

# IBM unveils a new high-powered analytics system for fast access to data science

27 September 2017

IBM today announced the Integrated Analytics System, a new unified data system designed to give users fast, easy access to advanced data science capabilities and the ability to work with their data across private, public or hybrid cloud environments.

The system, which comes with a variety of [data science](#) tools built-in, allows data scientists to get up and running quickly to develop and deploy their advanced analytics models in-place, directly where the data resides for greater performance. And because it is based on the IBM common SQL engine, clients can use the system to easily move workloads to the public cloud to begin automating their businesses with machine learning. In fact, because the popular database engine is used across both hosted and cloud-based databases, users can move and query data across multiple data stores, such as the Db2 Warehouse on Cloud, or Hortonworks Data Platform.

At the heart of the Integrated Analytics System are the [IBM Data Science Experience](#), Apache Spark and the Db2 Warehouse, all of which have been optimized to work together with straight forward management. The Data Science Experience provides a set of critical data science tools and a collaborative work space through which data scientists can create new analytic models that developers can use to build intelligent applications quickly and easily. The inclusion of Apache Spark, the popular open source framework, enables in-memory data processing, which speeds analytic applications by allowing analytics to be processed directly where the data resides.

New to this class of offering are the machine learning capabilities that come with both the Data Science Experience and Spark embedded on the system. Having machine learning processing embedded means that data does not need to be moved to the analytics processing, reducing the associated processes and wait times for analytics

to run and respond. This simplifies the process of training and evaluating predictive models, as well as the testing, deployment and training as it is all done in-place.

"The combination of high performance and advanced analytics – from the Data Science Experience to the open Spark platform – gives our business analysts the ability to conduct intense data investigations with ease and speed," said Vitaly Tsivin, Executive Vice President, at AMC Networks, who has been testing the system for several months. "The Integrated Analytics System is positioned as an integral component of an enterprise data architecture solution, connecting IBM Netezza Data Warehouse and IBM PureData System for Analytics, cloud-based Db2 Warehouse on Cloud clusters, and other data sources."

"Today's announcement is a continuation of our aggressive strategy to make data science and machine learning more accessible than ever before and to help organizations like AMC, begin harvesting their massive data volumes – across infrastructures – for insight and intelligence," said Rob Thomas, General Manager, IBM Analytics.

## Seamless Expansion to the Cloud

The integrated architecture of the new system combines software enhancements such as asymmetric massively parallel processing (AMPP) with IBM Power technology and flash memory storage hardware and builds on the [IBM PureData System for Analytics](#), and the previous IBM Netezza data warehouse offerings. It also supports a wide range of data types and data services, including everything from the Watson Data Platform and IBM Db2 Warehouse On Cloud, to Hadoop and IBM BigSQL. Like these solutions, the Integrated Analytics System is built with the IBM common SQL engine, enabling users to seamlessly integrate the unit with cloud-based warehouse solutions.

In addition, industry standard tools and the common SQL engine provide users with an option to also move these workloads seamlessly to public or private cloud environments with Spark clusters, based on the user's requirements.

Like IBM's existing data warehouse products, the Integrated Analytics System is designed to provide built-in data virtualization and compatibility with Netezza, Db2, and IBM PureData System for Analytics.

Among these capabilities, the new system also incorporates hybrid transactional analytical processing (HTAP). In contrast to typical business environments where transaction processing and analytics are run on distinct architectures, HTAP runs predictive analytics, transactional and historical data on the same database at accelerated response times. Later this year, the company plans to add support for HTAP with IBM Db2 Analytics Accelerator for z/OS, which will enable the [system](#) to transparently integrate with IBM z Systems infrastructures.

Provided by IBM

APA citation: IBM unveils a new high-powered analytics system for fast access to data science (2017, September 27) retrieved 8 May 2021 from <https://phys.org/news/2017-09-ibm-unveils-high-powered-analytics-fast.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*