InterSystems IRIS for Space Debris Identification and Tracking: SINTRA



George Hou National Accounts Manager,
Managing Director









1978

Founded

80+

Countries

7M+

Production Licenses

15%

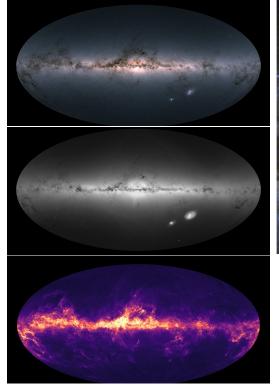
Worldwide Equity Trades

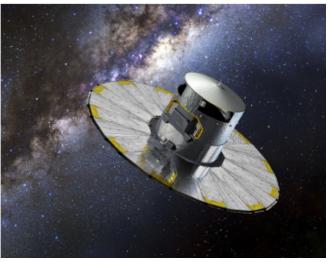
>1B+

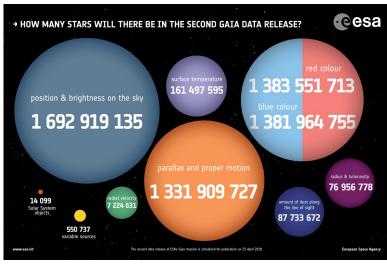
Patient Records



European Space Agency **esa**









POSITION



MOVEMENT



1 BILLION STARS



10 YEARS



1 MILLION GIGABYTES



https://sci.esa.int/web/gaia



InterSystems

Why did ESA select InterSystems?

- esa

- 1) Our "High Touch Model" Partnership
- 2) Performance Data ingestion & query response
- 3) Speed Time to capability/deployment
- 4) Safety Risk reduction/program success

Database and Application Platform



Collector technology

Data processing and storage on the Edge



Collector technology

Data processing and storage on the Edge



Collector technology

Data processing and storage on the Edge



Transmission



Integration with all Edge stations

Data processing and storage on the Hub

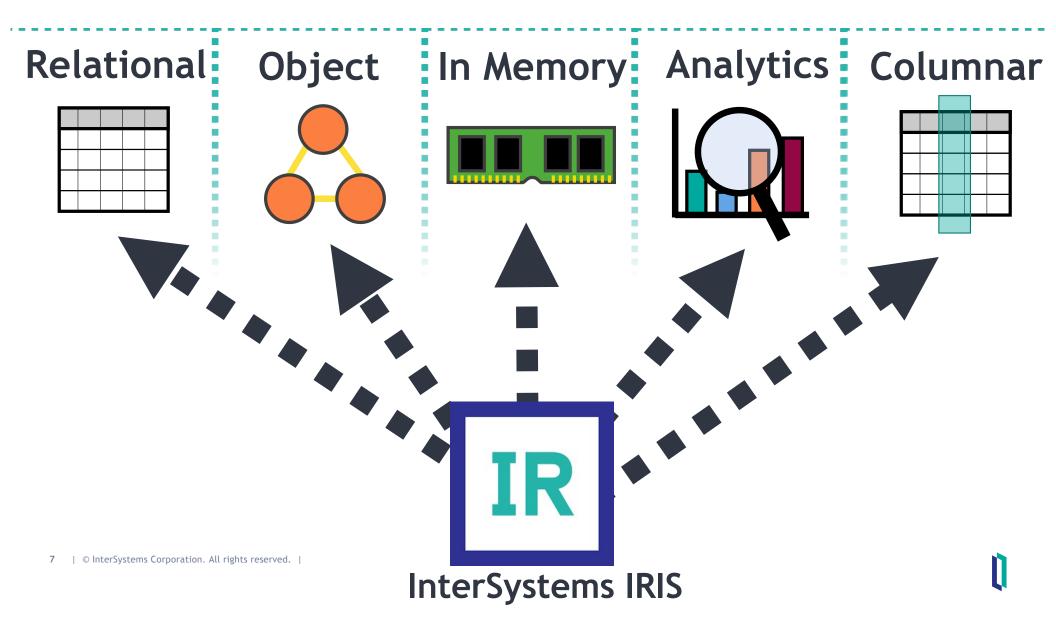
Analytics

Al & ML use cases

Built-in security, sharding, high availability, API management, and interoperability



In Memory Analytics Relational **Object** Columnar Amazon Redshift Amazon QuickSight **AWS** Amazon S3 **ElastiCache Amazon** Aurora

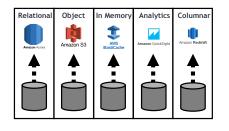


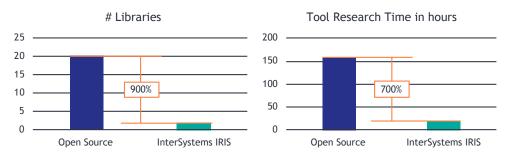
Comparison- Development time and cost

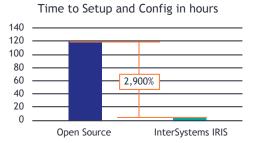
Building and delivering innovative solutions - Speed & Safety

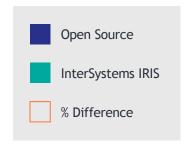


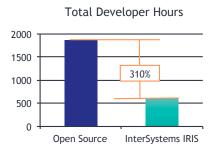


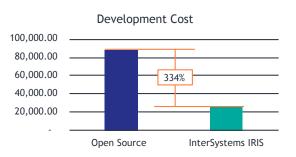












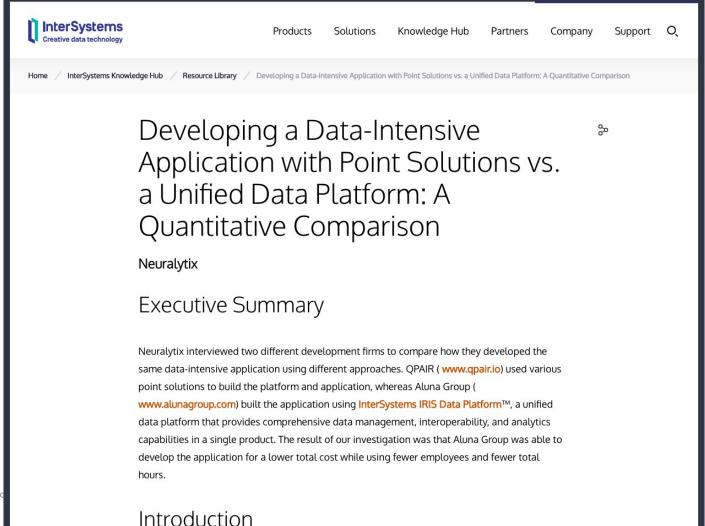
D InterSystems Corporation. All rights reserved. |



SOLUTION

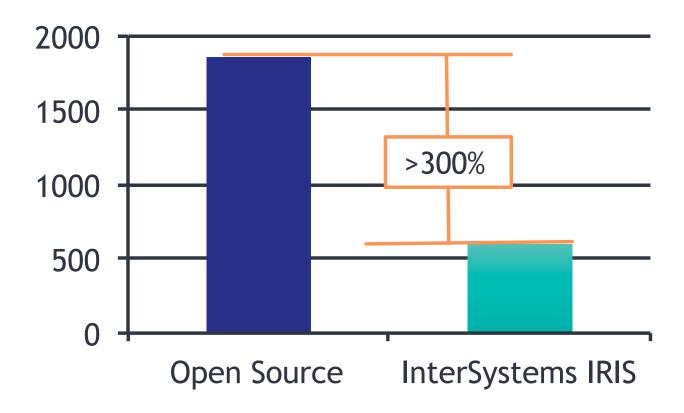
SOLUTION





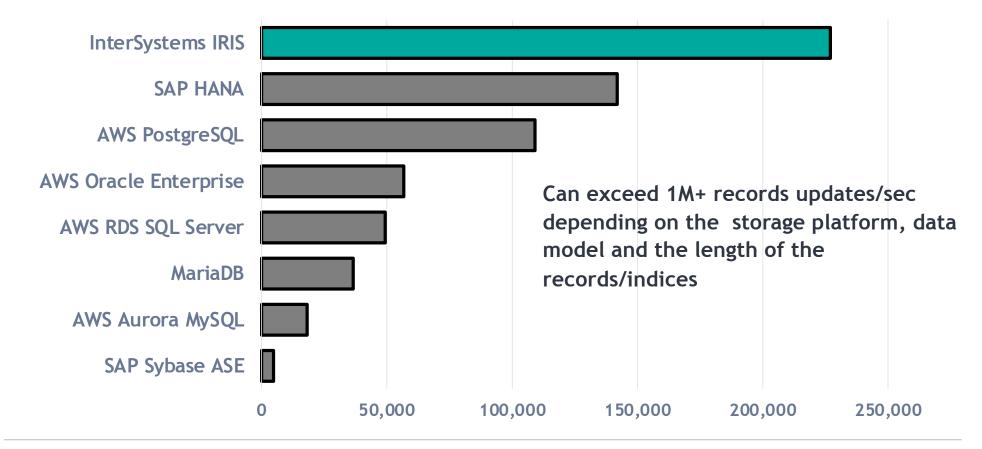


Time (and cost) to capability



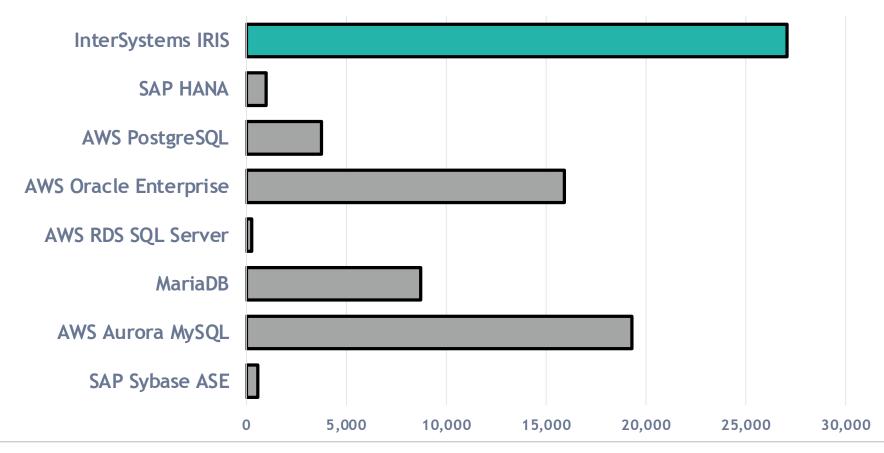


Insert Rate (Records / Second)





Query Rate (Queries / Second)







IRIS is Infrastructure Independent

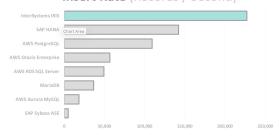


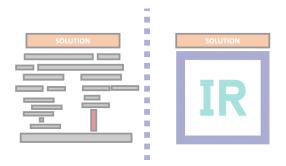
9x Faster

30% of the Resources



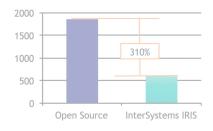
Insert Rate (Records / Second)





SPEED & SAFETY

Total Developer Hours





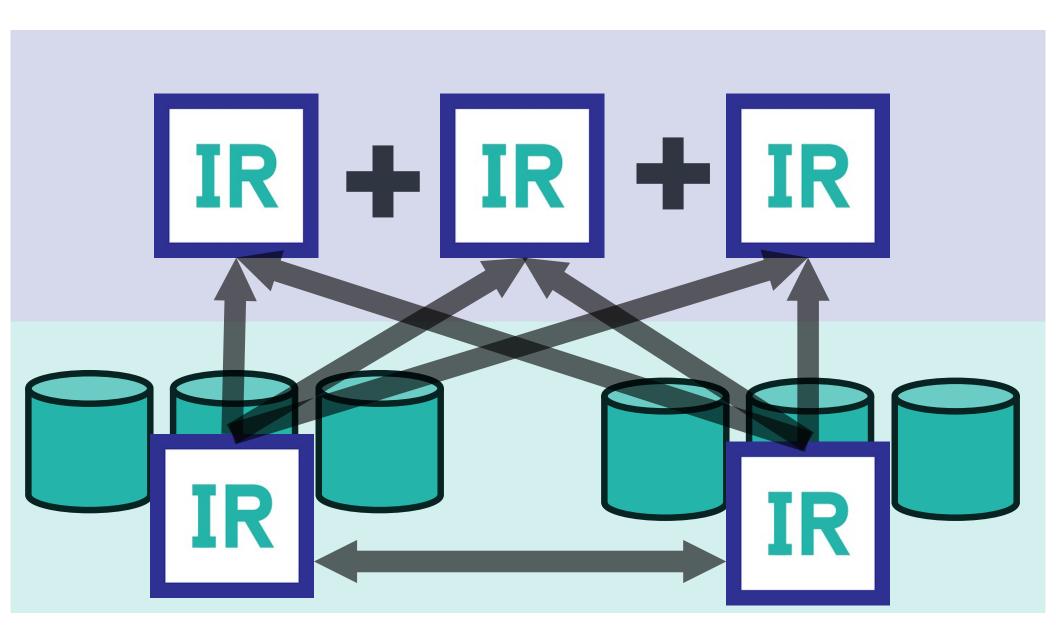


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Thank you!



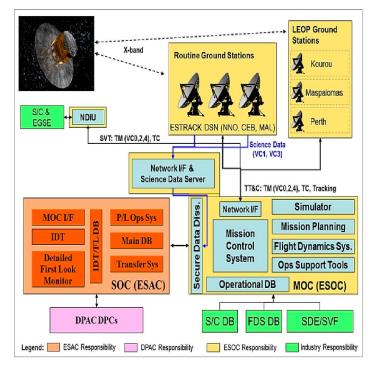


Figure 92: The Gaia Mission Control System (image credit: ESA)



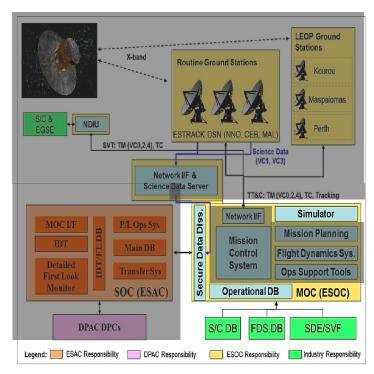


Figure 92: The Gaia Mission Control System (image credit: ESA)

