

Amazon Redshift, a data warehouse for the masses

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Amazon Redshift

a relational, petabyte scale, fully managed data warehousing service

- SQL is all you need to know
- ODBC and JDBC drivers available
- Parallel processing on multiple nodes
- No system administration
- Free tier: 750 hours / month for 2 months
- Available on-demand from \$0.25 / hour / node
- As low as \$1,000 / Terabyte / year



"Come for the cost, stay for the performance"



Case study: Photobox



http://www.lemagit.fr/etude/Photobox-consolide-et-analyse-ses-donnees-avec-AWS-RedShift

Maxime Mezin, Data & Photo Science Director:

"L'entrepôt de données ne comportait que les données du site e-commerce liées aux ventes. Alors que nous avions la volonté d'intégrer des données du service clients et des données d'analyse (...) Nous avions atteint la limite du stockage de la base Oracle, et cela ne marchait pas très bien en termes de performances."

"Avec Redshift, la rapidité d'exécution des traitements a été multipliée par 10. Sans parler de la vitesse de chargement des données."

"On paie en fonction de la quantité de données que l'on va stocker. Chez Google, cela était plus compliqué."

- 2 Redshift clusters: 1 for historical data, 1 for real-time processing
- Total Cost of Ownership divided by 7 (90K€→13K€)



Case study: Financial Times

https://aws.amazon.com/solutions/case-studies/financial-times/

- BI analysis of reader traffic, in order to decide which stories to cover
- Conventional data warehouse running on Microsoft technologies
- Scalability issues, impossible to perform real-time analytics → Amazon Redshift PoC
- Amazon Redshift performed so quickly that some analysts thought it was malfunctioning ©

John O'Donovan, CTO: "Amazon Redshift is the single source of truth for our user data."

"Some of the queries we're running are 98 percent faster, and most things are running 90 percent faster (...) and the ability to try Redshift out before having to invest a significant amount of capital was a huge bonus."

"Being able to explore near-real-time data improves our decision making massively. We can make decisions based on what's happening now rather than what happened three or four days ago."

Total Cost of Ownership divided by 4



FINANCIAL.

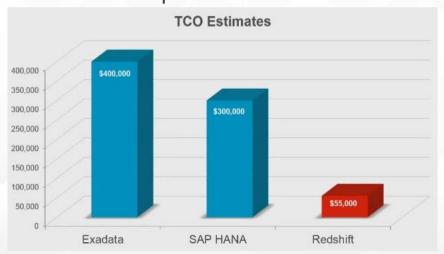
Case study: Boingo

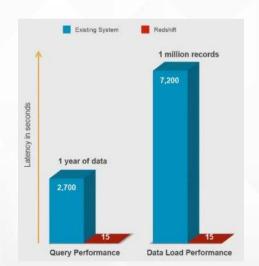
https://www.youtube.com/watch?v=58URZbp1voY



- Largest operator of airport wireless hotspots in the world: 1M+ hotspots,100+ countries
- About 15 TB of data, growing at 2-3 TB per year
- Platform running on SAP (ETL) & Oracle 11g: low performance, heavy admin, high cost
- Evaluated Oracle Exadata, SAP HANA and Amazon Redshift
- Selected Amazon Redshift and migrated in 2 months

6-7x less expensive than alternatives





Queries 180x faster

Data load 480x faster



DEMO

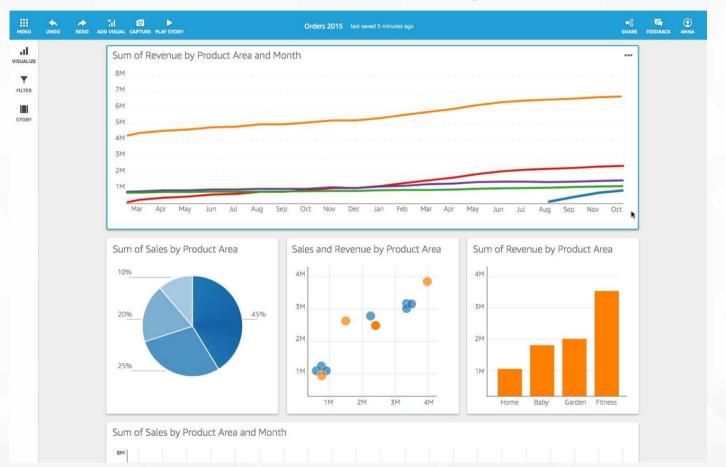
Demo gods, I'm your humble servant, please be good to me

4-node cluster
1 billion lines of CSV data (45GB)
→ 1 billion rows in a single table





Amazon QuickSight





Thank you! Let's keep in touch

Many events and meetups in 2016 all across France

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March 7-8





April 6-7 (Lyon)



April 20-22



April 25



AWS Summit May 31st



AWS User Groups in Paris, Lyon, Nantes, Lille & Rennes (meetup.com)