

Oracle Data Infrastructure Forum

Database Modernization with Oracle Autonomous Database

以自治資料庫實現企業現代化資料平台

雷智鈞 **Cano Lei**

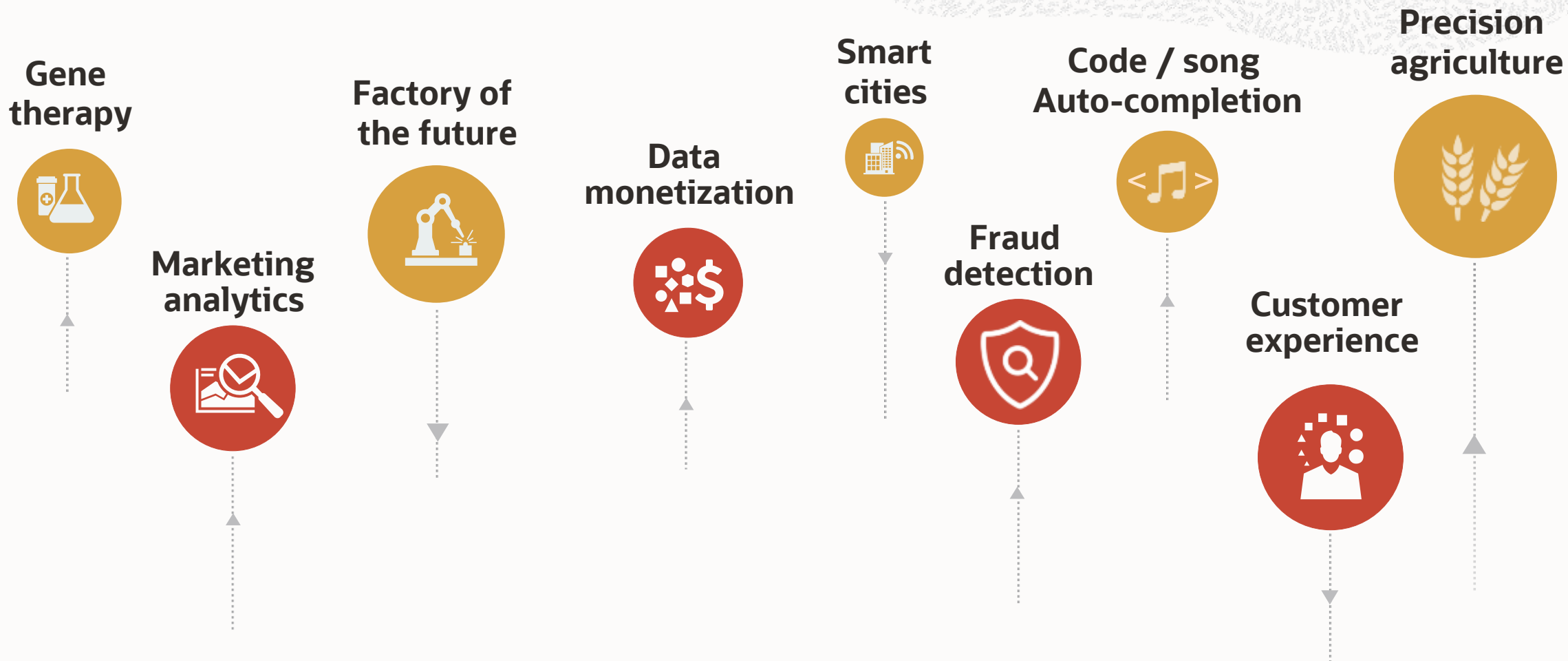
資深系統顧問

美商甲骨文 Hybrid Cloud Systems

Nov, 2021



您的資料平台已經是數位轉型的核心



您的資料平台已經是數位轉型的核心

Success in new dynamic markets depends on managing the data deluge

E-Commerce



Mobile



Hospitality



Rideshare



Bots



Virtual Assistant



AI



Travel and Entertainment



Geolocation



IoT



VR



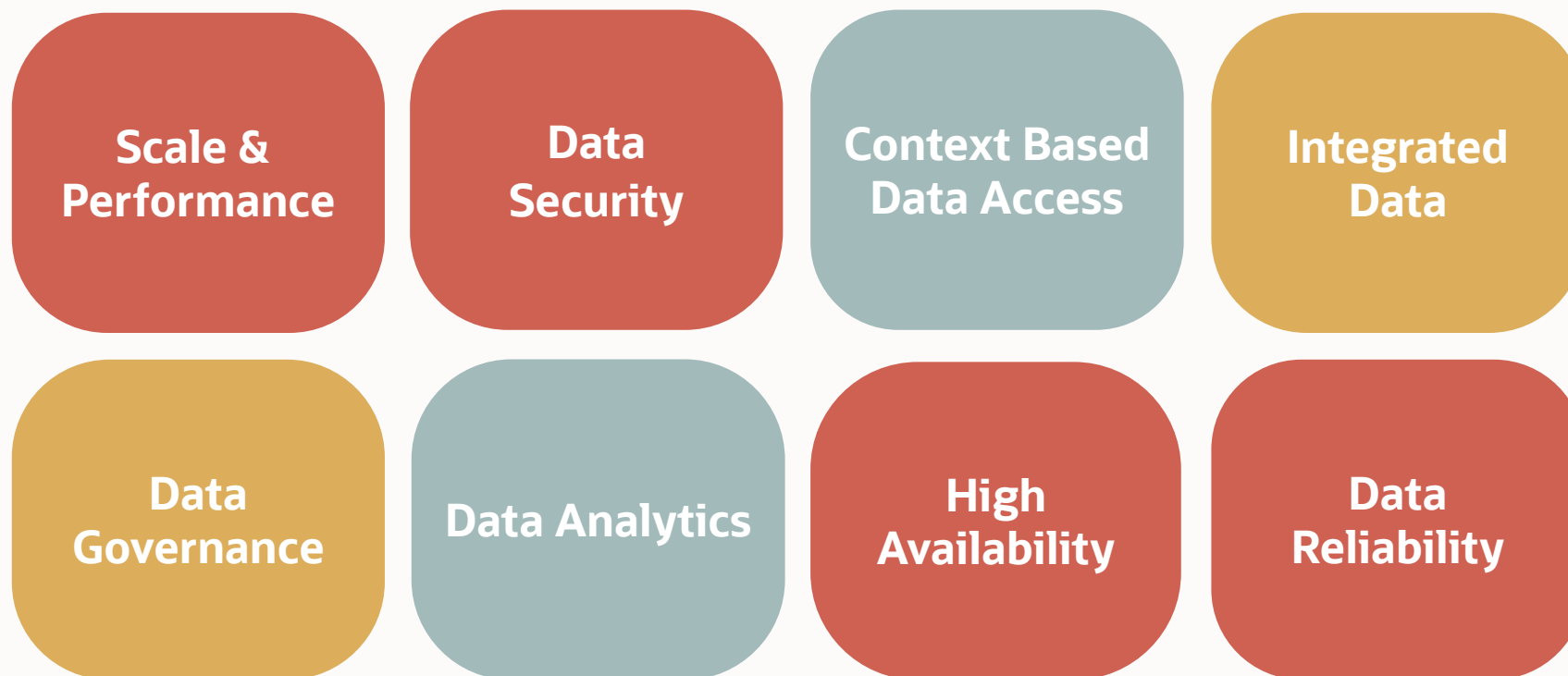
Crypto



Machine Learning



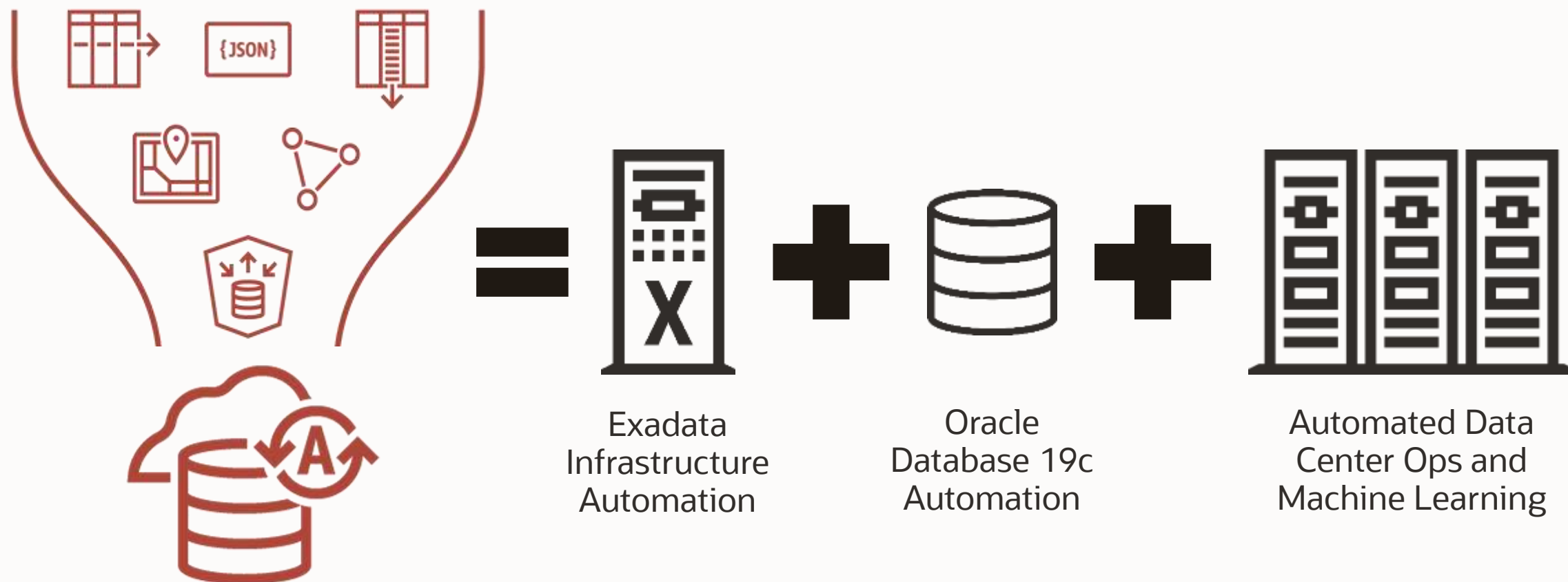
資料平台數位轉型的架構原則



Oracle Autonomous Database is a **Fully Managed Cloud Service**

With automation across all components driven by AI and ML

ORACLE
AUTONOMOUS
DATABASE



Oracle Autonomous Database

Delivers simplified data management for all

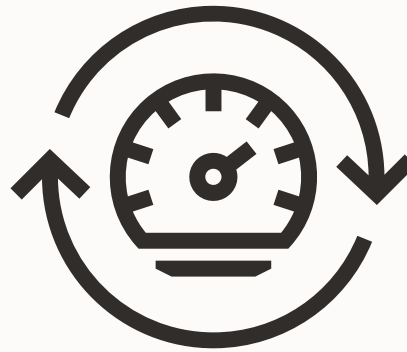
ORACLE
AUTONOMOUS
DATABASE

Enterprise-Class



Security, availability,
scalability, and performance

Self-Driving



Fully autonomous plus
true cloud-elasticity
for low cost

Most Productive



Self-service tools for business
analysts, developers and more

A Choice of Autonomous Database Services

Each service is optimized for specific workload use cases

ORACLE
AUTONOMOUS
DATABASE



Autonomous
Transaction Processing



Autonomous
Data Warehouse



Autonomous
JSON



Autonomous
APEX AppDev

A Choice of Deployment Platforms

Same autonomous database service available in the Cloud and on-premises

ORACLE
AUTONOMOUS
DATABASE



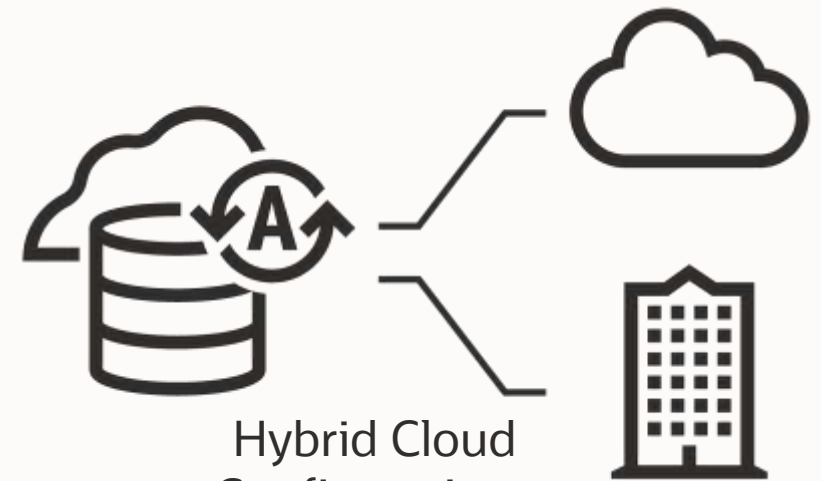
Oracle Cloud
Infrastructure



Exadata
Cloud at Customer



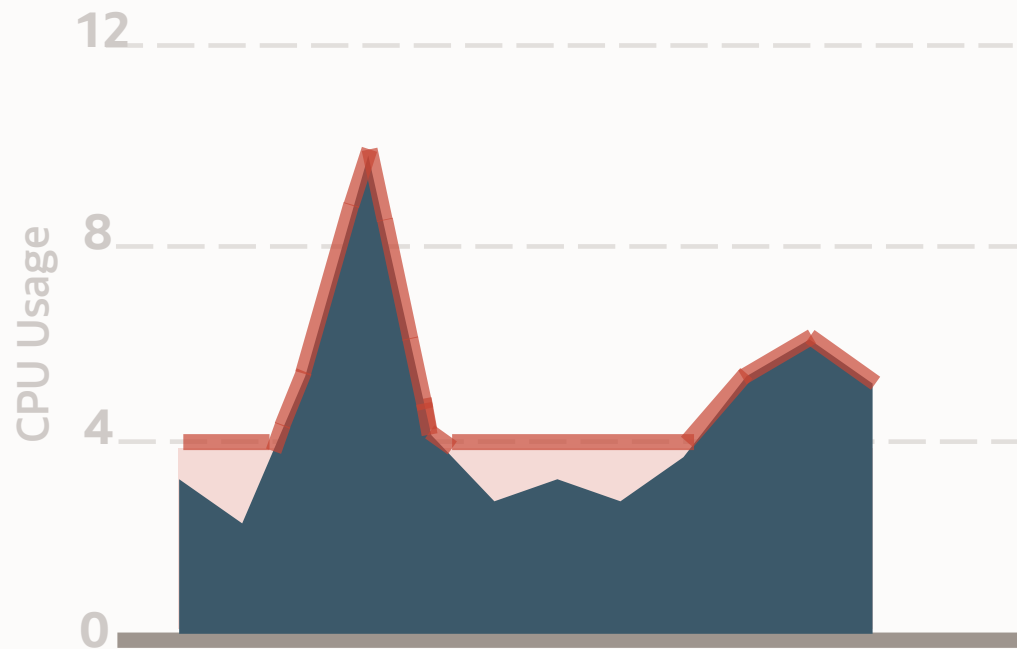
Dedicated Region
Cloud at Customer



Hybrid Cloud
Configurations

Auto Scaling Delivers New Database Paradigm – True Pay per Use

Dynamic Auto-Scale with Per-Second Billing



Dynamic Auto-Scale

Automatically scale up to 3X
Scaling with zero downtime

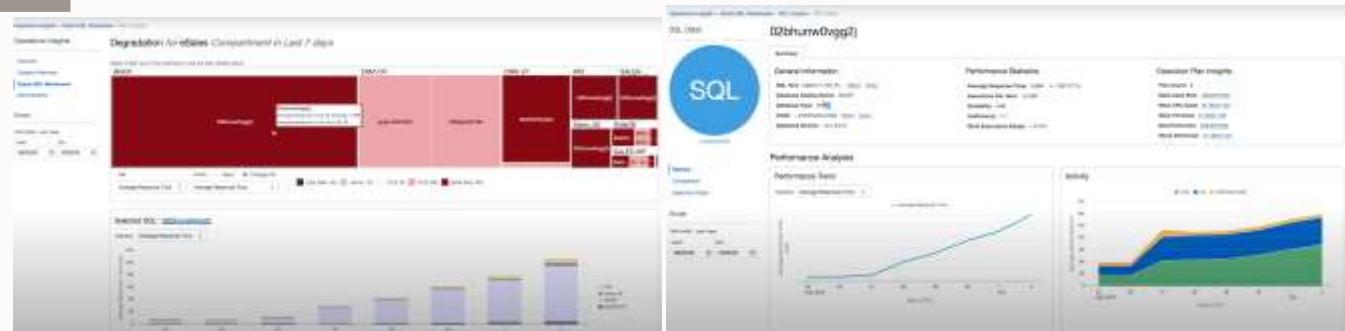
Autonomous Database

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Automatically scales compute resources when needed by workload.

All scaling occurs online, while the application continuously runs.

Enables true pay per use.





Oracle Autonomous Database placed first for all four Operational Use Cases and first or second for all four Analytical Use Cases in 2020 Gartner Critical Capabilities for Cloud DBMS Reports

Source: Gartner *Critical Capabilities for Cloud DBMS for Operational Use Cases*, Merv Adrian, Donald Feinberg, Rick Greenwald, Adam Ronthal, Henry Cook and Gartner *Critical Capabilities for Cloud DBMS for Analytical Use Cases*, Henry Cook, Donald Feinberg, Merv Adrian, Rick Greenwald, Adam Ronthal, November 2020

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Health Care



SaaS



Finance



Autonomous Database

Key Themes

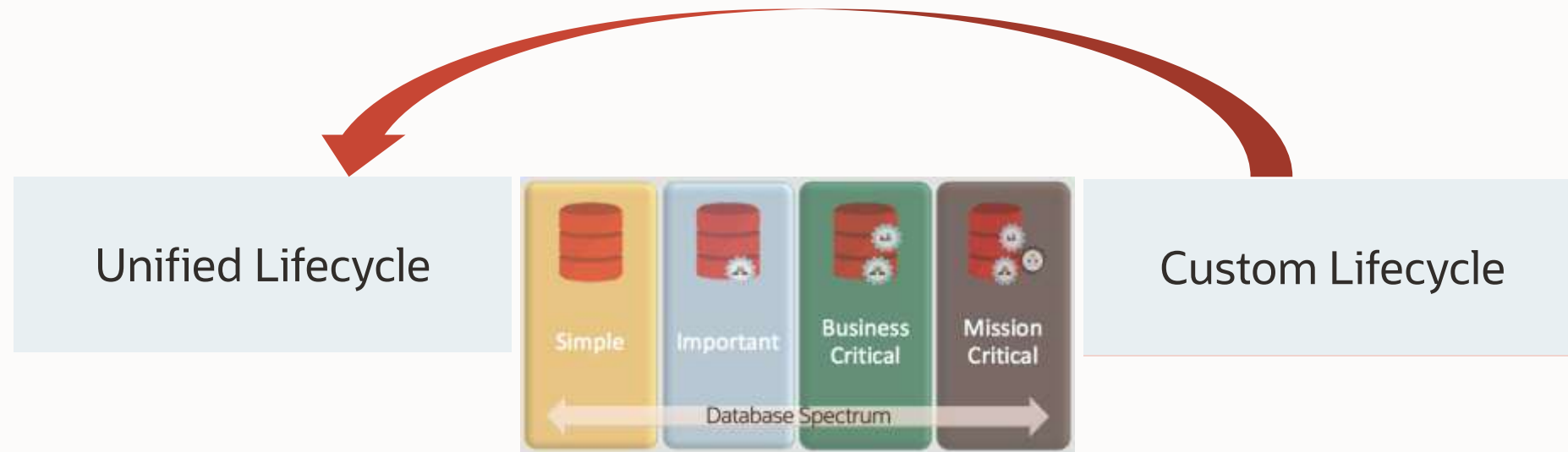


Production

- More **Autonomous**
- More **Mission-Critical**
- More **Usable**

Software Version: 19.11

Database Modernization with Autonomous Database



Autonomous Journey

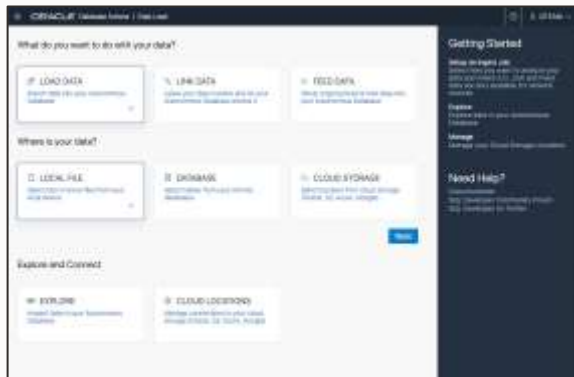
Trust and Verify, with time Unify Operations

Something New on Autonomous Database

Self-Service Tools for **Data Analysts**

From data to insights with built-in self-service data tools

NEW Load



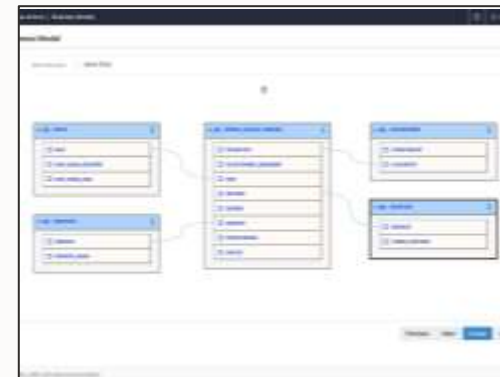
Simple drag & drop
loading

NEW Transforms



Declarative
transformations and
data cleansing

NEW Business Model



Automatically create
business models

NEW Data Insights



Automatically discover
hidden patterns and
anomalies



Export Data As JSON To Object Storage

OVERVIEW

ADB now has a procedure to export a query as JSON directly to Object Storage bucket.

The query can be an advanced query - includes joins or subqueries.

Specify format parameter with compression option to compress the output files.

Use DBMS_CLOUD.DELETE_OBJECT to delete the files

LEARN MORE

DOC

HOW IT WORKS

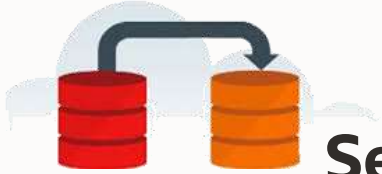
BEGIN

```
DBMS_CLOUD.EXPORT_DATA(  
  credential_name => 'DEF_CRED_NAME',  
  file_uri_list => 'bucketname/filename',  
  query => 'SELECT * FROM DEPT',  
  format => JSON_OBJECT('type' value 'json'));
```

END; /

VALUE

Simplifies process for scripting a procedure to push data from a query to Object Storage bucket for archiving or sharing with other cloud services/tools



Set Patch Level When Creating A Clone

OVERVIEW

When you provision or clone an Autonomous Database instance you can select a patch level to apply upcoming patches.

There are two patch level options: **Regular** and **Early**.

LEARN MORE

DOC

HOW IT WORKS

Create Autonomous Database Clone

Choose a clone type:

- Full Clone
- Refreshable Clone
- Metadata Clone

Clone source:

- Clone from Autonomous Database
- Clone from a backup

Configure the database:

Database name:

OCI ID:

OCI ID:

OCI ID:

OCI ID:

Patch level:

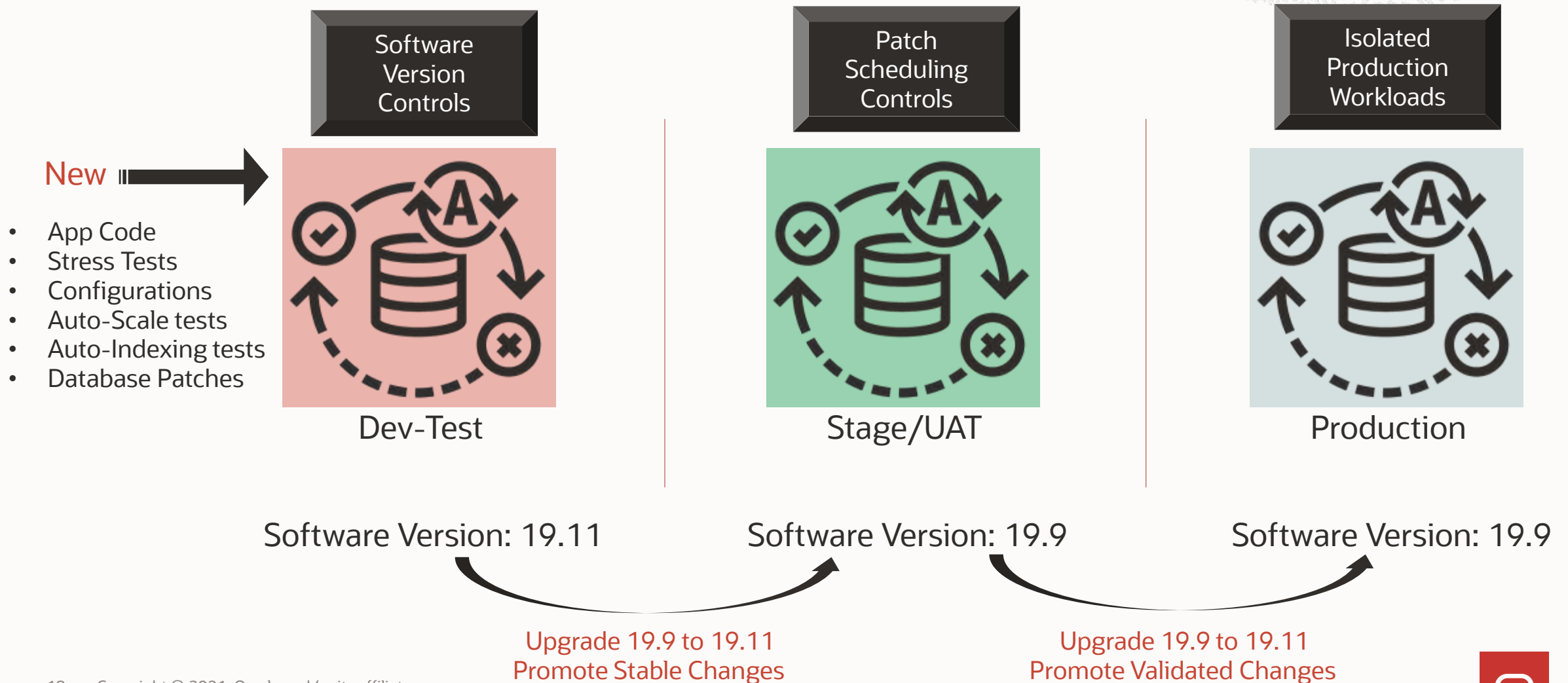
Early

VALUE

EARLY Patch Level - provides advanced access to upcoming maintenance patches 1 week before the regular patching cycle. Makes it easier to test applications and tools in advance of the automatic matching cycle.

Autonomous Database – Cloud@Customer

Autonomous on Dedicated Infrastructure with added Operational Controls



Always Free Autonomous Database Services

All Oracle Cloud tenancies get at least two Always Free Autonomous Databases

Choose from any of the workload types:

Autonomous Transaction Processing

Autonomous Data Warehouse

Autonomous JSON Database

- Each instance includes 1 OCPU, up to 20 GB of storage, up to 20 simultaneous database sessions
- APEX application development included with all instances
- One-click promotion to full Autonomous Database

Try Yourself for Free

Always Free

Autonomous Database
Service you can use for
unlimited time



www.oracle.com/cloud/free/

Thank you



ORACLE