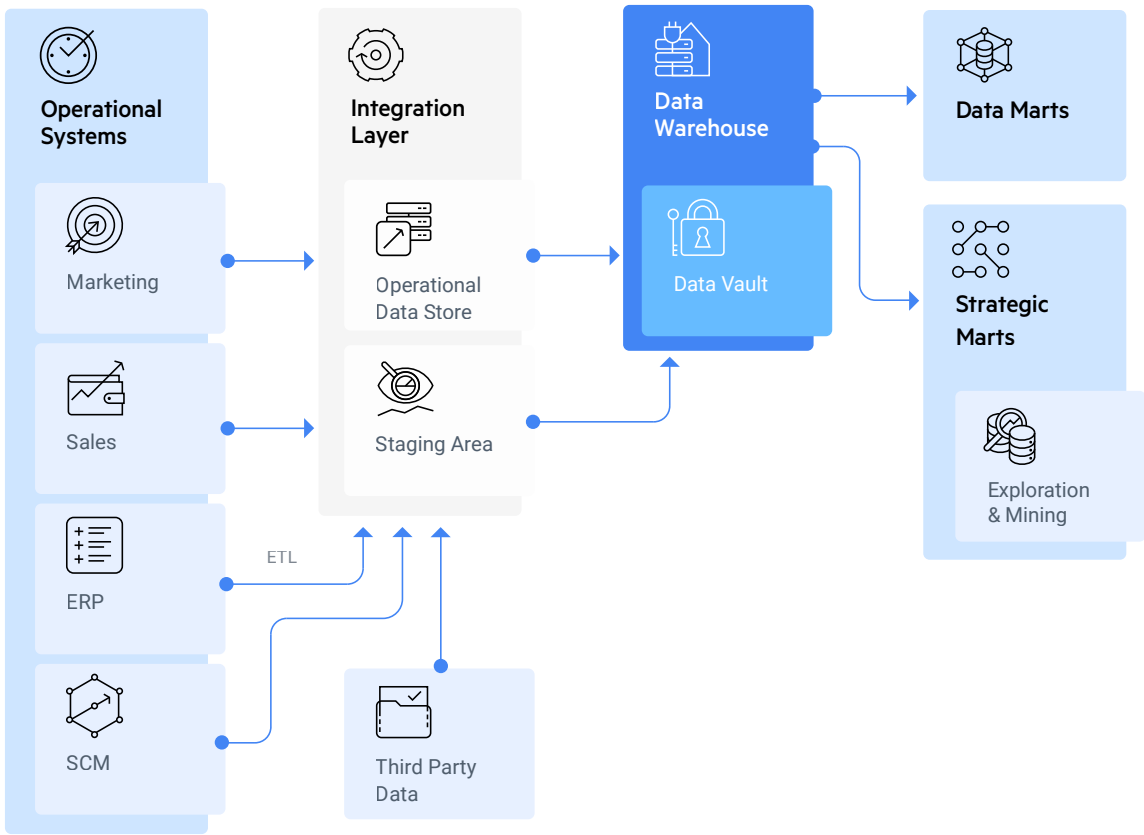
Accelerate Your Cloud Data Warehouse Productivity with Progress DataDirect

WHITEPAPER

Data warehousing has evolved substantially over the past few decades. Early on, data warehouses were fairly simple in terms of the number of applications from which they were pulling data. The majority of these applications were on-premises and connected to the warehouse via a quasi-manual integration layer.

For early instances of "bigger data" as opposed to today's BIG DATA, enterprises would often employ appliance-based data warehouses. While these offered additional capacity, the ballooning costs made them a difficult sell at the SMB end of the market. Internal data analysts or third-party applications could typically connect with these warehouses via ODBC or JDBC standards.

The Traditional Data Warehouse



Now, let's take a look at the traditional data warehouse approach. Generally, this would be an on-premises application or appliance, depending on needed space. Operational systems containing sales and marketing data would ETL (or ELT) into the data warehouse through some form of integration layer. That integration layer would likely incorporate data appending and cleansing efforts prior to being loaded into the warehouse. Finally, data from the warehouse gets consumed by data-marts, where analytics, business intelligence and reporting (among other activities) would take place.

The Emergence of the Cloud-Based Data Warehouse

It should come as no surprise then that, as with many other technologies, the cloud has had a disruptive effect on traditional data warehousing over the past few years. Cloud-based data warehouses such as Amazon Redshift, Snowflake and Google BigQuery now comprise the top three enterprise data warehouse solution spots according to G2.

Companies are relying more and more heavily on cloud-based data warehousing as it aligns with four key goals that are perennial features on any enterprise's to-do list:

1. Modernization – By moving to cloud-based data warehouse technology, companies are assured of always being up-to-date with the most current hardware and software underpinning their data access and storage capabilities.

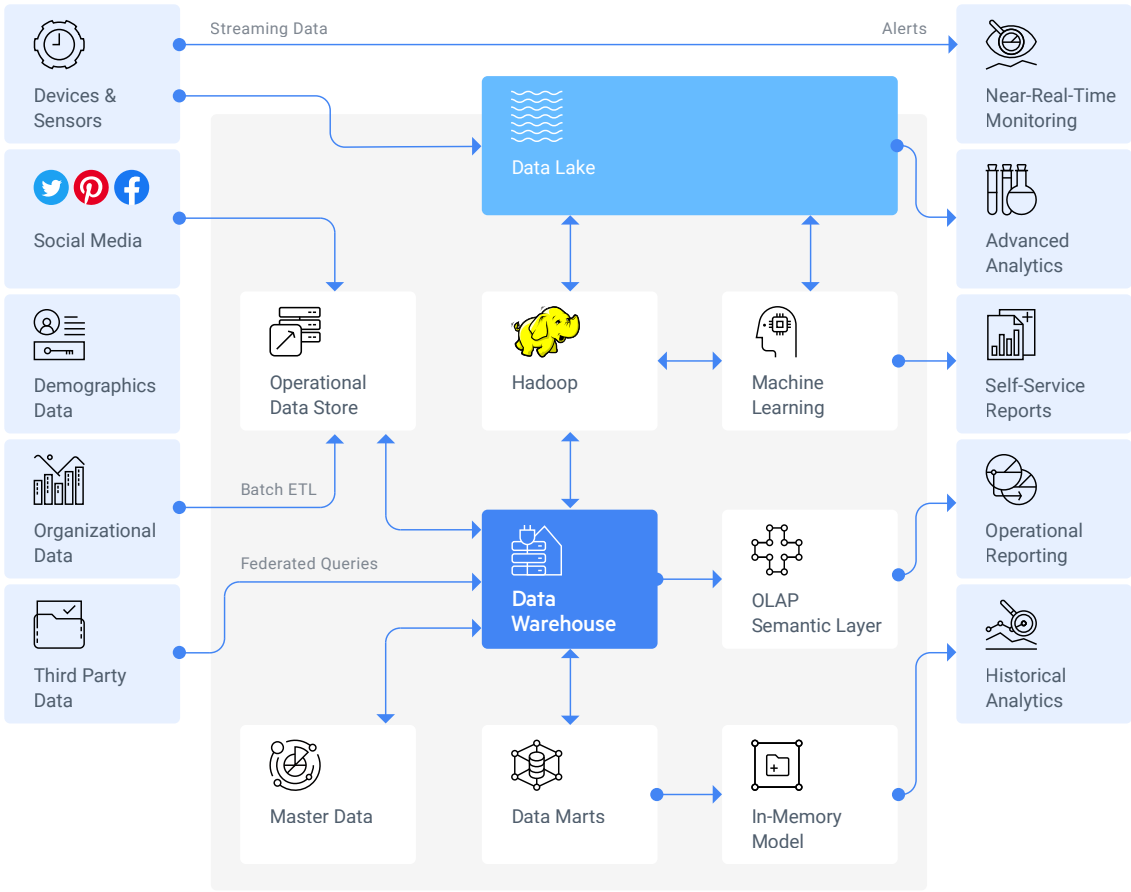
2. Scalability – The ultimate downfall of on-prem and appliance-based data warehousing was that it had trouble keeping up with the evolution—and expansion—of data. As data volumes grew, so too did the costs and headaches associated with adding on more and more capacity. With a cloud-based warehouse, scaling up and down is a seamless, painless process.

3. Cost-effectiveness – In addition to being painless and seamless, this strategy also costs less. Significantly less, in many instances. This is attractive to enterprises using mammoth amounts of space as well as SMBs with shoestring budgets to go with their big data applications.

4. Maintenance - Finally, cloud-based data warehouses require far less time and effort (and resources) to implement and maintain.

With all this in mind, it is little wonder that cloud-based data warehousing technology has taken off in recent years. Furthermore, it seems unlikely that data warehousing will trend back toward on-premises in the future.

The Cloud Data Warehouse Approach



Once again, here's a diagram courtesy of SQLHammer.com that demonstrates the cloud approach to data warehousing. Interestingly, it isn't that the basic premise has changed as much as the overall scale has just gotten bigger, much like the underlying data.

A lot bigger, in fact. Data is being pulled from more sources than ever before into the data warehouse, such as:

- Streaming data sources (like IoT)
- APIs
- Hadoop sources
- Data lakes
- Social data

On the other side of this equation, data from the warehouse is being pulled into many more downstream processes, including:

- Traditional and cloud-based BI and analytics
- AI and machine learning processes
- Real-time data monitoring and governance applications

Challenges of Moving to a Cloud Data Warehouse

While relocating your data warehouse efforts to the cloud makes sense from many of the above-mentioned perspectives, it isn't without its challenges. As with most large-scale IT projects, there are some pitfalls to be aware of. For example:

- Speed of data is the speed of business. In other words, are we certain that we won't encounter lag or delays to our real-time data access? Often times, this isn't a function of the cloud warehouse you choose, but instead the connections that you have between your data and your warehouse.

- Can I still get the answers I need from the data? It is no little thing to worry about connectivity back to the applications that you rely upon for your business intelligence, analytics and reporting. These are business processes

that are well-entrenched and functional. Saving money and efforts in one area should not cause additional costs and inefficiencies in another.

- Security considerations. These considerations are not so much around if the cloud-based application is secure. More so, that the channels of connectivity between your on-prem and cloud data sources are securely integrated with your data warehouse.

Overcoming These Challenges with Progress DataDirect

To meet and overcome these challenges, Progress® DataDirect® offers the widest, most performant line of ODBC and JDBC connectors for cloud data warehouse applications including Google BigQuery, Amazon RedShift and Microsoft Azure Synapse Analytics (formerly Microsoft Azure SQL Data Warehouse).

These solutions follow in a long line of enterprise-grade connectors and drivers that we've released for cloud and on-prem applications. In fact, 8 of the 9 leading BI/analytics vendors currently embed our connectors; more than 350 independent software vendors use our connectors and more than 10,000 enterprises rely on Progress DataDirect to solve connectivity challenges.

So, why should you choose us? Whether you are considering a move to a cloud data warehouse, or have already done so, here are a few points we'd like you to consider.

First, seamless connectivity is of paramount importance. It goes without saying that your warehouse is only as effective as the data sources and tools that it can connect to. Our cloud data warehouse connectors ensure that you'll be able to connect to any BI/analytics or reporting tool that uses ODBC or JDBC. Additionally, we ensure that you have superior querying capabilities regardless of the application or tool you choose.

Next, speed of access is critical and cannot be sacrificed. Generic and native drivers are often slow and unable to keep up with the real-time nature of your business. Enterprises rely on Progress DataDirect cloud data warehouse connectors because they are demonstrably faster in head-to-head comparisons, providing access to mission-critical data at the speed of business.

Finally, our cloud data warehouse connectors are engineered for enterprise-grade security standards and enhanced authentication mechanisms. Security is top of our mind so it doesn't have to be top of yours.

We invite you to test our connectivity solutions for your cloud data warehouse and see for yourself why so many enterprises rely on Progress DataDirect. Head to our website today for more information or to start a trial.

Unlock the Full Potential of Your Cloud Data Warehouse
https://www.progress.com/data-connectivity/cloud-data-warehouse

About Progress

Progress (NASDAQ: PRGS) offers the leading platform for developing and deploying strategic business applications. We enable customers and partners to deliver modern, high-impact digital experiences with a fraction of the effort, time and cost. Progress offers powerful tools for easily building adaptive user experiences across any type of device or touchpoint, the flexibility of a cloud-native app dev platform to deliver modern apps, leading data connectivity technology, web content management, business rules, secure file transfer, network monitoring, plus award-winning machine learning that enables cognitive capabilities to be a part of any application. Over 1,700 independent software vendors, 100,000 enterprise customers, and two million developers rely on Progress to power their applications. Learn about Progress at www.progress.com or +1-800-477-6473.

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