ORACLE



Oracle Analytics értéke és újdonságai

Analytics Server és Analytics Cloud

Fekete Zoltán Vezető műszaki tanácsadó Principal Solution Engineer Oracle Hungary

2022. május 18.

Red Bull Racing – OCI based analytics https://www.oracle.com/redbullracing

Claro-

Oracle Red Bull Racing is here – driven by data, built to win

The defending champion Formula 1 team expands its Oracle partnership, relying on Oracle Cloud to power race strategy, engine development, fan engagement, and more.

Read the press release

Oracle Cloud Infrastructure

Oracle Analytics Cloud

Oracle Data Science Platform

Oracle CX: Responsys, CrowdTwist, OCM—Sauce Video, Unity, Eloqua, Infinity IQ, Maxymiser

Oracle Database – konvergensre tervezve: multi-tenant, -model, -workload



Közös rendelkezésre állás, teljesítmény, biztonság, párhuzamosság, üzemeltetés

Oracle Analytics

Driving business transformation by accelerating the journey from data driven to analytics mastery



ORACLE

Oracle Analytics Server 2022 6.4



- Augmented Analytics
- Az önkiszolgáló adatvizualizációtól az elemzésekig, riportokig, riasztásokig és a dashboardokig, beépített Machine Learning
- Szemantikai réteg: egységes igazság mindenkinek

Oracle Analytics Server 2022 (OAS)

Customer Managed Deployment Options for Oracle Analytics

- Comprehensive analytics platform with data preparation, data visualization, natural language processing, and data quality insights
- New features include: Multi-table datasets, auto insights, new mapping features, new data sources, hierarchy support, graph and text analysis, custom data enrichment knowledge, etc.
- Machine Learning embedded
- FREE to licensed OBIEE Customers on active support
- Oracle provides choice deploy on-premises or on Oracle Cloud Infrastructure via Marketplace



Why is delivering analytics becoming more demanding?

- Meeting analytics expectations in ever shrinking decision timeframes is challenging
- More demand to rapidly mashup and connect new data streams
- Downloading data creates chaos
- Centralized data modeling became a bottleneck while decentralized models created more chaos



Everyone strives to be data-driven

Data-driven

is making informed decisions using trusted historical data



For many organizations, the use of reports or dashboards held promise of making them data-driven but **looking at past facts is not enough.**

Data Driven is not enough... Become transformational through analytics

Data-driven

is making informed decisions using **trusted historical data**



Analytics-driven

is making strategic decisions with all relevant data and unbiased predictions w modern immersive techs.

Analytics-mastery

is using **trusted data** pervasively and **enriching analytics** with services that drive **innovation**



Oracle Analytics Platform

Delivers at every stage of the analytics journey



Empower anyone and free data engineers

without compromising governance or security



- Separate tools: organization-wide challenges
- Need a single analytics platform that is flexible enough to suit each group
- Balance demands of all business users
- Data engineers gain freedom from repetitive, last minute business requests
- Analytics Server includes
 Common Information model logical abstraction used by thousands of customers
- Business users enabled with last-mile data preparation and enrichment without the need to resort to third party desktop tools or spreadsheets



Empower anyone and free data engineers

without compromising governance or security



- Analytics content creators and consumers gain autonomy to tell analytics-driven stories w trusted numbers
- Data engineers retain governance and compliance in a secure platform
- Leverage built-in ML, Al and natural language for faster access to more accurate results



Open Connectivity

- Dozens of built-in connectors
 - Relational, NoSQL, Big Data, SaaS, 3rd cloud, on-premises
- Secure access to to Cloud Sources, On-Premises, SaaS Applications, and more
- Blend any data regardless of source or type



Connect

Connect Model Prepare

Integrated Data Preparation

- Visual data transformation for Business Analysts
 - Reduce 'Export to Excel'
 - Improve governance and quality on self-service data preparation
- Vast array of transformation capabilities
 - Join, Branch, Bin, Group, Filter, Aggregate, Custom calculations, and more
- Direct integration with Database Advanced Analytics and OCI Services



Graph Analytics



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Data Quality and Governance

- Patented deep data profiling identifies the specific role of each column
- Interactive data quality insights alert the users about data issues
- ML based recommendations based on custom knowledge base
 - Fixing formatting, Transformations, Remove sensitive information, Enrichments

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Common Information Model

"Model once, deploy everywhere"

- Balance governance and user freedom
- Intelligent federation and navigation
- information consistency and availability where and when its needed.
- Breaks down data silos and makes information available on-demand.

Enterprise Physical Layer				
Establish connections and relationships for your data sources				
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Intuitive and Interactive Analytics

- Engaging analytics experiences, from dashboards to infographics to data stories
- >50 built-in visualizations, dozens of plug-ins
 - "Beyond the basics" out-of-the-box visualization (Sankey, Network, Pictogram, etc.)
- Built in geospatial analytics, NLG, diagnostics and predictive analytics

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Intuitive and Interactive Analytics

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Wine Year in Review

It's been a big year, but many of the issues arising for wine lovers are hardy perennials. Looking at the Achaia-Znpa province across the wide variety of wines and wineries, we are seeing clear positive trends this year. Let's explore some of these insights.







 \bigcirc

Explore Experience Collaborate

Data Discovery and Exploration Using Natural Language

- Find the right data fast!
 - Customers report spending 20-40% of their time looking for the right data
- Ask data questions in 28 different languages, scan the Analytics Catalog to identify the correct insights
 - Synonyms, abbreviations, auto-complete, dynamic filtering, dynamic calculation, time awareness, negation detection, and more





Self-Service ML to Uncover Hidden Insights

- Automated Machine Learning Insights
- Designed for users of any level
- Explain
 - Ask the system to analyze behavior of any attribute or measure
- Auto Insights
 - Auto ML capability to proactively identify interesting insights in any dataset as data changes



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Collaborate and share

- Share content securely with your team, business group or the whole enterprise
- Add commentary and contextual notes to dashboards
- Share visualizations and findings from mobile devices
- Tell your story without the need for copy/paste to slides





Collaborate

New Innovations in Oracle Analytics

100+ features delivered in the past 12 months

- Direct Connector to EPM Cloud and generation metadata
- Waterfall Enhancements
- Pivot persistent height/width
- Pivot word wrap
- Digitized Layers and map backgrounds
- SQL Server Azure Certification
- Safe Domains Enhancements
- Control visibility of viz filters
- Freeze map view (lock interactivity)
- EConsumer experience home page
- Navigation Actions to Dashboards & Reports
- Single step Data Set creation
- Increase Density
- Canvas Bar Usability
- Copy/Duplicate My Calculations
- Thumbnail quality improvements
- Register external ML models from OML and consume them directly from the OAS UI
- Function ship ML and Analytics execution to the database
- On-canvas filters

- Prep Enrichment on Live Data sets
- New Viz: Area Chart
- UX: Single Header
- Spatial functions in expression editor
- Improve 'use as filter' interaction
- Propagate shared folder permission to artifacts
- Legend properties for all charts
- Customized time zone in OAS
- Crypto agility improvements in various components
- Expose database analytics in Data Flows
- Reduce whitespace on the canvas
- Sparkcharts on performance tiles
- Waterfall Bridge chart
- Fine tune filter scope
- APIs to list canvas in a project
- OML integration: Show DB model full details in OAS inspectors
- Add a viz property to control the visibility of the Viz Filter

- Improve management of Live Data Set to ensure Live results
- Oracle Analytics Publisher (OAP) connectivity to Oracle Applications
- OAP REST API for APEX
- Support customization of OAP config
- Implement auto-purge in OAP
- Data Flows: Support for Database
 Text Tokenization
- Data Flows: Support for Database
 Frequent Itemset (Market Basket)
- New Viz: Area Chart
- Prep: single click trim
- Improved progress bar behavior
- Improve chrome density in the data panel
- Pass filters between filter bar & viz
- Impersonation for Kerberos connection
- Multi-column and no sort options
- Data Action: Support single/multi selection
- Data Action: Avoid passing duplicate filters
- Export: respect canvas aspect ratio
- Increase row limits on all exports

- Multi-Table, multi-sourced Datasets
- Prep: Custom Knowledge
- Prep: Quality Insights
- Scheduled Dataset Refresh
- On-Canvas Filters: Filter Types (top/bottom, Relative time, Range)
- On-Canvas Filters: Dates & Measures
- Support for SA, Essbase, EPM Hierarchies (Pivot/Table drill-ability)
- DB Analytics: Time series Forecast
- DB Analytics: Association Rules
- DB Analytics: Graph Analytics
- Visualization Title Tooltip property
- Custom sort dialog for charts
- Improved Home Page Search
- JDBC Data Sources
- Support for Big Query
- Disjointed datasets map layers
- Average Aggregation in Waterfall Viz
- Canvas Auto-Refresh
- Feature Extraction OML Model
- Object Storage for OAP Delivery
- Storing OAP Scheduler Data in Object Storage
- OAP: Support OAS Multi table data sets in Publisher Data Model
- And more...

Oracle Analytics Server 2022 – OAS 6.4

Multi-Table Datasets

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Conditional Formatting



Hierarchy Support

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Non-joined Map Layers



Graph and Text Analytics



Flexible Sort



One Analytic Platform for All Customer Needs

Customer Group	Require	Best Fit Solution
For commercial and public sector customers in regulated industries who intend to keep their business applications on-premises.*	An on-prem platform that can be highly customized by IT.	Oracle Analytics Server
For customers who intend to manage their own software deployment, whilst taking advantage of Oracle Cloud Infrastructure.	A cloud platform that can be deployed, managed and customized by IT.	Oracle Analytics Server on Marketplace
For cloud-first customers with a combination of on-premises and non Oracle SaaS applications.	A fully managed public cloud platform.	Oracle Analytics Cloud

*Support paying OBIEE customers can upgrade to OAS & use the new functionality at no cost

Connect

- Securely create, manage and share data source connections
- Choose from over 35 native connectors
- Use JDBC for other sources and legacy systems
- Include personal or desktop data files like XLS or CSV



Model

- Map and manage physical data sources centrally
- Build logical business views of the data for a trusted and consistent view of metrics
- Allow business groups self-service capabilities to build their own visualizations
- Secure, trusted and governed, yet flexible



Prepare

- Gain an immediate visual profile of the data with anomaly alerts
- Build connected, trackable and repeatable data transformations
- Remove the reliance on disconnected spreadsheets for last-mile data corrections and enrichment
- Enrich with intelligent recommendations

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Explore

- Built-in AI and ML for all roles, from clickers to coders
- Quickly add trends, clustering and forecasting with 1-click
- Use natural language to query any data source
- Include automated textual narratives with natural language generation



Machine learning for data scientists

- Extend with Oracle Machine Learning models
- Choose from an extensive list of ML algorithms
- Train, test and tune custom models
- Register certified models for broad use
- Execute models close to the source data



Spatial analytics

- Create interactive maps and perform spatial analysis on business data
- Oracle Analytics Spatial Studio for advanced mapping and spatial visualization





Embedded ML for citizen data scientists

- Use simple data flows with customizable ML algorithms
- Select from a range of built-in ML algorithms
- Customize models with no code
- Train, test and tune ML models specific to the business use case
- Publish certified models for wider business users



Experience

• Create and consume;

- Highly stylized interactive dashboards
- Parametrized dashboards
- Pixel-perfect reports
- Visualizations embedded into other apps
- Experience continuity across browser and mobile app



Collaborate

- Share content securely with your team, business group or the whole enterprise
- Add commentary and contextual notes to dashboards
- Share visualizations and findings from mobile devices
- Tell your story without the need for copy/paste to slides



Links and resources

Social links

- 1. <u>YouTube channel</u>
- 2. LinkedIn showcase page
- 3. <u>Twitter</u>

Oracle.com links

- 1. Oracle Analytics Roadmap
- 2. Oracle Analytics Blogs
- 3. Competitive comparison chart

Learn more (public links)

- 1. What is data analytics?
- 2. <u>What is analytics?</u>
- 3. What is data visualization?
- 4. What is natural language processing and generation?
- 5. Oracle Analytics Mobile
- 6. Capabilities Explorer

Public demo links

- 1. Oracle Analytics Product Tours
- 2. Live public demo instances
- 3. <u>Udemy Courses</u>



A unified analytics platform

- Reduce analytics complexity and meet expectations even with ever shrinking decision timeframes
- Meet demands to rapidly mashup and connect new data through governed selfservice
- Gain repeatable and trackable data prep and enrichment and avoid insecure data exports
- Establish a flexible balance between centralized models and business self-service
- Lower and predictable total cost of ownership



Our mission is to help people see data in new ways, discover insights, unlock endless possibilities.

Q&A



