



Analytics és Autonomous Database *Újdonságok*

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The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

Oracle Analytics



Oracle
Analytics
Cloud

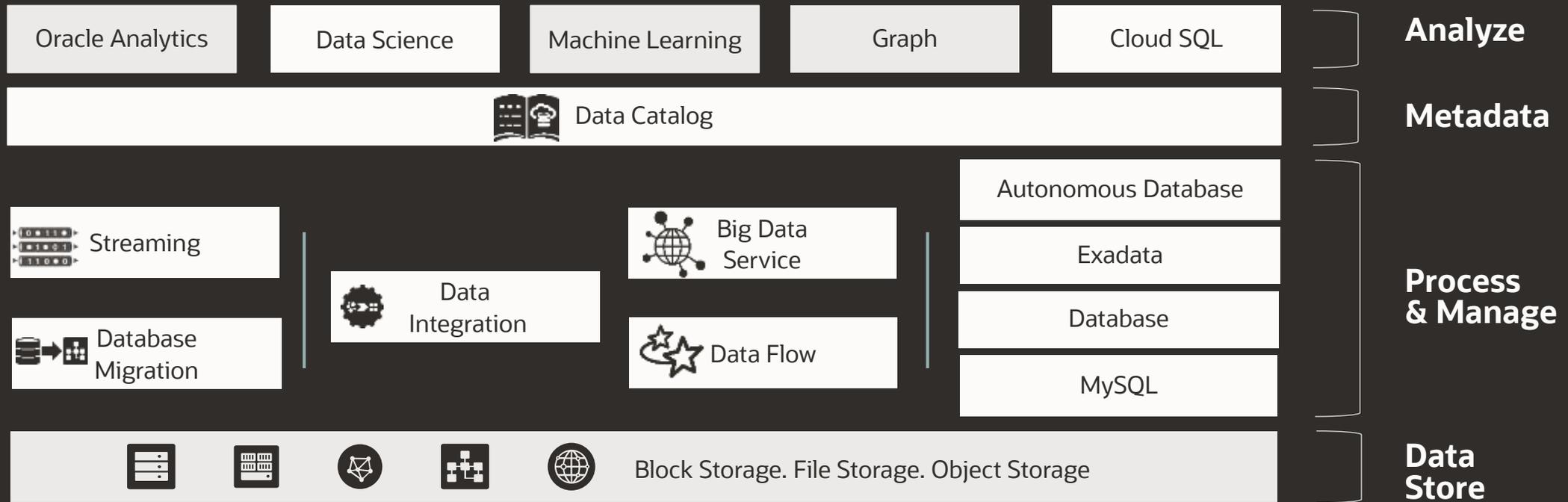


Oracle
Analytics
Server



Oracle
Analytics for
Applications

Oracle Analytics and Data Management landscape

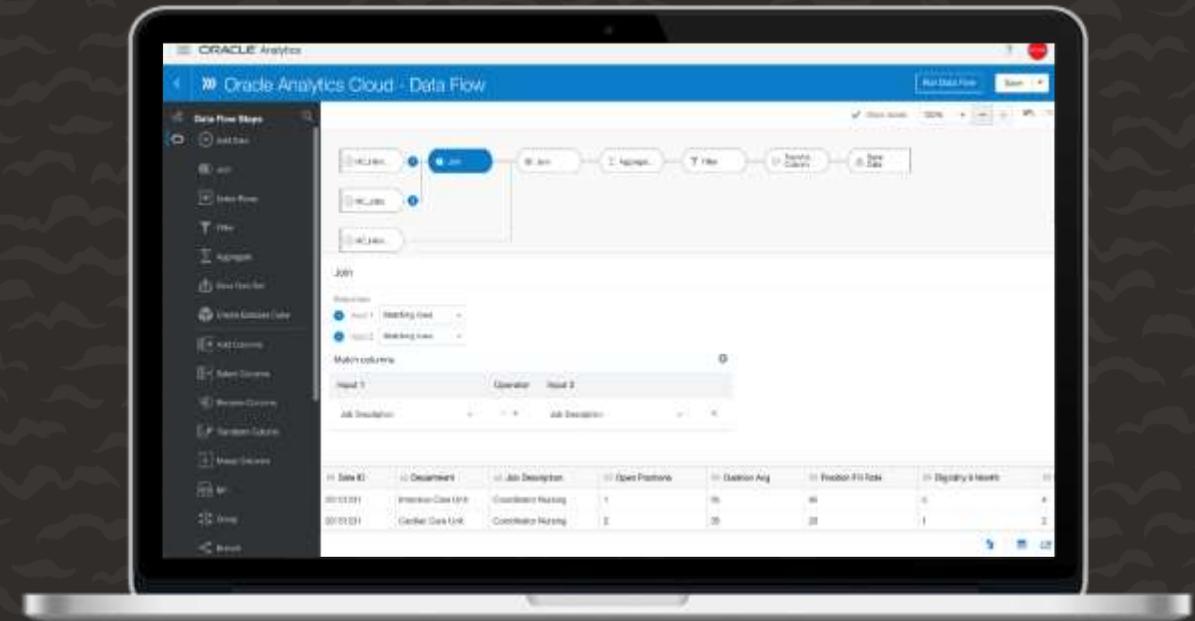


Analytics platform

Governed analytics		Self-service analytics		Augmented analytics	
Dashboards	Pixel-perfect reports	Data preparation	Data visualization	Voice & chatbot	Natural language
Semantic models	Query federation	Storytelling	Collaboration	Data enrichment	1-click explain
Role-based access control	Excel integration	What-if analysis	Mobile	Adaptive & personalized	Machine learning

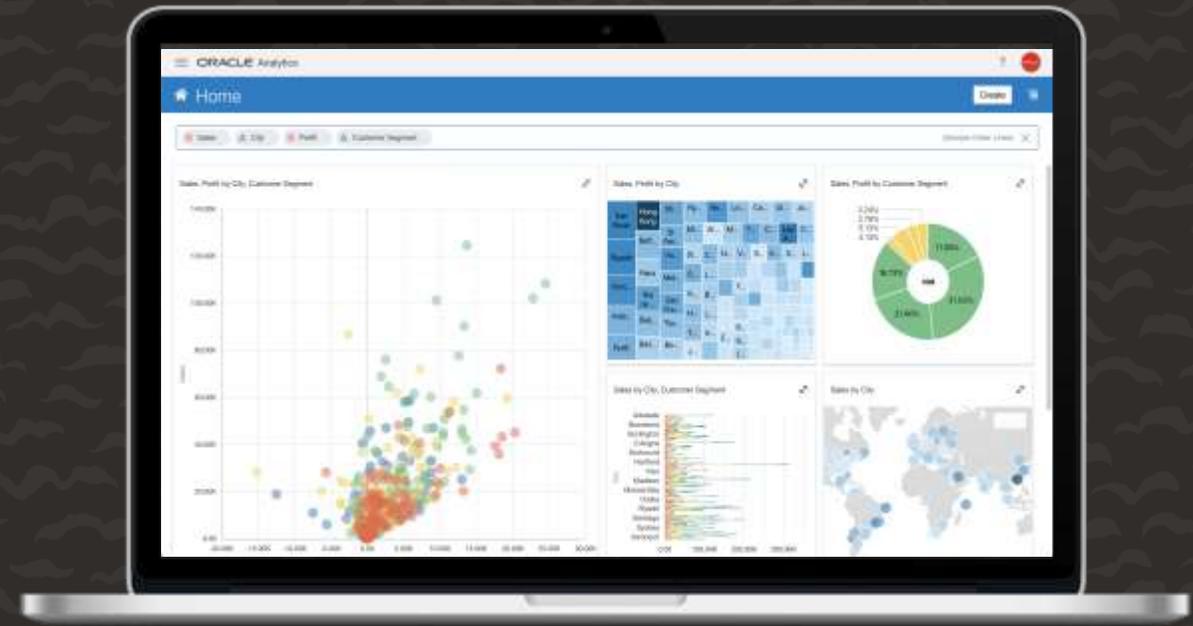
Data flow

- Use Data Flow to **ingest**, **clean** and **transform** easily your data from various sources and cloud!
- Group, split, join, union, merge and save data into a database or a cube



Natural language processing

- Query data directly using Natural language processing
- No Query or SQL needed
- Augmented analytics
- Voice enabled



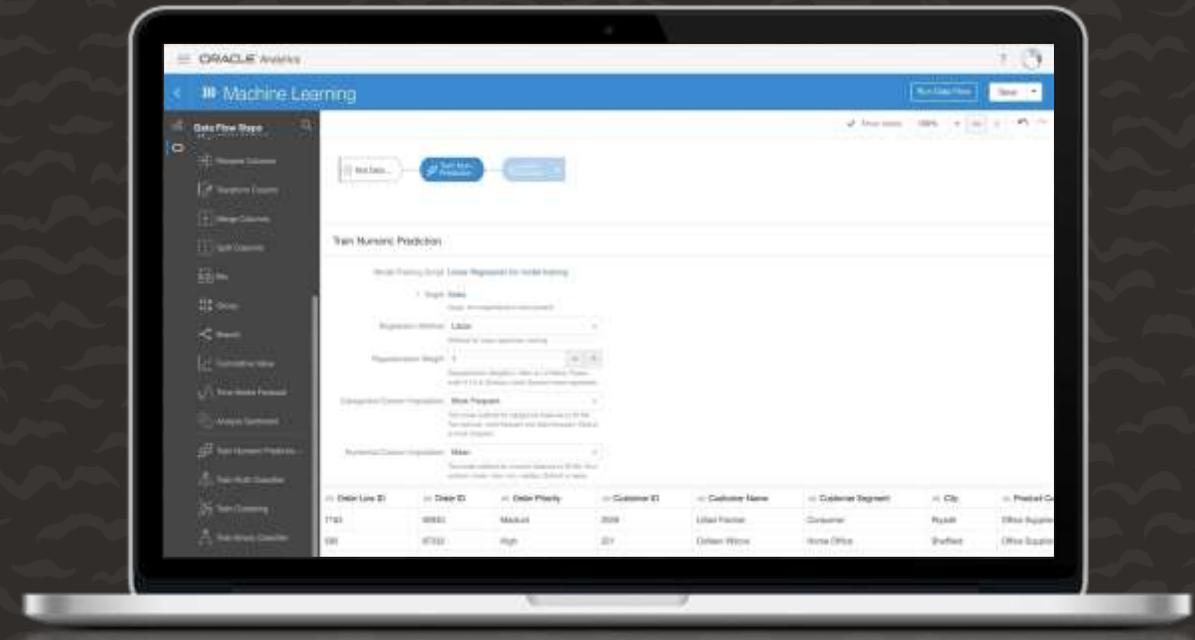
AI data exploration

- AI data exploration and insights
- Machine Learning models to provide top insights
- AI data profiling and data enrichment
- One click forecast, clustering and more



Machine learning

- Data flow to train machine learning models
- Linear Regression, Random Forest, CART, k-means clustering and more **algorithms**
- Machine Learning models for **predictive analytics**



Oracle Analytics Library: példák és élő demók

<https://www.oracle.com/business-analytics/data-visualization/library-overview.html>

Oracle Analytics Library

See Oracle Data Visualization in action with our live demo samples.

[Download Oracle Data Visualization Desktop](#)



Overview

Examples

Tutorials

Extensions

Geo Layers

Live Demos

Videos

Oracle Analytics Public

Live, public, instant access to Oracle Analytics, choose the server closest to your location for dozens of Oracle Analytics demos and samples.

Go to the OA Idea Lab to submit your product ideas and to cast your vote on others.



Oracle Analytics Library: példa és élő demók

<https://www.oracle.com/business-analytics/data-visualization/library-overview.html>

The screenshot displays the Oracle Analytics Library interface. At the top, there is a navigation bar with the Oracle logo and the text "ORACLE Analytics". Below this is a search bar containing the text "Type Project" and a close button. The main area features a grid of project cards, each representing a different data visualization project. The cards are organized into categories: "Projects and Reports", "Data", "Recent Data Sets", "Favorite Projects", and "Machine Learning". The "Sort by" dropdown is set to "Modified".

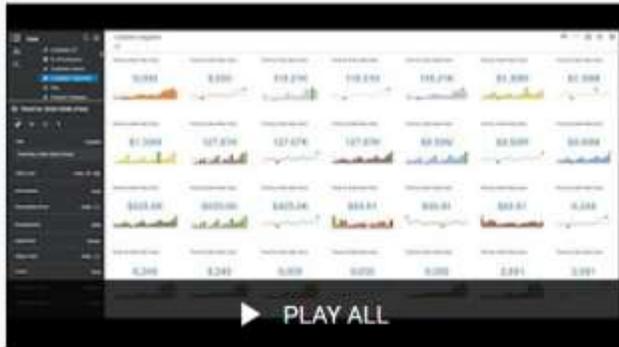
Key elements of the interface include:

- Navigation Bar:** Oracle logo and "Analytics" text.
- Search Bar:** "Type Project" with a close button.
- Category Tabs:** "Projects and Reports", "Data", "Recent Data Sets", "Favorite Projects", "Machine Learning".
- Sort by:** "Modified" with a dropdown arrow.
- Project Grid:** A grid of project cards, each with a star icon, a thumbnail image, and a title. Examples of project titles include "YT Trending Videos", "World Taxes", "World Population Project...", "Wine Reviews Analytics - ...", "US Wind Turbines", "US School Donations", "UFOs vs BigFoot", "Tour De France Doping ...", "Top Growing US Airports", "Tennis ATP : Roger vs Rafa", "Stock History - Executive...", "Simple Sample Project", "Road Accidents Lab", "Right Click & Calculated ...", "Real Time Sandbox Usa...", "ODTUG-Environmental ...", "OAC Twitter Activity", "Los Angeles Arrest Incid...", "Motion Chart - GDP x Ur...", "Italy Earthquakes", "History of First Names In ...".



Oracle Analytics Cloud újdonságok, OAC 5.7

[OAC What's New on oracle.com](#) [YouTube 5.7 feature videos](#)



Oracle Analytics 5.7 : Selected New Features

11 videos • 2,458 views • Last updated on Jul 20, 2020



This playlist shows some of the new features added to Oracle Analytics Cloud with 5.7 upgrade (July 2020)



Oracle Analytics

SUBSCRIBE

- 1  OAC 5.7 - Spark Charts on Performance Tiles
Oracle Analytics 1:37
- 2  OAC 5.7 - Waterfall Bridge Visualization
Oracle Analytics 1:46
- 3  OAC 5.7 - Register and Apply Oracle Database Machine Learning Models
Oracle Analytics 5:18
- 4  OAC 5.7 - Top N Filter on Attribute Columns
Oracle Analytics 2:27
- 5  OAC 5.7 - Spacing & Layout Enhancements
Oracle Analytics 2:46
- 6  OAC 5.7 - On Canvas Filter with List Box Viz
Oracle Analytics 4:16
- 7  OAC 5.7 - Selective Filters in Oracle Analytics Canvas



Oracle Analytics Cloud újdonságok, OAC 5.8

[OAC What's New on oracle.com](#) [YouTube OAC 5.8 bit.ly/OAC58Features](#)



Oracle Analytics 5.8 : Selected New Features

6 videos • 1,438 views • Last updated on Aug 31, 2020



Oracle Analytics

SUBSCRIBE

-  **OAC 5.8 - Canvas Layout and Data-Viz Enhancements**
Oracle Analytics
4:20
-  **OAC 5.8 - Build Heatmaps on top of Custom Images**
Oracle Analytics
4:26
-  **OAC 5.8 - Custom Local Time Zone Setting in OAC**
Oracle Analytics
2:35
-  **OAC 5.8 - Propagate Permissions to Related Artifacts of a Project**
Oracle Analytics
2:54
-  **OAC 5.8 - Embedding OAC Content into Public Websites**
Oracle Analytics
7:20
-  **OAC 5.8 - Connect OAC RPD to Essbase On Prem with RDG**
Oracle Analytics
4:29



Two Free Trial Options <https://www.oracle.com/cloud/free> — Learn, Explore, and Build for Free

New

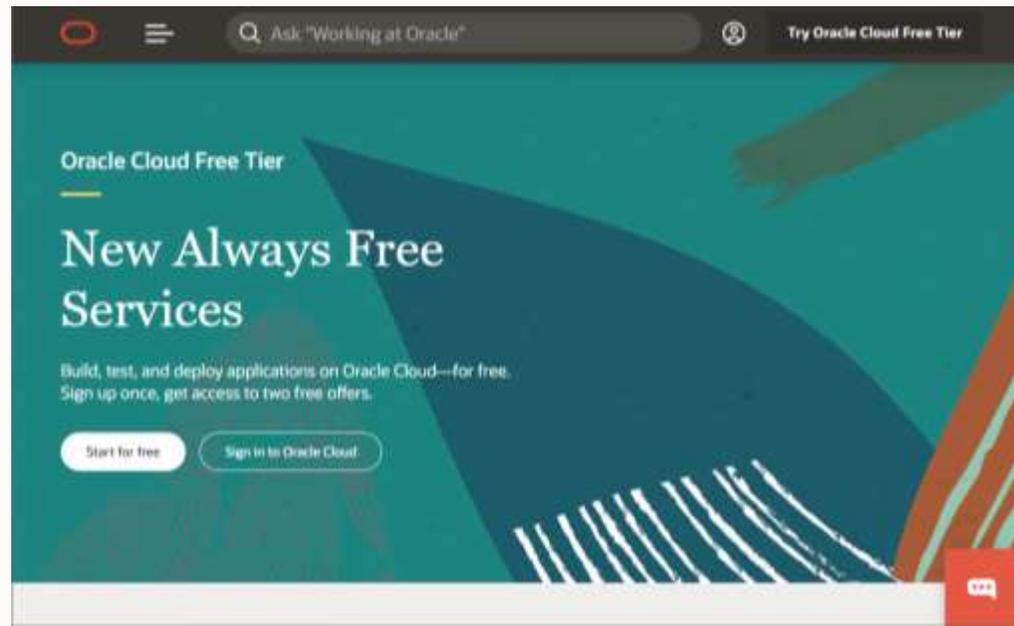
Always Free

Services you can use for an unlimited time

+

Free Trial

Free credits for 30 days



Always Free – What's Included



Autonomous Database

2 x Databases
20 GB each



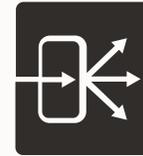
Compute

2 x VMs
1 GB Memory each



Storage

100 GB Block
10 GB Object
10 GB Archive



Networking/ Load Balancing

10 Mbps LB
10 TB Outbound
Data Transfer



Monitoring / Notifications

500M Metrics Ingestion
1B Metrics Retrieval
1M Http Notifications
1K Email Notifications

Available to All New and Existing Cloud Accounts

Forrester Wave

Translytical Data Platforms, Q4 2019

Oracle Position: Leader

Oracle ranked highest on both Axis

- “Unlike other vendors, Oracle uses a dual-format database (row and columns for the same table) to deliver optimal translytical performance.”
- “Customers like Oracle’s capability to support many workloads including OLTP, IoT, microservices, multi-model, data science, AI/ML, spatial, graph, and analytics”
- “Existing Oracle applications do not require any changes to the application in order to leverage Oracle Database In-Memory”
- “Customers like the platform’s ease of use, ease of expanding existing Oracle applications to take advantage of translytics, general data security capabilities, and technical support, as well as the Cloud At Customer offering”

THE FORRESTER WAVE™

Translytical Data Platforms

Q4 2019



Published: October 23, 2019

Analysts: Noel Yuhanna, Mike Gualtieri

Machine Learning (Advanced Analytics), Spatial and Graph – már nem opció, ingyenes

Publikus hivatkozások:

[Oracle Database Licensing Information Manual \(pdf\)](#)

<https://blogs.oracle.com/database/machine-learning%2c-spatial-and-graph-no-license-required-v2>

Database része funkcionalitásként
Premier/Extended support megléte
Már feature és nem DB Option

Autonomous Database **Experiences**

A
T
P



Order processing runs 100x faster via ATP and eliminated human error



600% performance improvement on ½ CPUs with Azure Interconnect



Provisioning time reduced from 2 days to 3 minutes



Guaranteed performance, availability, and security of PoS system for 1,000 clients

A
D
W



40X report performance improvement and 40% less cost versus on-premises



50% cost reduction versus Teradata on-prem, eliminated maintenance



Using the ML capabilities of ADW to help drive business opportunities



Reduced complex pricing query from 6 minutes to 2 seconds

One Autonomous Database family optimized for varied workloads



Oracle Autonomous Database

Autonomous Data Warehouse

Analytic workloads

- Data warehouse, data mart
- Data lake, machine learning

Autonomous Transaction Processing

OLTP and mixed workloads

- Trans., batch, reporting, IoT
- Application development, machine learning

Autonomous JSON Database

Native JSON Document

- User profile management
- Customer 360
- Catalog and content management

Choose the one that best meets your workload needs

Oracle Autonomous **JSON Database**

A managed cloud service for JSON storage

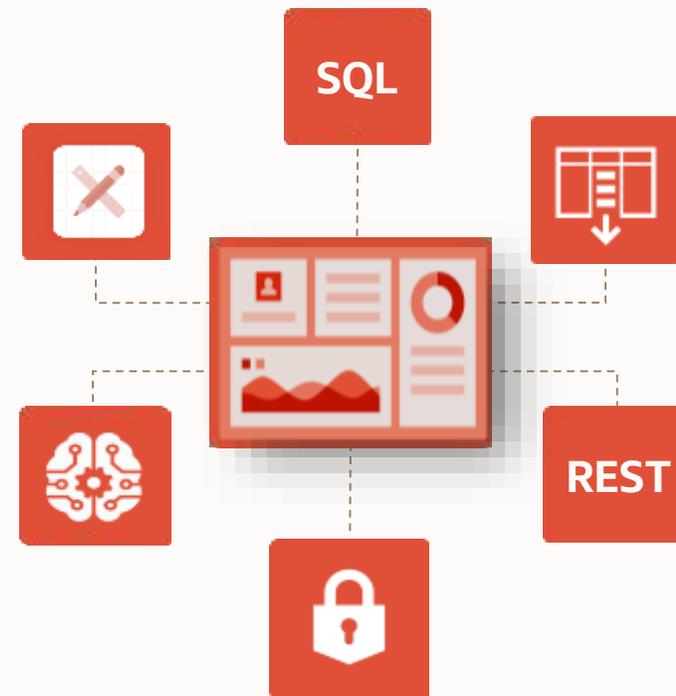
- New service for **JSON-centric** development
- Flexible and fast at scale
- **Native** JSON storage
- Simple **document APIs**
 - Language drivers, command-line, and REST
 - SQL not required



Oracle Autonomous **JSON Database**

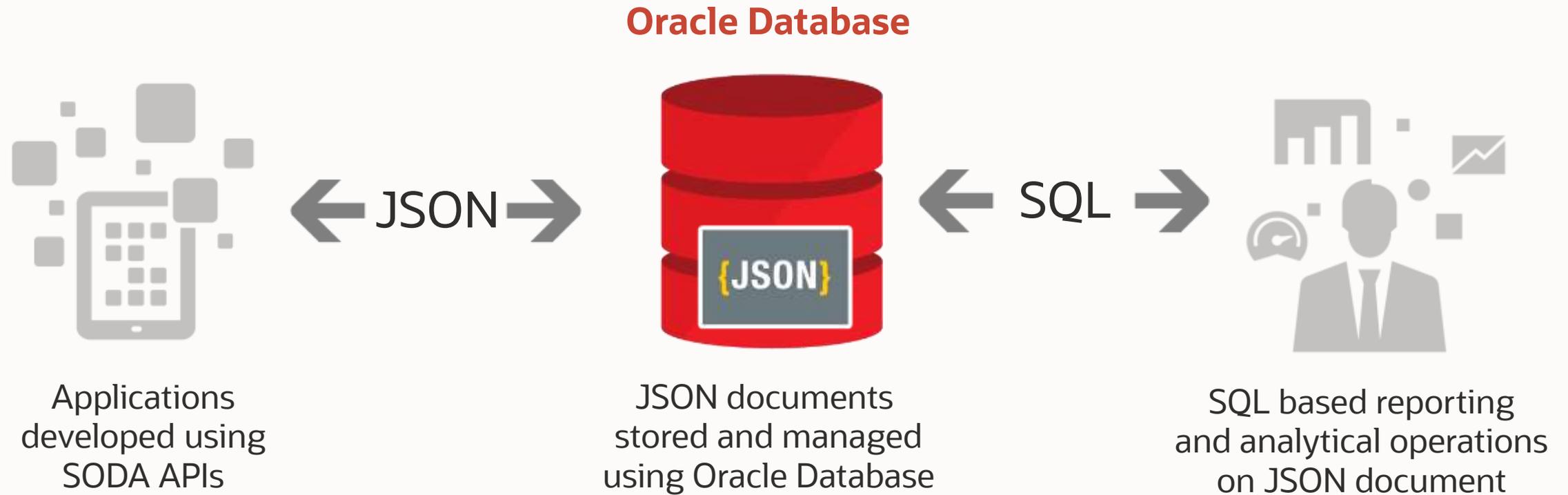
More than a simple document store

- ✓ Autonomous
- ✓ Full SQL support
- ✓ ACID transactions
- ✓ Advanced security
- ✓ APEX low-code development
- ✓ One-click instant expansion to ATP



Oracle Autonomous JSON Database

Oracle's Converged Database supports both NoSQL and SQL access



CRUD operations

Introducing **SODA** (Simple Oracle Document Access) and **SQLcl**

SODA APIs

- NoSQL-style APIs for
 - Java, JavaScript/Node.js, Python, REST, PL/SQL, C...
- Used to manage JSON data
 - create collections
 - store documents in collections
 - retrieve documents
 - query documents
 - ***No need to know SQL!***

SQLcl

- Modern SQL Developer Command Line interface for Oracle database
- Provides
 - inline editing, statement completion, command recall...
 - **SODA commands**

CRUD operations

Introducing **SODA** (Simple Oracle Document Access) and **SQLcl**

```
SODA allows schemaless application development using the JSON data model.

SODA create <collection_name>
  Create a new collection

SODA list
  List all the collections

SODA get <collection_name> [-all | -f | -k | -klist] [{<key> | <k1> <k2> ... > | <qbe>}]
  List documents the collection
  Optional arguments:
    -all  list the keys of all docs in the collection
    -k    list docs matching the specific <key>
    -klist list docs matching the list of keys
    -f    list docs matching the <qbe>

SODA insert <collection_name> <json_str | filename>
  Insert a new document within a collection

SODA drop <collection_name>
  Delete existing collection

SODA count <collection_name> [<qbe>]
  Count # of docs inside collection.
  Optional <qbe> returns # of matching docs

SODA replace <collection_name> <oldkey> <new_{str|doc}>
  Replace one doc for another

SODA remove <collection_name> [-k | -klist | -f] {<key> | <k1> <k2> ... | <qbe>}
  Remove doc(s) from collection
  Optional arguments:
    -k    remove doc in collection matching the specific <key>
    -klist remove doc in collection matching the list <key1> <key2> ... >
    -f    remove doc in collection matching <qbe>
```

SQLcl

- Modern SQL Developer Command Line interface for Oracle Database
- Provides
 - Inline editing, statement completion, command recall...
 - **SODA commands**

Full breadth of Oracle SQL features for JSON data

Spatial Analysis

- Hundreds of built-in spatial analytics functions that can run over GeoJSON

Machine Learning

- Build and score models with 30+ built-in ML algorithms

Procedural Language

- PL/SQL with JSON extensions and SODA support

True ACID Transactions

- Transactions spanning multiple documents and collections; no hand coding required

Virtual Private Database

- Fine-grained document-based security policies

Summary—Oracle Autonomous JSON Database

Modern document-centric development

- JSON Collections-based data model
- Rich clients - REST and SODA based development API
- Native JSON storage with advanced indexes and optimized performance

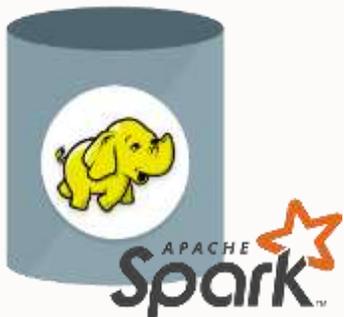
Proven enterprise database features to accelerate development

- ACID transactions
- SQL-based Reporting and Analytics (including scalable parallel execution)

Runs on Autonomous enterprise platform

- Availability
- Security
- Elasticity

ORACLE
APPLICATIONS



Oracle Machine Learning

OML4SQL

SQL API

OML Notebooks

with Apache Zeppelin on
Autonomous Database

OML4R

R API

Oracle Data Miner

Oracle SQL Developer extension

OML4Py

Python API

OML4Spark

R API on Big Data

OML AutoML UI*

Code-free AutoML interface on Autonomous Database

OML Services*

Model Deployment and Management,
Cognitive Text



* Coming soon

OAC Demonstrációk – néhány példa

- <https://www.youtube.com/user/EvolvingBI>
- https://www.youtube.com/watch?v=KR7C_cjJoVc
- <https://www.youtube.com/watch?v=SKdEkx6pzAs>
- <https://www.youtube.com/watch?v=YJ1aXZcSKHw>
- <https://www.youtube.com/watch?v=yOYemBtdpnQ>
- <https://www.youtube.com/watch?v=LwmCGAd-p0E>
- With ADW: <https://www.youtube.com/watch?v=koOLAY48IZM>
- <https://www.youtube.com/watch?v=MMfgcD3sC9I>
- Data Modeler: https://www.youtube.com/watch?v=ezg8_f0C1tE

Machine Learning Notebooks

Demó és kipróbálási lehetőség:

<https://go.oracle.com/LP=82487?elqCampaignId=166509>

<https://oracle.github.io/learning-library/workshops/adwc4dev/>

Oracle weboldal:

<https://www.oracle.com/database/technologies/datawarehouse-bigdata/oml-notebooks.html>

More Information

Learn more : [Autonomous JSON Database Web Page](#)

Sign Up for free : [Autonomous JSON Database Get Started Web Page](#)

[Documentation](#)

The image shows a composite of three screenshots related to Oracle Autonomous JSON Database. The top screenshot is the Oracle Cloud console interface for an Autonomous JSON Database instance. It features a green 'AJD' logo with the status 'AVAILABLE'. The console includes navigation buttons like 'DB Connection', 'Performance Hub', 'Service Console', 'Scale Up/Down', and 'More Actions'. The 'Autonomous Database Information' tab is active, displaying 'General Information' such as Database Name (AutonomousJSON), Workload Type (JSON Database), and Compartment (adwc4pm). It also shows 'Infrastructure' details like 'Dedicated Infrastructure: No' and 'Autonomous Data Guard' status (Disabled). The bottom screenshot is a documentation page titled 'Using Oracle Autonomous JSON Database', which includes a 'Table of Contents' with sections like 'Title and Copyright Information', 'Preface', and '1 Get Started Using Autonomous JSON Database'. The middle screenshot is another documentation page titled 'About Autonomous JSON Database', explaining that it is a cloud document database service specialized for NoSQL-style applications using JavaScript Object Notation (JSON) documents. It lists features like simple document APIs, serverless scaling, and high performance ACID transactions.



For more information...

oracle.com/machine-learning

Database / Technical Details /
Machine Learning



Oracle Machine Learning

The Oracle Machine Learning product family enables scalable data science projects. Data scientists, analysts, developers, and IT can achieve data science project goals faster while taking full advantage of the Oracle platform.

Oracle Machine Learning consists of complementary components supporting scalable machine learning algorithms for in-database and big data environments, notebook technology, SQL and R APIs, and Hadoop/Spark environments.

See also [AskTOM OML Office Hours](#)

Thank You



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