# **EROSTAT**

intelligent data management

EROSTAT (Engineered Resiliency on STAT) brings secure, governed enterprise class software and analytics through an open, hybrid, and multi-cloud enabled solution suite that orchestrates your data into a trusted, unified landscape.

# Modernizing government technologies for the 21st century and beyond

Critical issues with legacy technology, combined with the need to address mission opportunities at an accelerated pace, are forcing the government to improve IT strategies to meet these pressing demands.

The government has laid out a long-term plan for modernizing their IT infrastructure and becoming a next-generation organization. To accomplish this goal, agencies need three things to form their data systems:

- reliable data to empower their people
- · deep insight from all their data
- and access to the latest analytics and machine learning techniques to amplify their insights and apply them to their mission

These requirements demand a robust, integrated

approach to streamline the flow of data, provide transparency, effective governance, and innovation.

## Three challenges for creating a next-generation federal government

#### **Data discovery**

Data discovery across intra-agency and cross-agency, structured and unstructured data is a difficult or almost impossible task without tacit knowledge of the data's existence or physical storage location.

#### Unlocking insight

Looking at variations of data lake concepts that combine distributed files, relational and non-relational data stores, other technologies AND making all these work in a performant and auditable fashion is challenging. Furthermore, extracting any sort of value or insight from the data is near impossible.

#### Privacy and security

Governance is a growing challenge for agencies as more data moves from on-premises to cloud locations, and as privacy regulations become more pervasive.

### A software suite positioned for the future

EROSTAT intelligently secures, unifies, and governs data providing a trusted, solution for information delivery.

#### Autonomous data within reach

EROSTAT is a data-grid software providing a logical virtual interface for disparate data sources so users can access data via their preferred method even as data is automatically migrated from faster to slower storage tiers - physical storage access is abstracted away from users.

#### Governance without boundaries

Automated data governance policies ensure agencies can maximize the efficiency of storage resources and enforce metadata standards so data can easily be retreived regardless of location.

#### Effortless IT modernization

Agencies can install EROSTAT on existing architecture to federate other EROSTAT deployments allowing you to securely share data and collaborate while maintaining strict control over the security and governance policies.

### Modernized approach to data management

Data-grid architecture

ORGANIZATIONAL BOUNDARY

ORGANIZATIONAL BOUNDARY

SILO

SILO

SILO

SOTYMANG APPLICATIONS

SILO

SOTYMANG APPLICATIONS

OFFICIAL STREET

APPLICATION SERVER

OFFICIAL STREET

OFFICIAL STR

Users and applications can interact with the data-grid to manage data across organizational boundries

- Applications and users can only interact with local resources
- Ad-hoc integration and inconsistent across the organization

#### Built on a foundation of trust

EROSTAT utilizes the Integrated Rule-Oriented Data System (iRODS). Built on 20+ years of funded projects, iRODS allows you to take control of your data, regardless of where and on what device the data is stored.

#### Benefits of iRODS:

- Implements data virtualization, allowing access to distributed storate assets under a unified namespace, freeing organizations from getting locked in to single-vendor storage solutions
- Enables data discovery using a metadata catalog that describes every file, every directory, and every storage resource in the iRODS Zone
- Automated data workflows, with a rule engine that permits any action to be initiated by any trigger on any server or client in the Zone
- Enables secure collaboration, so users only need to log in to their home Zone to access data hosted on a remote Zone

#### Created with capability in mind

Web-based GUI

Customizable dashboards

Automated ingest

Data and metadata storage

Enforceable data lifecycle and data access

Track data origins

Data integrity assurance

Auditable



F: +1 504.831.1901