

# MARC RIERA

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## SUMMARY

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Experienced Platform Engineering and Infrastructure Leader with over 20 years of hands-on and managerial experience across petabyte-scale storage, distributed systems, HPC environments, DevOps tooling, and secure identity platforms. Proven track record in leading multidisciplinary teams, aligning infrastructure strategy with scientific goals, and supporting the operational backbone of data-intensive services. Skilled at balancing long-term planning with day-to-day delivery, and fostering strong internal partnerships across departments. A pragmatic advocate for platform-as-a-product principles, infrastructure-as-code (IaC), observability, and service design rooted in ITIL. Committed to reducing complexity for teams, increasing reliability for users, and ensuring that infrastructure evolves in step with EMBL-EBI's scientific mission.

## EXPERIENCE

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### **EMBL-EBI, Service and Data Management Coordinator**

*Jan 2021 - Present*

Lead a multidisciplinary team (8 direct reports, ~20 influenced) responsible for orchestration, monitoring, authentication, transfer, mail and other central services—core pillars of EMBL-EBI's research delivery infrastructure.

Championed the shift from siloed technical management to service-aligned delivery, embedding ITIL principles and ensuring internal visibility of infrastructure as part of a broader service ecosystem.

Defined strategic service roadmaps for IAM, FIRE, and transfer infrastructure, balancing long-term planning with evolving user needs across EMBL-EBI and EMBL central (e.g. IAM harmonisation with EMBL Heidelberg).

Personally led the FIRE tape archive tender—cutting disaster recovery costs significantly while increasing resilience for >100PB of mission-critical data.

Established User Groups and cross-functional service alignment practices for IAM, FIRE and orchestration, helping bridge infrastructure teams with public data services (ENA, EGA, etc.).

Mentored and developed team talent, encouraging CV-driven development and internal career growth while maintaining robust knowledge transfer and system resilience.

Successfully advocated for the adoption of VLAN stretching for seamless data centre migrations, culminating in EMBL-EBI's first zero-downtime move in 2025.

### **EMBL-EBI, Team Lead and Senior DevOps Engineer**

*Oct 2017 - Dec 2020*

Led strategic redesign of EMBL-EBI's main archival system (FIRE), scaling it from 15PB to over 100PB with modern, modular, Kubernetes-based architecture.

Designed and implemented a push-based ingest model and RESTful interface used by ENA, EGA, and other core resources.

Supervised developers and systems engineers, embedding Agile and continuous improvement practices across release pipelines.

Consolidated distributed VM and host environments under unified Puppet orchestration and Check\_MK monitoring, establishing ITS observability standard.

Maintained production-grade infrastructure supporting high-volume scientific data operations, with a strong focus on stability, resilience, and auditability.

Establish open and professional relationships with team members to achieve quick issue resolutions

### **EMBL-EBI, Senior Transfer Services Administrator**

*Sep 2016 - Sep 2017*

Designed and deployed performance monitoring and logging infrastructure to support large-scale data movement.

Doubled data throughput and improved operational stability by modernising the transfer stack (Globus, Aspera, FTP).

Introduced version control, infrastructure-as-code, and testing practices to the HPC and infrastructure teams.

Standardised network bonding (LACP) for all new transfer nodes, setting a new standard adopted institute-wide, improving performance and resilience across EMBL-EBI.

### **Atos, Technical Consultant, Team Leader & Service Manager**

*2011 - 2016*

Progressed through increasingly senior roles from infrastructure consultant to service manager during and after Atos's acquisition of Bull.

Line-managed a growing team from 4 to ~10 engineers across service desk and technical operations, delivering ITSM-based support for four major clients.

Designed and implemented enterprise-scale infrastructure upgrades, including the automated deployment of over 5,000 servers using Puppet and SaltStack.  
Defined IT service processes, SLAs, and knowledge frameworks to streamline operations and support in-house and client environments.  
Delivered strategic PoCs (OpenStack, Hadoop) and helped secure over \$1M in new business through successful demonstrations of technical capability.  
Served as a key interface between technical teams, project leads, and client decision-makers, aligning delivery with long-term infrastructure strategy.

**FBM Eurecat, Technical Services Coordinator**

2007 - 2011

Managed a 3-person internal IT team during a period of rapid growth (company headcount expanded from 50 to 250).  
Designed and implemented ITSM-inspired service structures for backup, user support, and system monitoring to scale delivery efficiently.  
Delivered infrastructure architecture and third-party vendor selection for research environments with high service availability requirements.  
Pioneered early automation approaches (SVN, Dropbox) for deployment and configuration management before mainstream DevOps adoption.  
Balanced hands-on technical responsibilities with hiring, mentoring, and resource planning for team stability and delivery consistency.

**FBM Eurecat, Software Engineer**

2007 - 2008

C#, Java and perl developer. Development of shallow parsers and error correction tools

**Deutsche Bank, Lotus Notes Developer**

2006 - 2007

Rapidly prototyped new data processing capabilities into existing system

**CEUS, Academy Teacher**

2003 - 2006

Created dynamic learning environment that valued instructor and student interaction

## EDUCATION

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*Judge Business School Executive (Cambridge)*

*Chief Technology Officer Programme • 2024 - 2025*

*Judge Business School Executive (Cambridge)*

*Steering complex projects • 2025 - 2025*

*Judge Business School Executive (Cambridge)*

*Strategic thinking for the CXO • 2025 - 2025*

*University of Strathclyde (Glasgow)*

*Bachelor of Science • **EEE project** • 2006 - 2006*

*Ramon Llull University (Barcelona)*

*Bachelor of Science • **Computer Science** • 2003 - 2005*

## LICENSES & CERTIFICATIONS

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**ITIL Foundation Level**

*AXELOS Global Best Practice • Issued 2023*

**PRINCE2 Agile® Foundation & Practitioner**

*PeopleCert • Issued 2020*

**Oracle Database 11g OCA + OCP**

*Oracle • Issued 2015*

**IT Service Management Foundation, based on ISO IEC 20000**

*EXIN • Issued 2012*

**Red Hat RHCSA + RHCE**

*Red Hat • Issued 2011 - Expires 2016*