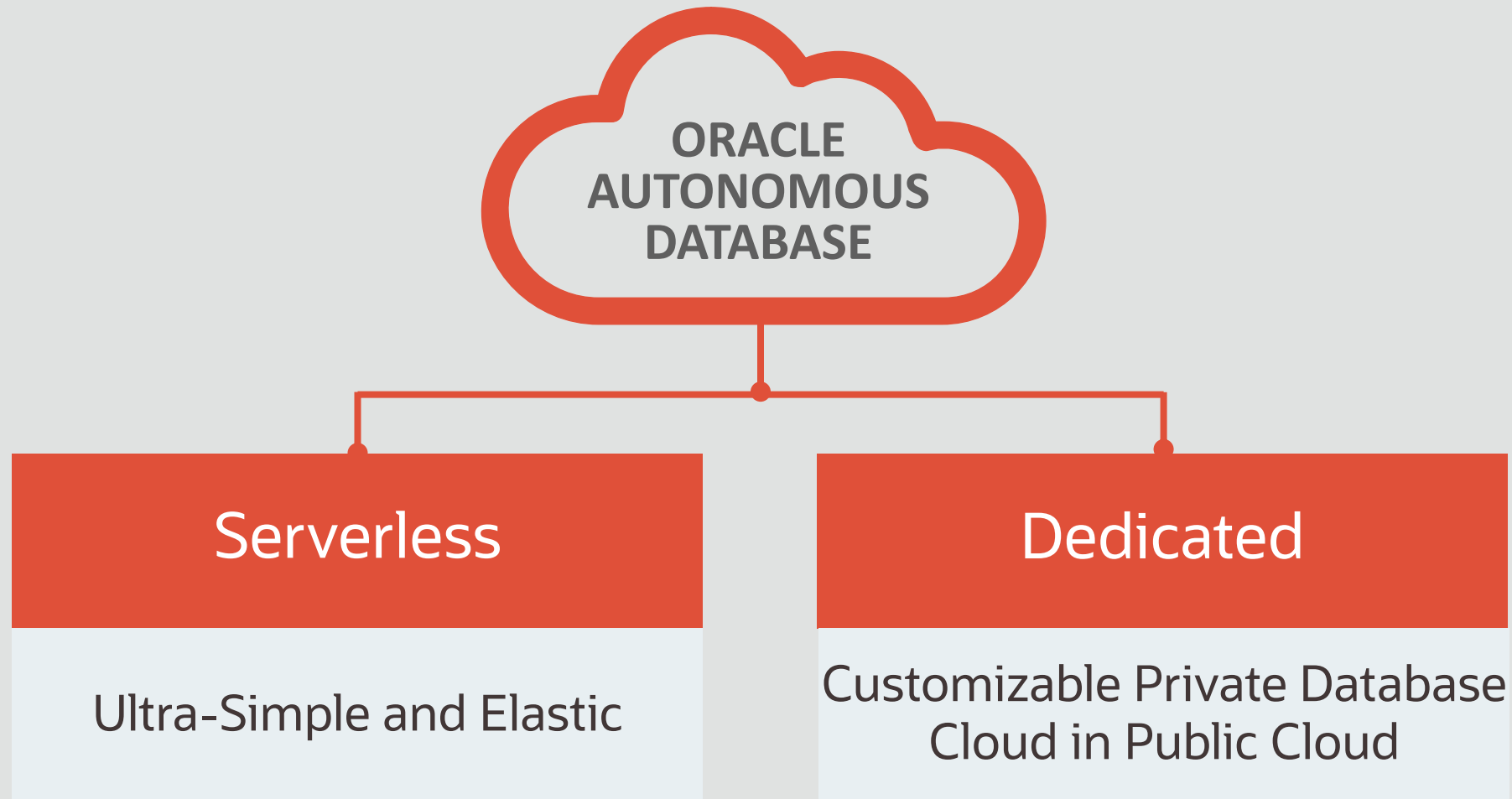


Autonomous Database

One Autonomous Database – Two Deployment Choices



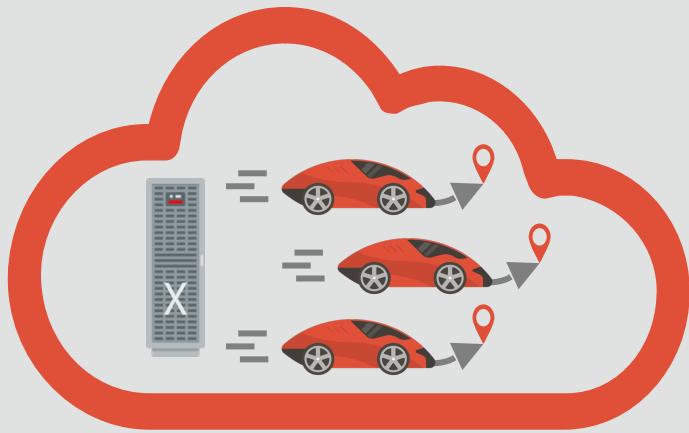
Autonomous Database Serverless – Primary Benefits

- Simple
 - Oracle **automates and manages everything**
 - Deployment, lifecycle, software updates, etc.
 - Customer just chooses database compute, storage, and region
- Elastic
 - **Low minimum size** - 1 OCPU
 - **Low minimum time** commitment - 1 hour
 - Automatically scales online **for true pay-per-use**

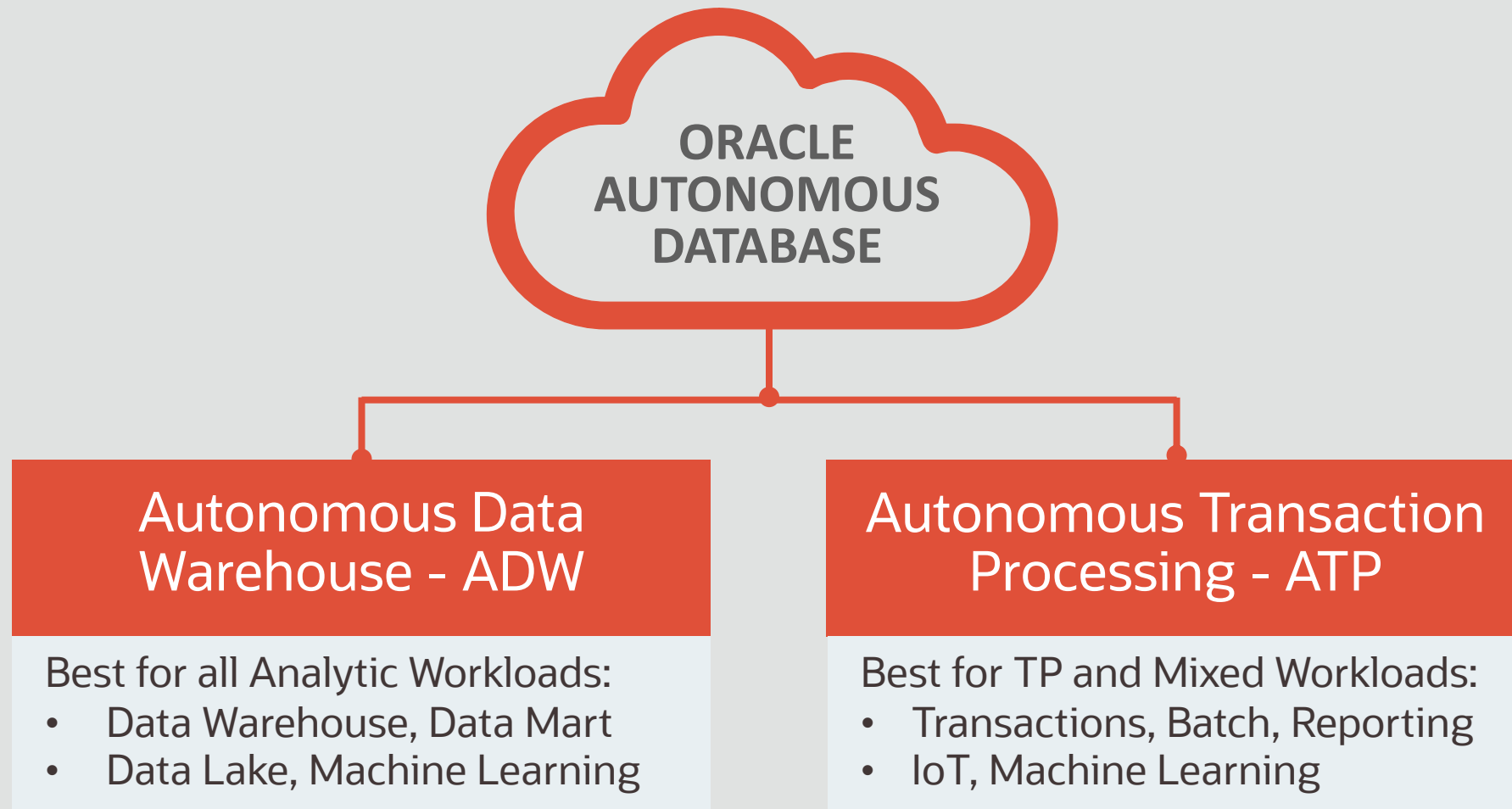


Autonomous Database **Dedicated** – Primary Benefits

- Provides your own **Database Cloud** running on dedicated Exadata Infrastructure
 - Runs all your databases - any size, scale, or criticality
- Highest **Isolation**
 - Runs inside **Secure Isolation Zone** for highest protection from other tenants
 - Configure multiple Exadatas or Container Databases for intra-company isolation
- Customizable **Operational Policies**
 - Control of provisioning, updates, availability, density



One Autonomous Database – Optimized by Workload



Automated Management

Oracle automates end-to-end management of data warehouse

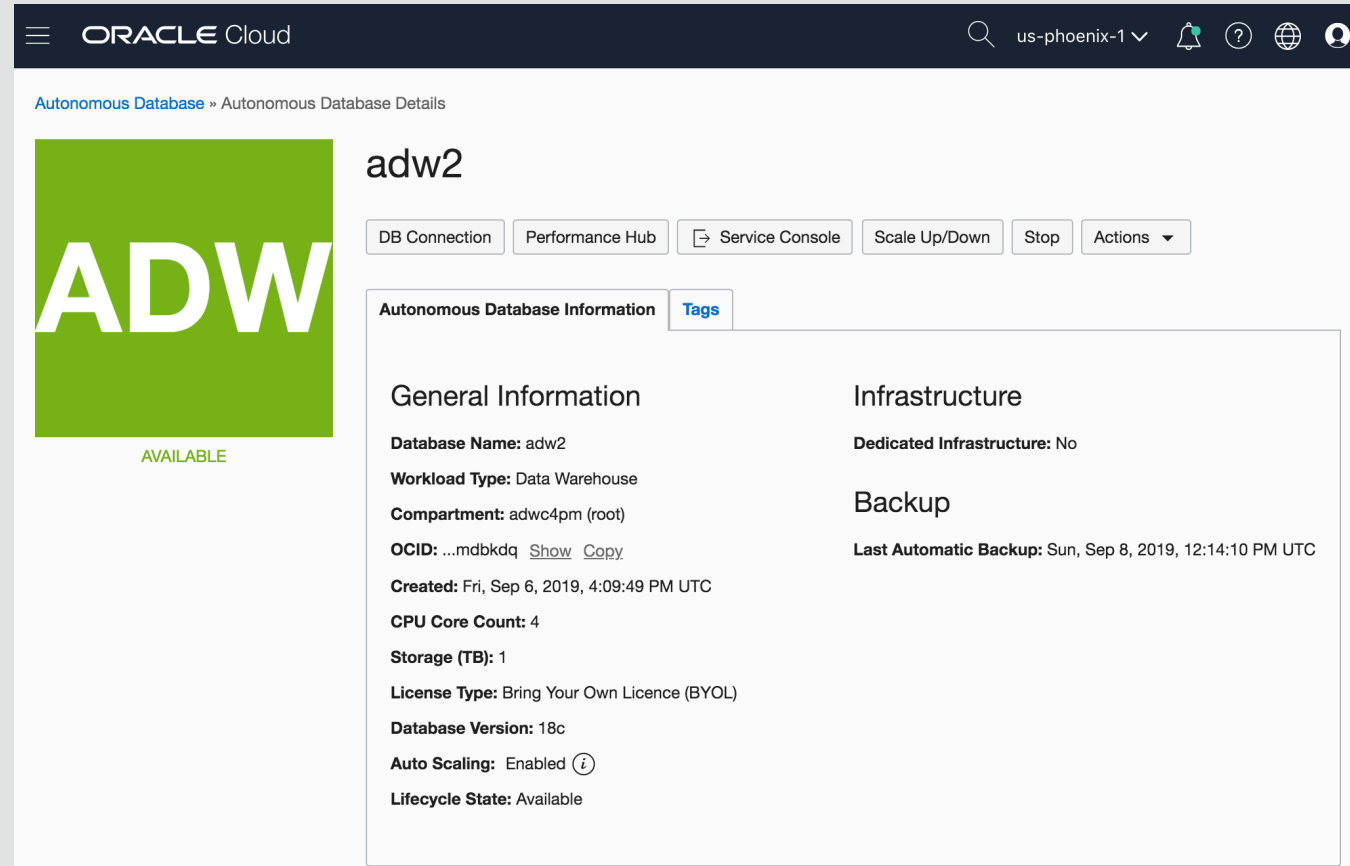
Provisioning new instances

Backup and restore

Patching and upgrades

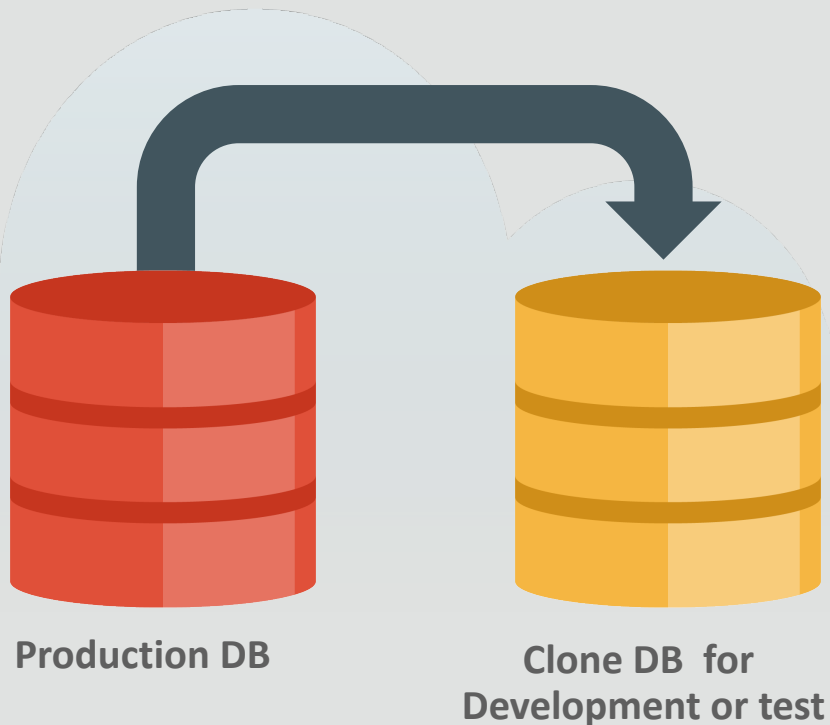
Cloning

Full lifecycle managed using Service Console or API's



The screenshot displays the Oracle Cloud management interface for an Autonomous Database (ADW) instance named 'adw2'. The top navigation bar includes the Oracle Cloud logo, a search icon, and the region 'us-phoenix-1'. The breadcrumb trail shows 'Autonomous Database » Autonomous Database Details'. A large green square with 'ADW' in white and the status 'AVAILABLE' in green text is prominent on the left. To the right of the instance name, there are buttons for 'DB Connection', 'Performance Hub', 'Service Console', 'Scale Up/Down', 'Stop', and an 'Actions' dropdown menu. Below these, the 'Autonomous Database Information' tab is selected, showing 'General Information' and 'Infrastructure' sections. The 'General Information' section lists: Database Name: adw2, Workload Type: Data Warehouse, Compartment: adwc4pm (root), OCID: ...mdbkdq (with Show and Copy links), Created: Fri, Sep 6, 2019, 4:09:49 PM UTC, CPU Core Count: 4, Storage (TB): 1, License Type: Bring Your Own Licence (BYOL), Database Version: 18c, Auto Scaling: Enabled (with an info icon), and Lifecycle State: Available. The 'Infrastructure' section shows 'Dedicated Infrastructure: No' and a 'Backup' section with 'Last Automatic Backup: Sun, Sep 8, 2019, 12:14:10 PM UTC'.

Cloning in Autonomous Database



Easy and fast cloning

Today: full clone or metadata-only clone

Coming soon:

- Clone across regions

- Clone from backup

- Refreshable clone

Automated Tuning

“Load and go”

Define tables, load data, run queries

No tuning required

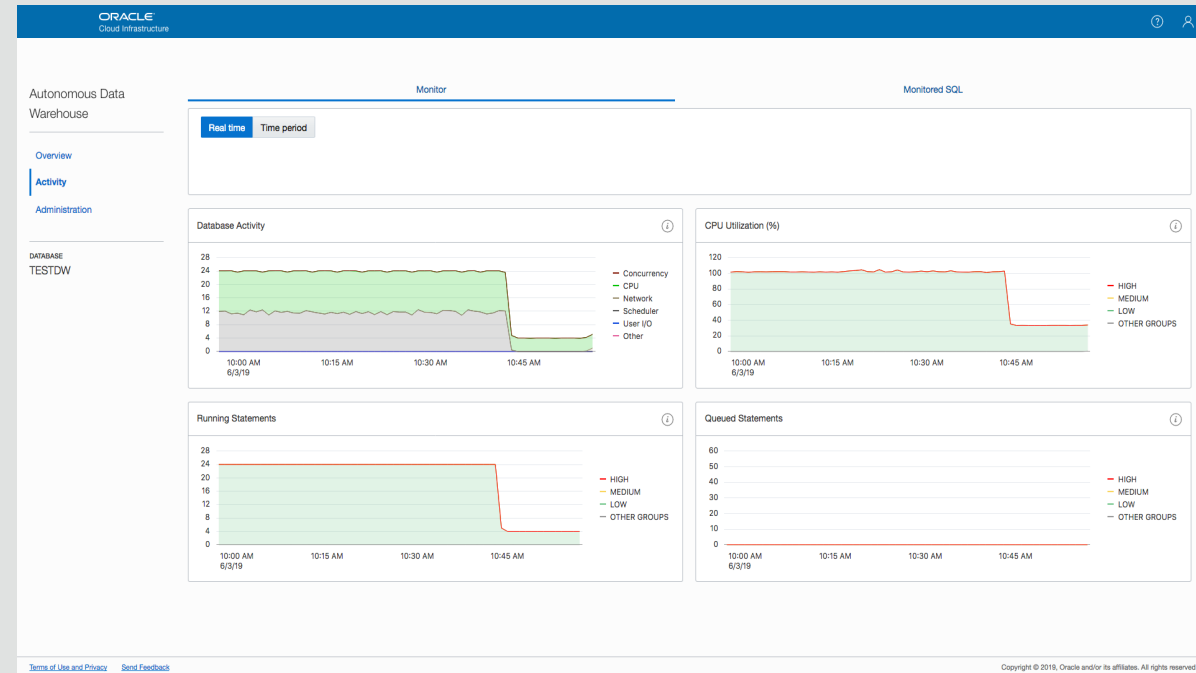
No special database expertise required

No need to worry about tablespaces,
partitioning, compression, in-memory,
indexes, parallel execution

Fast performance out of the box with
zero tuning

Auto-scaling to adapt to changing
workloads

Built-in resource-management plans



Automated Reliability

Fault-tolerant, highly-available Exadata infrastructure

- Triple-mirrored disks for disk failures

- Real Application Clusters for compute node failures

- Self-healing hardware

Automatic backups

- Point in time recovery to anytime in last 60 days

Online patches

- Regular patches applied with zero database downtime



Automated Security

Always up-to-date on **security patches**

Eliminates the largest security risk in current customer-managed systems

Full encryption for entire database, backups and all network connections

Database auditing always on

Login failures

Modifications to user accounts or database structures

Secure by default

Customers are unable to disable security configurations



Fully Elastic: Pay for What you Use

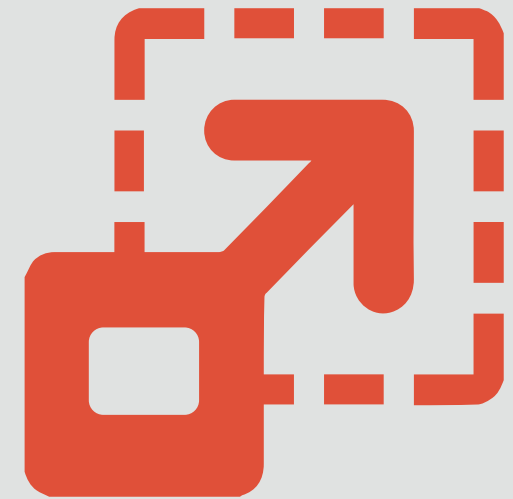
Size to the exact number of OPCU's and TB's required

Not constrained by fixed building blocks

Auto-scaling instantaneously adjusts CPU and IO resources for current workload requirements

Shut off idle compute save money

Restart instantly



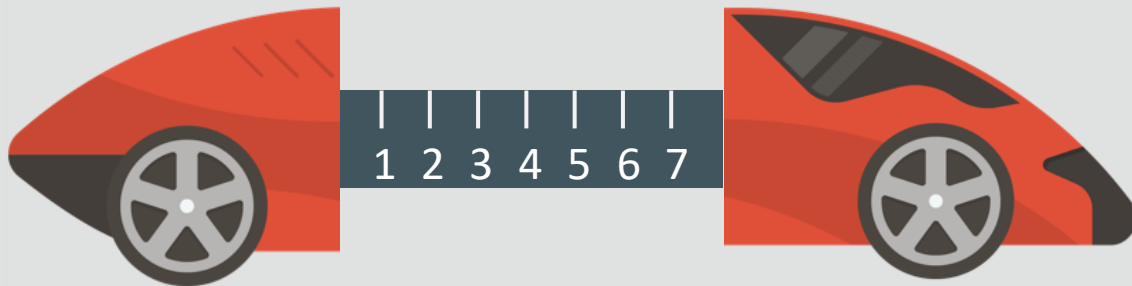
Auto Scaling in Autonomous Database

- **Instantaneous** scaling based upon workload requirements
 - Up to 3x additional CPU and IO resources
- **Simple** 1-click to enable:
- **Saves money**: pay for the resources that you use



Auto scaling

Allows system to use up to three times the provisioned number of cores as the workload increases. [Learn more.](#)



Autonomous Database: Cloud Platform

Cloud-based Tools

Service console for Cloud Admins

SQL Developer Web for Database Developers

OracleML for Data Scientists

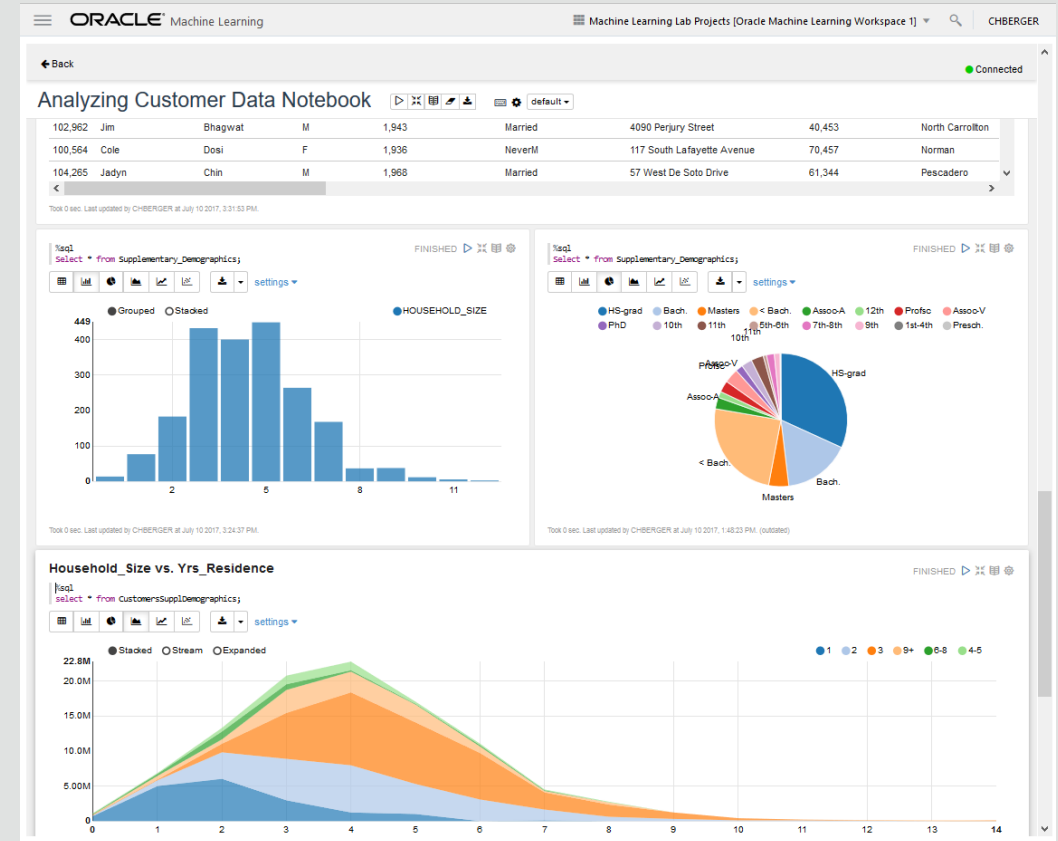
APEX (Application Express) for Applications Developers

OracleML: Built-in notebook

Collaborative UI for data scientists

Easy access to shared notebooks,
templates, permissions, scheduler,
etc.

Based on Apache Zeppelin
Roadmap: Common UI for data
scientists across multiple services



APEX - Oracle Application Express

Autonomous Database-centric web application development framework



Develop desktop and mobile web apps



Visualize and maintain database data



Leverage SQL Skills and database capabilities

Oracle Data Visualization Desktop

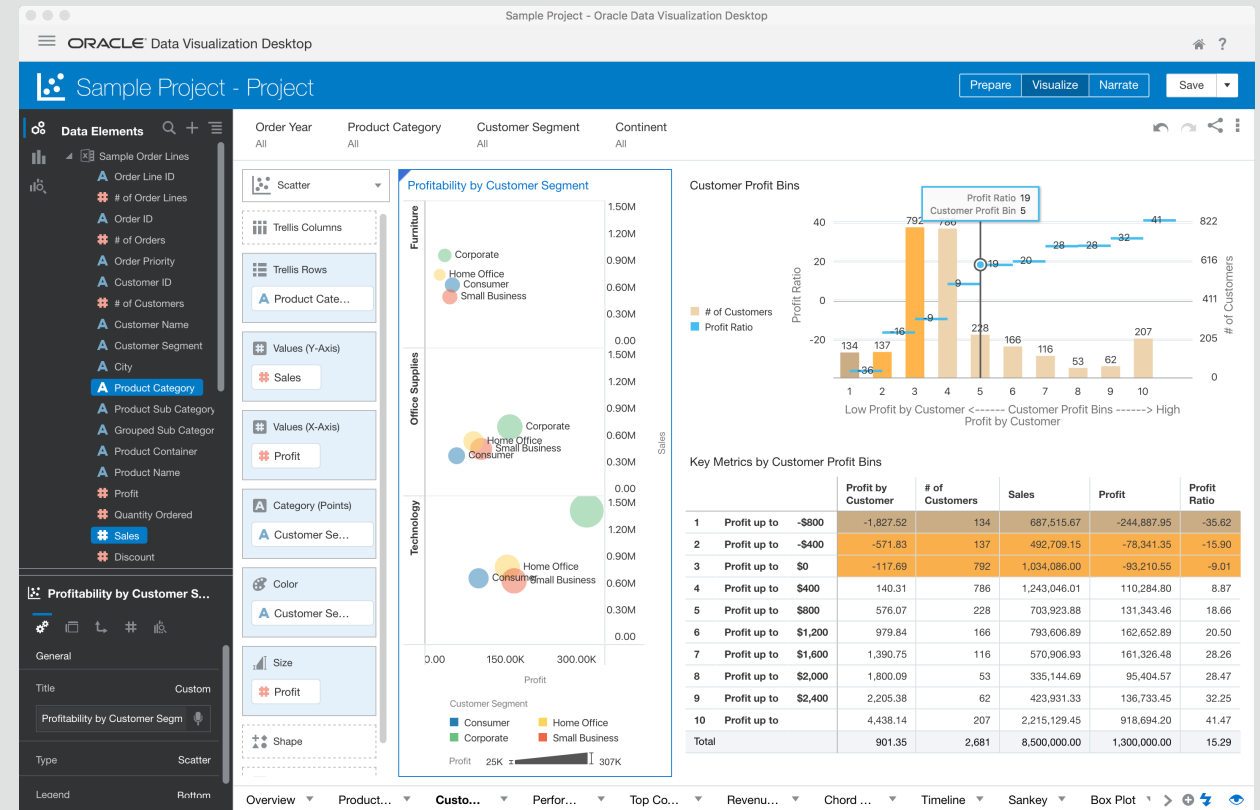
Self-service data exploration for business users

Rich, interactive visualizations

Included with ADW*

Also available as cloud version within Oracle Analytics Cloud

* May be use with ADW at no added cost



Third Party Business Intelligence/Integration Platforms

ORACLE®
Business Intelligence

Qlik 

 **tableau**

 **looker**

MicroStrategy


informatica


data
virtuality

 **sas**

 **Progress®**

 **HVR**

 **FLEXAGON**



 **SIMBA®**
BY MAGNITUDE

WingArc 
The Data Empowerment Company

alteryx

 **yellowfin**