

## **Data Centre Roadmap**

**Bob Macdonald | Manager UBCNETwork and Infrastructure Facilities** 

The current Data Centre is located on the ground floor of the Klink building; it is the main data centre for the UBC campus with a 100 Equipment Rack capacity, this was recently supplemented by a 10 rack Data Centre installation in the Main Communications Room of Life Sciences. The Klink facility was upgraded in 2008/2009 to increase Generator backup capacity and replace the end of life HVAC system with a new closed loop cooling and humidity controlled infrastructure. The facility although ageing still plays a key role in all services provide by UBC IT and as such has dedicated staff managing and operating the data centre. An example of this will be the expansion of Co Hosting capability in the Klink facility to allow stakeholders to temporarily host there equipment in preparation for Virtualisation onto the centralised services offered by UBC IT.

A new Data Centre is currently under construction as part of the Capital project for the construction of the new Pharmaceutical Science building. This highly efficient facility will be governed by UBC IT and will consist of approx 5000 sq ft of data centre capacity with a 100 rack capacity housing primarily research based computing. In addition investigations are underway to secure a third facility off site from the Vancouver campus; this facility would provide redundancy and disaster recovery capability for both Vancouver and Okanagan campuses.

The completion of the new Data Centre will allow for the transition of Research computing and IT services consolidation away from inefficient Dept Server Rooms to the new facility. With this consolidation and with offsite Data Centre Space the Klink Facility can be gradually depopulated of its Core services equipment over the next 5 years. Departmental Server Rooms decommissioning will be ongoing as Research consolidates and as services are centralised.

Life Cycle Maintenance will be ongoing and budgeted accordingly.

Year	Milestones
2010	Design of new Data Centre
2011	Construction of new Data Centre
	Short list options for offsite capacity
	Select, develop off site location
	Begin decommissioning of department Server Rooms where appropriate
2012	Commissioning of new Data Centre
	Begin depopulation of Klink Data Centre
	Off Site capacity commissioning
2013	Department Server Room decommissioning Cont.
	Depopulation of Klink Cont
2014	Department Server Room decommissioning Cont
	Depopulation of Central Core Services within Klink Completed



- Energy Efficiency design for new Facility completed.
- Stakeholder input for user cost plan.
- Populate new Facility to 25% capacity.
- Commission Off Site Location.
- Turn down Westgrid 1 within Klink Facility.
- Depopulation of core services from Klink completed.
- Department Server Room capacity reduced by 25%.











- Design build new facility
- Off site capacity review with other institutions
- Select off site location
- Begin Server Room decommissioning.
- Department Server Room capacity decommissioning cont.
- Depopulation of Core Services from Klink cont.