



Candidate Information Pack

Data Engineering
Professionals

Level 4 – Executive Level 2

Position details

Title	Data Engineering Professionals
Classification	Level 4 – Executive Level 2
Location	Canberra and Adelaide
Salary Range	\$97,148 - \$232,719* (*Total Salary range comprises salary and applicable allowances and bonuses. Remuneration is subject to s33 of the ISA.)
Contact	Recruitment Phone: (02) 6261 1849
Closing Date and Time	Please refer to date on website

About ASIS

The Australian Secret Intelligence Service (ASIS) is Australia's overseas intelligence collection agency. We are Australia's experts at collecting highly sensitive information – secret intelligence – from sources overseas to keep Australia and our region safe and prosperous.

Our work spans continents and cultures. As a tech-powered and data-driven organisation, we use covert techniques and cutting-edge technology to put us in the right rooms, next to the right people, with the right access to the intelligence we need. We are tasked to collect intelligence – it might be political, military or economic information – deliberately withheld from the Australian Government that might present threats to or opportunities for Australia.

From graduates to career changers, we come from every corner of the country and all walks of life, with backgrounds from all around the world.

Regardless of our ethnicity, experiences and education, we're bound by a shared commitment to something bigger: building a better future for those who come after us. We seek to reflect the community we serve, and welcome applications from Aboriginal and Torres Strait Islander peoples, women, people with a disability, neurodiverse, people from culturally and linguistically diverse backgrounds and those who identify as LGBTQIA+.

It's a mission owned by everyone, with opportunities for all.

The roles

Are you keen to design and develop world-class capabilities, turning data into knowledge and operational outcomes? Are you passionate about building solutions to allow data to tell its story? ASIS offers an opportunity to achieve these goals in an uncompromisingly unique environment. As a Data Professional in ASIS, you will have the chance to actively enable our operational teams to make the best use of ASIS's unique data assets.

ASIS leverages the wide world of open-source software and supplements it with our own development to deliver the bespoke tools required for the ASIS mission. Among our core technologies are Python, Scala, Java, TypeScript, and JavaScript. Our stack includes Spring, Vue, PyTorch, Tensorflow, Apache Spark, Accumulo, Hadoop, NiFi, Solr, Ansible and Git. We leverage structured and unstructured data, including geospatial and multilingual datasets. Ideal candidates will be extraordinarily innovative, self-motivated and keen to use these toolsets to craft new systems that are simply not found in any other organisation.

If this sounds like an environment you could thrive in, then apply for one of these unique positions.

Specialisations

We have a number of positions available including:

- Software Engineers at L4 to EL1
- Data Engineers at L 6 to EL1
- Data Technicians at L4 to Level 6
- System Engineers at L4 to EL1
- DevOps Engineers at L4 to EL1
- Data Centre Facilities Manager at EL1 to EL2 (Canberra only)

Salary Range

L4: \$97,148 – \$101,338

L5: \$105,013 – \$113,141

L6: \$116,245 – \$133,968

EL1: \$145,137 – \$169,572

EL2: \$171,497 – \$202,365

Application Levels

A Level 4 candidate would be expected to be new to the area and work under the guidance and supervision of a more senior officer.

A candidate at the Level 5 level would be expected to have one to two years real-world experience and will be working under some supervision.

A Level 6 level candidate would be expected to have more experience and operate with limited supervision within a core group of developers.

A candidate at the EL1 level is expected to have substantial experience, and some deep technical expertise. They operate entirely independently and have the capacity to fulfil leadership roles as required.

EL2 candidates fulfil principal engineer or section leadership roles. They are expected to have substantial experience and significant deep subject matter expertise in their field of specialisation.

Specialisations

Software Engineer (L4 – EL1)

Software Engineers in ASIS play a pivotal role in enabling us to achieve our unique mission and drive real world outcomes. They design, build and maintain innovative bespoke systems that maximise the value and impact of our data.

They are highly motivated and engage in cross-functional collaboration, working closely with other engineers, data scientists, and end-users to translate business needs into scalable, high-impact solutions, ensuring seamless integration across the entire stack.

Key Responsibilities and Tasks

- Engage in cross-functional collaboration with other engineers, data scientists, and end-users, to design, develop, and maintain innovative bespoke systems that maximise the value and impact of ASIS's data
- Enable high value mission outcomes by building engaging and intuitive UX for end-users, robust backend APIs for engineers and data scientists, or solutions that bridge both
- Write clean, maintainable, and scalable code, actively participate in code reviews, and contribute to fostering a culture of continuous improvement
- Design, implement or apply efficient data structures and algorithms to optimize performance
- Continuously learn and develop new skills, taking ownership of your personal and professional growth, while working independently with minimal supervision
- Clearly communicate business and technical concepts to diverse range of stakeholders, from end-users to senior leadership.

Education, Qualification and Experience Requirements:

The panel will regard the following education, qualifications and/or experience highly:

- Formal training, such as a bachelor's degree in a relevant field such as computer science, software engineering, or equivalent
- Experience working and succeeding as a software engineer in industry, government, intelligence or research institutions
- Demonstrated independent drive to succeed in a small, tight-knit team
- Excellent verbal and written communication skills

Data Engineer (L6 - EL1)

We are looking for motivated and experienced Data Engineers to join our team and tackle unique data challenges that directly impact our business operations.

This role is perfect for candidates with several years' experience in data engineering, data integration, and data management. Using tools like Python, NiFi and Java, you will be responsible for designing, building, operationalising and securing data pipelines, stores and real-time processing systems. You will leverage your experience to help inform the design of our next generation of scalable, secure, reliable and performant data systems.

ASIS operates in an uncompromisingly unique environment. No two days, or datasets, will be the same as you maximise the use of ASIS's operational data holdings—a challenge that sets us apart from the ordinary.

Key Responsibilities and Tasks

- Support the design, development and maintenance of our data ingest pipelines
- Troubleshoot issues related to data ingestion, identifying root causes and implementing sustainable solutions promptly
- Support the design, development, delivery and maintenance of large-scale secure data systems
- Collaborate closely with data colleagues, analysts and mission areas to understand data requirements and support data delivery initiatives
- Contribute to communicating and documenting data workflows, processes, and solutions for knowledge sharing

Education, Qualification and Experience Requirements

The following education, qualifications and/or experience will be highly regarded:

- Bachelor's degree in Computer Science, Information Technology, or a related field
- Basic understanding of programming concepts; familiarity with Python, Java, or similar languages is a plus
- Strong interest in learning about data management, ETL (Extract, Transform, Load) processes, and data pipelines
- Have a knowledge of database management systems (relational, and non-relational) and bulk data concepts
- Ability to work collaboratively in a team environment and willingness to learn from experienced professionals
- Excellent problem-solving skills and attention to detail

Data Technician (L4 - L6)

We are looking for motivated entry-level Data Technicians to join our team and tackle unique data challenges that directly impact our business operations.

This role is perfect for candidates eager to kick-start their career in data engineering, integration, and management. You will be responsible for loading, running and monitoring data pipelines, including associated Standard Operating Procedures and administration. You will be using tools like Python to ensure seamless data ingestion into our systems, and take pride in building and maintaining an efficient and critical capability.

ASIS operates in an uncompromisingly unique environment. No two days, or datasets, will be the same as you maximise the use of ASIS's operational data holdings—a challenge that sets us apart from the ordinary.

Key Responsibilities and Tasks

- Learn under the guidance of senior team members, and then take ownership of data ingestion pipelines
- Implement basic data validation and quality checks to ensure data integrity throughout the ingestion process
- Troubleshoot issues related to data ingestion, and assist with the implementation of sustainable solutions promptly
- Collaborate closely with data colleagues to support delivery initiatives
- Contribute to documenting and communicating data workflows, processes, and solutions for knowledge sharing

Education, Qualification and Experience Requirements

The following education, qualifications and/or experience will be highly regarded:

- Tafe Certificate III/IV in Information Technology or related field; or strong performance in online Programming or Data courses
- Basic understanding of programming concepts; familiarity with Python or similar languages is a plus
- Strong interest in learning about data management, ETL (Extract, Transform, Load) processes, data pipelines, and implementing a robust data program
- Ability to work collaboratively in a team environment and willingness to learn from experienced professionals
- Excellent problem-solving skills and attention to detail

Systems Engineer (L4 – EL1)

Systems Engineers in ASIS maintain highly specialised systems delivering to operational teams around the globe. We have a large number of systems delivering a variety of services at a range of maturities. Extending beyond a normal systems administration role, there is never a dull moment and we work closely with our data scientists and analytical teams to have a real impact.

Key Responsibilities and Tasks

- Build, maintain and support development, test and production environments including CI/CD
- Implement and maintain best-practice security controls, including both on-system and throughout the development lifecycle
- Develop and maintain high-quality documentation including logical, system and network design documentation
- Perform analysis of monitoring, error reporting, alerting and issue reports to find the root cause of problems
- Collaborate with other engineers and data scientists to implement robust and scalable software solutions in a problem space like no other
- Contribute to the design and development of ground-breaking solutions for unique data challenges across the ASIS mission
- Independently learn and develop new skills and techniques with an eye to practical applications
- Communicate regularly and pre-emptively with peers and colleagues to keep everyone informed

Education, Qualification and Experience Requirements

The following education, qualifications and/or experience will be highly regarded:

- Formal training, such as a bachelor's degree in computer science, engineering, or related field
- Experience in designing and maintaining large scale storage systems (Gluster, Ceph, etc)
- Strong containerisation experience using Docker, Podman and Kubernetes
- Experience in distributed computing technologies particularly Hadoop, Elasticsearch, Solr
- Strong experience in designing and tuning high-performance compute and AI infrastructure

DevOps Engineer (L4 – EL1)

We are a dynamic team consisting of Site Reliability Engineers (SREs), data engineers, and data scientists. We are looking for a skilled DevOps Engineer to join our team and take ownership of the entire CI/CD pipeline.

Key Responsibilities and Tasks

- Build, manage and optimise containerised workflows using Podman and Kubernetes
- Design, implement, and maintain CI/CD pipelines to ensure efficient and reliable software delivery
- Write and maintain scripts in Python to automate various DevOps tasks
- Utilise GitHub Actions to streamline the development and deployment processes
- Collaborate with SREs, data engineers, and data scientists to ensure seamless integration and deployment of applications
- Monitor and troubleshoot CI/CD pipelines to identify and resolve issues promptly
- Ensure the security, scalability, and performance of our infrastructure and applications
- Document processes and best practices to facilitate knowledge sharing within the team

Education, Qualification and Experience Requirements

- 3+ years of experience in a DevOps engineering role.
- Proven expertise in managing containerised workflows using Podman and Kubernetes.
- Strong programming skills in Python.
- Experience with GitHub Actions for automating workflows.
- Solid understanding of CI/CD principles and best practices.
- Experience working within air-gapped environments.
- Experience with cloud platforms (e.g., AWS, Azure, GCP) is a plus.
- Familiarity with infrastructure as code (IaC) tools such as Terraform or Ansible.
- Excellent problem-solving skills and attention to detail.
- Ability to work independently with minimal management oversight.
- Strong communication and collaboration skills.

If you are a passionate DevOps Engineer looking to make a significant impact in a dynamic team, we invite you to apply for this position. Join us and help shape the future of our technology stack!

Data Centre Facilities Manager (EL1 – EL2)

We are seeking a highly skilled Data Centre Facilities Manager to oversee our multiple data centre sites. The ideal candidate will have a strong background in managing power, cooling, and liquid cooling systems, enforcing best practices and standards, and maintaining vendor relationships. Experience in building previous data centres is a plus. This role involves helping to build out our next-generation data centre capabilities, including high-density computing environments such as GPU and HPC, and ensuring high security standards.

Please note, these roles are based in **Canberra**.

Key Responsibilities and Tasks

- Manage and maintain multiple data centre sites, ensuring high availability, reliability, and security
- Oversee power, cooling, and liquid cooling systems to optimise performance and efficiency
- Enforce best practices and standards for data centre operations and maintenance.
- Maintain strong relationships with vendors and service providers to ensure timely and effective support
- Develop and implement strategies for capacity planning and expansion, particularly for high-density computing environments
- Collaborate with cross-functional teams to support new data centre builds and upgrades
- Monitor and analyse data centre performance metrics to identify areas for improvement
- Manage budgets and resources for data centre operations and projects
- Provide leadership and guidance to the data centre facilities team
- Manage liquid cooling environments to support high-density computing, including GPU and HPC workloads
- Implement and maintain high-security environments to protect sensitive data and infrastructure
- Manage and maintain electrical and mechanical systems, including feeders, transformers, generators, IPS, ATS units, PUD units, chillers, pumps, and handling and CRAC units
- Drive the successful delivery of large-scale data centre projects from inception to completion
- Manage project timelines, budgets, and resources to ensure project goals are met.
- Coordinate with internal and external stakeholders to align project objectives and drive outcomes
- Travel to data centre sites as needed for fault resolution, maintenance, and other operational tasks
- Take ownership and lead in this space to drive outcomes and ensure the success of data centre operations

Education, Qualification and Experience Requirements

- 5+ years of experience in data centre facilities management with an emphasis on building and equipment operations
- Strong knowledge of power, cooling, and liquid cooling systems in data centres
- Experience in managing high-density computing environments, including GPU and HPC systems
- Experience in enforcing best practices and standards for data centre operations
- Previous experience in building and commissioning data centres
- Familiarity with data centre infrastructure management (DCIM) tools
- Strong problem-solving skills and attention to detail
- Excellent communication and leadership skills
- Ability to work under pressure and manage multiple tasks simultaneously
- Experience in managing high-security environments is essential
- Demonstrated ability to drive outcomes and achieve project goals
- Willingness to travel to data centre sites as required

Benefits of working at ASIS

ASIS employees enjoy access to generous workplace terms and conditions. Benefits include but are not limited to:

- Competitive salary plus 15.4% superannuation
- A variety of leave options including 22 days paid annual leave per year
- Paid leave between Christmas and New Year
- Domestic Relocation assistance for new staff to Canberra
- Health and wellbeing initiatives
- Salary packaging arrangements
- Learning and development opportunities including access to study assistance
- A variety of support services including but not limited to Employee Assistance Program (EAP) and a Staff and Family Support Office.

While ASIS officers are not able to work from home due to the classified nature of our work, staff have access to a range of flexible working arrangements. These include part time hours, condensed hours and/or flexible start/finish times to support other responsibilities.

ASIS conditions of service are similar to those applying for the Australian Public Service, for a full list of benefits and conditions see asis.gov.au

Eligibility

To be eligible for a role you must:

- Be an Australian citizen
- Be assessed as suitable to hold and maintain a high-level security clearance
- For more information on eligibility please see the Protective Security Policy Framework which is publicly accessible at protectivesecurity.gov.au, section 12 provides information on Eligibility and suitability

How to apply

Click on "Apply Now" on our website on the role/s that you are applying for. You will be required to submit the following:

- 800-word pitch outlining your skills and experience for the role
- A current CV, no more than 2 pages in length, outlining your employment history, academic qualifications and relevant training that you may have undertaken
- Details of two referees, which must include a current supervisor

Applicants are encouraged to consider the Integrated Leadership System (ILS) capabilities when preparing their application. For more information on the ILS, and tips for applying for jobs in Australian Public Service, please visit the APSC website found at www.apsc.gov.au.

All applications for employment with ASIS are handled in the strictest confidence. It is essential you maintain a similar level of confidentiality and that you do not discuss your application with anyone.

Important:

If you are currently living overseas and wish to apply for a role with ASIS, please note that we cannot contact you until you return to Australia. Every part of the recruitment process, including contacting you, must be done while you are in Australia.

If you have no plans to return to Australia in the foreseeable future, we recommend you wait until you return before submitting an application.

Reasonable adjustments

ASIS is committed to fostering a diverse and inclusive environment for candidates to participate in all stages of the selection process. Please let us know if you require any additional assistance or reasonable adjustments during any stage of the recruitment process and we will work with you to manage this throughout. If you are successful in gaining employment, reasonable adjustments can also be made available to you in performing your role.

Recruitment process – what happens next

We thank all applicants for their interest in a role with ASIS. Please be advised that our selection process is rigorous and extensive and that we do not provide feedback to unsuccessful applicants. **If you progress from application, you will receive an SMS requesting you to complete online testing – please ensure that you complete this testing or your application will not progress further.**

All selection process decisions are merit based and candidates must be prepared to undergo various selection stages throughout the process.

A merit pool will be established for candidates who are suitable for this round and will remain valid for 18 months.