

Memo 71

Implementation support - DO Lead Engineer



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DO Lead Engineer

Introduction

The DO will be a non-profit organization at the heart of industry, government and science collaboration.

The DO vision is to be at the vanguard of data-centric innovation, leading in the production of data-centric solutions, talent, and social capital. This translates to the mission of hosting datasets of global value acquired and generated in Chile and enabling their maximal exploitation by the global scientific community, the industry, and the public, facilitating data access, analysis, exploration, visualization, and governance to foster knowledge and its applications in economy.

The first dataset that the DO will use for its mission will be Astronomy.

Over the last century, the technology of astronomical observatories improved dramatically, the understanding of the origin and destiny of our universe has evolved accordingly, but there is still more to discover. This progress in technology ignited a transformation in the way astronomy works: the knowledge that emerged from individual's minds now flows from multi-disciplinary teams using data-centric tools. On one hand, data blooms from observatories; on the other, data bursts from cosmological simulations on computing clusters. Telescopes will produce zetta-scale datasets over the next decade, and theoretical astrophysics will generate similar data volumes and challenges.

Chile is a capital of Astronomy. Since the 60s, the collaboration between the Chilean government and international observatories has brought 40% of Earth's telescopes to our territory. That share will grow to around 60% in 2021. The inauguration of instruments in the next decade will further enshrine the Atacama Desert as a capital of astronomy. The volume of astronomical data acquired in the Atacama desert will go from around 1 PB/year today, to 16.5 PB/year in 2021.

Chile is a protagonist of global astronomy. Astronomy is at the vanguard of big data. Big data is the center of a broader revolution that is impacting digital economy in our country and elsewhere. Chile can increase its protagonism in this revolution, through Astronomy.

We are calling you to lead a team of DOers that will have the responsibility of implementing the DO vision, and establish a robust and strong foundation for this innovative initiative aiming to solve global challenges, from Chile.

Call for Proposals

ACTI A.G. is the **management entity** hired by CORFO to manage the Astroinformatics Program. ACTI A.G. requires to hire a person for leading the pre-operations phase of the implementation of the Data Observatory in the Cloud. This document establishes the procedure used by the **management entity** to select **candidates** and how the **selected candidate** work will be managed.

Timeline

- Call for proposals published: June 27nd, 2019
- Last day for proposal submissions: July 31st, 2019
- Evaluation period: June 27nd until candidate is selected.

Audience

We welcome everybody to participate in this call.

Instructions

Interested in participating shall send their resume and a motivation letter (in english) to jcletelier@acti.cl including:

- Minimum content
 - Letter of intent
 - Curriculum vitae
 - Authorization and contact details of 2 Professional references

The management entity will note the reception of applications date and time.



Proposal evaluation

The applications will be evaluated following the process below:

1. Candidates will be evaluated as they submit their application
2. First stage of evaluation will be done according to candidates submission fitness for key responsibilities and requirements (see sections “Key responsibilities” and “Requirements” below)
3. The program team will recommend interviewing one or more candidates to the management entity.
4. The management entity will notify the need to query candidates references.
5. The management entity will notify selected candidates (and everybody else)

Timeline and Total budget

The gross salary for this position ranges from \$CLP 2,500,000 to \$CLP 3,850,000 depending on the candidate experience and skills.

Key responsibilities

The successful candidate will play a critical role in the first step of the data observatory in:

- Leading the implementation of the cloud infrastructure and initial deployment of the Chilean ALMA Regional Center
- Evolving the current DO proofs-of-concept to full-scale DO challenges
- Laying the groundwork for the DevOps DOers of the future, at the heart of government-industry-science collaboration.

Requirements

We are searching for a great teammate, skilled and experienced in cloud architectures, knowledgeable in data-centric frameworks and solutions.

We require from you:

- Commitment and responsibility to work with passion to achieve the objectives of the implementation.
- Capacity to work in a team, this is a multi-disciplinary effort that requires your abilities to trust others and earn the trust from others.
- Experience in designing and implementing solutions in cloud environments.
- Experience in working to enable data-centric solutions
- Experience Testing and Prototyping; this means the ability to fail often and learn fast from that.
- Value oriented: the ability to understand we are implementing systems for real people and a defined mission, and how to work without losing sight of that
- Capacity to listen and learn about others around you, the ability to empathize with diverse DO stakeholders is crucial for the success of the DO as a neutral broker at the heart of teams solving challenges that for different reasons, are important for private companies, science and government.
- Ability to make yourself understood in written and spoken English
- Desired:
 - Git experience, we will use it for the implementation
 - Experience working in multi-cultural and multi-disciplinary projects.
 - Diversity: our activity has a gender representation challenge; we encourage hiring from less represented groups.

Interested?

Write to us at observatoriodedatos@economia.cl

Evaluation Criteria

Data Science use case understanding

Evaluation	Grade	Description
bad	1	no understanding
insufficient	3	poor understanding
sufficient	5	partial understanding
good	7	good understanding
very good	10	very good understanding

Data Engineering and Cloud skills and experience

Evaluation	Grade	Description
insufficient	1	poor skills & experience
sufficient	3	sufficient skills & experience
good	5	good skills & experience
very good	7	very good skills & experience
certified	10	certifications

Project Management

Evaluation	Grade	Description
insufficient	1	poor skills & experience
sufficient	3	sufficient skills & experience
good	5	good skills & experience
very good	7	very good skills & experience
certified	10	certifications

Leadership and Talent Formation skills and experience

Evaluation	Grade	Description
insufficient	1	poor skills & experience
sufficient	3	sufficient skills & experience
good	5	good skills & experience
very good	7	very good skills & experience
certified	10	certifications