# Technical Services – CDSCC SCP3

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| Advertised Job Title**:** | Computer Systems Administrator |
| Reference Number**:** | 57880 |
| Classification**:** | CDSCC SCP 3.1 – 3.4 Professional Stream (NON CSOF) |
| Salary Range: | AU $95,022 to $105,619 plus $5,787.60 Tracking Station Allowance plus superannuation and any other applicable allowance |
| Location**:** | Canberra Deep Space Communications Complex, Tidbinbilla, ACT |
| Tenure: | Indefinite |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | Australian Citizens Only |
| Functional Area**:** | Technical Services |
| % Client Focus - Internal: | 50% |
| % Client Focus - External: | 50% |
| Reports to the: | Engineering Group Leader |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| The **Canberra Deep Space Communication Complex (CDSCC)** hosts the ground-based facilities needed to support continuous spacecraft telecommunications as part of NASA’s **Deep Space Network (DSN)**. For more information on CDSCC, please visit: <http://www.cdscc.nasa.gov>  The **Operations and Engineering Section (OES)** hosts the operational staff and supporting technical expertise required to utilise and maintain the systems located at CDSCC. Within OES, the **Engineering Group** provides the technical expertise needed to support operations staff in their activities, maintain a wide range of equipment, undertake targeted development work and assist other CDSCC Sections as needed. The **Data Systems/Administration (Data Sys/Admin)** sub-group is responsible for administration, management and development support of designated DSN flight computer systems. Additionally, the team provides related technical services to other local groups including Operations, RF, Antenna and Radio Astronomy as well as liaising with overseas subsystem support and development engineers. The **Computer Systems Administrator** position resides within this sub-group.  With limited direction from the Senior Computer Systems Administrator, the Engineering Group Leader, and the OES Manager and as part of a small team, the **Computer Systems Administrator** will provide technical support for DSN flight computer systems. The Computer Systems Administrator will also provide IT security support for these systems and assist with tasks being performed at CDSCC in support of operational automation and the JPL sponsored Centre of Excellence for automated software installation. |

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| **Duties and Key Result Areas:** |
| **INSTALLATION, MAINTENANCE AND SUPPORT INCLUDING IT SECURITY**   * Commission, upgrade, test, calibration and repair of equipment and subsystems that are part of the monitor and control, tracking, telemetry and command systems. * Installation and maintenance of operational software, including OS / security patches. * System Administration (primarily Linux) in a secure networked environment. * Ensure the ongoing availability of critical flight computer systems. * Troubleshoot hardware problems at the operating system and firmware levels. * Provide out of normal working hours support via telephone or attendance onsite for special activities, diagnostics and repairs when necessary. * Assist or provide necessary training to operations staff in relation to new system deliveries. * Support IT security tasks for Flight Systems to ensure compliance with JPL IT Security policies. * Assist in forward planning and implementation tasks associated with Flight Systems IT Security.   **PROJECT MANAGEMENT, CONFIGURATION MANAGEMENT AND TECHNICAL PLANNING**   * Provide supervision and technical guidance to visiting contractors for new or upgraded systems. * Maintain record keeping tools and version control of system hardware and software configurations. * Evaluate JPL flight network IT security requirements and assist in developing strategies for future human spaceflight IT Security enhancements. * Prepare, update, and review documentation and reports, including drawings and schematics. * Support of system performance testing, data capture and analysis. * Participation in formal reviews and acceptance testing at CDSCC and on occasion at JPL, GDSCC or MDSCC.   **Design & development**   * In a team environment, develop and support a network based software installation service and deliver associated products to DSN wide Flight Systems.   + Liaise with internal/external stakeholders throughout the development life cycle.   + Develop advanced Linux/UNIX and Solaris Operating System Environment features.   + Test newly developed configurations and operational scenarios.   + Develop tools to support systems including version control and record keeping.   + Employ advanced troubleshooting techniques (e.g. network packet analysis, code review).   + Work with Operations staff members to develop and evolve DSN operations automation tools.   **LIAISON WITH INTERNAL AND EXTERNAL CLIENTS**   * Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation. * Work collaboratively with colleagues within your team and across the DSN to reach objectives. * Other duties as required. |

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all pre-requisites and essential criteria can be appointed*  ***Pre-Requisites:***   1. **Education/Qualifications:** Degree in arelevant Engineering or Information Technology area. 2. **Other Certifications:** Hold and maintain a current Driver’s Licence.   ***Essential Criteria***   1. Certifications in Linux or Unix Systems Administration for e.g. Red Hat Linux or a Sun Microsystems Solaris Advanced Systems Administration Qualification. 2. An ability to troubleshoot hardware problems to a systems level. 3. Self-motivated and able to providing quality service to clients while under minimal supervision. 4. Ability to exercise sound judgement and act on initiative in routine matters, and when required, under operational pressure. 5. Ability to effectively present information and liaise appropriately with overseas colleagues. 6. Must demonstrate the ability to foster teamwork and develop effective working relationships.   **Desirable Criteria**   1. Network administration qualifications for CISCO equipment, Microsoft Windows System Administration Qualification such as the Microsoft Certified Systems Engineer (MCSE). 2. A practical understanding of network administration and IT security. 3. Configuration and maintenance of Sun, Dell, Intel computer hardware and NetApp appliances. 4. Experience with Virtualization Technologies such as Oracle VM, Vagrant and Docker. 5. Experience with Configuration Management Tools such as Puppet, Ansible and Salt. 6. Experience in use of Tcl/Tk or similar scripting language.   **As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to**:   * Excellent science * Inclusion, trust & respect * Health, safety & environment * Delivery on commitments.   **In your application and at interview you will need to demonstrate alignment with these behaviours.** |

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| **Other Information:** |
| **How to Apply**  Please apply for this position online at <https://jobs.csiro.au/> and enter requisition number **57880**. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’)  Please load your CV (Maximum 2MB). You may also be required to respond to some screening questions.  If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: [careers.online@csiro.au](mailto:careers.online@csiro.au).  **Referees**: Please provide contact details of two previous supervisor or academic/professional referees in your resume/CV. We will ask your permission before making contact.  **Contact:** If after reading the selection documentation you require further information please contact:  **Mr Graham Baines**via email: **gbaines@cdscc.nasa.gov** or phone: **+61 2 62 017 855**  Please do not email your application directly to Mr Baines. Applications received via this method will not be considered.  The **Commonwealth Scientific and Industrial Research Organisation (CSIRO)** is Australia's national science agency and one of the largest and most diverse research agencies in the world.  We offer excellent career development, professional support, and the opportunity to work with science leaders.  CSIRO's purpose is to deliver great science and innovative solutions for industry, society and the environment by igniting the creative spirit of our people. For more information on CSIRO, please visit: <http://www.csiro.au>  The **CSIRO Astronomy and Space Science (CASS)** division provides facilities for scientists from Australia and around the world to explore our solar system and beyond. These facilities include the Australian Telescope National Facility (ATNF), which supports radio astronomy by operating radio telescopes at three observatories across NSW and the Canberra Deep Space Communication Complex (CDSCC). For more information on CASS, please visit: <http://www.csiro.au/org/CASS.html> |