

Oracle Advanced Compression: Advanced Row Compression Benefits

ADVANCED COMPRESSION INFORMATION

- [Technical White Paper \(here\)](#)
- [Data Sheet \(here\)](#)
- [Proof-of-Concept Guidelines and Best Practices \(here\)](#)
- [Implementing Compression Tiering and Storage Tiering \(here\)](#)
- [Frequently Asked Questions \(here\)](#)
- [Customer References \(here\)](#)
- [Fortune 500 Company Advanced Compression Testing Results \(here\)](#)

GET STARTED WITH ADVANCED ROW COMPRESSION

Oracle's free Compression Advisor to use a very useful tool for estimating compression ratios, information about advisor is available on OTN at:
<http://www.oracle.com/technetwork/database/options/compression/downloads/index.html>

About Advanced Compression and Advanced Row Compression

Oracle Advanced Compression, and Oracle Database, together provide a robust set of compression, performance and data storage optimization capabilities that enable IT managers to succeed in complex environments. Whether it is a cloud, or an on-premises Oracle Database deployment, Advanced Row Compression can deliver robust data compression, across different environments, with no changes in applications.

Benefit: Reduce Storage Requirements and Costs

Enterprises are experiencing an explosion in the volume of data required to effectively run their businesses. This ongoing growth in data volume presents a daunting management challenge for IT administrators. First and foremost are the spiralling storage costs: even though the cost per MB of storage has been declining dramatically in the last few years, the enormous growth in the volume of data that needs to be retained online makes storage one of the biggest cost elements of most IT budgets.

The Advanced Row Compression feature, of Advanced Compression, is a non-obtrusive data compression solution that typically results in a 50%, or more, reduction in overall storage requirement for database tables and/or partitions with little or no disruption for implementation. This will allow you to better utilize existing database storage, and possibly defer additional purchases of new storage, for growing applications. Because Advanced Compression substantially reduces the total data size in the application database, storage requirements grow much slower than non-compressed databases.

*See how Advanced Compression user, **Goodman Fielder**, is able to reduce their data storage footprint by 40% without any performance impact ([see here](#)).*

Benefit: Improve Query Performance

Many Oracle Database users have growing databases behind their applications, and as the business expands, so does the amount of data under management. As this happens, application and database administrators are confronted with the realization that their application query performance is being impacted by ongoing data growth.

Fortunately, the benefits of Advanced Row Compression go beyond just on-disk storage savings. Another significant advantage is Oracle Database's ability, when using Advanced Row Compression, to read/process compressed data (and indexes) directly, in memory, without uncompressing the data. This helps improve query performance due to the reduction in I/O, and the reduction in system calls related to the I/O operations. Further, the database's buffer cache becomes more efficient by storing more data without having to add memory.

Once data is compressed with Advanced Row Compression, it remains in this state for all types of operations (queries, backups and etc...) which in turn means less data

has to be manipulated per transaction. It is typical for Advanced Compression users to report a 2x to 3x improvement in query performance after data compression.

*See how Advanced Compression user, **Samsung Welstory**, is able to perform queries 2x faster with Advanced Compression ([see here](#)).*

Advanced Compression Links

Advanced Compression

Oracle.com page:

<https://www.oracle.com/database/technologies/advanced-compression.html>

Storage Optimization Blog:

<https://blogs.oracle.com/DBStorage/>

Additional Advanced Compression use cases....

<https://www.oracle.com/database/technologies/advanced-compression.html>

<https://www.oracle.com/search/customers> (search for "Advanced Compression")

Want more information to prepare for, or perform, an Advanced Compression Proof-of-Concept?

Please see this Oracle White Paper for more information about best practices learned from customer POC's and insights to help plan your compression POC as well as help you understand the results of your POC.

<http://www.oracle.com/ocom/groups/public/@otn/documents/webcontent/3411538.pdf>



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For more information about Advanced Compression, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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Hardware and Software, Engineered to Work Together

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