1. Job Details

Job title: **Senior Systems Administrator**

School/Support Department: **Management Information Services**

Unit (if applicable): **Technical Services, part of Development Services Group**

Line manager: **Technical Services Manager**

2. Job Purpose

To work as a senior member of the Technical Services team to maintain and develop all aspects of the corporate applications infrastructure. In particular to provide high quality specialist technical support for key web and application server technologies, network security, Unix, Linux and Microsoft Windows servers. This role is essential to maintain a smooth running, secure, efficient and up-to-date environment from which the University’s vital business systems are delivered.

3. Main Responsibilities

1. Support and maintain the corporate IT infrastructure to ensure day-to-day smooth running, with minimal downtime, of all services for staff and students. Ensure that services meet customer requirements and are delivered to agreed standards with appropriate documentation maintained. **20%**

2. Provide technical input, leadership and planning for business projects in specialist technical areas including security and firewalls, web and application software configuration, networking and Linux/UNIX/Windows server administration ensuring appropriate and optimal use of technology to achieve business objectives. **40%**

3. Closely monitor security vulnerabilities and technology developments assessing threats and opportunities to offer informed guidance on the actions required to protect and enhance the corporate applications infrastructure. The post-holder works closely with colleagues in MIS Customer Services and Unix Facilities Management to ensure knowledge and expertise is pooled to maximise benefit to the University. **10%**

4. Provide Oracle Database Administration for business projects supporting the Senior Database Administrators and ensuring all agreed standards and technical procedures are adhered to. **10%**

5. Plan, coordinate and execute technical projects and major updates within areas of technical specialism. Carry out significant research and investigation, plan execution and co-ordinate personal and staff inputs to deliver required outcomes with minimal impact on existing services. **10%**

6. Provide mentoring role for other team members providing regular guidance and on the job training in specialist technical areas. **10%**

4. Planning and Organising

- Technical Services Team normally works to a plan three to six months ahead, although projects up two years ahead may be on the schedule. Planning involves balancing inputs required for business driven IT projects with the essential technology driven projects, e.g. major software upgrades.
- The post holder is the lead technical resource for the 2005/6 INF project “Old College Secure Infrastructure Upgrade” which will replace the firewall infrastructure used to protect key MIS services, e.g. Business Objects, desktop and web publishing, delivered from servers in Old College.
- Following regular, usually daily, advisories from CERT the post holder is required to assess any risk, communicate any threat to Technical Services Manager and implement any necessary software patching across all MIS production and development servers.
- The post holder is responsible for the development, testing and maintenance of server and application Disaster Recovery procedures which will be initiated in the event of a major incident affecting the corporate applications infrastructure.
- Mentoring the Napier student placement delegating work and providing regular guidance and on the job training as required.
- Balancing support requirements with project related tasks is a crucial element of this role

5. Problem Solving

- Support of production systems is a major part of the job and can demand prompt solutions to unanticipated problems requiring a degree of flexibility and a pragmatic approach.
- In the event of service failure or performance problems, often associated with business critical activities such as matriculation, the post holder is required to rapidly evaluate the problem, agree corrective action and implement a solution which meets the needs of all stakeholders in accordance with agreed standards and procures, e.g. Change Control and Service Announcements.
- Using the MIS help desk to manage and prioritise support calls, working closely with colleagues to develop a comprehensive set of procedures covering regular support activities and raising issues with the Technical Services Manager. An essential requirement to manage the workload and respond quickly and appropriately to support calls which are frequently of a business critical nature.
- Monitoring systems and resources interpreting measurement data and reacting to service or system issues to implement effective and appropriate corrective action.

6. Decision Making

- Maintaining pace with the rate at which technology is changing and the resulting threats and opportunities for the corporate applications infrastructure. The post holder is a technical authority within his/her specialist areas advising colleagues and customers on required actions whilst ensuring an appropriate balance between functionality, cost and security.
- Based on a technical evaluation of customer requirements and working within agreed budgets the post holder is required to specify appropriate technical solutions liaising with hardware and software suppliers as required.
- Direction comes mainly from the Technical Services Manager. Regular meetings are held to discuss progress and determine priorities.

7. Key Contacts/Relationships

- Technical Services Manager or the Assistant Director Development Services on a daily basis to discuss work progress and priorities.
- EUCS Unix Facilities Management Team on a daily basis to discuss issues relating to the UNIX environment and security.
- Colleagues in MIS on a daily basis to provide detailed technical support to meet agreed project objectives.
- Staff in the University user community to provide technical support and resolve problems as required.
- Regular contacts with hardware and software suppliers

8. Knowledge, Skills and Experience Needed for the Job

- A relevant degree or equivalent qualification
• A minimum of three years experience working as a Systems Administrator in a production environment with at least one years experience in a technical or service leadership role.
• A professional qualification or other evidence of competence in specialist technology areas, e.g. Firewall-1 certification.
• Having expert knowledge of server technologies and an in depth knowledge of security issues is essential while appreciating the need to balance these appropriately with the business needs of the University.
• Excellent verbal and written communication skills.
• Team working and team building skills.
• Confidence to work under pressure and to deliver effective and high quality solutions to problems.

9. Dimensions

The post holder has shared operational responsibility for:

• Administration of 31+ production UNIX application servers
• Administration of 11 UNIX database servers
• Administration of 10+ Windows/Linux Servers
• Administration, configuration of secure Firewall infrastructure protecting all Corporate Services running from Old College. (100+ websites, 42+ servers, 1500 mailboxes/diaries 2TB (1 TB is 1 million megabytes) of client data)
• Management of 3+ TB of critical University data. (1 TB is 1 million megabytes)
• Maintaining services for 35000+ registered customers (staff, students, alumni) in SG2 and the wider academic community.
• Ensuring that services are available 24*7.
• Delivering 70+ business application systems.
• Providing technical guidance to 30+ development and support staff in MIS.
• Microsoft Windows, Active Directory and Windows server support.

10. Job Context and any other relevant information