Bright Computing

College of Life and Environmental Sciences (University of Exeter, Penryn) Enhances its Clustered Infrastructure

CASE STUDY

"I couldn't believe that it only took 4 hours to install the Bright software and get our new cluster live, and then just 20 hours to be entirely operational."

— Dr. M D Sharma
Research Fellow, University of Exeter

UNIVERSITY OF EXETER

The University of Exeter combines world class research with excellent student satisfaction at its campuses in Exeter and Cornwall. It is a member of the Russell Group of leading research-intensive universities. Various colleges at the University of Exeter's Penryn Campus in Cornwall have been a Bright customer since 2013

The Challenge

A Research Fellow from the University of Exeter's campus in Penryn approached Bright in late 2015 to discuss planning and re-vamping an old cluster within their college. This old cluster comprised of a mixed variety of servers and hardware, at all stages of lifecycle.

This clustered environment had been configured manually over the years, with researchers deploying open source tools and technology to tie the IT environment together. However, this mixed bag of freeware required a significant investment of time in terms of day-to-day administration and management. Every bit of extra time spent on managing the system would be time taken away from valuable research projects.

The team at Penryn wanted to introduce automation, to reduce time spent on administration and to optimise the existing infrastructure for performance and reliability while extending the usage of the cluster to a wider community in a cost-effective and efficient manner. Bright infrastructure management technology was chosen to fulfil this role.

The Result

Time Savings
The Research Fellow was overwhelmed that it took just 20 hours to get the cluster up and running, and completely operational, using Bright software.

"I couldn't believe that it only took 4 hours to install the Bright software and get our new cluster live, and then just 20 hours to be entirely operational. Considering the amount of time we have invested over the years on manual administration, this was unprecedented."

—Dr. M D Sharma,
Research Fellow, University of Exeter

"Bright makes cluster management very little effort. The support team at Bright are very responsive. It's clear to see Bright's value for money when delivery is achieved in such a short time."

— Dr. M D Sharma
Research Fellow, Exeter University

Subsequently, this model was adopted by Robin Blundy at another college at the same campus who had a much more complex requirement but were able to deploy basic functionality to their cluster within a working day.

Nurturing the Next Wave of Cluster Experts

A new group to benefit from this local resource at the University of Exeter's Penryn Campus will be a group of students who will learn how to run and manage a cluster. A second benefit is the transfer of skills across the team. Both Robin and a new Bioinformatician at the Penryn campus benefitted from Bright's easy-to-use GUI that made on-boarding much simpler. They were able to learn the technology quickly, and be able to administer the cluster(s) independently in record time. This reduced the impact on end users while the staff members were coming up to speed.

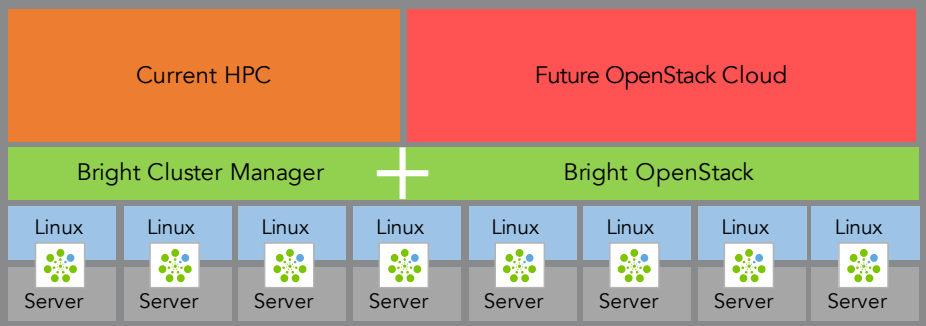
A third benefit of note is that Bright technology supports the researchers' desire to continue to use certain open source technologies. The difference now is that all technology in the infrastructure is managed through a single Bright user interface, which ensures that the various tools knit together seamlessly.

"Bright makes cluster management very little effort. The support team at Bright are very responsive. It's clear to see Bright's value for money when delivery is achieved in such a short time."

—Dr. M D Sharma,
Research Fellow, University of Exeter

Ready for the Future

Future expansion plans within the research team include evaluating OpenStack; but only across part of the cluster. Bright will be able to manage this evolution seamlessly, presenting the HPC and the OpenStack environments from a single pane of glass.



Bright Computing
www.brightcomputing.com