New Features in OBIEE 12.2.1.4

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- Vlamis Software founded in 1992 in Kansas City, Missouri
- Developed 200+ Oracle BI and analytics systems
- Specializes in Oracle-based:
  - Enterprise Business Intelligence & Analytics
  - Analytic Warehousing
  - Data Mining and Predictive Analytics
  - Data Visualization
- Multiple Oracle ACEs, consultants average 15+ years
- [www.vlamis.com](http://www.vlamis.com) (blog, papers, newsletters, services)
- Co-authors of book “Data Visualization for OBI”
- Co-author of book “Oracle Essbase & Oracle OLAP”
- Oracle University Reseller
- Oracle Gold Partner
OBIEE, BICS, DVD, OAC New Features Webcasts

- 11.1.1.3 (August 2010)
  - Huge release with major new functionality

- 11.1.1.5 (May 2011)
  - BIWA TechCast May 25: [Oracle BI 11.1.1.5 - New Features](#)

- 11.1.1.6 (February 2012)
  - BIWA TechCast Feb 29: [Oracle BI 11.1.1.6 New Features](#)
    - New features mostly for Exalytics

- 11.1.1.6.2 and 11.1.1.6.2 BP1 (May 2012 and June 2012)
  - BIWA TechCast Aug 1: [Oracle BI 11.1.1.6.2 BP1 New Features](#)
    - Trellis Views

- 11.1.1.7 (April 2013)
  - BIWA TechCast Apr 5 [Oracle BI 11.1.1.7 New Features](#)
    - Freeze headers/scroll bars for tables and pivot tables
    - View content in SmartView in Excel and enhanced export
    - New Oracle R Enterprise (ORE) integration and capabilities

- 11.1.1.9 (May 2015)
  - BIWA TechCast Jun 4, 2015 [Oracle BI 11.1.1.9 New Features](#)
    - Search in Subject Areas pane
    - Global variables and Save Column As choice in Criteria tab

- 12.2.1 (October 2015)
  - BIWA TechCast Nov 19, 2015 [Oracle BI 12.2.1 New Features](#)

- BICS March 2016 (March 2016)
  - Webcast Apr 5, 2016 BICS [BICS March 2016 New Features](#)

- 12.2.1.1 (June 2016)
  - BIWA TechCast Jul 19, 2016 [Oracle BI 12.2.1.1 New Features](#)

- 12.2.1.2 and DVD 2.0 (October 2016)
  - Webcast Nov 22, 2016 [DVD 12.2.2 and OBIEE 12.2.1.2, New Features](#)

- DVD 3.0 (June 2017)
  - Webcast Aug 29, 2017 [DVD 3.0 New Features](#)

- DVD 4 (October 2017)
  - Webcast Nov 9, 2017 [DVD 4 New Features](#)
    - New Home Page and New Visualization control experience
    - New column controls for date/time, auto-binning
    - New narrate experience
    - New data flow steps, including create Essbase cube step
    - Machine learning

- OAC 4 (December 2017)
  - Webcast Dec 19, 2017 [OAC 4 New Features](#)
  - Webcast Apr 4, 2018 [Migration from OBIEE to OAC Webinar](#)

- 12.2.1.4 (June 2018)
  - Webcast Jun 19, 2018 [Oracle BI 12.2.1.4 New Features](#)

All listed on website at [http://www.vlamis.com/obiwebinars/](http://www.vlamis.com/obiwebinars/)

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Use Questions or Chat or Questions to communicate
OBIEE & OAC Differences

**OBIEE**
- Runs on premise
  - Can run “up in the cloud”
  - Customer administers
- Pay extra for DV interface
- RPD file to map tables to subject areas
- Includes Actionable Intelligence
- Pay for license and support
- Still around, but less emphasis
- Annual releases
- Includes BI Mobile App Designer, Scorecard, Marketing, BI Composer

**OAC**
- Runs on Oracle Cloud
  - Can run on “cloud at customer”
  - Have private instance (unlike BICS)
- Includes DV interface
- RPD or new thin client modeler to map tables to subject areas
- Latest has Actionable Intelligence
- Pay by the hour or month
- Oracle is concentrating on OAC
- Monthly/Quarterly releases
- Includes Day by Day for mobile, Machine Learning

See presentation [Migration from OBIEE to OAC Webinar](#) for more information
OBIEE 12.2.1.4 Functional New Features Overview

A. Data Visualizations
   1. New Home Page + UI Refresh and ASK
      a) *Drag spreadsheet to home page, canvas
   2. New Visualizations and experience
      a) Graphical confidence levels
      b) Top & Bottom N Filtering
      c) Waterfall and Boxplot
      d) Duplicating and reordering canvas (see below)
      e) Chart & Axis layout additional options
   3. New Viz control experience
      a) *Properties Pane,
      b) *Copy/Paste/Duplicate,
      c) *Pin Filter to all Canvases
      d) *Data Actions
   4. New Column Controls
      a) *Date/Time level set & switch
      b) Show metric as a percentage
      c) *Auto-Binning metrics used as Categories
      d) Automatic Number Type
   5. New Project control Features
      a) Rename Connection or Data Source
      b) Unrelated data sources in a project
      c) Data Limit Truncation Warnings
      d) Simplified Project Permissions
   6. *New Narrate experience

B. Data-flows
   7. New Steps
      a) Merge Rows Step (Set Operator)
      b) *Binning Step
      c) *Grouping Step new UI
      d) Cumulative Aggregate Step
      e) *Filter Step
   8. Sequences for Data-flows
   9. Customize Name/Description of a step
   10. Data Flow UI
       a) Improved flow-chart UI
       b) Deliver DF output to remote connection

C. New Data Sources
   11. Generic ODBC and JDBC support
   12. OBIEE remote subject areas or analyses as data source
   13. Additional txt sources delimiters, undo in query builder

D. BI Publisher
   15. View job priority in Report Job history page
   16. For BI Pub Report Designers:
       a) Manage priorities
       b) New functions, commands in eText template
       c) Generate to CSV files
       d) Output to PDF/A-1B or PDF/A-2B
       e) Lost of other little features

E. Admin / Console
   17. Embedding DV Content via debug on DV
   18. Custom plugin loader
   19. Manage Themes – customize UI
   20. Caption files (localization of catalog)

* Shown as part of DVD4 What’s New Webcast
To be demoed in OBIEE 12.2.1.4 What’s New Webcast

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1 - New Home Page + UI Refresh

Full, more end-user intuitive Alta-based UI refresh

New adaptive home page with self evolving content based on specific usage of DV
2 - Graphical confidence levels

Set the confidence level directly on right-click menu for trend lines
2 - Top & Bottom N Filtering

Switch between Range filtering and Top/Bottom filtering mode
2 - New Waterfall & Boxplot Visualizations
2 - Duplicating & re-ordering canvases

Duplicate into a new Canvas with all the source content

Drag and drop Canvases to re-order them in any sequence
2 - Chart & Axis layout additional options

Show / Hide axis graduation labels,
Enable logarithmic scale

Show / Hide lines & points,
Select centered or left-aligned steps/segments
3 – New Viz Controls: Properties Pane for Columns and Viz

Use properties pane to edit default properties of any object (Type, Agg rule, format, level...)

Use same properties pane to edit properties of any specific visualization. Viz level properties override column default properties.
3 – Cross Canvas Copy/Paste, Viz Duplication
Pin/Un-pin filter to all Canvases

- Single Click duplicate-visuals
- Copy paste any visual from one canvas to another canvas

Pin or un-pin single filter for whole project or for a single canvas
3 - Data Actions

Configure multiple Navigation targets for each column object in your project.

A column can navigate to URLs or canvas pages passing contextual values.
4 – New Columns Control: Date/Time level set & switch

1. Time level options show by default for any single time object in your data-set.

2. Modify default time level and format using the properties tab, for any date object in your dataset.

3. Override column default time levels in each visualization.
4 – New Columns Control: Show as percent of column, Automatic Number Type

V4 single Number data Type

V3 (Old) multiple number types

Single click show values as percent of Rows/Columns/Subtotals in Pivot Tables
4 – New Columns Control: Auto-Binning of metrics when used as Categories

Metrics can be used as categories for charts. DV will automatically bin metric values by report grain to present meaningful viz.

User can easily override number of bins, group by clause by a right click.
5 – New Projects control features: Data Set / Connections renaming

Existing data-sets or connections used in projects can be renamed via Edit right click menu.

New edited name is automatically propagated in dependent objects.
5 – New Projects control features:

Unrelated data sources in a project

Data-Sets with no joining at all can be brought in a single project, visualizations from each dataset coexist in a canvas.
5 – New Projects control features: Simplified Project Permissions, Data Limit Truncation Warnings

- **Fine project permissioning** can be set from project inspect menu.
- Automatic warning of data sampling when member values are over specific views limit.
- Data sampling was applied due to the large quantity of data. Please filter your data. The limit of 1000 categories was exceeded.
6 – New Narrate Experience

Enhanced Story-telling / Narrate experience with deeper control over user annotations and rendering formats.
7 - Data Flow Merge column and other expressions

New Function to merge multiple columns into a single column

New aggregation calculations available in expression editor
7 – Data-flows: New Merge-rows step (union), enhanced filtering

New canvas-like experience for filters node in Data-flows

Merge (Union) rows from multiple iso-structured datasources

Data Flow Steps
- Add Data
- Join
- Merge Rows
- Filter
- Aggregate
- Save Data Set
- Create Essbase Cube
- Add Columns
- Select Columns
- Rename Columns
- Merge Columns
- Bin
- Group
- Cumulative Value

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New wizard-UI node to bin granular data in Data-flows

Customize bin width manually or by moving sliders
7 – Data-flows : New Create Group Step

New wizard-UI node for grouping dimension members values in Data-flows
A new node to create rolling or moving aggregates in Data-flows.
8 & 9 – Data-flows Sequences
Data-flows step custom renaming

Chain Data-flows one after another in any sequences. Save and execute sequences.

Customize name and description of Data Flow nodes to be more explicit.
10 - Data Flow Improved flow-chart UI and Deliver DF output to remote connection

Option to save Data-Flow output directly into underlying database connection
11 - Data-sources support Generic ODBC

1. Register ODBC data-source on host machine
2. Create DVD Connection to host ODBC source
3. Create DVD data-source from ODBC connection
4. Build Visualizations
12 - Remote OBIEE Subject Areas as Data-source

1. Create Connection of type Oracle Applications
2. Create Data source by selecting a Subject Area
3. Select objects from the Subject Area to compose your data-source
4. Build Visualizations
13 - Additional txt sources delimiters, undo in query builder
14 – New Data-source Types

Create Connection

Select Connection Type

- Oracle Applications
- Oracle Database
- Oracle Content and Experience Cloud
- Oracle Essbase
- Oracle Service Cloud
- Amazon EMR
- Amazon Redshift
- Apache Hive
- DB2
- Dropbox
- Google Analytics
- Google Drive
- Greenplum
- Hortonworks Hive
- IBM BigInsights Hive
- Impala
- Informix
- MapR Hive
- MongoDB
- MySQL
- Pivotal HD Hive
- PostgreSQL
- Salesforce
- Spark
- SQL Server
- Sybase ASE
- Sybase IQ
- Teradata
- JDBC
- OData
- ODBC
18 – Embedding DV Content

Easily Embed DV content in operational applications

**Embedding Script To Include**

Include following `<script>` tag once per page. Based on the JavaScript framework used, replace `<embeddingMode>` with either "jet" or "standalone"

```html
<script type="text/javascript" src="http://sl-us.oracle.com:9704/ui/api/v1/plugins/embedding/<embdeddingMode>/embedding.js"></script>
```

**Default**

To embed this project showing the default view, use the following HTML inside an appropriately sized element:

```html
<oracle-dv project-path="<projectPath>">
</oracle-dv>
```

**Canvas "Canvas 1"**

To embed this project showing the "Canvas 1" canvas, use the following HTML inside an appropriately sized element:

```html
<oracle-dv project-path="<projectPath>" active-page="canvas" active-tab-id="1"> 
</oracle-dv>
```
18 – Custom Plugin loader
(Console page missing, but can access if know URL)

Note Console choice not there.
Can access via URL:
host:port/dv/ui/home.jsp?pageid=console

Some console tabs work; some don’t

Need this to upload custom plugins.

Will be fixed in patch release.
Changes on Classic home page Admin tab:

- **Theme Management** allows control of logo upper left corner, a few colors
- **Manage Catalog Captions** allows localization
Oracle Analytics Library

Overview

Plug-ins
Sample Projects
Maps & Spatial
Machine Learning
Ebase Samples

How to deploy Analytic Samples
sort by Last Updated

Presentation Variable Prompts
Oracle
April 18, 2010
Use this custom plug-in to set the value of any presentation variable from within a DV canvas. Presentation variables allow to make dynamic columns or dynamic constants in any Oracle DV custom calculation.

Custom Ties
Oracle
April 09, 2016
The Custom Tie plug-in allows users to frame rules for performing conditional formatting on a performance Tile. The layout of the Tile is highly flexible with large number of formatting options which makes it better for representing KPIs.

InfoGraphic Sample Plugin
Oracle
May 15, 2016
This Info Graphic sample plug-in developed by PEAK Indicators enables you to display nice Info Graphics visually within Oracle DV. It supports the use of your own custom image. A number of properties that allow you to specify the Image to use, font size, text, color, icons only for a specific population etc make this a very compelling visualization.

Mobile Grid Bars Plug-in
Oracle
Feb 06, 2018
Designed specifically for mobile devices highlighting the use of a variety of bar charts.

Image Gallery Plug-in
Oracle
DV Governance

Force Directed Graph Plugin
Vlamis
Jan 18, 2018
The Force Directed Graph plug-in allows you to display visual hierarchical data.
Resources and Questions?

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OBIEE 12.2.1.4 Documentation (see What’s New of each book) https://docs.oracle.com/middleware/bi12214/biee/docs.htm


YouTube channel Oracle Analytics from SampleApp Team https://www.youtube.com/user/EvolvingBI/videos

YouTube video playlist on DV4 new features https://www.youtube.com/watch?v=AoMxQDX4KNQ&list=PLOcpw36tp3yKTe2EDF29vr60wWIM4aWDP

Webinar on What's Involved in Migrating from OBIEE to OAC? April 4, May 2 http://www.vlamis.com/papers2018#may2