

# Gluent Advisor

## Data Sheet

### Overview

Gluent Advisor helps identify schemas and tables that can be offloaded to Hadoop by looking at database usage statistics and presenting the most likely candidates for offloading. Advisor's HTML user interface makes it easy to identify the largest schemas and tables in your database so you can easily focus your efforts on offloading data to Hadoop that that will provide the most value to your organization.

## Gluent Advisor

Enterprises are experiencing data growth at an astounding rate. For most enterprise data warehouses, retention of historical data and ingestion of new IOT data are a key contributor to performance bottlenecks and long running queries.

Gluent's unique data virtualization approach allows enterprises to integrate traditional relational databases and the next generation distributed systems into one hybrid platform, without having to rewrite existing applications. With Gluent, data archived to Hadoop or cloud storage is always accessible to database engines and applications just as if it still resided in the original database.

Understanding what data is of the most value and what can safely be offloaded can be a struggle. With Advisor, you can get an immediate picture of what data and workloads are easily offloadable into Hadoop, which will affect the amount of storage resources your RDBMS will require and how much performance pressure can be alleviated by offloading that data.

## What It Does

Advisor allows you to analyze your Oracle database performance statistics and gather information about the utilization of your data. Through this analysis Advisor presents a detailed breakdown of the database objects such as schemas and tables, and generates a detailed report that can be examined in a web browser.

Advisor reports provide metrics that identify the schemas and their associated tables and the percentage of the data in these tables that can be safely offloaded. In addition to the percentages the user can see the real storage impact in terms of volume of data in tangible storage metrics.

From this simple report you will be able to tell how much of an impact data retention is having on your database environment, not only in terms of storage and processing capacity, but as it relates to the amount of licenses you may need to maintain in order to continue operating your platform at peak performance.

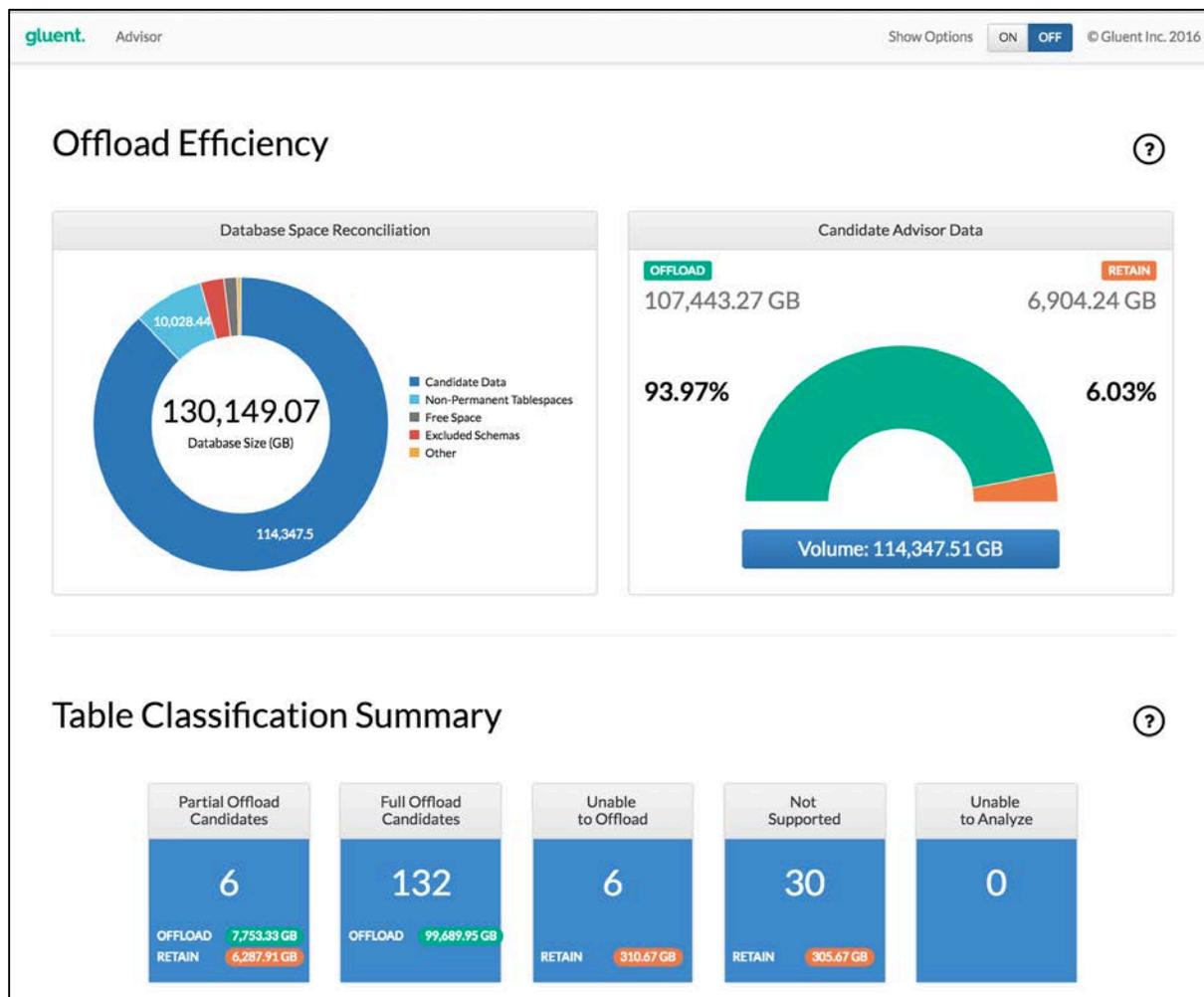
## Ease of Use

Ease of use is the hallmark of Advisor. No software needs to be installed and no lengthy data collection jobs need to be scheduled. Advisor can be run by anyone in the organization with just read only privileges to the Oracle Database performance history.

Advisor can analyze an entire database system, a select set of schemas, or just the tables you desire. You get a full perspective of how much storage space your database is consuming, along with how much data can be safely offloaded. Data that is not a good candidate for offloading is identified and additional detail is provided for further analysis. Included in this detail is information about where the partition thresholds are as well as the SQL queries that are increasing your data temperature.

## Advisor Walk Through

Below is an example Advisor report with explanations of each section.



### Offload Efficiency

This section provides an overview of the analysis done by Gluent Advisor. At this level, you can see if the target database is a good candidate for storage offload.

### Data Space Reconciliation

This chart provides a breakdown of the storage in the target database environment. This overview considers things such as non-permanent tablespaces, allocated but not used free space, excluded (system level) schemas and provides an estimate of the amount of data that is candidate for offload.

### Candidate Advisor Data

This chart examines the Candidate Data and indicates how much of it is actually offloadable, based on various criteria. The section in green indicates the amount of data that could reasonably be offloaded and the orange indicates what should stay in the host database.

### Table Classification Summary

This section breaks down the tables scanned within the target database and classifies their ability to be offloaded.

Tables are classified as follows:

- **Partial Offload Candidates** – tables that are range-partitioned and contain cold partitions that can be offloaded
- **Full Offload Candidates** – tables that can be fully offloaded due to their relatively cold status
- **Unable to Offload** – tables that are not candidates for offload due to their hot status
- **Not Supported** – tables that have complex or esoteric datatypes, materialized views, etc.
- **Unable to Analyze** – tables that were unable to be analyzed for some reason

Each breakdown provides an accounting of the storage that can be offloaded or that should be retained in the host database.

### Table Classification Detail

The Table Classification Details provides specific information about individual tables, their ability to be offloaded, and information about data that should not be offloaded.

### Partial Offload Candidates

Table Name ↕	Partition Name (HWM)	Offload Partitions	Retained Partitions	Offload GB ↕	Retained GB	Offload Percent
SALES	SALES_20160104	52	177	4555.21	1923.98	70.31
COSTS	COSTS_201412	48	181	2219.24	745.7	74.85

This section breaks down, by owning schema, those tables that are range-partitioned and where some of the partitions are considered “cold” enough to offload. The report allows the user to drill down into the owning schema and see the table names, partition names, number of offloadable partitions, offload size and retained size.

Clicking on the icon adjacent to the Retained Partitions column will present a pop-up detailing what triggered these partitions to be retained.

### Full Offload Candidates

Full Offload Candidates

The following schemas contain tables that can be fully offloaded

DATA\_ARCH TABLES 9 OFFLOAD 9,791.57 GB

Search: Begin typing... Filter: Show tables above this Offload GB amount... Go Reset

Table Name	Partition Type	Offload GB	Offload Percent
SALES	RANGE	6480.56	100.0
COSTS	RANGE	2964.94	100.0
CUSTOMERS	None	293.88	100.0
SUPPLEMENTARY_DEMOGRAPHICS	None	21.97	100.0
TIMES	None	13.73	100.0

This section breaks down, by owning schema, those tables that are candidates for full offload. The report allows the user to drill down into the owning schema and see the table names, partition types and offload size.

### No Offload (Modified Tables)

No Offload (Modified Tables)

The following schemas contain tables that should not be offloaded

DMART TABLES 5 RETAIN 16.79 GB

Search: Begin typing... Filter: Show tables above this Retained GB amount... Go Reset

Table Name	Partition Type	Retained GB
CUSTOMERS	None	13.06
GL_LIST_DAY	LIST	1.89
GL_RANGE_VARCHAR2	RANGE	0.85
GL_HASH	HASH	0.49
GL_LIST_DEFAULT	LIST	0.49

This section breaks down, by owning schema, those tables that are *not* candidates for offload due to the fact that the tables are frequently modified. The report allows the user to drill down into the owning schema and see the table names, partition types and retained size.

Clicking on the icon adjacent to the Partition Type column will present a pop-up detailing what triggered these partitions to be retained and a list of statements that drove these changes.

### No Offload (Unsupported Tables)

**No Offload (Unsupported Tables)** Collapse

The following schemas contain tables that are not supported for offload

▼ DATA\_ARCH TABLES 4 RETAIN 24.72 GB

Search  Filter  Go Reset

Table Name ↕	Partition Type ↕	Unsupported Reason ↕	Retained GB ↕
FWEEK_PSCAT_SALES_MV	None	Materialized View	17.85
DR\$SUP_TEXT_IDX\$I	None	Secondary Table	2.75
DR\$SUP_TEXT_IDX\$R	None	Secondary Table	2.75
CAL_MQNTH_SALES_MV	None	Materialized View	1.37

This section breaks down, by owning schema, those tables that are *not* candidates for offload due to unsupported datatypes. The report allows the user to drill down into the owning schema and see the table names, partition types, reason the table is unsupported and offload size.

## Run Advisor on Your Database

If you'd like to run Gluent Advisor for free on your database to see how much data could be offloaded, contact us at [info@gluent.com](mailto:info@gluent.com) or call. We'd be happy to help.