Business Imperatives

Data volumes in the digital world are growing at an exponential rate. To remain competitive and relevant, enterprises today need to harness these big data volumes to gain meaningful business insights. This trend is not just limited to non-traditional data, but also traditional data sources (CRM, ERP, Transactional systems) that are generating far too much data today, than they were a few years ago.

An estimated 2.8 ZB of data in 2012 is expected to grow to 40 ZB by 2020. 85% of this data growth is expected to come from new types; with machine-generated data being projected to increase up to 15 times, by 2020. (Source: IDC)

To solve the big data problems of the world, customers are increasingly adopting big data technologies.

This, however, leads to another problem – that of Unified Data Access.

Enterprise data in the big data world is spread across traditional relational databases, such as Hadoop-based big data platforms, and NoSQL platforms.

Consequently, getting an integrated view of the data from all these different sources is becoming a challenge; and a lot of time is being spent on offline mashups, instead of data analytics.
Infosys Solution

Infosys Unified Data Access Layer solution addresses this challenge of unifying multiple, traditional, and big data sources, seamlessly.

It does this by leveraging multiple open-source components that are a part of the Hadoop stack, to create a virtual access layer, which enables execution of multi-dimensional queries in a unified way across multiple sources.

The Infosys Unified Data Access Layer solution comprises—

- A Hive storage Handler that connects to different data sources
- A semantic layer that serves as a virtual data model to integrate the different data sources

- A publishing layer that comprises Apache Lens and Apache Kylin. These online analytical processing (OLAP) -

layers allow for creation of relational and multidimensional data cubes that can enable unified data access to data consumers.

Client Benefits

- The solution addresses the need for an access layer that can integrate big data sources with other sources
- It also provides an option of creating multidimensional data cubes from multiple data sources, thus improving response times for analytical usage
- It is completely based on open-source tools – as opposed to other proprietary offerings available in the market