

Oracle Advanced Compression reduces business-critical SAP data storage requirements by 40% at Goodman Fielder

“The driver for implementing Oracle Advanced Compression was the growth in our SAP ECC6 database size. By using Oracle Advanced Compression, we freed up a total of 20 TB over multiple SAP ECC6 instances. We targeted the top 20 tables by growth, and compression was done without outages. The process was completely transparent to our users. I was very satisfied with the ease of use, and the end result.”

– Ian Lofley, Technical Services Manager

Executive Summary

The massive growth in data volumes being experienced by enterprises introduces significant challenges. Companies must quickly adapt to the changing business landscape without impacting the bottom line. IT managers need to efficiently manage their existing infrastructure to control costs, yet continue to deliver extraordinary application performance.

The Oracle Advanced Compression option and Oracle Database together provide a robust set of compression, performance and data storage optimization capabilities that enable IT managers to succeed in this complex environment.

Whether it is a cloud or an on-premises Oracle database deployment, Oracle Advanced Compression can deliver robust compression across different environments with no changes in applications. Benefits from Oracle Advanced Compression include smaller database storage footprint, savings in backups and improved system performance.

This Case Study discusses how Goodman Fielder benefited by using Oracle Advanced Compression in their business-critical SAP application environment, not only improving performance, but also reducing their existing storage requirements by more than 40%, thus allowing Goodman Fielder to put off new storage acquisition costs.

Read more to learn how they accomplished this.

About Goodman Fielder

The company has an excellent portfolio of well known consumer brands in some of Australia's largest grocery categories, including Meadow Lea, Praise, White Wings, Pampas, Mighty Soft, Helga's, Wonder White, Vogel's (under license), Meadow Fresh and Irvines.

Goodman Fielder products cover every meal occasion, including breakfast, lunch, dinner and snacks. Goodman Fielder also produce and market bread, milk, margarine, flour, dressings, condiments, dips, mayonnaise, frozen pastry, cake mix, pies, savories, desserts, sauces, vinegar and cooking oils.

Goodman Fielder is headquartered in Sydney and employs approximately 5,000 people in Australasia and the Pacific Islands. The company manufactures their products in almost 50 plants in Australia, New Zealand, Papua New Guinea, Fiji and New Caledonia.



Oracle Customer: [Goodman Fielder](#)

Location: Sydney, Australia

Industry: Food Company

Employees: 5,000

ENVIRONMENT

- IBM P7 w/ AIX 7.1
- SAP ECC 6.0
- Oracle Database Enterprise Edition
- Advanced Compression option

KEY TAKEAWAYS

- SAP ECC OLTP database was growing at a rate of 350-400 GB / month
- Cost of storage was increasing as a result of the growth rate
- Compression was transparent to business users, and was enabled without an outage
- POC in test environment surprised Goodman Fielder regarding how much space saving was possible
- Implemented compression across Production, Staging (UAT) and Test environments

“Oracle Advanced Compression exceeded our expectations. It enabled us at Goodman Fielder to reduce our database growth, reduce our data storage footprint by 40% and did so without performance impact. A win all around for us!”

– Tapan Vadodaria, Oracle DBA

Data Growth Challenges

Goodman Fielder’s SAP ECC application is a business-critical application across the company’s sites throughout Australia and New Zealand. This OLTP application is at the heart of Goodman Fielder’s daily business transactions and processing. Any system issues or performance degradation, of the SAP ECC application, would have serious consequences for the business in the manufacturing and delivery of their products to consumers.

Goodman Fielder’s SAP ECC database has been growing at the rate of 350-400 GB / month. Within the last two years, the overall size of the database doubled and reached close to 10 TB. With this rate of data growth, the company needed to lower data storage costs without impacting database performance.

Started with a Proof of Concept

Goodman Fielder performed a POC (Proof-of-Concept) with Oracle Advanced Compression on SAP in their test environment. By compressing the larger tables, Goodman Fielder freed up almost 50% of space in the test environment. The POC also helped the Goodman Fielder DBA team to have a good idea on the timings needed to compress each table.

After thorough testing with business users, that also included performance verifications, Goodman Fielder decided to implement Advanced Compression in their production environment. Goodman Fielder enabled compression one table at a time and completed the implementation over a period of three weeks without any downtime.

Compelling Performance

Transaction	Before Compression	Post Compression
FBL3N	17 min	10 min
FAGLB0	10 sec	5 sec
KSB1	40 sec	20 sec
KE5Z	11 min	5 min
KE24	30 sec	20 sec
ZGOODMVT	237 min	175 min

A key area that, along with compression savings, was of interest to Goodman Fielder during their evaluation of Advanced Compression was the system performance after compression of the data. During their testing, and after implementation in their production environments, there was no performance degradation related to compression and in fact, Goodman Fielder saw performance improvements in various SAP transactions as shown in the table above.

Compelling Storage Savings

Advanced Compression reduced the size of Goodman Fielder’s production database from 10 TB to 6 TB. This compression immediately allowed the DBA team to have over 4 TB of free allocated space at the database level -- space that can be reused for future transactions and storage. As Goodman Fielder copies their production environment to other auxiliary environments, the total disk space savings were boosted to a total of 20TB.

Goodman Fielder’s DBA team planned and targeted the compression of a total of 20 SAP tables consuming more than 50 GB of data. During the planning stage, Goodman Fielder’s DBA team used the Oracle Compression Advisor which predicted an average compression ratio of 4.79x

ADVANCED COMPRESSION FEATURES USED

- OLTP Table Compression
- SecureFiles LOB Compression

BEST PRACTICE:

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/technet/work/database/options/compression/downloads/index.html>

for the database tables involved, with the final results of the compression matching or exceeding the findings.

The DBA team also converted the database LOB objects to the modern and optimal SecureFiles architecture and then compressed it with SecureFiles LOB Compression (LOW ratio), as recommended by the SAP BRSPACE tool. The result established significant space savings for the LOB objects with no performance impact.

Goodman Fielder's DBA team used the SAP BRSPACE tool for enabling compression, and one of the biggest and heavily used SAP tables, GLPCA, reduced in size from 700 GB to 144 GB.

The other benefit the DBA team discovered, after implementing OLTP Table Compression, was that the overall growth rate of the database dropped from 350 GB per month to less than 200 GB per month. Goodman Fielder had to invest heavily in regular purchases of additional disk space earlier and by freeing up existing storage, additional storage purchases were deferred, thus producing speedy savings.

Goodman Fielder's DBA team enabled Advanced Compression in their production environment compression during business hours with no performance impact -- all the tables were compressed without any downtime.

Conclusion

By using Oracle Advanced Compression, Enterprises can minimize their CapEx and OpEx costs without sacrificing application performance and downtime. Advanced Compression can deliver savings on managing structured and unstructured data and can reduce database storage footprints by 2x to 4x across different environments with no changes required in the applications.




For more information, please reach out to your Oracle Account Manager.



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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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