.

This enhanced capability is paving the way for more informed marine conservation efforts—determining the impacts of artificial light on turtle hatchlings, as well as people and other biological receptors.