



TECH TALK:

Autonomous Database Introduction for Researchers

Wednesday, March 17th, 2021
10:00 AM US EDT

Mike Riley

Cloud Solutions architect
Oracle for Research

Rich Pitts

Research Advocate
Oracle for Research

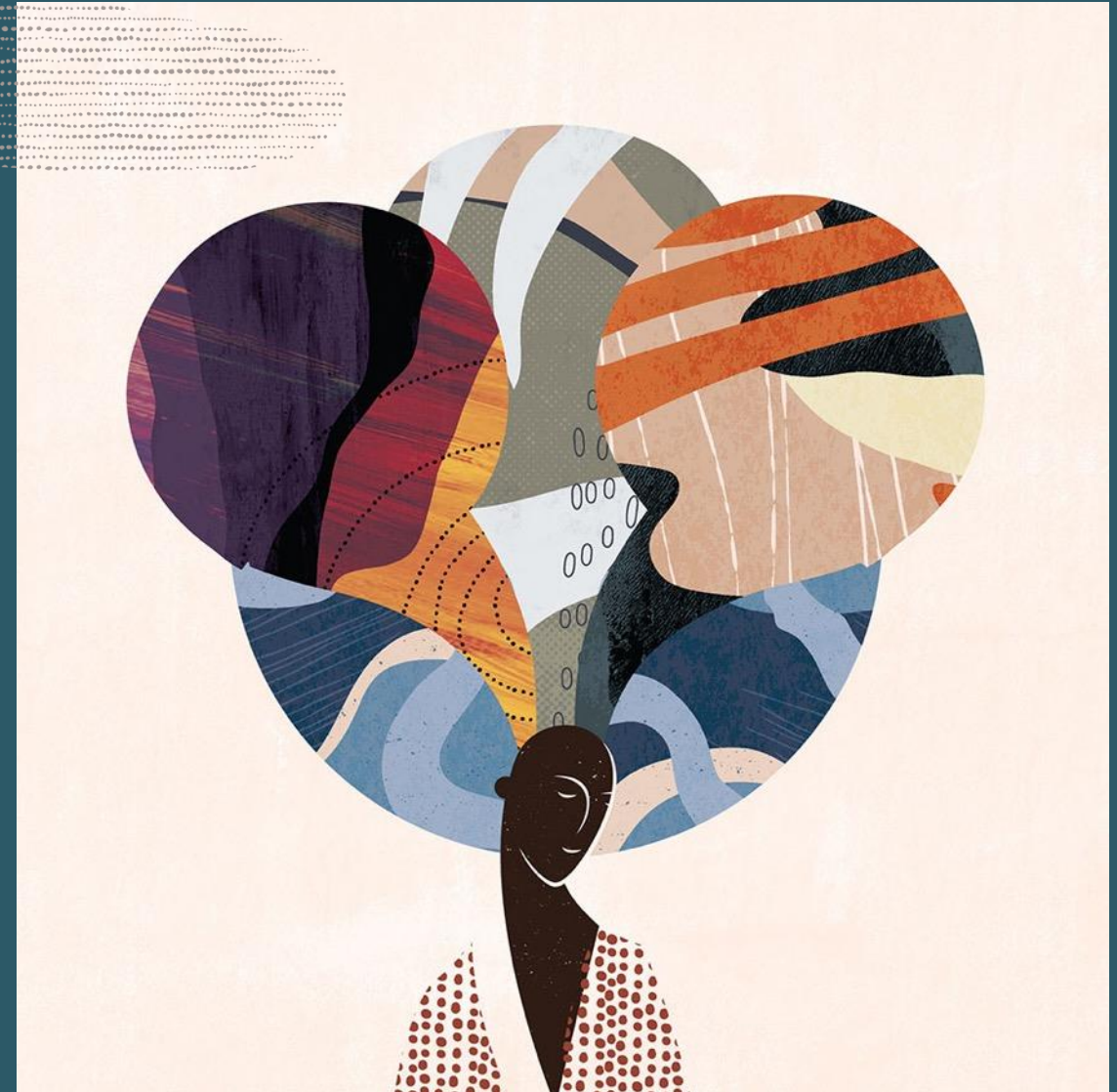
TECH TALK HOUSEKEEPING

- Today's webinar is being recorded. We will share the link to the recording with you via email after the event. The recording will also be made available to the Oracle for Research community.
- We invite your comments and questions, both about the tech topic being discussed and about the series more generally. Questions may be submitted using the Q&A box on your screen or you may ask questions directly using your microphone. When not asking a question, please mute your microphone.
- Questions may be asked during the presentation and we will also have a Q & A time at the end of the presentation when you can ask questions directly and engage in discussion.
- At Oracle for Research, we believe that research and innovation happen best when a diverse and thoughtful community is free to engage in respectful, compassionate, and open dialog. To that end, when asking a question or providing feedback, we ask that all participants be respectful, collaborative, and constructive.

Agenda

- Is there a data problem to solve
- What is the Autonomous Database
- The converged database concept
- Getting started Demonstration
- Resources to use

Managing data....



Is there a data problem to solve..?

1. I want to focus on the science not the database

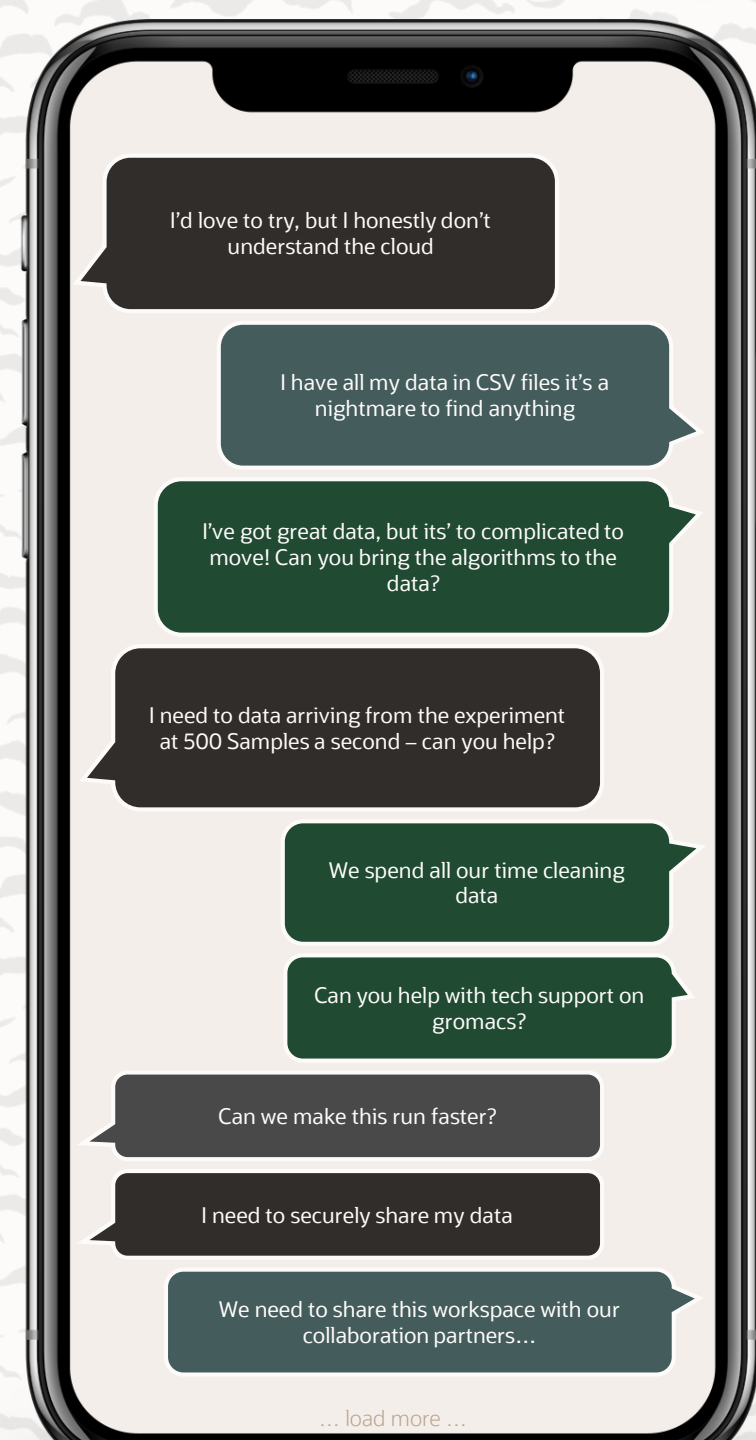
- **SIMPLE**
 - Oracle **automates and manages everything**
 - Deployment, lifecycle, software updates, etc.
 - You just choose database compute, storage, and region

2. What happens if lots of people want to work on the Data?

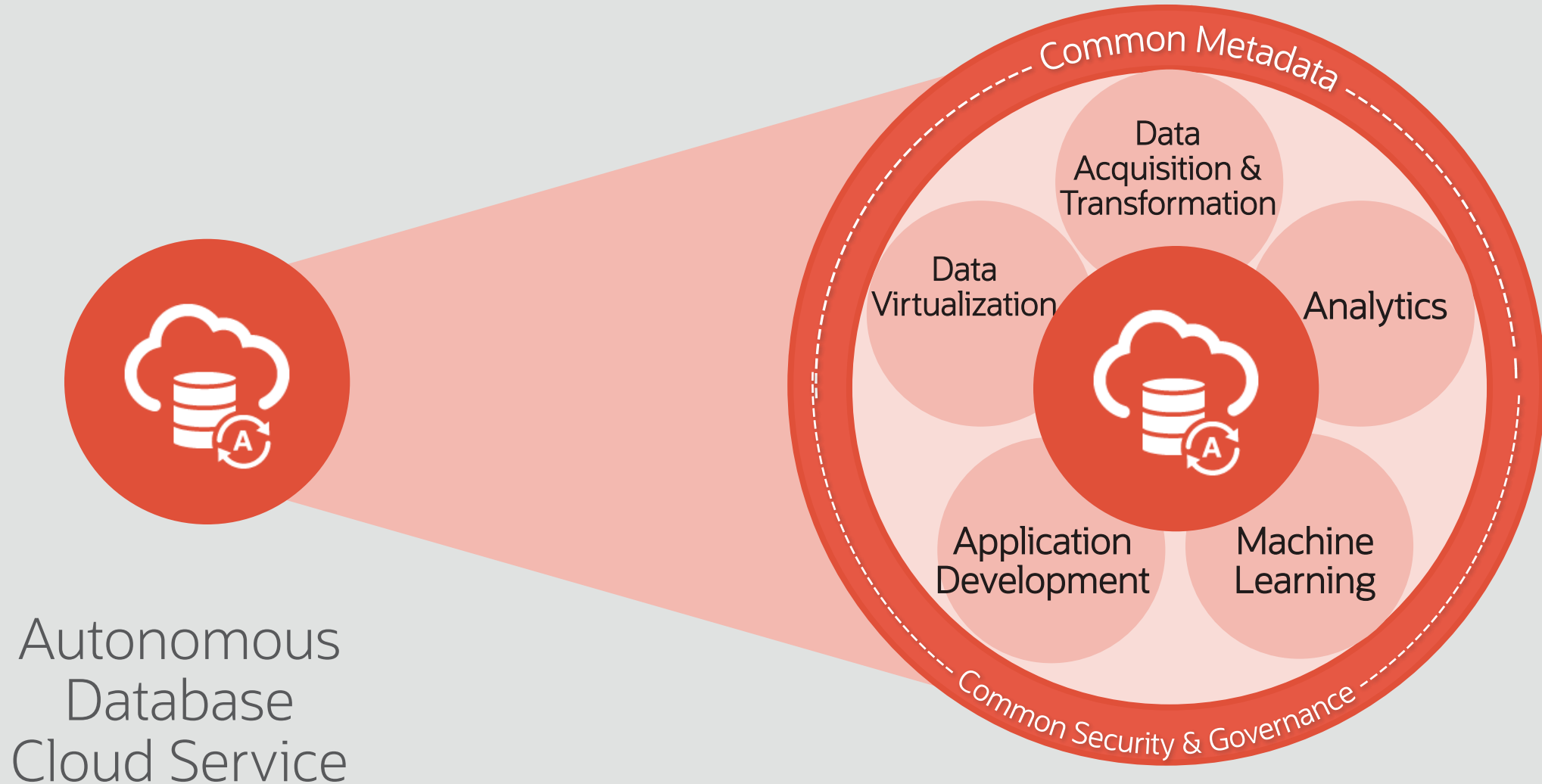
- **ELASTIC**
 - **Low minimum size** - 1 OCPU
 - **Low minimum time** commitment - 1 hour
 - Automatically scales **UP and DOWN** online **as needed**

3. I want timely results

- **FAST**
 - Based on **Exadata technology**



Autonomous Database | Evolves into a Data Platform



Tightly integrated data platform

“Autonomous Data Platform Creates Data Driven Outcomes”

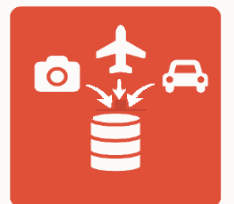
***Technologies
Natively
Integrated into Database...***



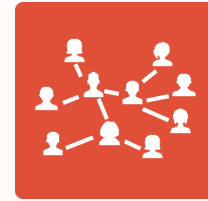
Machine Learning



Real-Time Analytics



IoT



Social Graph Analysis



Documents



Spatial



Blockchain



ORACLE

The Automation of the IEU GWAS Database



OpenGWAS contains over 11 billion associations between people's genes and health-related outcomes, allowing researchers to investigate many potential causes of poor health.

Rich Pitts - Architect

Mike Riley - Technology Specialist

Both members of Technology Cloud Engineering (UK)



125 Billion Records



Transform: Autonomous Database Cloud

Everything is Automated and Managed by Oracle

- Provisioning
- Scale-Up and Scale-Out
- Security
- Tuning
- HA Cluster
- Disaster Protection
- Patching

*Easy Data management
Frees Researchers to
investigate and
do the science*

Now to Mike for the test drive



Now to Mike for the test drive.... Place Holder



Resources and next steps

Innovate Faster - Rapid Dev and Prototyping

ALWAYS Free Cloud Tier



Autonomous DB

*2 x Databases
20 GB each*



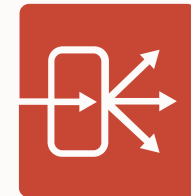
App Compute

*2 x VMs
1 GB Memory*



App Storage

*100 GB Block
10 GB Object*



Networking

*10 TB Out
10 Mbps Load Bal*

- Built-in **Application Express (APEX)** for low-code, web-based app dev
- Built-in **SQL Developer Web** for database development

Eliminates Obstacles to Developers Starting with Oracle



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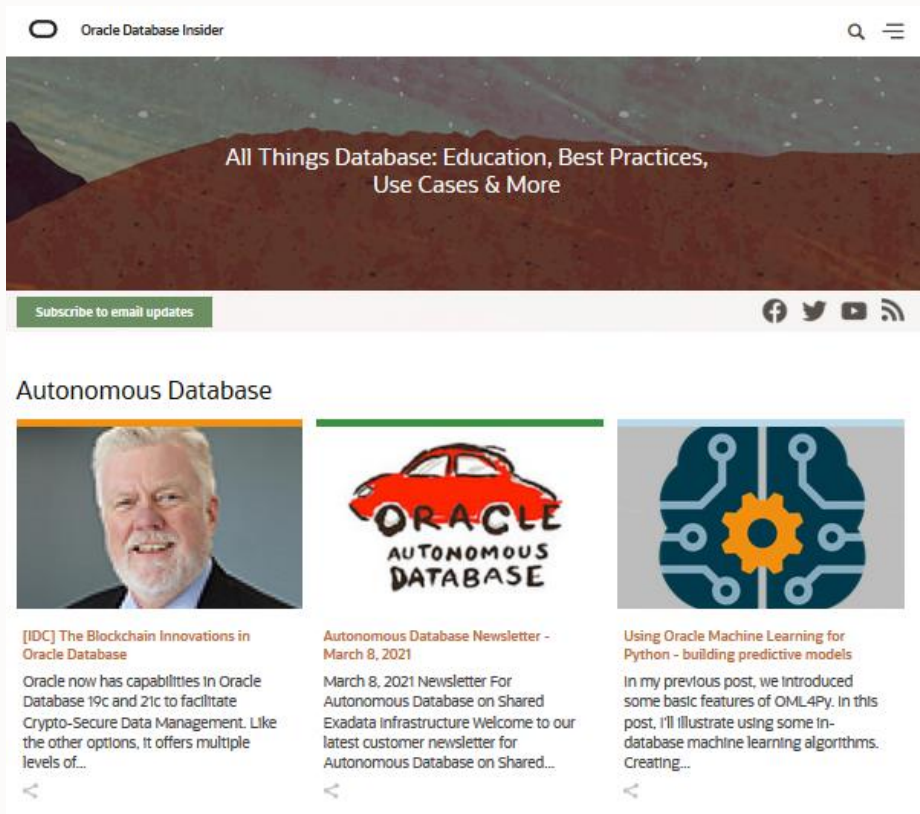
Autonomous Database Introduction for Researchers

Thank you !!!

Questions, Answers & Discussion

Resources.....

Resources for today



The Blogs

[The Autonomous Database Blog](#)

[What is a converged database ? Explained here](#)

Links to Workshops

[LiveLabs Autonomous Database Quick Start Workshop](#)

[Converged Functionality of Oracle Autonomous Database Workshop](#)

[Search for available Autonomous Database LiveLabs](#)

Techniques with the Autonomous Database

[Developing Python Applications for Oracle Autonomous Database](#)

[Getting Started with Graph Analytics & Autonomous Database.](#)

[Oracle Github example notebooks for Autonomous Database.](#)



Cloud. Community. Collaboration.

TECH TALK:

We welcome comments & feedback

Please Email: OracleForResearchTech_ww@oracle.com

Next Tech Talk: Apr 21ST 2021

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