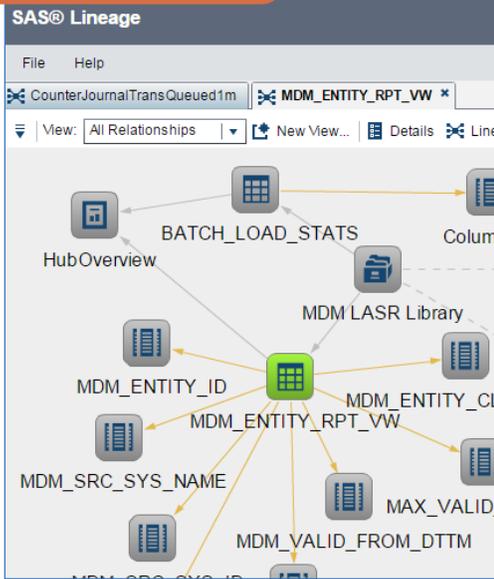


> Fact Sheet



What does SAS® Data Governance do?

SAS Data Governance helps you maintain a consistent set of policies and processes for your corporate information – including big data sets in Hadoop and Impala. You'll spend less time managing your data – and more time managing your business – with our patented solution.

Why is SAS® Data Governance important?

With SAS Data Governance, you can put the necessary processes in place to more effectively manage all of your data assets and critical information. And you can boost collaboration between business and IT so everyone in your organization is on the same page.

For whom is SAS® Data Governance designed?

It is designed for all business departments with an emphasis on data stewardship, executive managers who consume governed data, and IT members who are key stakeholders in overseeing the data governance program.

SAS® Data Governance

Give your data some guidance – and make it work for your business

You've done the dirty work. Your data is in good shape, and you're ready to move your business forward. Customer data matched and complete? Check. Product information well-defined and consistent? Check. Now what? How do you maintain that high level of quality and make your data work for you?

SAS Data Governance helps you build the set of policies, processes and boundaries you put in place to holistically manage your data. You establish how you want your data to behave and then let the technology work behind the scenes while you run your business.

You might be surprised by what happens when your data has rules. Workflows run better. Business and IT are on the same page. Reporting and monitoring get easier. Policies are complied with. And you can finally relax knowing that your high-quality data will continue to be right.

Key Benefits

- **Always have trusted data.** SAS Data Governance gives you reliable data. It protects your business information and provides oversight so you don't have to continuously patrol your processes.
- **Improve profitability by identifying revenue potential.** Once your data is under control, you can gain a more complete picture of your business from every angle – everything from customer relations to billing practices. This helps you pinpoint opportunities for top-line growth as well as optimize all customer interactions.
- **Go from data governance to big data governance.** SAS Data Governance can expand your data governance program to include Hadoop data, via Hive.
- **Manage spending across the enterprise.** Gaining a clear picture of money in and money out is crucial to controlling costs. With SAS Data Governance, you can more easily uncover your spending patterns, consolidate expenses and determine which purchases might be outside expectations.
- **Reduce risk by automating compliance management.** With unified, consistent reference data, you can more easily meet risk objectives. SAS provides the governance capabilities needed for compliance, including validation and integrity controls, as well as robust audit trails and lineage information.

Overview

SAS Data Governance involves a combination of technology and services that enable you to manage data and help your business achieve consistency and transparency for the long term.

Enterprise data governance

If you're like most organizations, you have a set of business policies and rules that apply to both new and existing data – but with multiple applications enforcing them. SAS

Data Governance unifies your efforts, providing a common data model and centralized data access for easier maintenance. As a result, you have a central business rule repository that governs data across all applications and databases.

Business data glossary

An intuitive, browser-based GUI makes it easy to create and maintain a single glossary of common business terms in the SAS Business Data Network. You can create

descriptions and associated conditions of usage, providing your IT team with guidance for business rules, all via a workflow-driven term-creation and editing process. This improves business and IT collaboration and helps you take a data governance program from concept to reality.

Lineage and metadata management

The patented SAS Data Governance solution provides data lineage capabilities via SAS Lineage, along with the SAS Business Data Network to help document and manage metadata across systems – from both SAS and third-party tools, transformation jobs and data models. SAS Lineage, a lineage visualization tool, allows you to explore relationships and conduct impact analysis to see how changes to one data element might affect information in other systems. With SAS Metadata Bridges, users can import third-party lineage metadata. This includes third-party ETL jobs, data transformation logic and data models.

Security and governance policy enforcement

The ability to not only keep your data secure, but quickly identify and correct problems, is integral to success. SAS Data Governance provides lineage capabilities for both technical and business metadata to watch for changes, assess impacts, query the logical types and update the metadata repository. Likewise, you can manage data access at a granular level, allowing only authorized individuals to view or change specific data elements.

Enhanced user experience

Data stewards not only need the ability to manage data, update processes and track progress, but also the ability to do it quickly and efficiently. SAS Data Governance provides a browser-based data management console that enables you to access all data governance interfaces from

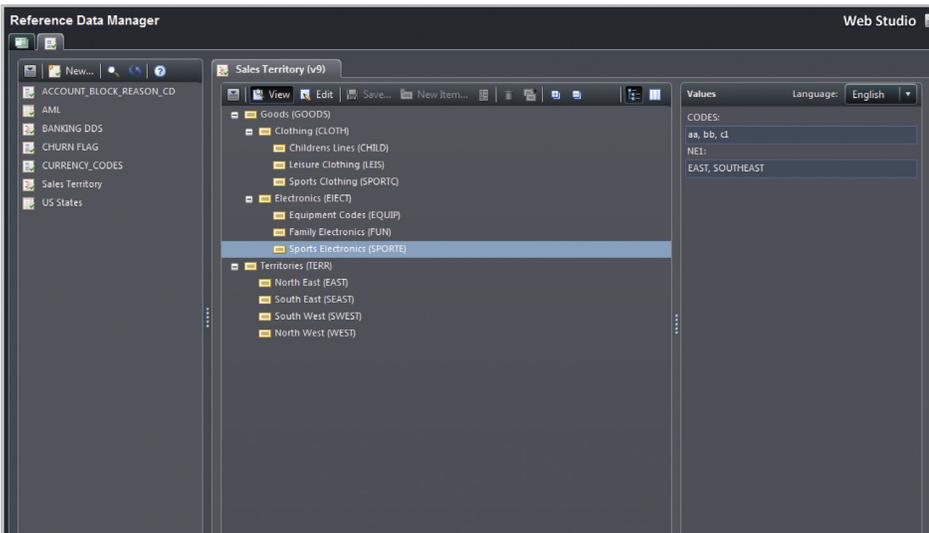


Figure 1. Reference Data Manager offers a web-based interface that can be used across departments and lines of business to store and manage lists, name and value pairs, and hierarchies referenced by data management processes.

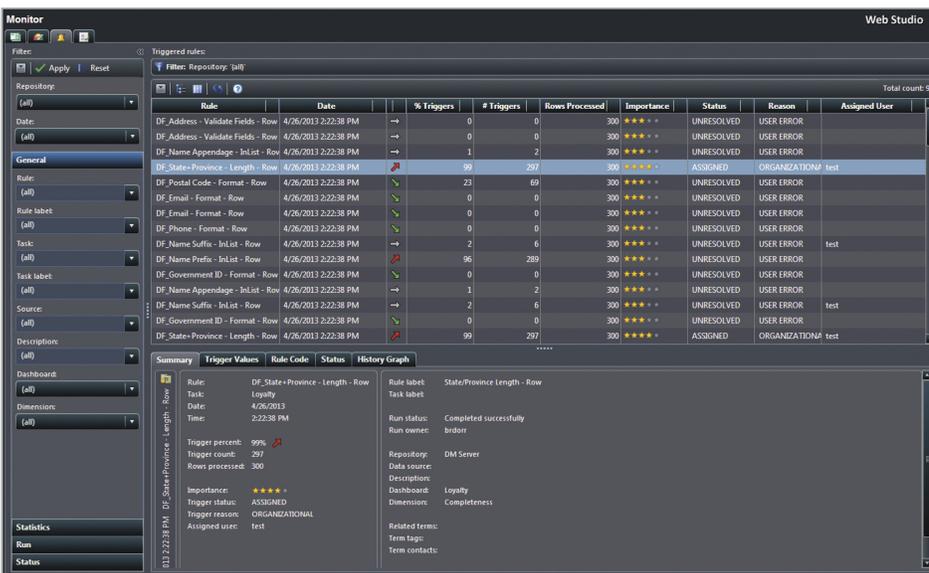


Figure 2. The SAS Data Governance monitor viewer provides the design, development and monitoring environment for proactive data governance so you can identify which records are causing rule violations and determine how to remediate them.

a single location. You'll have more control than ever when it comes to correcting issues, modifying procedures and establishing business rules.

Data remediation

Early detection of problems is critical to managing data. With data remediation, both business and IT personnel can quickly identify and correct issues before they cause bigger problems downstream.

Business rule validation

Your organization has standards for its data quality and business processes, and business rule validation helps enforce those standards. You can promptly identify and minimize the costs associated with previously undetected data quality issues and business rule violations. Plus, you can develop and refine all-encompassing business rules that govern your data in the same interface.

Integration with data quality and MDM solutions

SAS Data Governance fully integrates with SAS Data Quality and SAS Data Management to uncover relationships across tables, databases and different source applications for data that needs to be governed. And you can identify any data outliers and gain insight into source data integrity.

Key Features

Enterprise data governance

- Supports the consistent maintenance and use of data attributes through a common data model and centralized data maintenance and access processes.
- Enables ongoing conformance with rules and quality through data profiling and business rule monitoring.

Business data glossary

- Create and manage common business terms across the enterprise.
- Store and apply definitions to guide all data management processes.
- Reuse, manage and report on the use of a single glossary.
- Safeguard sensitive or protected information through read-only access to glossary content data.

Lineage and metadata management

- Lineage visualization and metadata management allow you to visualize and manage technical and business metadata - and understand the impact of changes to data elements.
- Automatically scan for changes in metadata and save them to the repository.
- View relationships and impact analysis across both SAS and third-party data transformation jobs, data models and other data elements.

Security and governance policy enforcement

- Role-based access to authorized data stewards helps you manage access to attribute content by role.
- Granular, role-based security allows you to secure access to sensitive information when creating and editing workflows.

Seamless user experience

- Web-based console enables the ability to search and display entities, as well as add, modify and retire entities and hierarchies.
- Data stewards can manage metadata for entities, attributes and transformations.
- Reporting capabilities enable critical metrics views and trends, tracking progress of data initiatives.
- A unified web-based console enables monitoring, launching and administering MDM, data governance, business rules and data stewardship components.

Data remediation

- Workflows for governing stewardship and other business processes can be designed, published and reused.
- Workflows define case management activities of issues flagged during data definition and monitoring processes, allowing for run-time drill-through of tasks associated with active workflows.
- When problems are identified during a load process, the remediation interface enables data stewards to review records and resolve issues.

Business rule validation

- Ensure data meets organizational standards for data quality and business processes.
- Identify, profile and validate reference data from any source system on any platform.
- Validate data against standard statistical measures and customized business rules.
- Create and manage business rules across processes.
- Maintain and manage history and data change management in a single interface.

Key Features (continued)

To learn more about SAS Data Governance, download white papers, view screenshots and see other related material, please visit sas.com/datagovernance.

Integration with data quality and MDM solutions

- Uncover relationships across tables and databases – and across different source applications.
- Discover and validate data patterns and formats and view relationships across elements.
- Enforce standards for both product and customer data sets.
- Detect data that falls outside predetermined limits and gain insight into source data integrity.
- Use an intuitive interface to build customizable business rules to find data that does not comply with established standards.
- Establish alerts to signal when data is out of compliance with established policies.

The screenshot shows the SAS Business Data Network interface. At the top, there's a menu bar with 'File' and 'Help'. Below it is a navigation pane on the left with various categories like 'All Terms', 'Notifications', 'My Drafts', and 'Search'. The main area displays a table of terms with columns: Term Name, Description, Type, Importance, Status, Workflow, and Last Modified. The 'ActualEducationalSettings' term is selected, and its details are shown in a pane below. The details pane includes tabs for 'Identification', 'Hierarchy', 'Associated Items', 'Notes and Contacts', and 'History'. The 'Description' tab is active, showing a detailed description of the term and its requirements. On the right side of the details pane, there are sections for 'Details', 'Tags', and 'Related Terms'.

Figure 3. SAS Business Data Network allows business and IT users to collaborate on the creation of business terms, establish links to the term and examine related data elements.

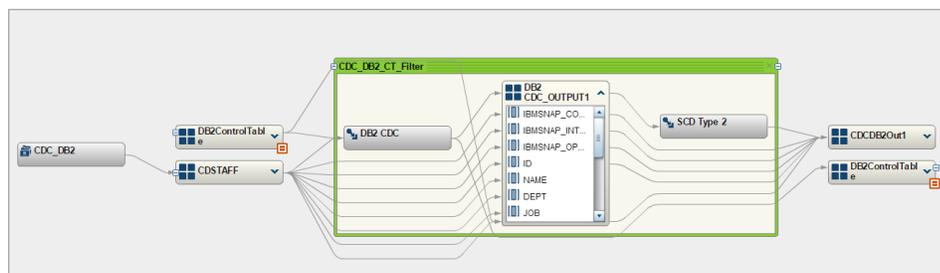


Figure 4. SAS Lineage provides a way to visualize relationships. It also provides impact analysis (above) to determine how changing one attribute might affect other reports, databases or systems, across both SAS and third-party tools and data elements.