Abstract

As businesses experience an inevitable surge in data growth, the need to harness valuable insights from large data sets gains significance. To effectively address the challenges and complexities of data management, business and technology leaders need information lifecycle management (ILM) solutions. This paper discusses how a robust ILM solution can help organizations leverage data effectively. It highlights the importance of managing production data, investing in right ILM solution, and assessing existing data management practices. The paper also introduces the Archive and Purge solution by Infosys as a comprehensive product extension for Oracle Revenue Management and Billing (ORMB) ILM needs.
Introduction

In the evolving business data landscape, enormous amounts of data can pose several challenges to organizations. Businesses face the critical task of managing data and extracting value from it. Short-term and sub-optimal measures of increasing compute or storage capacity and relying on compression or tiered storage solutions are not always viable. Such solutions can quickly become overwhelmed by the rapid and relentless influx of data from integration needs, data federation, and activity logs. Therefore, organizations are increasingly adopting a more comprehensive approach that balances business policy, technology, and the demands of audit, legal, and regulatory compliance while preserving system integrity. They are turning to the transformative power of ILM solutions, which effectively address data management challenges.

ORMB offers robust capabilities for processing massive data, handling complex pricing, as well as calculating charge, billing, and payments, making it a prime choice for the financial services, insurance, and healthcare industries. Given the enormous amount of data in these sectors, an ILM solution forms an integral and indispensable element of the ORMB implementation, providing a structured approach to the data management lifecycle. By rightsizing production data, an ILM solution can enhance performance and productivity while lowering maintenance costs. The benefits are evident. Therefore, investing in a well-designed ILM solution for ORMB is a wise decision.

The Infosys' solution has been ingeniously designed to function as an extension to ORMB, leveraging standard data models and incorporating hooks for seamless integrations. It optimizes the process to adapt flexibly to diverse custom environments and configurations.

Assessing Data Management Practices

It is essential to assess the data management practices in an organization before integrating an ILM solution. The following key considerations can help businesses gain valuable insights into their data utilization and system performance:

- Although data is an asset, what percent of production data is actively used?
- Does the inactive data in the system contribute to deriving business value?
- Does the operational system meet your performance needs, or has it slowed down due to excessive data?
- Do you have a well-defined archival and purge strategy?
- Is data coming at an accelerated pace, nearly doubling annually?
- Are you concerned about the impact of data size on backups, upgrades, and system costs?
- What are the regulatory requirements for data availability?
- Is there a direct correlation between continuous data growth and a constant increase in costs for hardware, compute, storage, and maintenance?

Archive and Purge Solution by Infosys for ORMB

The Infosys' solution is a comprehensive process engagement and product extension solution tailored to the specific ILM needs of any organization. This solution is designed to yield substantial returns over its lifecycle.

Archiving relevant data and removing low-value data requires a deep understanding of meta information, information relationships, and usage patterns. Data purging must be carried out carefully without compromising critical system data.

Figure 1: Data archival process
Some of the important considerations of the Infosys’ solution are:

**01**
- How can you avoid system downtime during archival?

**02**
- Does your archival technical architecture ensure zero impact on users and system performance?

**03**
- How can you ensure that all purged data is archived with zero data loss?

**04**
- How do you ensure consistent data purging across multiple systems, such as ORMB and reporting systems?

**05**
- Is your ILM strategy covering post-purge processes to optimize performance and storage benefits?

Leveraging ILM with People, Process, and Technology

The Infosys’ solution for ORMB ILM addresses data integrity for applications, ensuring that users receive valid, complete, and consistent data across various data objects, including information maps, bills, invoices, price items, events, and journals. The processes involved can be sensitive to changes in schema structures, database and application upgrades, configurations, system patches, and network speeds. We have archived and purged over 100 million records per week using automated, scheduled jobs with alerts and notifications. The purge process leverages partitioned tables, offering an integrated solution built for businesses while ensuring compliance with architecture, infrastructure, and security requirements.

Leveraging people, processes, and technology can help meet ILM needs as follows:

**People:** Business/IT owners play a crucial role in determining policies on data retention, specifying what data to retain, when, and for how long.

**Processes:** It is essential to understand the application that provides end-user information and evaluate the value of data in maintaining the integrity of the application.

**Technology:** Architecting ILM solutions that work seamlessly with infrastructure and security is essential for managing data growth and supporting a usable, high-performance solution deployment.

Organizations can reap the benefits of an ILM project by prioritizing it as an essential activity, even though it may not be seen as urgent. The primary advantage lies in performance improvements, resulting in enhanced user productivity. Additionally, ILM solutions ensure audit and regulatory compliance. With effective archive and purge strategies in place, organizations can derive higher value from inactive data while deriving key benefits such as reduced file and database storage for live production data, as well as streamlined processes.
Conclusion

Implementing a proven ILM solution is imperative for businesses witnessing rapid data growth. Organizations can harness the rich value of data and ensure data integrity by attempting to strike the optimal balance between business policies and technological capabilities. The Infosys' solution offers an adaptable approach that enables businesses to navigate the complexities of information lifecycle management, leading to improved productivity, compliance adherence, and substantial cost savings. Organizations must recognize the significance of ILM solutions to reap the benefits of efficient data storage, greater data integrity, and enhanced overall performance.

About the Author

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Ramesh, a Chartered Accountant, has over 17 years of experience in IT consulting and delivery. He has successfully guided organizations in their cloud-enablement journeys and spearheaded complex digital transformation programs within the financial services industry. He has extensive expertise in leading finance transformation, digital transformation, billing and reporting transformation, and implementing ERP and reporting solutions, as well as finance and accounting process implementations.