ORACLE UTILITIES METER DATA MANAGEMENT BUSINESS INTELLIGENCE

Oracle Utilities Meter Data Management Business Intelligence offers pre-built dashboards that help you improve the performance of your meter data system and analyze usage trends.

Oracle Utilities Meter Data Management Business Intelligence provides pre-built dashboards to help managers and executives extract full value from customers’ meter data.

The first release in this product line is Oracle Utilities Meter Data Analytics.

Oracle Utilities Meter Data Analytics includes two dashboards:

- The Performance dashboard, which pinpoints AMI-related performance issues occurring in specific segments of the AMI system or in the data from meter providers.
- The Usage dashboard, which analyzes consumption trends among customers grouped geographically or by segment.

The Performance and Usage dashboards both permit users to retrieve data using a number of different categories (dimensions), including:

- The calendar month and year to be measured,
- The type of service to be measured (e.g. residential, industrial).
- The type of usage (e.g. residential time-of-use rates, hourly industrial rates).
- Hardware information, such as manufacturer of head end system or device and the model.
- The market to be measured, such as a city, a postal code, or utility-determined geographic region.
- The service provider, if any.

Once users find a combination of data that suggests issues—positive or negative—they can view / drill down into detailed BI data tables.

Performance Dashboard

The Performance dashboard measures the speed and accuracy with which you receive meter data. Users can analyze usage by choosing in the appropriate dimensions on each of the following dashboard pages: Overview, Quality, Quality Analysis, Timeliness, On-Time Analysis, and Estimation.

In retail settings and other instances where metered data comes via third parties, the Performance dashboard permits managers to measure the performance of the third parties against contractual performance indicators and against each other. This dashboard helps answer such questions as:

- Are third parties meeting their performance goals in terms of the timing and accuracy of the data they provide?
• Is performance improving or declining?
• Does performance vary over specific types of reads (for instance, residential vs. commercial) or over specific time periods?

Utilities performing their own meter reads can use the Performance dashboard to isolate and determine the causes of late, estimated, or missing data from their own AMI systems. They can find answers to questions like:

• Does the rate of late, estimated, or missing reads vary among head ends, device types, or manufacturers? Does it vary among days of the week or months of the year?
• Are there combinations of factors—for instance, particular meter models at particular times of the year—that result in poor performance?
• Is the rate of estimated reads trending up or down?

Once managers identify trends, they can more easily pinpoint problems, ask questions, and probe data sets to determine the causes and possible solutions for improving metered data accuracy.

Usage Dashboard

The Usage dashboard, like other forms of consumption analysis, helps utilities and retailers determine the amount of electricity required to meet demand at specific times of the day, week, and year. It helps them compare consumption by different groups—for instance, residential customers with and without electric vehicles—and thus anticipate future growth or decline in demand. The Usage dashboard also lets electricity buyers anticipate variations in supply requirements based on temperature patterns.

Grid operators can use the Usage dashboard to help anticipate the size and timing of potential grid overloads and bottlenecks. The Usage dashboard also helps utilities gain insight into the ways consumption varies across specific customer segments or in specific geographic areas, helping them target appropriate groups for conservation messages or aiding in the design of peak-load reduction programs.

Users can analyze usage by choosing in the appropriate dimensions on each of the following dashboard pages: Overview, Usage Trend, Degree Days, Usage by Month, Usage by Day, and Usage Comparison.

Running Against the Transactional Database

Unlike a number of other Oracle Utilities Business Intelligence products, which use pre-packaged extractors and schema to move data from application databases to the Oracle Business Intelligence data warehouse, Oracle Utilities Meter Data Analytics analyzes data directly from the transactional database, leveraging aggregations pre-built into Oracle Utilities Meter Data Management.\(^1\) Once the MDM data have been pre-aggregated, they are stored in materialized views on the MDM database. OBIEE uses these materialized views to process the data for use by the Meter Data Analytics dashboards; it does not look directly into the measurement data store.

This Meter Data Analytics architecture offers several advantages. It:

• Provides Meter Data Analytics with high performance.

\(^1\) Out-of-the-box aggregations include feeder level, substation level, city, and postal zone. Aggregations are configurable to suit the analysis. Also configurable are data aggregation frequency and aggregated data refresh rate for analysis.
• Permits a high degree of granularity in the data analyzed. Meter Data Analytics can show highly granular hourly usage data, for instance, which is vital to a complete understanding of usage. And it does so without creating the major storage and maintenance issues that would be occur were the product to replicate so much granular data in the schema.

• Restricts the complexity of data aggregations to MDM instead of replicating the techniques in a second application.

• Ensures that ongoing MDM processes remain unaffected. Use of Meter Data Analytics does not interfere with ongoing MDM processes because OBIEE uses materialized views rather than looking directly into the measurement data store.

**Related Products**

Use of Oracle Utilities Meter Data Analytics requires:

- **Oracle Utilities Meter Data Management 2.0.1 or higher**
- **Oracle Business Intelligence Enterprise Edition 10g**
- **Internet Explorer 7.x or 8.x, or Firefox 3.x**
- **Windows XP SP3 or Windows 7**
- **WebLogic 10.3.3**

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**Contact Us**

For more information about Oracle Utilities Meter Data Management Business Intelligence, visit oracle.com/goto/utilities or call +1.800.275.4775 to speak to an Oracle representative.