Data Centre Community of Practice

Don Caruana, Laurence Rietberg, Roy Pigeon

Data Centre Working Group

- During 2014 Data Centre Working Group established by QUDIT

- Maintain a vibrant community-of-practice for professional development purposes

- Progress collaborative initiatives to benefit QUDIT members.

- Meet bi-annually with rotating venues

- Representatives from JCU, CQU, SCU, GU, QUT and UQ

- This THETA session - a focal point for the working group to engage wider with stakeholders outside Queensland

- Awareness growing – ANU representative to join next meeting at UQ in July
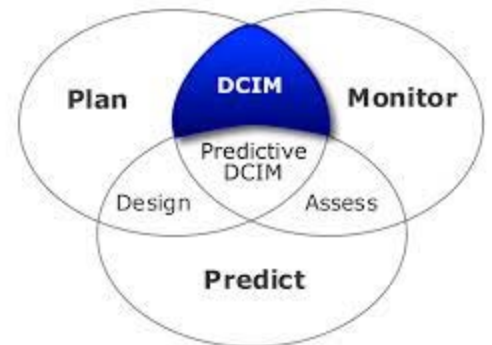
Current Initiatives

Consideration of **residual current devices** (RCDs) in data centres, balancing and managing the safety risks with the conflicting service risks resulting from nuisance RCD trips: an expert consultancy for the sector (UQ) and latest technology options (Griffith)

An initiative to periodically canvass the data centre **co-lo market** with particular reference to higher education/research sector issues

Data centre **monitoring** and **efficiency** initiatives

RCDs in Data Centres

- High availability is still possible…

- Apply a risk management approach to any RCD roll-out

- Install as near to load as possible; i.e., in racks

- Use 'super immunised' RCDs, such as Schneider 'si' or GE 'ai' RCDs – 2 pole accessories – interrupt A + N

- Leakage current (LC) is cumulative – based on power supply type, age, and quantity, <u>not</u> load

- Continuously monitor LC where possible

- Measure and compare data between tests

- Proactively replace an RCD @ <= 20mA ramp test

(Acknowledgements: David Morley, CITEC)

CQUniversity
V
Cyclone Marcia

Real-life Disaster Recovery Test

Roy Pidgeon
May 2015

About CQUniversity

- 23 Sites across Australia
- Dual Sector University
- 32,000 Students

Before the storm

- Category 1 to 2 Cyclone Prediction
- 24 Hours before event
  - Activate Emergency Management Team
- Actual cross predicted for Friday 20th Feb

The Storm

Everyone's OK – but...

No power

Almost no communications

No Fuel

Everything is a mess

Its HOT!

POWER INVERTER

DC INPUT

FAN

MARTEC

That's it folks

Thanks for your attention