



Low Friction Data Warehousing

WITH PERSPECTIVE ILM DATA GOVERNOR

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Foreword

I have had the pleasure of working with the Perspective ILM team for several years. As global award-winning Microsoft BI Partner of the Year and early adopters of modern technology, Nadav Rayman and his team never cease to impress me with the depth and quality of their enterprise BI solutions. Perspective ILM proactively completes the last mile of Microsoft BI and Analytics platforms.

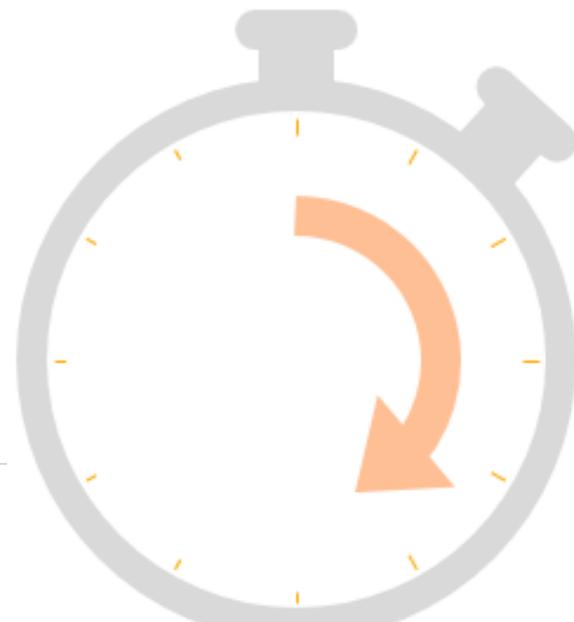
Perspective ILM Data Governor uniquely accelerates operational data store, analytical sandbox and data warehouse creation by eliminating most of the complex extract-transform-load (ETL) work that historically accounted for 80% of the work effort. Utilizing an agile orchestration design and a simple user-friendly web interface, data savvy analytics professionals can quickly yet responsibly deliver insights with Data Governor from disparate data sources with no complex coding.

Data Governor initial implementation takes a few days versus months using traditional approaches. New data sources can be added in a matter of minutes. Data Governor is not comparable to a traditional data warehouse automation or metadata management solution. The flexible design was inspired by taking a slightly different approach to applying more than 20 years of data warehousing design patterns. By combining the best of data warehouse automation with a light-weight design built specifically to democratize full life-cycle analytics initiatives, anyone that can query data is now able to stand up a unified, persistent data store for reporting.

If you are looking for an inexpensive way to speed up analytics development using technologies and skills that are widely available, then Data Governor by Perspective ILM just might be your ideal solution. In this brief white paper, we will introduce Data Governor, explore common use cases and success stories.



Jen Underwood
Founder, Impact Analytics, LLC



New Era of Rapid Data Warehousing

To keep up with the speed of business in a rapidly changing world of data, modern self-service analytics and data warehousing approaches have emerged. Expensive data warehouse automation offerings began entering the market several years ago. Although those solutions offered value, they had strong dependencies on traditional Kimball-based, dimensional data warehousing methodology. Organizations today have progressed to using rapid, agile reporting philosophies. In doing so, more flexible approaches that supplement Kimball designs for traditional self-service reporting include use of third-normal form persistent data stores, data vault and analytical sandboxes are being successfully embraced.

Eliminating Slow Reporting and Analytics Pains

Historically analytical projects were developed using slow, waterfall approaches and dimensional design patterns for reporting query optimization. Development times for creating a small subject area with one or two source systems could easily vary from two to four months or longer from project initiation to the first report.

It was not uncommon to hear of multi-million-dollar failed data warehouse projects and endless rants of reporting frustration. Data warehouse projects are complex, risky and slow to show value in a world that has little to no time to wait for results.

Organizations that needed to get insights much more quickly often created “shadow IT” projects using Microsoft Excel, Access, and data discovery tools such as Power BI, Tableau, Qlik Sense and TIBCO Spotfire. Self-service analytics tools did provide immediate reports but they did not address or eradicate the fundamental organization need for a unified reporting data source. As a result, “shadow IT” projects classically falter over time as more redundant data gets added by ambitious data analysts and inefficient data gathering processes grow too difficult to maintain.

“By simplifying a variety of data warehouse design patterns, ETL that often accounts for 80% of total development time was almost entirely eliminated.”

To address the business needs for immediate insights while concurrently establishing a long-term, reliable reporting and analytics foundation, Perspective ILM created Data Governor. Data Governor was designed to reduce dimensional database design tasks, tedious time-intensive ETL development, testing and ongoing maintenance activities using agile orchestration design. By simplifying a variety of reporting warehouse design patterns, ETL that often accounts for 80% of total development time was almost entirely eliminated.

By accelerating the data foundation work, analytical professionals are able to spend more time on higher value, highly visible tasks of making sense of the data. Traditional ETL developers can reduce time in mundane code and finally keep up with a never ending list of requests to add more data.

Data Governor’s easy user-friendly web interface allows anyone to build a operational reporting data store, data warehouse or analytical sandbox using standard SQL. Safeguards in the solution prevent data redundancy and quality issues. Through automation and point-and-click ease, data savvy analytics professionals can quickly yet responsibly deliver insights with Data Governor from disparate data sources with no complex coding.



Figure 1 Traditional Data Warehousing Tasks

Applying 20 Years of Lessons Learned

Perspective ILM has baked in more than twenty years of reporting best practices and value-added utilities into Data Governor. Data Governor’s persistent staging layer uses an elegant, code-free design. The efficient approach and flexibility of data retention are truly unique. Ultimately everyone benefits from time savings, nicer non-technical development experience, and faster access to new data sources for near real-time reporting on many types of data. Let’s explore Data Governor’s modern approach to data warehousing.

Delivering Immediate Value

Data Governor’s initial implementation takes a few days versus months using traditional approaches. New data sources can be added in a matter of minutes. Data Governor is not comparable to a traditional data warehouse automation or metadata management solution. By combining the best of data warehouse automation with a lightweight web design interface, Data Governor democratizes the entire life cycle of analytics initiatives.

“Data Governor’s initial implementation takes a few days versus months using traditional approaches. New data sources can be added in a matter of minutes.”

Exploring Data Governor

Solution Overview

Perspective ILM’s Data Governor is a data orchestration accelerator. It natively integrates with Azure SQL Data Warehouse, as well as on-premises SQL Server and Analytics Platform System

(APS), allowing flexibility for cloud, on-premises, or even a hybrid data warehouse solution. After basic installation and configuration, a non-technical web interface allows users to select data sources and tables to load. Optional historical change data tracking and audit logging is available.

With point-and-click ease, business users can schedule incremental or full data refreshes without having to write any code or access highly secure database administration tools. For groups with existing ETL or ELT logic in stored procedures, SQL Server Integration Services packages, PowerShell or operating system commands, Data Governor allows reuse of those existing data warehouse foundational assets without rework.

“reconciliation allows subject matter experts to improve data quality – a top pain point in modern analytics”

An enhanced reconciliation process design allows knowledgeable subject matter experts to repair and ultimately improve data quality – a top pain point in modern analytics environments. Data Governor’s dashboard provides users with up-to-date data load performance information.

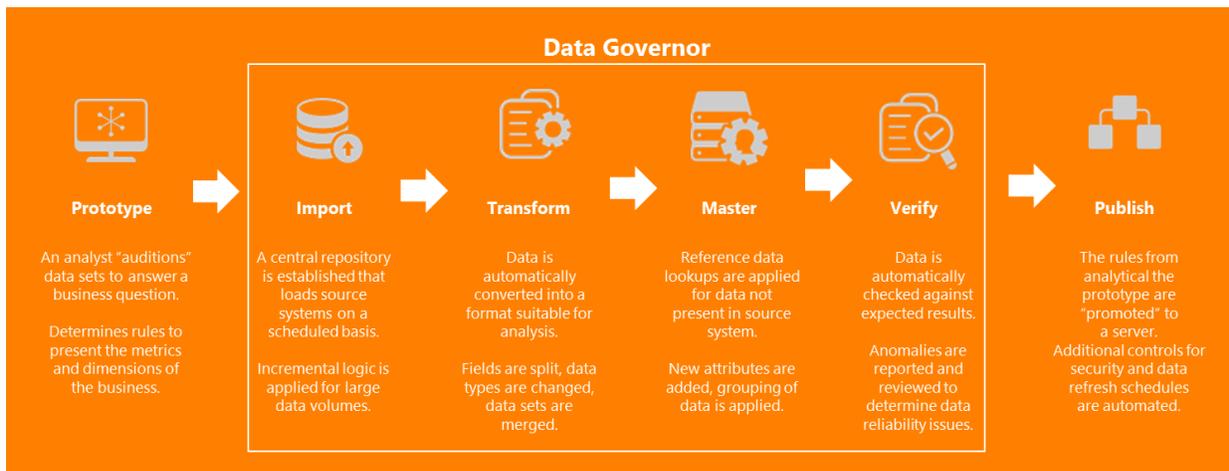


Figure 2 Managing the Lifecycle of Analytics Development

Technical Architecture

Since Data Governor is quick to set up and automatically reconciles data from numerous data sources, IT can focus on enabling the business, acquiring new data sources and securing data assets. Analytics teams can enjoy faster access to more data sources for near real-time reporting.

For IT professionals, Data Governor provides a secure, reliable, scalable and auditable reporting and analytics data foundation. Out-of-the-box tasks provide rapid data migration, cross data source reconciliation, master data synchronisation and single customer view processing. Intelligent data load script controls make sure jobs run in the right sequence and also fit into limited time windows for processing.

For analytical sandbox scenarios, Data Governor prevents non-technical users from loading redundant data and also ensures efficient, maintainable data movement processes with new or existing processes.

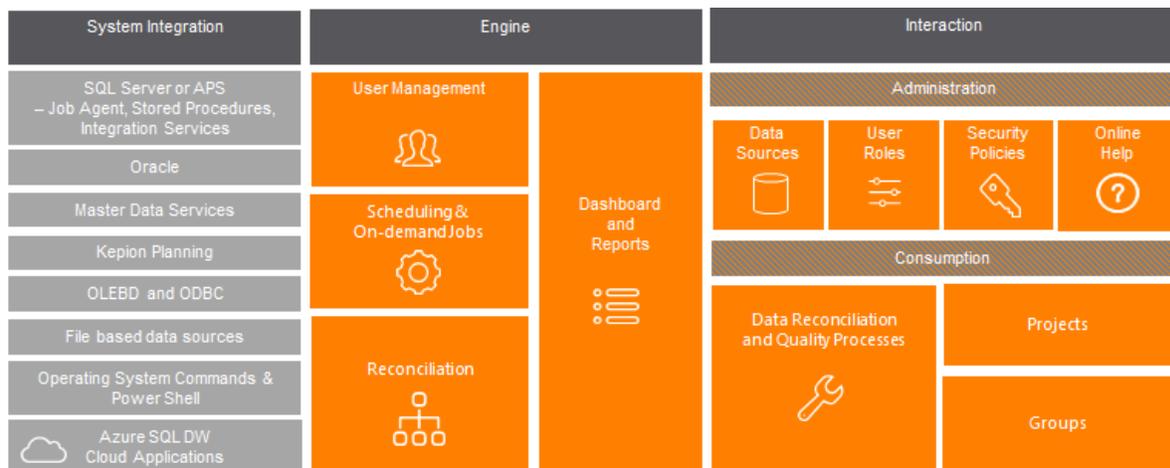


Figure 3 Logical Architecture

Capabilities and Key Features

Operational Transparency	Sequencing and Scheduling	Data Import and Export	Integration
<ul style="list-style-type: none"> Automated Instrumentation Data lineage Alerts and notifications Error reconciliation for data quality Job status reporting Auditing and change tracking 	<ul style="list-style-type: none"> Automated deployment Simple connection and parameter configuration Built-in scheduling dependency management Agnostic control of processing type Separation of roles and responsibilities 	<ul style="list-style-type: none"> Rapid addition of new data sources Bulk data load wizard Automated staging Incremental, full or change data processing Master Data Services synchronisation Change data detection and row versioning 	<ul style="list-style-type: none"> Excel and Text Files Command line jobs and PowerShell SQL Server, SQL Server APS and Azure SQL DW Oracle databases OLEDB/ODBC sources SharePoint Lists Master Data Services Kepon Planning

Summary

Perspective ILM's Data Governor provides a rapid, flexible solution for enabling data savvy business professionals to deploy and manage a scalable reporting and analytics foundation. In just a few days, users can enjoy the immediate value and flexibility of low friction data warehousing at a fraction of the cost of modern data warehouse automation.

If you are considering a data warehouse or analytical sandbox, don't overlook the immediate value of Data Governor in your information architecture. Analytics has never been easier, faster or more reasonable to deploy than it is today.

Additional Resources

For more information of a demonstration, please contact us at info@perspectiveilm.com

Alternatively, you can register to try Data Governor today:

http://www.perspectiveilm.com/DG_Tryitnow

- Perspective ILM website <http://www.perspectiveilm.com/>
- Perspective ILM blog <http://blogs.perspectiveilm.com/>
- Data Governor Videos https://www.youtube.com/playlist?list=PL-kR_DHRdpPk3tyS2OkNJwMum3PpRxhlf

