

USQ
AUSTRALIA

The “Now” generation Datacentre

UNIVERSITY OF
SOUTHERN QUEENSLAND



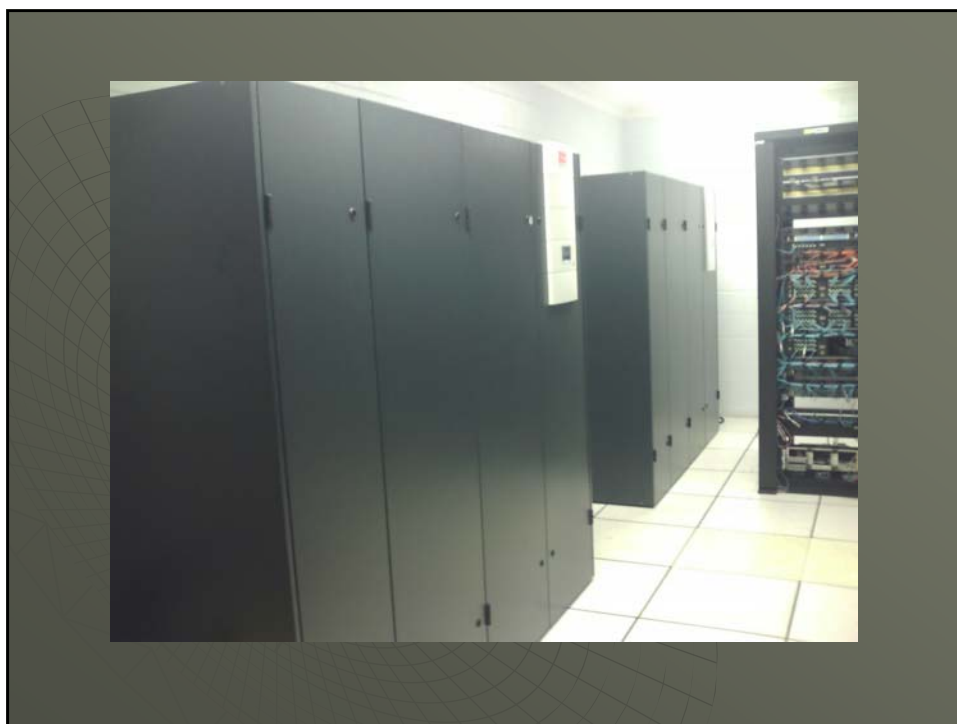
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QUESTnet 2010









Existing Compute Environment

- ◆ Cooling at maximum capacity
- ◆ Power distribution approaching maximum capacity
- ◆ Structure capability of floor unable to support high density racking
- ◆ Structural problems with the building
- ◆ Zinc whiskers on raised floor tiles

Decision influenced by

- ◆ Project budget
- ◆ Project Timelines
- ◆ Alignment with strategy
- ◆ Flexibility of chosen solution
- ◆ Expansion capability
- ◆ Build model
- ◆ Innovative solution
- ◆ Leading edge technology

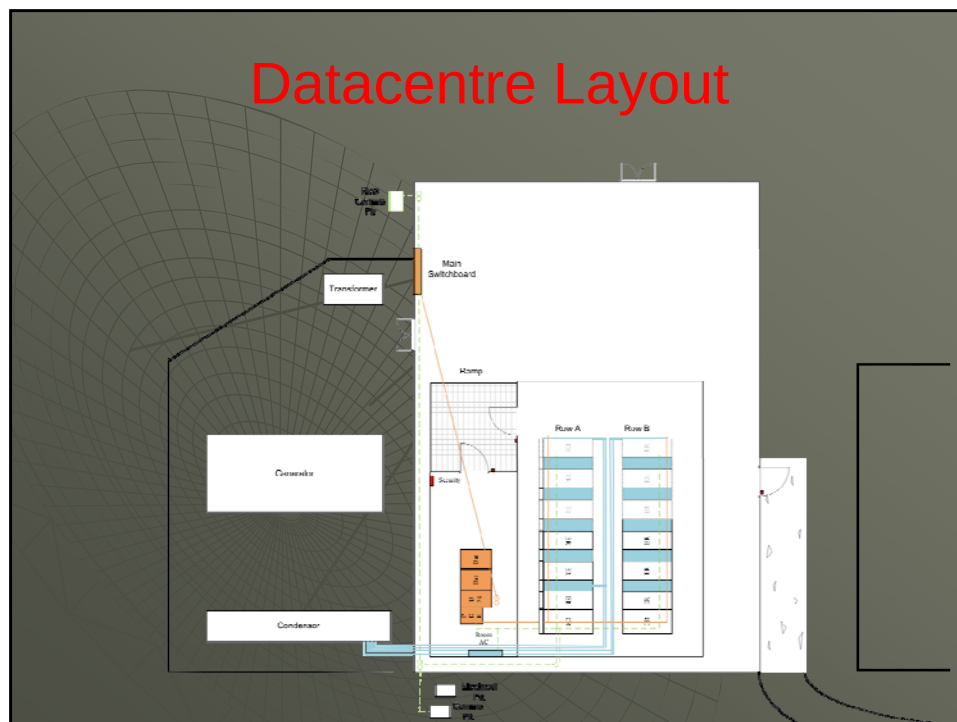
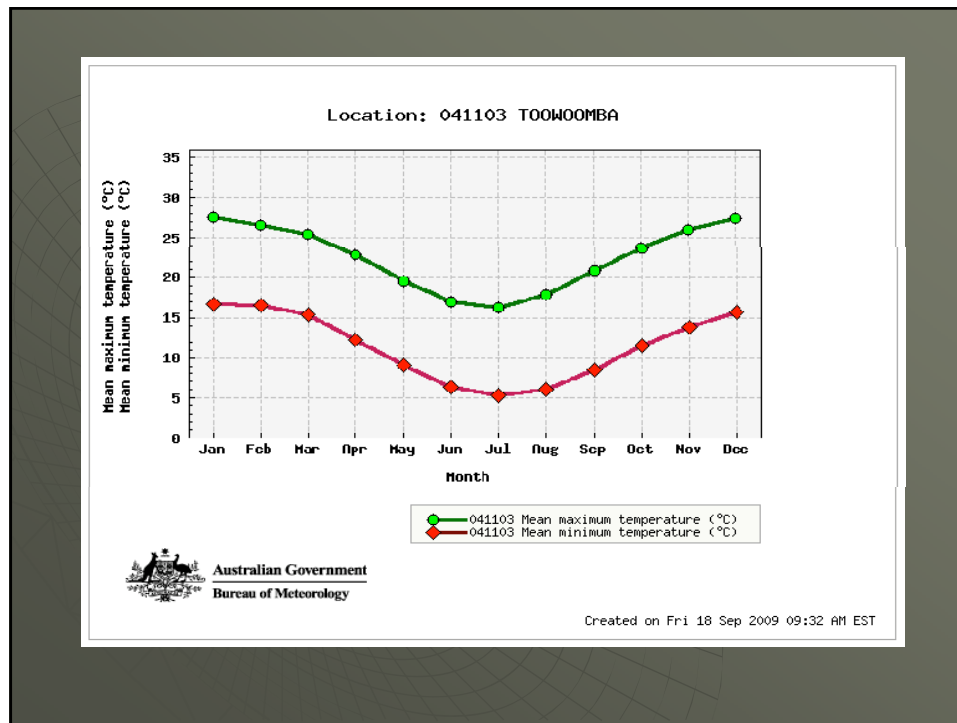


Advantages of Strategy

- ◆ Continued operation while awaiting decision on Springfield building
- ◆ Greater resilience with spread of infrastructure between campuses
- ◆ MDC investment recoupable
- ◆ Higher density Data Centre footprint
- ◆ Repurpose E114 to open plan office
- ◆ Investment able to be capitalised
- ◆ Minimal disruption to services during transition

Expected Benefits

- ◆ Efficiency savings
 - Power (PUE < 1.4)
 - Free cooling
- ◆ USQ carbon neutral by 2020
- ◆ High availability
- ◆ Physical footprint
- ◆ High density racking - 25KW capacity
- ◆ In rack fire suppression
- ◆ Repurposing (shed and Data Centre)



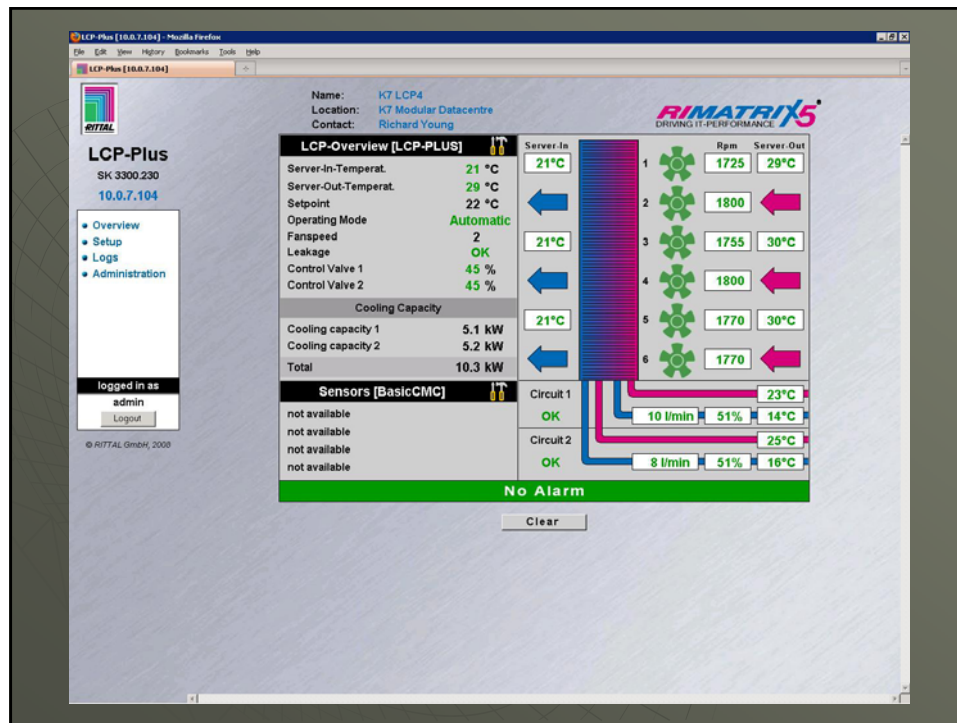












Useful Stats	At Fit Out	Max Capacity
Floor space	54sqm	Ability to Double if required
Racks	6 x Equipment 2 x Comms	14 x Equipment 2 Comms
Power	100KVA	200KVA
Heat Load	100KW	300KW
Air Conditioning	4 x LCP T3+	12 x LCP T3+

Current PUE 1.8 with MDC currently running at approx 30 % load capacity (10% at Fit Out)

PUE of 1.5 projected as load can be increased significantly without increasing cooling requirement

3 Year window projected until 100% utilisation of current capability