

FIJI NATIONAL UNIVERSITY

Job Description

VISION STATEMENT:

To be the leading dual-sector University in the Pacific.

MISSION STATEMENT:

To serve the people, the economy, and society of Fiji and the wider Pacific region, by providing education and training for employability, with an excellent student experience; carrying out research with real-world impact, aligned to national priorities and with global relevance; engaging proactively with stakeholders, in our communities, nation, and region; and demonstrating leadership in sustainability

1. POSITION DETAILS

Position	: System Engineer
Grade	: 5
Incumbent	: Mr/Ms
Division	: Division of Information Technology Services
Department	: Department of Network, Systems & Security
Location	: Derrick Campus
Reports to	: Director Information Technology Services through respective Managers

2. PURPOSE

The System Engineer is responsible for managing a virtualized hyper-converged environment running on VMware and VSAN and OS administration of Windows. The position's primary responsibility is to manage VMWare, VSAN, DELL Blade servers, manage Veeam Replication & Rubrik backup. The commitment also involved managing the Hardware, HDD spacing, Memory allocation, maintenance, monitoring, patching, and upgrading the servers. He/She will be responsible for assisting budget submissions, evaluating tenders, providing management with reports, Managing assigned projects, and being an ideal mentor for other team members.

The University has Datacenters that are geographically dispersed over Viti Levu, He/she is responsible for managing the access of all the data centers and disaster recovery site.

In addition to the responsibilities listed above, this position is responsible for providing support for customers (users), and assigned applications and/or information systems, including provisioning of servers, memory, and HDD space allocation, according to the customer requirement and standards.

Additional responsibilities also include supporting solution design, researching how to help translate requirements into workable technical solutions, and supporting the evaluation of third-party vendors as directed

3. ORGANISATION CHART

Position of Your Immediate Supervisor: **Manager IT – Network, Systems & Security**

In the table below write down the positions reporting to you (if any). For each of those positions, indicate the number of staff reporting to them.

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Positions Reporting To You	No Of Staff Reporting To Them
None	None

4. KEY ACCOUNTABILITIES

1. System Planning & Development

- a) Manage and stay abreast with current and evolving System technologies (Veeam, Edge Computing, Data encryption, Embedded Hardware Authentications) by developing and updating the annual plan on the University's System infrastructure.
- b) Plan and develop strategies to introduce new features and System-related technologies to increase productivity and decrease costs and update the annual plans
- c) Prepare, maintain and update documents of System's equipment and infrastructure according to the specifications.
- d) Ability to understand technical and functional requirements and translate these into specifications for equipment tenders
- e) Assist in developing tenders for sourcing of System equipment, Backup Power Supplies, Hypervisor Solutions, Data Backup Solutions, and infrastructure which meets the needs of the University and technical specifications and lead the System team in their assessments
- f) Ensure defense in-depth implementation of security, ensuring disabling non-essential services in Virtual Environment, Server Infrastructure, backup data solutions and any other related to the FNU Systems falls under this section.
- g) Prepare plans to maintain, plan and initiate the failover tests of the server equipment in coordination with cohort departments
- h) Research, identify and evaluate ways to improve systems administration tasks such server virtual machine cloning, patching, imaging, software distribution etc.

2. System Operations

- a) The Division of ITS aims to provide an SLA of 99.99% uptime of its services.
- b) Ensure to maintain change and audit log as well as report incidents of any outage to ICT management
- c) With highly advanced IT infrastructure implemented at University, encountering new & complex faults are common. Should be able to work with external technical support to provide fixes that may be highly customized for the University.
- d) Responsible for maintaining Server Infrastructure, Virtual and Physical Environment, Data Backup Systems and OS orchestration
- e) Ensures the stable operation of the in-house Systems/Datacentres and all colocation data centres
- f) Provide periodic reports on System health, backup and capacity issue. Ensure risks are registered into the IT risk register.
- g) Responsible for maintaining secured access of system devices at FNU Data Centers, Colocation Datecenter and Disaster Recovery site.
- h) Provide Tier 5-7 end-user support (technical hardware & software) for all IT services related to the department.
- i) Recommend and perform any required maintenance, upgrades and installations to ensure the most optimal environment.
- j) System Engineer is also responsible for managing, troubleshooting, licensing, patching, and updating of hardware and software assets Attend to alerts and notifications generated by Monitoring servers and other security devices.
- k) Physical periodic checks to colocation site's hosting at Data Center and DR sites as well as data centers located at FNU campuses.
- l) To manage and escalate service requests to the Managers in order to avoid service breaches

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- m) Continuous monitoring and health check of Data-Centre uninterrupted power supplies (30kVA UPS).
- n) Ensure to maintain the weekly checks of GenSets supplying power to the FNU data centers in accordance with Estate and Facility department.
- o) Ensure to keep monitoring issues and problems by identifying abnormalities, and report violations.
- p) Ensure that appropriate measures are proactively followed in response to unforeseen issues such as IT downtime or zero-day exploits to the servers
- q) Responsible to keep the anti-virus, Window Firewalls and patching of servers up to date in the section.

3. System Installations

- a) Design, configure, implement and maintain all system platforms and their associated software, such as Updated version of Microsoft OS, VMWare vSphere, Hyper-V, ESXi Linux, Red HAT, and Virtualization management software.
- b) Ensure to assist Cohort departments for installation, configuration and troubleshooting of Server shells and Operating systems.
- c) Responsible to maintain, update and co-ordinate among cohort department for vulnerable servers
- d) Responsible to configure, maintain and monitor Server access
- e) Manage the standard and planned tasks on Server/System devices and software such as installation works, device security configurations and their tests are done according to approved installation and test plans.
- f) Ensure System infrastructure plans, architecture designs and detailed design documents and AS-built documents are maintained up to date.
- g) Ensure proper deployment of new servers, regular maintenance, removal of unused servers is done regularly.
- h) Ensure to protect System by defining access privileges, control structures, and resources management
- i) Research, develop and Prepare documentations for new purchases of system Equipment and software.
- j) Liaise with finance and prepare analysis of the quotations and follow ups.
- k) Ensure to identify the vulnerability in the server infrastructure and mitigate the top-level threats in co-ordination with cohort departments
- l) Responsible to assist in failover procedure of BCP to start the secondary server environment in case unavailability of our main Data Center
- m) Responsible to keep record and track of all the server installed in the University and inventory of the devices and cleanup as and when necessary
- n) Responsible to procure and maintain FNU Wide System related equipment/Software Licenses, Version upgrades and patch applications,
- o) Maintaining the inventory and design documents. Ensuring changes in configs are reflected in the diagrams
- p) Manage and assist the process of providing training and documentation to users in the division. Help identify technology training needs for users and arrange appropriate training opportunities. Work with student employees creating custom documentation and training materials for in-house systems or divisional business practices
- q) Assist in testing of new custom hardware units and software products. Assist the Service and Support team with hardware installations and troubleshooting
- r) Ensure to maintain and updated regularly the server access monitoring system.

4. Other Responsibilities

- a) Completes work assignments and supports universities specific projects by applying expertise in subject area; supporting the development of work plans to meet universities priorities and deadlines; ensuring team follows all procedures and policies; coordinating and assigning resources to accomplish priorities and deadlines; collaborating cross-functionally to make effective business decisions; solving complex problems; escalating high priority issues or risks, as appropriate; and recognizing and capitalizing on improvement opportunities.
- b) Practices self-development and promotes learning in others by proactively providing information, resources, advice, and expertise with co-workers and other users; building relationships with cross-functional stakeholders; influencing others through technical explanations and examples; adapting to modern course

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delivery and new responsibilities; listening and responding to, seeking, and addressing performance feedback; providing feedback to others and managers; creating and executing plans to capitalize on strengths and develop weaknesses; supporting team collaboration; and adapting to and learning from change, difficulties, and feedback.

- c) Own the Incident Management Process and follow internal procedures for change management, incident management and escalation
- d) Monitor and manage cohort work activities at all times conduct in a professional and courteous manner to all staff, students, and external community. Collaborate with cohort ITS departments and teams as and when required.
- e) Actively take participate in internal/external audit and comply with the requirements
- f) Actively participate in ensuring the requirements of a quality programme, including the requirements of any Quality Assurance System, are met and maintained
- g) To carry out other duty and/or responsibilities related to the efficient and effectivity functioning of the Department and Division, as directed by the Manager or Director.

5. KEY CHALLENGES

- This is an important technical role in the systems section, and the FNU Systems is the core backbone of all ITS-related services. The incumbent will be required to work odd hours to perform the scheduled upgrade as well as to attend to any faults or issues arising at any time of the day/ night
- There is a high risk of managing the complex system infrastructure and performing upgrades. When things break, the expectation of the University is very high to provide an immediate fix.
- Ensuring conformity in the implementation of policies and processes in an organisation with diversity in people and organisational culture.
- The role demands extended work hours and delivery of work under tight deadlines

6. QUALIFICATION

Essential

- A Bachelors degree in Computer Science, Information Systems, Cyber Security or Information Technology
- VMWare – Certified Technical Associate (VCTA)

Desirable

- VMware vSphere 6.5 Advance Design
- VMware - Certified Advanced Professional (VCAP)

7. EXPERIENCE

Essential:

- 3 years experience in IT sector with at least 2 years managing VMWare, Rubrik, Veeam, IBM Blade server, Dell Blade server, and SAN Storage system.
- Must possess prior experience of VMWare environment, data backup technologies, and event management on enterprise level
- Fundamental understanding of software, computer, and network architectures
- Experience in managing Server Access Monitoring software.
- Must possess excellent customer service skills.

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- Must have prior knowledge of doing documentation.

Desirable:

- Certified by reputable IT vendors.
- Experience in managing IT assets.
- Understanding of System related Protocols

8. KNOWLEDGE & SKILLS

- Candidate must have hands-on experience dealing with Virtual and physical server system, Data Backup and encryption technologies, System's security Protocol, backup strategies, data communications, collaboration solutions, software licensing, system monitoring, application development, prepare specifications for tender evaluations, project management, dealing with the latest technology and demonstrated experience in ICT operational management.
- Candidate must be experienced in reviewing IT policies & strategies, ensuring availability of all IT-related systems.
- Demonstrates an understanding of the issues relevant to a variety of software modules; maintains an up to date perspective and knowledge of the businesses; applies technology and business knowledge to solve business problems and create new opportunities. Sets and conveys clear goals and monitors progress; is accessible and supports relevant others; obtains results and adds value to the organization by making timely and sound decisions and influencing others.
- Intellectual capacity to break down a problem or situation into its component parts, identifying implications, timeframes and sequences.
- Creates commitment to common goals; identifies competing interests, and finds ways to balance them; values contributions of all team members and other constituencies; values team accomplishments over individual accomplishments; leverages others' strengths and experiences to achieve team goals; cooperates with colleagues and shares resources.
- Establishes and builds relationships with the stakeholders of the University. Applies knowledge to the business and provides personalized, value-added service. Demonstrates willingness to meet needs of clients by pursuing improved courses of action; delivers products and services that best serve client needs; uses client feedback as a basis for improving service and performs necessary follow up work without being prompted.
- Ability to communicate ideas in both technical and user-friendly language.
- Candidate must have strong sense of urgency when supporting all Student/Staff
- Exceptional planning skills, as well as the ability to work within change control parameters
- Ability to express complex situational information verbally and in written form
- Excellent oral, written, and interpersonal communications skills
- Ability to work well under pressure and minimal supervision
- Ability to create accurate System and application diagrams using MS Visio
- Extensive practical knowledge in importing data for use in report software, spreadsheets, graphs, and flow charts
- Exceptional analytical and problem-solving skills, with logical problem-solving experience from Layer 1 through Layer 7 of the OSI model
- Experience with high-availability environments with 99.99% service-level agreement (SLA) experience with virtualization

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9. WORKING RELATIONSHIP

INTERNAL	Frequency
Dean, Director, Manager, Support Staff, Head of Department, Head of School, Dean(s), Staff and students	Daily

EXTERNAL	Frequency
FNU Stakeholders, Commercial and Non- Commercial Industries, Students, Statutory bodies, NGOs and External Institutions/Universities, Vendors, Technical Support, External Engineers	As when required

10. JOB DESCRIPTION AND VARIATION OF EMPLOYMENT CONDITIONS

It is acknowledged and agreed that from time to time as result of the evolving needs of the employer, the Employee may be required to upgrade his/her qualifications and/or to alter the position or role tasks that are to be carried out. Such alterations shall not be deemed to be a variation of this job description or a breach of its terms providing the substantive nature of the employment remains consistent with the parties' intention at the time of contracting.