POSITION DESCRIPTION – General Staff

Position Title:	IT Architect	Level:		8/9
Faculty/Division:	Engineering & Information	Department/Location:		SMART

Primary purpose of the position:

This position aims to support the modelling and data visualisation and analysis work conducted at the SMART Infrastructure Facility (SMART), University of Wollongong (UoW). You will be part of SMART's Research Support team and will have to design, implement and support cloud computing facilities, running Linux and Windows-based software stacks run in virtual machines in support of SMART's data analysis and modelling efforts. In close collaboration with UoW's Information Technology Services (ITS) and sub-contractors, you will assist SMART's academic and general staff in using cloud facilities and/or local HPC environment as appropriate, including some code programming tasks whenever needed. This position will report directly to the Research Director and will become the technical interface between SMART, ITS and IT sub-contractors.

Position Environment:

The SMART Infrastructure Facility is a world-class comprehensive research and teaching facility of integrated laboratories that will address the way that infrastructure related disciplines are taught and researched. SMART is the first of its kind in Australia, and one of the very few in the world. It will promote research collaboration across traditional disciplines, increase and expand research capacity, stimulate collaboration with industry, government and research institutions and provide an independent, comprehensive, multi-disciplinary facility for holistic and evidence-based evaluation of infrastructure. SMART is the largest infrastructure research facility in the world and will lead the University of Wollongong in the development and expansion of the national infrastructure data network. The Facility will support research and commercial programs that are nationally significant and that will impact government, industry and communities in infrastructure management.

SMART provides an exciting opportunity for a highly motivated, flexible and multi-skilled individual to work as part of a committed and outcomes-oriented team that will shape and build SMART as a strategic priority for the University over the next few years. The position environment will be dynamic with changing demands and emphasis as the Facility develops and grows. This environment will suit team members who are adaptable, happy to take on new challenges, are prepared to assist across functions to achieve demanding deadlines and common goals. The IT architect role will support the design, maintenance, and management of computer and data intensive IT systems in support of SMART's research.

Major Accountabilities/Responsibilities:

	Responsibilities	Outcome	Percentage of Time	Office Use Only
1.	IT architecture	Efficient and cost effective platforms for SMART's computational needs.	30%	
2.	IT documentation	Documentation of SMART's IT systems	20%	
3.	IT management	Appropriately managed IT systems	25%	
4.	IT training and assistance	Assisting SMART research staff in utilising computing resources.	25%	

5.	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.	Ongoing	
6.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	Ongoing	
7.	Have OH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & others.	Ongoing	

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:
- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

Reporting Relationships:

Position Reports to:	Research Director
The position supervises the following positions:	N/A
Other Key Contacts:	Chief Executive Officer Chief Operating Officer

Key Relationships:

Contact/Organisation:	Purpose & Frequency of contact
ITS	Whenever ITS' assistance is needed in managing central IT resources (weekly on average).
IT sub-contractors	Supervising IT services implementation and delivery as per contractual engagements.
IT standard agencies	Regular contacts with INTERSECT, ANDS, NICTA and CSIRO to keep up with Australian and international standards.

Key Challenges:

1. Delivering fit-for-purpose and on time IT solutions.
2. Ensuring that IT architectures are properly documented.
3. Ensuring that IT systems are appropriately maintained and backed-up.
4. Contributing to SMART's strategy by providing adequate IT support to the research team.

SELECTION CRITERIA - Knowledge & Skills:

- Demonstrated experience in software deployment under Linux and Windows environments.
- Demonstrated experience in working within an academic and research environment.
- One or more scripting languages, ideally Bash, Batch, and Python/Perl, as well as a solid background in one or more generic programming languages, ideally Java.
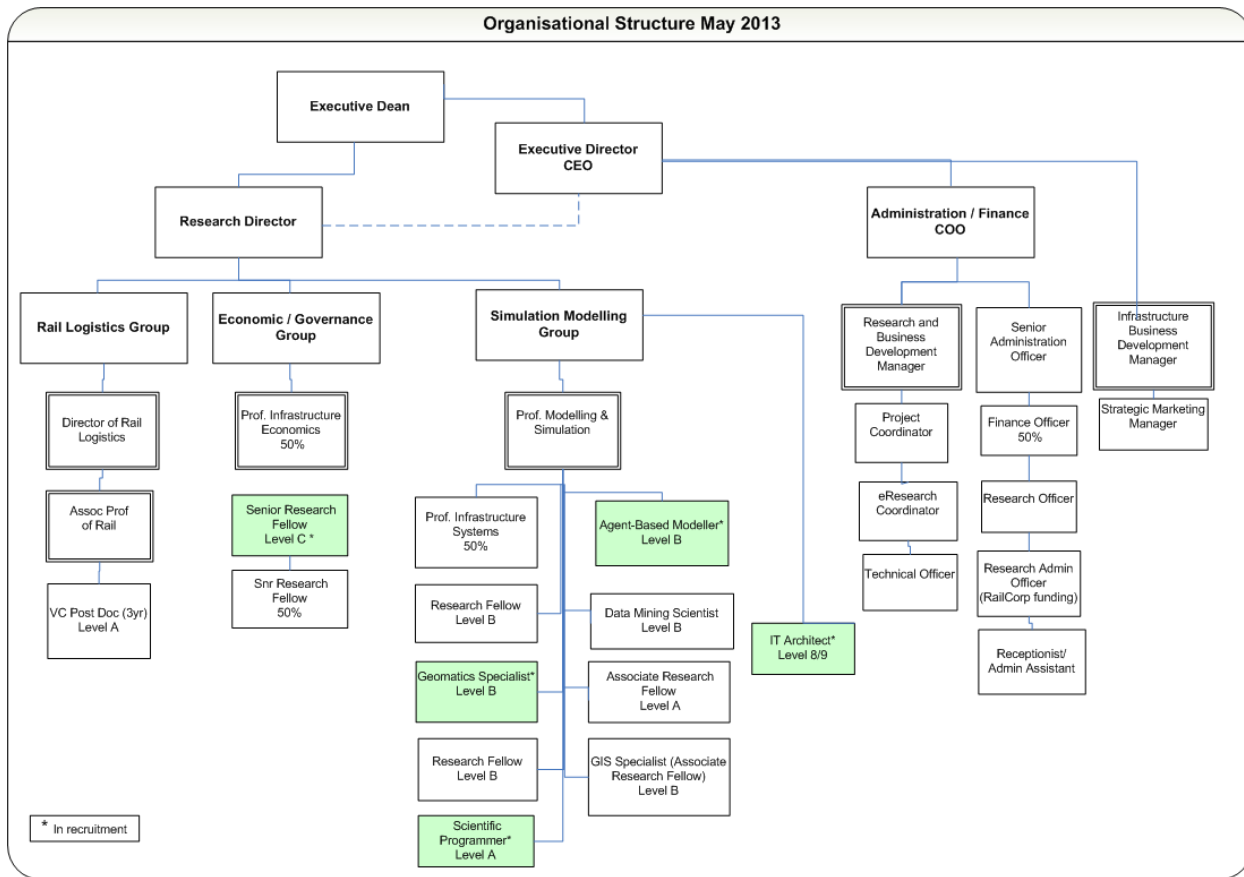- One or more virtualisation products.

SELECTION CRITERIA - Education & Experience:

- Bachelor degree in computer systems engineering or closely related discipline.
- Linux and Windows systems administration experience.
- Experience in designing computer clusters in support of data intensive research.
- Experience in administration, configuration, and maintenance of PostgreSQL/PostGIS databases.

Personal Attributes:

- Ability to generate innovative solutions.
- Good work ethic.
- Capacity to work in multi-disciplinary teams.

Organisational Chart:

Organisational Structure May 2013

Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____