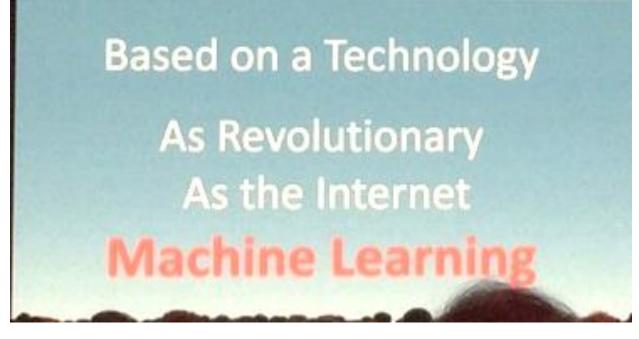


Larry Ellison's Keynote



Automation is Essential to Preventing Data Theft
Automated Cyber Security & Automated Database Work Together

- New Cyber Security Technology Tuesday
- Automated Threat Detection and Immediate Remediation
- New Database Technology Today
 - Automated Database Can Instantly Patch Itself while Running
 - No Delay Waiting for Human Process or Downtime Window
 - Lots of Other Benefits from Database Automation



Machine Learning (ML)
The Applications are Revolutionary
Autonomy: "Self-Driving" cars

- · Computer Vision: Facial Recognition
- New MI. Applications: Autonomous Database & Automated Cyber Security

Huge Amounts of Computer Systems Data in Event Logs Enable New Database and Security Applications for Machine Learning

- · Lots of Event Logs
 - Infrastructure logs: Network, Server, Storage, VM, OS
 - Platform logs: Database, Java, Analytics, etc.
 - Applications logs: ERP, CX, HCM, Custom, etc.
- Event Log Training Data Enables New Machine Learning Applications
 - Security: Detect and connect anomalous events: Login from Ukraine and unique SQL
 - Database: Classify normal query patterns and automatically tune database

Oracle 18c Autonomous Database Total Automation Based on Machine Learning

- . No Human Labor: Eliminate 100% of the human labor to manage the database
- · Database automatically provisions, upgrades, patches, tunes itself while running
 - Automated real-time security patching with no downtime window required
- No Human Error: SLA Guarantees 99.995% reliability and availability.
 - Minimize costly planned plus unplanned downtime to less than 30 minutes a year
- * No Human Performance Tuning: Consumes less compute and storage than at Amazon
 - We guarantee your Amazon bill is cut in half. Lower labor costs is an even bigger savings.

Database Autonomy & Highly Automated Cyber Security

Database Autonomy: Fully automated 100% "self-driving" database Automated Cyber Defense: Detect & remediate attacks in real-time They Work Together:

- -Discover attack: Real time ML log processing detects security anomaly in data
- -Remediate: Database automatically patches itself while running

Lots of Other Benefits Come with Total Database Automation

racle 18c Autonomous Database

- Fully Automated Database Provisioning and Management
 - Even for mission critical scale-out clusters with datacenter disaster protection
 - User defines policies then system automatically manages itself
 - Automatic provisioning, backup, upgrades, patching, tuning, etc., while running
- No human administration means no administrator errors or malicious behavior

Oracle 18c Autonomous Database **Continuous Adaptive Performance Tuning**

- · Fully Automated Performance Tuning
- Automatic optimization: indexing, caching, statistics, parallelism, etc.
- Continuous tuning to adapt to data volume increases and data distribution changes
- Consumes less computer resources than human tuned system.

Oracle 18c Autonomous Database Dynamic Elastic Hardware Allocation

- * Fully Automated Hardware Resource Elasticity
 - Instantly expand/shrink compute and storage without downtime.
 - Minimizes cost by delaying resource allocation until time needed
 - No overpaying for partially used fixed configurations

Oracle 18c Autonomous Database

Non-Stop Availability: Fault Tolerant plus On-line Recovery and Upgrades

- System Failure or Scaling
- Exadata, RAC, ASM
- Regional Outage or DB Corruption Active Data Guard

- Patches (Updates)

- RAC Rolling Upgrade
- Major Release Upgrades
- Transient Logical Standby
- Table/Index/Schema Changes
- Online and Edition Based Redefinition

- User Error

- Flashback transaction, table, or database.

Oracle 18c Autonomous Database Guaranteed 99,995% Reliability and Availability

- SLA Guarantees 99.995% Reliability and Availability
- Less than 30 minutes of downtime per year
- Includes both planned and unplanned downtime
- No exceptions in fine print: 100x more reliable than Amazon

Autonomous Database for Data Warehouses Available: December 2017

- Automated
 - -Automatically provision, upgrade, patch, tune while running
 - -Eliminates human labor and human error
- Efficient
 - Minimize Hardware Resource Consumption
 - -Guaranteed half the cost of Amazon
- Reliable
- -Guaranteed 99.995% availability
- Guaranteed 100x better availability than Amazon





Introducing Database BYOL to PaaS Pricing Includes Full Database Autonomy plus all Features Customer has Licensed

Pay as you go BYOL Database PaaS Pricing

Oracle Public Cloud, Cloud@Customer	SYOL Pags Price Storage	EYOL Paas Price Compute
Oracle Database Enterprise Edition Standard Infrastructure	\$50/OCPU	\$168/OCPU
Oracle Database Enterprise Edition Exadata Infrastructure	\$148/Terabyte	\$280/0CPU

Minimum Configuration 1 OCPU plus 1 Terabyte: \$300 per Month
PaaS Discount of 30% with Monthly Dollar Volume Commitment
BYOL EE Database Plus RAC, Multitenant, Active DataGuard for 99.995% Availability



SIX SHORT DEMOS

Oracle Autonomous Cloud Database versus
Oracle Database on Amazon Cloud

Redshift Database on Amazon Cloud

DEMOS 1, 2, 3

Oracle Database on Oracle Cloud versus Oracle Database on Amazon Cloud Demonstration Workloads: Real Data Warehouses from Four Different Customers

- Financial analytics
- Market research analytics
- Insurance analytics
- · Retail analytics

Autonomous Database for Data Warehouses

Available: December 2017

- · Efficient
 - -Oracle on Amazon 5 to 8 Times Higher Cost than Oracle Autonomous DW
 - -Guaranteed to cut your Oracle Data Warehouse on Amazon Bill in Half
 - -Save Even More on Reduced Labor Costs

