The IEEE, ITEE WA, IET and IICA invite you to this presentation
by WAITTA Incite Award winners DownUnder Geosolutions

Why we can't use co-location (building high density data centres)

Dr Stuart Midgley, CTO DownUnder GeoSolutions

When: 5.30pm 22nd September
Where: Engineers Australia Auditorium,
712 Murray St West Perth

Overview:
Traditional data centres are not designed to handle and cool the latest high density systems. DownUnder GeoSolutions has built one of the most dense and efficient data centres in the world. Doing so required a rethink, completely different design and the development of new technology. The next generation data centres break all the rules and require vendors, manufacturers, operators, owners and even city councils to change the way they think.

About the Presenter:
Dr Stuart Midgley has been working in the high performance computing industry for 20 years as a user, developer, system support/administrator and system architect. Currently he is responsible for DUG's production systems totalling more than 13PFlops.
With a PhD in computational theoretical physics, Stuart learnt very early in his career the power of super computers and the impact they can have on research and has carried over that experience into running one of the world's largest production computing systems.
With a strong interest in new and emerging technologies, Stuart looks forward to continued development and growth of DUG's system, incorporating the latest hardware and programming paradigms.
"I seem to spend most of my time designing and testing cooling systems, building compute clusters and playing with large toys."

A data centre cooling solution that's cooling the planet

DUG was recently announced the Winner of the Most Effective Platform category of the WAITTA Incite Awards. The award celebrated DUG's breakthrough data centre cooling system which is making their data centres among the most energy efficient in the world. The company's patent-pending innovation cools their supercomputers in a specially-designed oil-like substance called polyalphaolefin dielectric fluid. The extremely hot components within the servers are then cooled by the circulating fluid rather than the more traditional, expensive and inefficient air cooling methods. As a result of the innovation DUG's power costs have reduced by 45%. full story