### ORACLE®

# ORACLE: **BIG DATA** 122 .759 Big Made Simple

## Oracle Big Data SQL Hands-on Lab

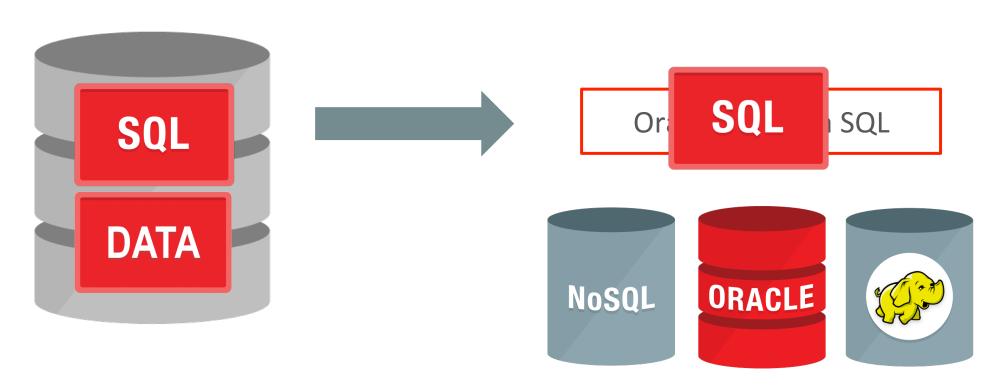
Marty Gubar - Big Data PM



#### Database Strategy for Big Data

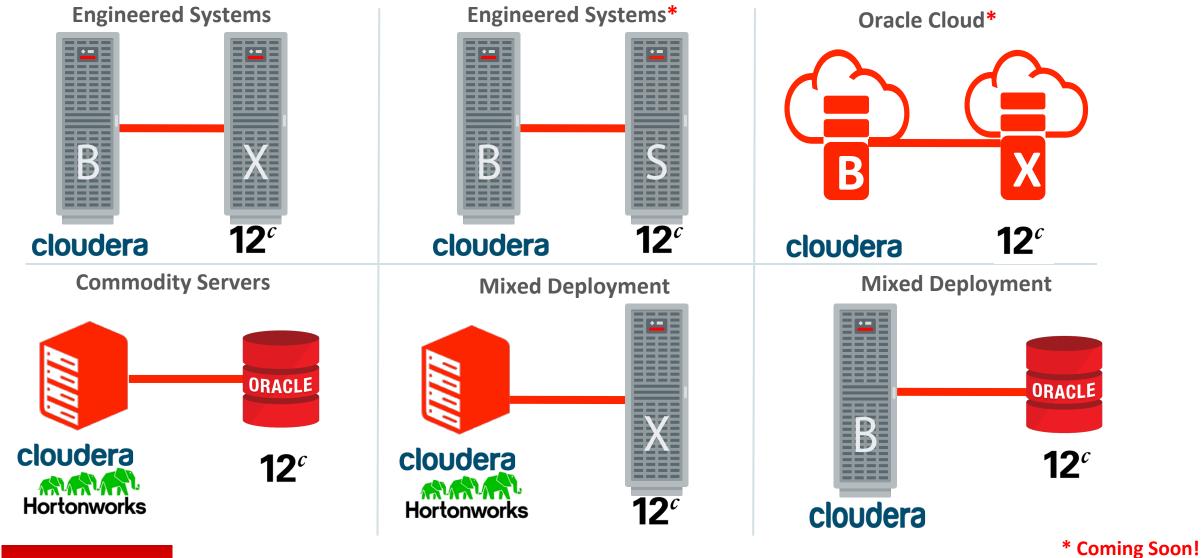
Conventional view of Data Management

Emerging view of Data Management





#### Big Data SQL Configurations



#### Metadata: Extend Oracle External Tables

```
CREATE TABLE movielog (
    click VARCHAR2(4000))

ORGANIZATION EXTERNAL (
    TYPE ORACLE_HIVE
    DEFAULT DIRECTORY DEFAULT_DIR
    ACCESS PARAMETERS
    (
com.oracle.bigdata.tablename logs
com.oracle.bigdata.cluster mycluster
    ))

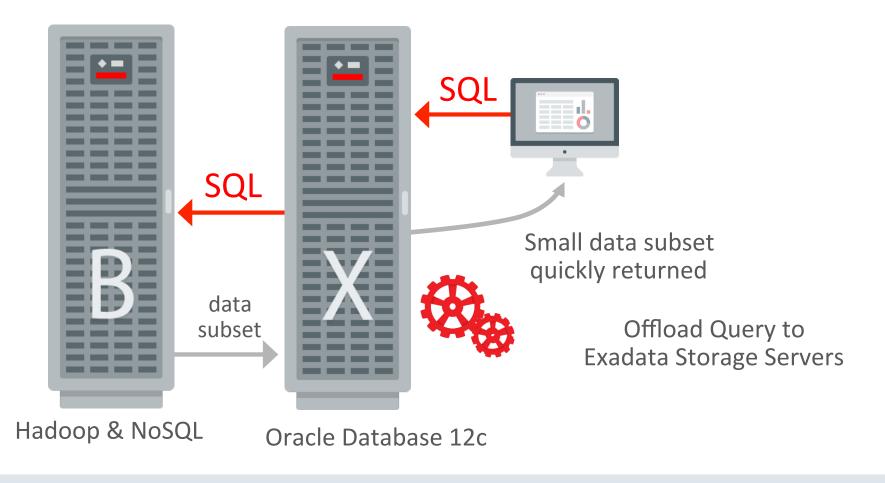
REJECT LIMIT UNLIMITED;
```

- New types of external tables
  - ORACLE\_HIVE (leverage hive metadata)
  - ORACLE\_HDFS (specify metadata)
- Access parameters used to describe how to identify sources and process data on the hadoop cluster

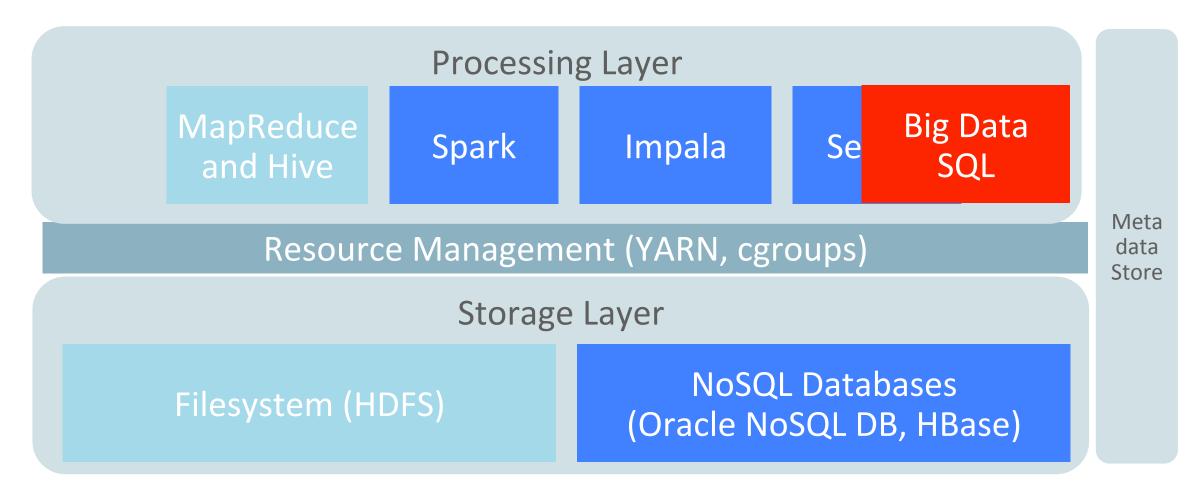
#### Oracle Big Data SQL

Massively Parallel SQL Query across Oracle, Hadoop and NoSQL

Offload Query to Data Nodes

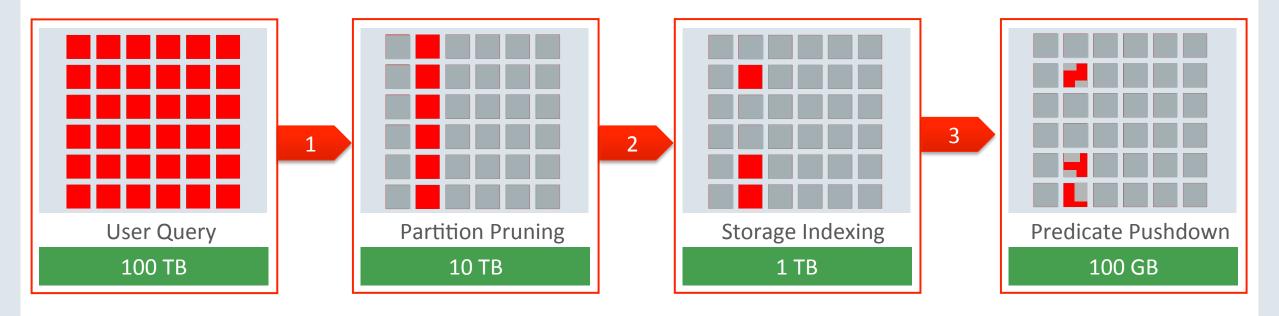


#### Big Data SQL: Another Hadoop Processing Engine



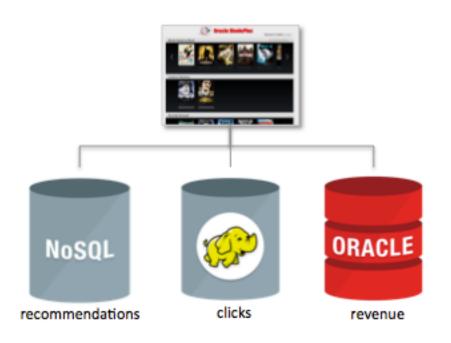
#### Big Data SQL Performance Features

#### **IO Reduction Features Deliver Compound Results**





#### Scenario: On-line Movie Streaming Site



- Data sources
  - Recommendations in NoSQL DB
  - User behavior in HDFS
  - Data Warehouse in Oracle Database
- Gain value from all data!



#### List of workshops

- Part 1 Configuring Oracle Big Data SQL
- Part 2 Create Oracle Table Over Application Log
- Part 3 Leverage the Hive Metastore to Access Data in Hadoop & Oracle NoSQL Database
- Part 4 Applying Oracle Database Security Policies Across the Big Data Platform

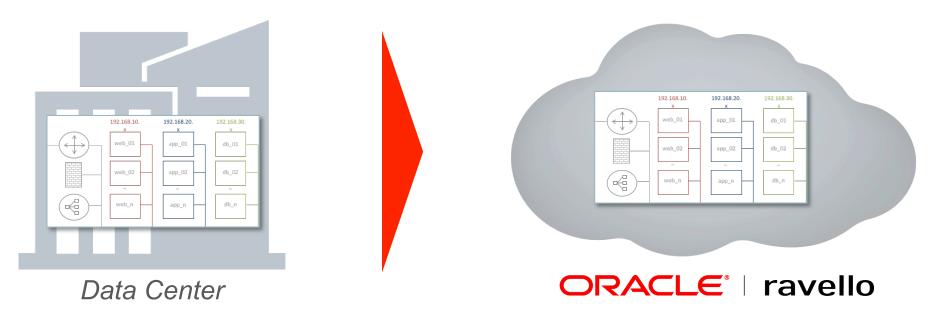
#### List of workshops

- Part 5 Using Oracle Analytic SQL Across All Your Data
- Part 6 Introduction to SQL Pattern Matching
- Part 7 Checking the Pattern Matching Process
- Part 8 Creating a More Useful Data Set
- Part 9 Other Useful 12c Analytical SQL Features

#### Ravello accelerates the move from data-center to public cloud

Run data-center based **VMware** or **KVM** workloads on public cloud without any changes

Same VMs, networking, storage



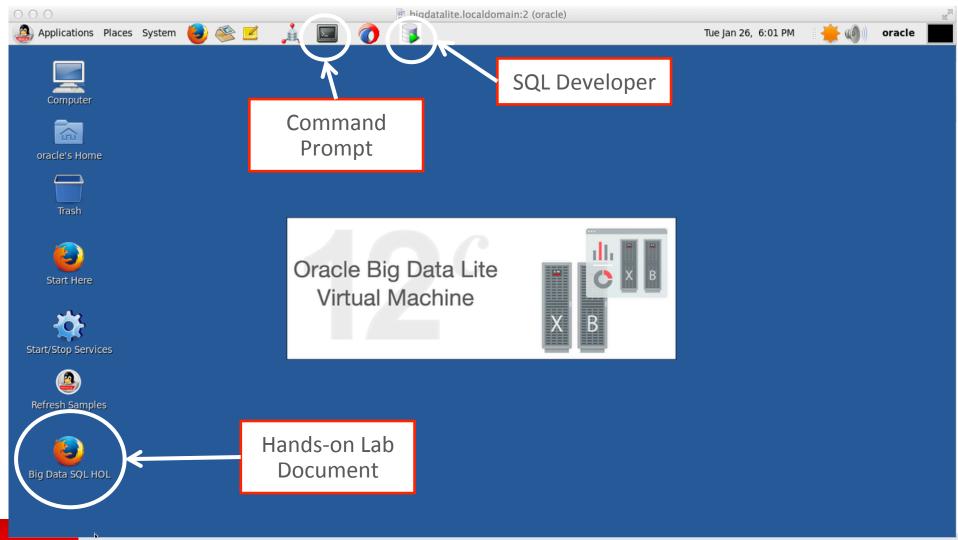
No app changes → Data-center to cloud *in hours*, and *NOT months* 

#### Connecting

- You will be assigned an IP Address
- Use VNC:
  - vnc <ip-address>:1
  - password: welcome1
- or SQL Developer
  - ip-address:1521:orcl
  - moviedemo / welcome1



#### Starting the Hands-on Lab





#### For More Information

- Get started with the software using Oracle Big Data Lite: <u>http://www.oracle.com/technetwork/database/bigdata-appliance/oracle-bigdatalite-2104726.html</u>
  - (simply google "Big Data Lite")
  - Link to HOL is on that page
- Oracle.com:
  - Big Data SQL: <a href="https://www.oracle.com/database/big-data-sql/index.html">https://www.oracle.com/database/big-data-sql/index.html</a>
  - BDA: https://www.oracle.com/engineered-systems/big-data-appliance/index.html
- Data Warehouse Insider Blog: <a href="https://blogs.oracle.com/datawarehousing/">https://blogs.oracle.com/datawarehousing/</a>



# Integrated Cloud

Applications & Platform Services



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