Contact

Cambridshire
marc@riera.co.uk

www.linkedin.com/in/joanmarcriera
(LinkedIn)
riera.co.uk (Personal)

Top Skills

Leadership
Systems Engineering
Strategic Roadmaps

Languages

Spanish (Native or Bilingual)
Catalan (Native or Bilingual)
English (Professional Working)

Certifications

Oracle Database 11g Administrator
Certified Associate
Leadership Principles for Emerging
Leaders with Bill George
WSET Level 1 Award in Wines

Joan Marc Riera Duocastella

Strategic Problem Solver & Simplifier | Mastering the Art of
Unravelling Complexity | Driving Solutions @ EMBL-EBI | IaC
Expertise | Rich History of Diverse Certifications
Greater Cambridge Area

Summary

I am a service and data management coordinator at the European
Bioinformatics Institute (EMBL-EBI), where I'm responsible for the
services allowing data to flow in and out at the PB scale. I lead
the team that owns the solutions for transfer services, our 100PB
software-defined storage, and the authentication and authorization
infrastructure for our institution and other partners.

Experience

European Bioinformatics Institute | EMBL-EBI
9 years 2 months

Service and Data Management Coordinator
January 2021 - Present (4 years 10 months)

Senior DevOps Engineer
October 2017 - January 2021 (3 years 4 months)
Cambridge, United Kingdom

I joined the Technology and Science Integration team (TSI) which is
responsible for bringing new technology into the EBI to improve the service
provided to internal and external users and projects.

I work as part of the Human Cell Atlas (HCA) project to define comprehensive
reference maps of all human cells using single cell gene expression
techniques as the basis for both understanding human health and
understanding different disease mechanisms.

EMBL-EBI has a critical role in the project to ingest an additional 10Pb of data
over the next 5 years into our existing archive (13+Pb of object store) directly
through our Unified Submissions Interface and by pulling verified data from
remote cloud systems. My team will be extending the scope and scalability of
our existing archive to support these new big data challenges.

We will deliver simple, open and direct access to all HCA data across many cloud based systems and as part of this team I will have great opportunities to engage with the data generators, project users and our collaborators from the University of California, Santa Cruz (UCSC), the Broad Institute and the funders the Chan Zuckerberg Initiative (CZI) to build the DCP.

This role includes the following tasks:

- Make sure our archiving systems operate reliably and scale successfully
- Keep up to date and bring into the team modern software engineering best practice and new technologies to improve the operational performance of the software
- Work collaboratively with other teams at the University of California, Santa Cruz (UCSC) and the Broad Institute to define interfaces for importing and exporting data to other cloud systems
- Representing the team and the institute at HCA project meetings and international scientific conferences
- Guiding other members of the HCA team within TSI in the operation of our archive and its development activities

Systems Administrator
September 2016 - August 2018 (2 years)
Cambridge, United Kingdom

I will be responsible for EBI's central computing services including HPC clusters, job scheduling and monitoring. These responsibilities include user support, troubleshooting, and both hardware and service maintenance and update, in order to keep the infrastructure at the highest levels of use and performance.

The EBI maintains clusters totalling 1,500 nodes which are used for production services and by several hundred developers and researchers. Additionally, EBI manages more than 60 PB of scientific data, which are mounted from different storage systems using multiple technologies such as NFS, GPFS, Lustre and PANFS

RIBOX Quality Goods LTD
Director
September 2017 - February 2023 (5 years 6 months)
United Kingdom

Importing high quality goods in my spare time.

Atos

1 year 9 months

Solutions Architect
January 2016 - September 2016 (9 months)

Since I started developing myself in this role I had the pleasure of working with many different technologies, from which the most interesting projects are:

- Design and deploying a federated OpenStack environment, including HA capabilities on all the management services, for the Fiware Foundation : https://www.fiware.org/

- Setting up a 'Proof of Concept' for Hadoop on different OS, using different environments like Ambari and Cloudera, on Ubuntu14.04 and Centos 6 and 7. After the PoC was declared successful, was interesting to prepare a design for ~140 nodes and seeing how many things we did wrong the first time.

Other skills that I have refreshed and enhanced are:

- Fully automated deployment systems. 90 nodes deployed from scratch (pxe) only took 16 minutes, including infiniband drivers, kernel parameters and many other minor details.
- Socket management and proxies.
- Cluster management, never do anything twice on a cluster.

Technical Service Manager (TSM)
January 2015 - January 2016 (1 year 1 month)

In addition to my responsibilities as Technical Consultant I am now a Technical Service Manager (TSM) for several long-term customers. As a TSM I have the end to end responsibility to balance customer expectations with the knowledge of the team, setting milestones in delivering new features and ensuring that the team have the appropriate knowledge for their duties.

My duties as TSM include:
- Development and presentation of the necessary evolution projects for the client infrastructure.

- Ensure that availability and continuity is provided as the HA and DR solutions evolve.
- Anticipate problems as far as possible and cooperate for quick resolution.
- Lead the homogenization of the monitoring and orchestration systems to reduce time to delivery.

On the path of having everything automated.

Bull
Technical consultant and Team Leader
April 2011 - January 2015 (3 years 10 months)

Hired as full-time systems administrator and ended up as a multi-skilled manager with good all-round supervisory and technical expertise. Capable with a proven ability to ensure the smooth running of ICT systems and to provide IT services that will improve the efficiency and performance of a company.

My duties as Team Leader include:
- Assuring the necessary knowledge is applied to each task.
- Understanding and fulfilling the client expectations through the team work.
- Distribute workloads and administer several projects deadlines.

My duties as consultant:
- Design Linux, Oracle and Backup architectures.
- Understand monitoring needs and deploy adequate solutions.
- Implementation of orchestration solutions like puppet and salt.
- Training the customer and/or support groups when everything is ready.
- Troubleshot and automate L1 and L2 problems if they reach L3.

Other tasks that are not on my daily basis but are somehow important:
- HPC system engineer.
- Storage, Oracle and networking Benchmarking and performance advisor.
- Storage management: NetApp, LSI, EMC, DDN, Optima.
- Systems integration: ELK, OMD, TheForeman and others.

Planning, implementing and improving IT solutions is my main role at Bull, thanks to this I have also been involved, and I feel confident, with the following technologies:
- VmWare

- NetApp & LSI
- Commvault/calypso
- Nagios, check_mk, OMD
- Red Hat Cluster Suite ,
- Lustre
- Puppet, SaltStack and ansible.
- jMeter, iozone, iperf, perfstats
- Python with selenium WebDriver

Fundacio Barcelona Media
3 years 11 months

Researchers support coordination.
February 2009 - March 2011 (2 years 2 months)
Barcelona Area, Spain

At this job, being at the beginning the only Linux system administrator responsible for a
R+D+I institution and having several very smart researchers working with 'Alpha' releases gave me
a deep knowledge on how to monitor, analyse and find bottlenecks.
Also the need to rebuild work environments developed my interest and knowledge for many automation technologies.
When I started there were two Linux servers and Linux desktops were not centrally managed, two years more than 50 Linux servers and almost 100 Linux desktops were managed from a single orchestrator machine.

Data Center resources management for several R&D groups.
Virtual infrastructure monitoring and administration. (mostly vmware, also hyper-v)
R&D network administration. (QoS arrangements)
Active Directory logon and startup scripting. (windows and Linux)
Backup (Legato Networker) architecture and administration for Linux and Microsoft systems.
Non Microsoft related issue resolution, involving from internal messaging to external documentation and public cloud usage.
Image deployment for windows and Linux.
Monitoring management and reporting.
Quest Authentication Service administration.
Support for different research groups such as sound, image, computational linguistics, and others.

Knowledge link between groups.

FlexLM administration.

Yahoo research Linux housing troubleshooter.

Sysadmin and Technological services
August 2007 - March 2011 (3 years 8 months)
Barcelona Area, Spain

Development of many automated solutions to allow our newly born IT department to grow with a fast-growing institution.

Software deployment to linux grid system. (Puppet and PuppetMaster)

Monitoring using Ganglia, Mmonit and munin.

Oracle Grid Engine manager and administrator (former Sun GE).

Queue manager for OGE (SGE).

Linux infrastructure management and new functions implementation.

Check and repair backup. (Legato and Bacula)

Linux help desk coordinator.

AD and Quest user management.

Exchange mail box management.

Infrastructure monitoring . MOM and QMX for MS and Linux.

Linux service monitoring using Zabbix.

SCCM and WDS software deployment.

Unattended installation with pxe , preseed and kickstart.

Software Engineer
May 2007 - June 2008 (1 year 2 months)
Barcelona

C# , Java and perl developer. Mostly translating perl projects to C# and Java for performance and interoperability purposes.

Software engineer on projects enhanced with NLP (Natural Language Processing).

NLP development: shallow parsers and error correction tools.

GFT iberia solutions
Deutsche Bank IT Consultant.
September 2006 - May 2007 (9 months)
Sant Cugat del Vallès

Java and LotusScript developer.

Oteman
Employer Control Automatization
June 2006 - September 2006 (4 months)

Creation of a plan to control and maintain software licenses remotely and automatically.

C# implementation of an Active Directory service to automatically inventory all software installed an all desktops and servers of the organization.

Academia CEUS
Teacher
November 2003 - May 2006 (2 years 7 months)

Year course planer on microcomputing brench.
Teaching binary and assembler.

—————

Education

Universitat Ramon Llull
Bachelor of Science (BS), Computer Science · (2001 - 2005)

University of Strathclyde
Final Project Degree on EEE, The Department of Electronic & Electrical Engineering (EEE) · (2005 - 2006)

Cambridge Judge Business School