



- Cloudera SDX provides enterprise-grade security and governance on all data and metadata, with dedicated, integrated interfaces to manage it. Data security and governance policies can be set once and consistently enforced everywhere, reducing operational costs and business risks while enabling complete infrastructure choice and flexibility.
- SDX's Data Catalog provides a single pane of glass for both administrators and end users alike. Data stewards can profile and classify data as well as create data access policies based on classification and audit adherence for complete visibility and traceability of sensitive and regulated data. For data users, the Data Catalog provides a self-service portal to find and share relevant, trusted business information with full access to profiling insight, data lineage and business glossary.



# DELIVERING GOVERNMENT DATA CONTEXT

## Security and Governance in Support of Your Agency Mission

In an increasingly hybrid technology ecosystem, government agencies find it difficult to operationalize their vast data holdings. The information is there in abundance, but leaders still struggle to apply consistent security, governance, and intelligence across their valuable data sets.

The public sector requirements around compliance and transparency make this an especially urgent situation. Agencies operate under a wide range of regulatory constraints that determine who can use what data, in what ways, and for what purposes. Without consistent management tools, they can be hard-pressed to meet that high bar of accountability.

In place of existing siloed solutions that litter the fragmented IT landscape, agencies need a new approach. One that is centered on “data in context” — an automated means to identify and track who is using the data, what analytics are being applied, and what schema or policies govern that use. Context makes data use trackable and traceable, enabling agencies to meet their obligations for both appropriate use and public accountability.

### A Fragmented Landscape

In legacy IT environments, data lives mostly on-premises, siloed within agencies or programs. Different systems and applications would each support their own approaches to storage and analytics, their own security rules and policies. In such scenarios, IT is overburdened to implement, reproduce, and manage governance and security policies for the heterogeneous analytics systems and applications across diverse architectures.

The move to hybrid and multi-cloud environments has done little to improve the situation and in some cases, has made things worse.

Now IT must manage data not just within those legacy systems but also across a patchwork of private and public cloud resources. It’s harder to apply consistent controls, and harder to give end users the flexibility they need to gain insights by bringing together data. Often end users seeking faster access to data and analytics introduce shadow IT (unauthorized applications), further complicating an already complex situation.

While public cloud providers offer some support around security, the majority of the workaround data management still falls to the IT team. They're the ones who must apply consistency across the organization, and the proprietary nature of public cloud offerings can make this difficult. It's hard to share data across multiple clouds, and harder still to enforce consistent policies around data usage.

Government IT needs a better way to manage data, a unified and automated means to apply consistent security, governance, and intelligence across the hybrid and multi-cloud ecosystem. Agency leaders need data context, a unified methodology for viewing and managing the full spectrum of data and analytics activities within their organizations.

**Data Context:**  
a single, coherent way to view and manage data processes across multiple architectures

**Delivering Data Context**

Cloudera SDX (Shared Data Experience) creates that critical layer of context by applying centralized, consistent data access services across all platform deployments regardless of whether the workloads are long lived or transient in nature. Security and governance are attached to the data: They move with the data automatically, regardless of where or how the data is being used.

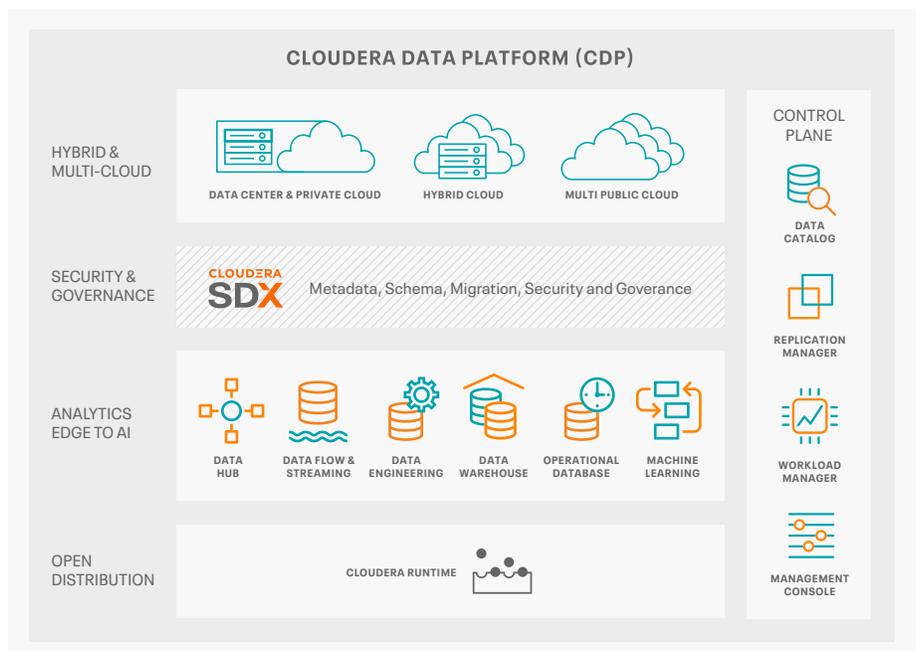
As a purely open-source solution supporting the Cloudera Data Platform (CDP), SDX readily delivers critical security, governance, and intelligence functions across the full range of compute and storage solutions. It enables hundreds of different workloads to run against shared or overlapping sets of data, without requiring IT to redefine or reinforce the rules for every new iteration.

An always-on service implemented using powerful community open-source projects, SDX gives IT the ability to enforce consistent security and governance, and to glean valuable business intelligence, regardless of where the data lives or how it is used. It breaks down siloes, operating seamlessly across cloud and data center deployments.

Hundreds of government agencies spanning



countries rely on Cloudera



**Why Cloudera**

Cloudera Data Platform enables organizations to effectively execute their data and analytics strategy to address current and evolving customer expectations.

**EDGE TO AI ANALYTICS**

Analytics for the complete data lifecycle combined in a single platform, eliminating the need for costly and cumbersome point products.

**DATA SECURITY & COMPLIANCE**

Maintains consistent data security and governance across all environments.

**HYBRID AND MULTI-CLOUD**

Delivers the same data management capabilities across all clouds and data centers.

**100% OPEN SOURCE**

Open compute and open storage ensures zero vendor lock-in and maximum interoperability.

This results in a number of significant gains both for IT and for the end-users of data:

- **Enterprise-Strength Security:** SDX makes it possible to standardize and enforce granular, dynamic, role and attribute-based security policies across the data ecosystem. Prevent and audit unauthorized access to sensitive or restricted data across the platform. Encrypt data across the stack at rest as well as in motion and manage encryption keys.
- **Governance and Compliance:** Government agencies face special sensitivities around their data usage, with various regulations and other mandates regulating the use and handling of sensitive personal information. Agencies also must be transparent in their efforts to comply with these rules. With SDX, agencies can identify and manage sensitive data and effectively address compliance requirements with unified data management operations, including metadata search, lineage, and chain of custody, data access auditing as well as classification, profiling, and business glossary.
- **Shared Intelligence:** To manage data effectively, agencies need deep and broad insights into where the data lives, how it is used, by whom, and to what ends. With SDX, agencies gain insight on how data and workloads are used across the platform to drive continuous optimization as well as unlock deeper data insight and value.

With a better means to manage security, governance, and intelligence, agencies will also see improvements in efficiency. Data is useful only to the extent that people are able to use it. With data in context, SDX enables agencies to manage performance at a high level. Intelligent insight enables data stewards to see how different workloads are performing and to readily spot the outliers. This information helps the platform make recommendations for improvement and can even apply automatic fixes to restructure underperforming processes.

With data context, analytics are deployed faster, more economically, and more resilient. Ongoing observation allows for continuous optimization and improvement. With SDX, organizations get to know their data and know that it's used properly.

As part of CDP, SDX operates across all clouds and infrastructures, empowering IT to own the data lifecycle in its entirety, from edge to AI. With better and consistent security, governance, and intelligence, government agencies can put their data to work, improving outcomes while meeting critical requirements around both privacy and transparency.

**About Cloudera**

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.

Learn more at [cloudera.com](https://cloudera.com)