

# Maximizing the power of SAS<sup>®</sup> Analytics and Cloudera on Intel architecture

## The challenge of transforming big data into insights

To truly recognize valuable insights from your organization's vast troves of data, you must be able to quickly discover the relationships, opportunities and risks that exist within the raw data. Once you have that understanding, you can begin to build and refine analytic models that deliver timely insights to decision makers. That's easier said than done, though. To become data-driven, you need a scalable, reliable and powerful solution that supports fast, in-depth data analytics.

SAS and Cloudera can help. SAS' world-class analytic capabilities and big data technologies, powered by Intel and running on a Hadoop-based enterprise data hub from Cloudera, provide the optimal environment for big data analytics. This solution reduces time spent on data preparation and model development to speed time-to-insight, so your data can reliably inform and improve your business' decision-making processes.

## The benefits of Hadoop processing with SAS<sup>®</sup> and Cloudera

Many organizations are moving to Hadoop for data storage, processing and exploration — and with good reason. Distributed solutions using Hadoop can more efficiently store, process, manage and analyze large volumes of data by using SAS hardware configurations based on the Intel<sup>®</sup> Xeon<sup>®</sup> processors E7 v3 family and Intel<sup>®</sup> SSDs. These solutions are easily scalable and highly available, with data stored optimally across all cluster nodes.

Traditional analytical solutions constantly move data from disk to compute nodes and

back during processing. This incurs big costs in time, resources and bandwidth—and the larger the data sets, the higher the costs. The SAS and Cloudera solution takes the opposite approach: It applies SAS directly within the Hadoop cluster, utilizing an in-memory analytics architecture and SAS Embedded Process, reducing data movement and boosting speed. Together, SAS and Cloudera give you a faster, more efficient and lower cost data storage and processing infrastructure.

## Fast, flexible and scalable: A SAS<sup>®</sup> and Cloudera solution for big data analytics

As the volume of data within an organization grows, the enterprise's ability to rapidly process and utilize diverse data becomes even more critical. Running real-time analytics at the site of data generation, creating self-service business intelligence reports, visualizing data in new ways to discover new trends and interactively developing and refining analytical models are just a few ways companies are using big data analytics today.

An enterprise data hub with SAS and Cloudera empowers you to gain value from data across the enterprise — whether that data is structured or unstructured, in your databases or outside of them. The solution enables time-sensitive data explorations and analytical models so you can discover the insights you need when you need them. You can quickly create and automatically deploy models in your enterprise data hub, using them to score new data within each Hadoop node. The data hub uses in-memory analytics, which permit you to run more scenarios and produce more precise insights for the enterprise.

## Why Cloudera?

The Cloudera Hadoop distribution was the first of its kind certified on SAS. Designed specifically for mission-critical environments, Cloudera Enterprise includes its 100 percent open source Hadoop offering (CDH) with advanced system and data management tools, plus dedicated support and community advocacy from world-class Hadoop developers and experts.

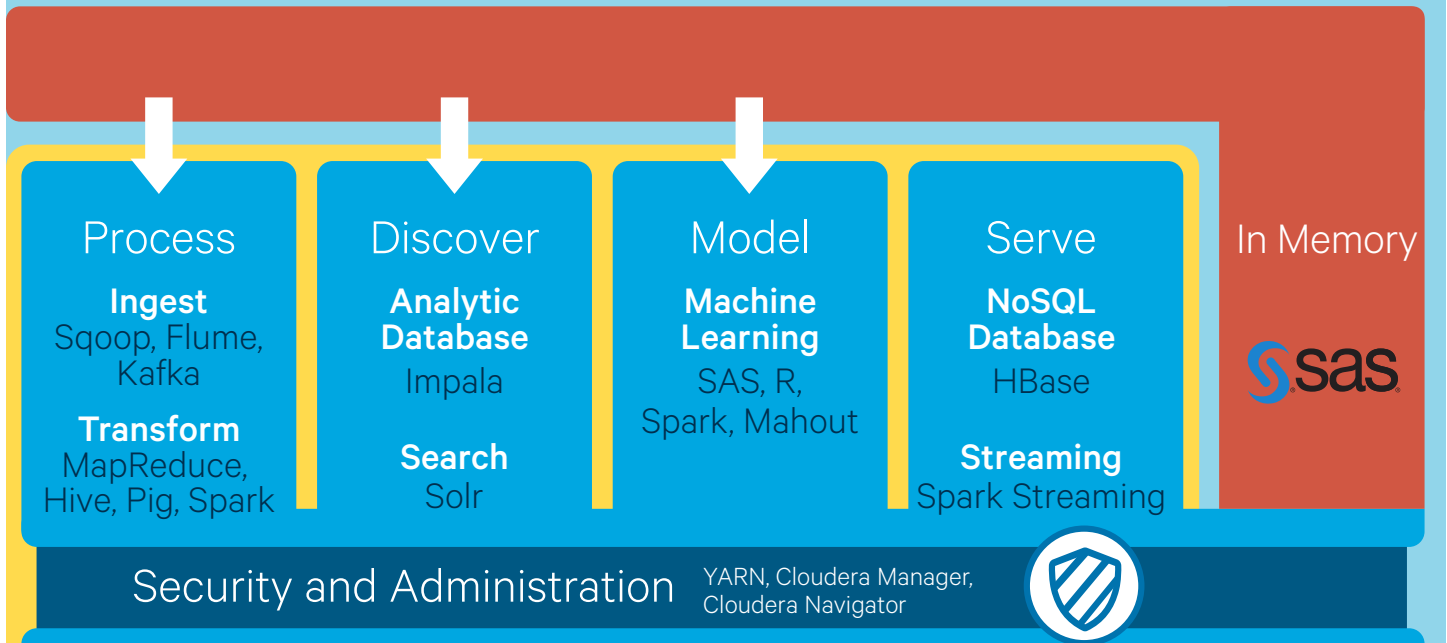
Cloudera reduces the risks, costs and uncertainty of big data management and accelerates your time-to-value. IT, enterprise architects, data scientists and business users rely on Cloudera as the enterprise platform for big data storage, processing, discovery and analytics. It enables you to gain value from all your data, not just what's in your siloed data stores.

Cloudera is scalable and enterprise-ready, delivering the proven, comprehensive security and governance required for your big data applications. Cloudera's partnership with Intel ensures security does not affect cluster performance.

With security and governance at the core, plus extensive systems management and deep integration with SAS technologies, you can feel confident storing all your data in Cloudera Enterprise, thereby giving your SAS users access to more complete data sets for exploration and discovery.

Cloudera and SAS bring you a proven solution for enterprise analytics, speeding time-to-insight so you can recognize the full business value of your data.

# Cloudera Enterprise



SAS and Cloudera enable you to reduce latencies associated with data management and analytics, giving you more time to concentrate on more important tasks. It is built for the enterprise, easily meeting your data and analytic governance and security standards at every point in the analytics life cycle.

Now you can build an efficient analytics lab specifically suited to your organization that delivers the accurate insights you need fast. Simultaneously, IT and business can collaborate to incorporate analytics into your operational processes, thereby gaining timely, relevant value from your data.

## About SAS, Intel and Cloudera

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions, SAS helps customers at more than 75,000 sites improve performance and deliver value by making

better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.

Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Additional information about Intel is available at [intel.com](http://intel.com).

Cloudera is revolutionizing enterprise data management by offering the first unified Platform for Big Data, an enterprise data hub built on Apache Hadoop™. Cloudera offers enterprises one place to store, process and analyze all their data, empowering them to extend the value of existing investments while enabling fundamental new ways to derive value from their data. Only Cloudera offers everything needed on a journey to an enterprise data hub, including software for business critical data challenges such as storage, access, management, analysis,

security and search. As the leading educator of Hadoop professionals, Cloudera has trained over 40,000 individuals worldwide. Over 800 partners and a seasoned professional services team help deliver greater time to value. Finally, only Cloudera provides proactive and predictive support to run an enterprise data hub with confidence. Leading organizations in every industry plus top public sector organizations globally run Cloudera in production. [www.cloudera.com](http://www.cloudera.com).

## Learn more

To learn more about how SAS and Cloudera can help you maximize the value of your data, contact your representative or visit [sas.com/cloudera](http://sas.com/cloudera).

