Consolidate Your Operational and Analytical Data in One Place
Lower Your Storage Costs and Simplify Your IT Landscape

Big Data is driving significant growth in IT spending – and for good reason. As companies collect huge amounts of information from enterprise systems, e-commerce sites, social media channels, and customer mobile devices, they can analyze it to determine the best way to improve and market products, cut costs, and attract and retain customers. But as database sizes explode, your business needs lower-cost storage for archived data – and an infrastructure that can ensure rapid response time for employees who need it.
There Has to Be a Better Way

As long as your archived operational data and analytical data are stored in separate systems, achieving these goals – lower storage costs and rapid response times – will be nearly impossible. As illustrated in Figure 1, a traditional approach to data storage creates two silos of data, and it requires investment in two third-party storage solutions, which increases costs and adds unnecessary complexity to your IT landscape. The costly data recovery, backup, and maintenance efforts demanded by dual storage infrastructure systems have long plagued IT departments.

At the same time, the traditional approach forces you to implement two siloed systems to help you comply with legal requirements for segregation of data and the holding and destruction of data within specified time frames. This adds further to the cost and complexity of data storage and management.

To get the most from your Big Data assets – both operational and analytical – it’s critical that you bring together both sets of data in a common data store.

**SAP SOLVES THE STORAGE DILEMMA BY CONSOLIDATING DATA**

Using SAP® Sybase® IQ database software, you are now able to archive and store historical operational and analytical data in one scalable database and run faster in-database workloads. Figure 2 illustrates how this works.

- **For operational data:** The SAP Information Lifecycle Management component, with its enhanced storage functionality, enables you to archive enterprise resource planning (ERP) and other operational data on SAP Sybase IQ instead of a traditional data store. You can store archived data from live systems and data from legacy systems that was transferred to the information lifecycle management (ILM) retention warehouse.

- **For analytical data:** The SAP NetWeaver® Business Warehouse application uses an intelligent near-line storage (NLS) management solution that allows analytical data to be stored in SAP Sybase IQ. In addition, now you can implement the new, native NLS interface from SAP, which eliminates the need to purchase a third-party product.

**THE POWER OF SAP SYBASE IQ**

By storing all of your archived operational and analytical data in SAP Sybase IQ, you eliminate the need for third-party data stores, as all components of this solution are provided by SAP. This reduces costs and simplifies your IT landscape. You also reduce data volumes, as all data is stored efficiently in the columnar database architecture used by SAP Sybase IQ.

Furthermore, with SAP Sybase IQ, you lay the foundation for faster data access, analytics, and reporting. Because of the column-based architecture, even data that’s rarely used (and for which no more updates are anticipated) is always still available to users. This architecture also enables significantly faster performance and higher compression rates (up to 90%) for data stored in tables compared to storage in a conventional relational database management system (RDBMS).

As you manage your archived data, you can leverage the storage capabilities supported by SAP Sybase IQ. If you ever need to apply analytics or run reports, you can upgrade SAP Sybase IQ at any time by adding the required functionality – without worrying about integration.

**Figure 1: Traditional Storage of Operational and Analytical Data in Separate Environments**
Realizing the Benefits

By using SAP Sybase IQ to consolidate your archived operational data and analytical data in one place, you can realize benefits such as:

- **Cost savings** – Now you can get all components from one trusted vendor. You also reduce costs by storing data more efficiently, as SAP Sybase IQ provides better data compression compared to classic archives. This is particularly beneficial for archive indexes, which can consume a large amount of space when stored in a classic RDBMS.

- **Increased performance** – With its columnar-style database, SAP Sybase IQ enables a fast archive index read without additional secondary database indexes. This results in very high performance. The solution also supports increased search capabilities using broader indexes, which save time and enable faster I/O because the system can skip layers (for example, network, storage software, and hardware) to access data – compared to a standard solution that uses an external archive store.

- **Reduced system complexity** – By eliminating the need for third-party data stores and ILM software, you can reduce the complexity of your IT landscape, which further lowers your costs.

- **A clear evolution path to compliant storage** – If you have old archive files, you have the option to migrate these files from the old storage system to SAP Sybase IQ and eliminate the old system.

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FIND OUT MORE

To learn more about how SAP can help your organization consolidate your operational and analytical data stores in one place, please contact your SAP representative or visit us online at www.sap.com/ilm.