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Unified Information Management with JIT Acquisition in Big Data and Analytics

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Abstract: *In Big Data and Analytics, Unified Information Management is powerful way of source in big data which easily available across several multiple sources to fulfill needs of information by only getting access. It included High Volume Data Acquisition, JIT Acquisition, Multi-Structure Data, Low Latency Data Processing and Analysis Consistency. The High Volume Data must gather all data from different channels but it cannot persist and maintain all data that have received. High Volume data Acquisition may ignore and discard data. The JIT Acquisition will persist and maintain ignored and discarded data.*
Keywords: *BD; JI;*

I. Introduction

Among the many BD (Big Data) Challenges, It also found that, the BD is huge complex term and require rapid amount of data. Due to this challenge outdated applications and relational database management not up to the mark to avail facility in rapid way to user [1]. In way to approach Big Data analytics collectively, we must first understand it in well manner that user would want to get data in rapports of its requirement, qualities and improvement [1]. This include relationship of data with respect to other forms, structure, method of data collection, huge data, historical data importance, quality matter and value to data. In big data arrangement, it includes data procurement, data pre-processing and data transmission. Data collection is nothing but a techniques which collect data from sources where raw data is originate further specific processed perform on it fulfill task. When the task of data collection complete, it will be transferred to storage media for processing and analysis. Because of the several different types of data sources, the collection of different type of data may be stored in form of redundancy, and consistency, etc., and that's why it's become meaningless data to store. Therefore, to make the valuable data integration, Data pre-process is a valuable term under lots of circumstances to collect the data from sources, which reduce storage and also store overall data without discarding [2]. Data integration is the foundation of Big Data and Analytics, which collect data from different sources without discarding and provides platform to available data view [3]. In high volume data acquisition of unified information management, the collection of raw data from multiple channels shall utilize an efficient transmission mechanism without ignoring and discarding, later it will sent to database of big data to serve different OLAP Tools and applications.

II. Unified Information Management with JIT Acquisition

Unified Information Management deal with require to manage information comprehensive as opposed to maintaining independently. Unified Information Management is powerful way of source in big data which easily available across several multiple source. Information technology allows us to make available any information instantly. It is also available all facility to make relation within your information due to applications performance, security and usability it get facilitate. This facility make user to allow all data at his fingertips to accelerate to take valuable decisions. In view of big data and analytics, The Unified Information Management enables to store integrated data from different sources and channels to leverage information and analysis. It includes High Volume Data Acquisition, JIT Acquisition, Multi-Structure Data, Low Latency Data Processing and Analysis Consistency [1].

A. High Volume Data

High volume data played important role in data acquisition and due to this all related tools work properly to complete the task of analysis. There are so many data acquisition tools and protocols available. These tools and protocols are also open source solutions and stands for the process of data acquisition. All tools have been developed and currently working in production environments.

The system must need to acquire all data whether that data belongs to high volumes or variety or velocity. It must persist and maintain all data received but it discarded or ignored data and while sum amount of data are save for some moment of time [4].

B. Just-In-Time Acquisition

No matter how much volume, velocity, and variety of data is to be processed. High Volume Data procurement is not able to persist and maintain all data received. So it discarded or ignored data and while sum amount of data are save for some moment of time. As obvious this seems as drawback. To overcome this drawback JIT Acquisition is introduced. The Architecture uses the JIT method to streamline the delivery process of data. The Benefits of Just-in-Time Acquisition is a stratagem that acquires data from high volume data acquisition, which may be ignored or discarded from it while sum amount of data are save for some moment of time. Just-in-Time Acquisition is a methodology aimed primarily at reducing time within data acquisition of system as well as response time of end user. Just-in-time data delivery is focused on efficiency, while lean High Volume Data acquisition is centered on using efficiency to add value for the end user. The JIT Acquisition process adds value by increasing efficiency.

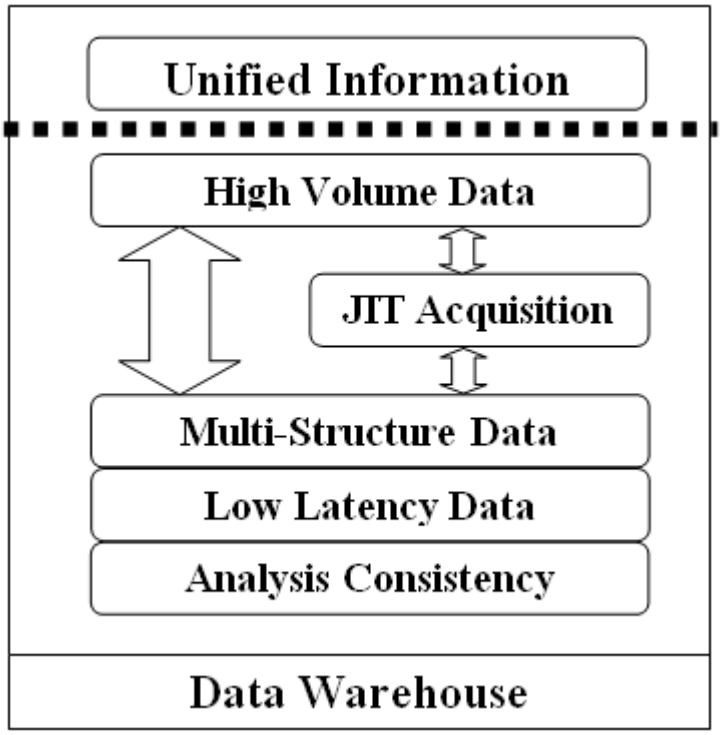

Fig. 1. Unified Information Management with JIT Acquisition

C. Multi-Structure Data

Multi-structure data deals with different forms and types of data. It can be come as a result between machines and peoples after interactions. It may be happened by using web applications or social networks. It is related to organization and discovery of multi structure data. In unified information management, it has ability to search data across different forms by navigating it. It can also be improved by the ability to organize data of different forms. That can be happened using into a common schema. Using this structure of data organization, the schema can relate structured data and semi structured data. For example model number and specification is structured data and installation videos are unstructured data. The sophisticated business chances can be searched from different forms data in new way.

D. Low Latency Data

It enhanced to process a very high volume of data with minimal delay (latency). These are planned to help operations that need in real-time access to make fast change in data. Data processing can occur at many stages of the architecture. In way to deal with processing arrangement of Big Data, the low latency data processed fast and efficient way.

E. Analysis Consistency

When different type of people performs the similar form of analysis they must get the similar outcome and obviously they should get similar screen of output. As notice as this seems, it should not be small difference, especially if the different type of people belong to different departments or location. The analysis consistency requires architecture reliability and governance.

F. Data Warehouse

A data warehouse is a repository of subjectively selected and adapted operational data, which can successfully answer any ad hoc, complex, statistical or analytical queries. It contains integrated historical data, both summarized and detailed information [1]. It also includes Authoritative Data, System-Generated Data, External Data and Analytical Data.

III. Result of Just-In-Time Acquisition

The Unified Information Management with JIT Acquisition in Big Data and Analytics is providing solution to overcome the problem of data gathering when amount of several high volumes, velocity, and variety of data comes under one roof of big data. Previously, High Volume Data procurement is not able to persist and maintain all data received. So it discarded or ignored data and while sum amount of data are save for some moment of time. This is main lacuna of data processing in big data and analytics.

Just-in-Time Acquisition is stratagem that acquires data from high volume data acquisition, which may be ignored or discarded from it while sum amount of data are save for some moment of time. Just-in-Time Acquisition is a methodology aimed primarily at reducing time within data acquisition of system as well as response time end user. Just-in-time data delivery is focused on efficiency, while lean High Volume Data acquisition is centered on using efficiency to add value for the end user. The JIT Acquisition process adds value by increasing efficiency. It also helps end user for collect information, make analysis and take suitable decision. It keeps information dynamically through real time.

The multi-structure works with high volume data acquisition and JIT acquisition to provide fast data to web application and social networks users because of this architecture it will avoid the delay time of data processing. Analysis consistency included in this architecture to make it reliable and governance. This architecture has ability to find out and search across different type and nature of data to serve user in fast manner with proposed JIT acquisition. The JIT Acquisition process adds value by increasing efficiency and kept various types of data in data warehouse for long time. The proposed JIT acquisition fulfills data gathering process and serving high efficient quality data to user with minimal delay.

IV. Conclusion

High Volume Data procurement is not able to persist and maintain all data received. So it discarded or ignored data and while sum amount of data are save for some moment of time. As obvious this seems as drawback. The Architecture uses the JIT method to streamline the delivery process of data where it must not ignored or discarded data as happened with High volume Data Acquisition. The Just-in-Time Acquisition is a technique that acquires data from high volume data acquisition, which may be ignored or discarded from High Volume Data Acquisition. Just-in-Time Acquisition is a methodology aimed primarily at reducing time within data acquisition of system as well as response time of end user. High Volume Data acquisition is centered on using efficiency to add value for the end user with JIT.

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