Informatica PowerCenter
Data Virtualization Edition

Deliver a Current, Complete, Trusted View of the Business within Days

Your organization has an unreliable view of the business. Even as new data and reports are needed within days, it often takes weeks to explain requirements and months to change a data warehouse or deliver on new integrations. It might then take several releases to get the right data or reports, further delaying project delivery. What’s more is when integration becomes so complex and inflexible that new projects break existing work without you knowing it. The result is an incomplete, old, and inaccurate view of the business that causes productivity to decline and costs to increase.

The Data Integration Foundation for Agility and Productivity

Informatica® PowerCenter® Data Virtualization Edition enables business and IT to deliver a current, complete, and trusted view of the business – within days rather than months. It serves as a high-performance, secure, agile data integration foundation for all integration projects. It includes all the capabilities of PowerCenter Standard Edition and adds features that increase productivity and agility. By leveraging this technology, companies have been able to reuse skills and deliver new projects up to five times faster and at a third of the cost. PowerCenter Data Virtualization Edition enables your organization to:

- Leverage a single environment for data integration and data federation
- Instantly reuse virtual views for any application or project without rework
- Ensure self-service and business-IT collaboration with role-based tools

Fast and Direct Access to Trusted Data for Data Integration Projects

PowerCenter Data Virtualization Edition supports a full range of data integration projects and use cases to support the various initiatives within the enterprise:

- **Business intelligence** — quickly augment the data warehouse with new data that the business needs and trusts for operational BI
- **Data warehouse prototyping** — jumpstart data warehousing projects with shorter development cycles and incremental delivery
- **MDM hub extension** — rapidly extend the master data in a MDM hub with transactional data to provide a complete view of all data
- **Data migration** — seamlessly support data migration projects by insulating reporting users from changes in the underlying data sources
- **Data services for SOA and integration** — deliver a reusable data abstraction layer for data access and management, and minimize point-to-point integrations

BENEFITS

- Rapidly deliver new critical data and reports across applications and warehouses
- Access, merge, profile, transform, cleanse data in a Web-based Analyst tool
- Collaborate with developers through a common repository and shared metadata
- Insulate consuming applications from change with a flexible, logical data model
- Deploy the same work seamlessly as virtual views or physical data integration

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Role-Based Tools that Enable Self-Service and Accelerate Business-IT Collaboration

PowerCenter Data Virtualization Edition provides role-based tools that share common metadata. Analysts directly access data across systems and collaborate with IT to create business rules that leverage the any-stage data profiling, advanced transformations, and real-time data quality capabilities of the Informatica Platform.

- **A Web-based self-service analyst tool** for analysts to define rules, profile data, and directly access the data they need, without IT intervention
- **A powerful Eclipse-based development environment** for IT to graphically discover, access, merge profile, transform, optimize, and deploy reusable data services
- **A Web-based, global administration console** designed for distributed environments that centralizes all administrative, security, operational, and service-monitoring tasks
- **Reusable mapping templates** for designing business/transformation logic in a modeling tool, such as Visio, and automatically generating data integration mappings
- **A comprehensive library of rich ETL-like transformation objects** for creating and extending context-independent, reusable integration objects
- **An extensive expression library** for expanding the existing set of predefined expressions and creating user-defined functions
- **A robust visual debugger** that accelerates iterative development and minimizes error-recovery logic for design and run-time environments

Key Features

PowerCenter Data Virtualization Edition enables the bottom-up or top-down creation of Logical Data Objects.
Integrated, Any-Stage Data Profiling of Federated Data

Using PowerCenter Data Virtualization Edition, analysts, architects, and developers can quickly profile federated data and integration logic at any stage, and document with valuable metadata. Profiling results from data sources and integration logic are shared with business users to ensure their requirements are being met early and throughout the process.

Integrated, On-the-Fly Data Quality on Federated Data

PowerCenter Data Virtualization Edition can leverage pre-built native data quality rules (e.g., cleansing, enrichment, matching, and standardization) that can be reused across projects without rework. You can execute data quality rules as a service on the fly and in real time to federated data, without pre-processing, staging, or physically consolidating the data.

Reusable Logical Data Objects

PowerCenter Data Virtualization Edition uses an open, top-down and bottom-up model-based and metadata-driven approach to build reusable logical data objects (LDO) based on business entities (e.g., CUSTOMER, PRODUCT, and ORDER). You can quickly deliver a standards-based data abstraction layer to insulate consuming applications from changes in underlying data sources.

Single Environment for Data Integration and Data Federation

PowerCenter Data Virtualization Edition provides a single, optimized, high-performance environment for both data integration and data federation. To ensure high-performance, you can leverage a query-plan interface as well as numerous optimization and caching capabilities typically used in data federation. The edition also enables you to develop and reuse the same data integration logic for data federation, ETL, or Web services—instantly and without any rework.

PowerCenter Data Virtualization Edition enables any stage data profiling of both the data sources as well as integration logic.
Integrated Data Federation
PowerCenter Data Virtualization Edition sources and combines data from multiple heterogeneous data sources into a single virtualized view in real-time, so that it appears as one data source to consuming applications. Organizations can create a virtual view of data with a high-performance data federation engine, which supports advanced transformations, including data quality in real time along with sophisticated caching techniques, optimizations, and security typically needed in data federation. The Business gets direct real-time access to new, time-sensitive, trusted and operational information.

Built-In Web Services Support
PowerCenter Data Virtualization Edition leverages Web services protocols, including XML, WSDL, and SOAP, REST to access data, metadata, and data integration workflows within an SOA. This edition provides a Web services hub for centralized monitoring and reporting along with built-in support for WS-Security, a built-in WSDL editor, and a Web services testing tool. Dynamically Scalable Data Services

Dynamically Scalable Data Services
PowerCenter Data Virtualization Edition allows existing data transformation logic to be exposed and reused as data services. It automatically scales Web services to support a large number of concurrent workloads, typical of a shared services Integration Competency Center (ICC) environment.

Universal Data Access
PowerCenter Data Virtualization Edition enables a single approach to accessing data in a wide variety of systems and formats. When complemented by Informatica PowerExchange®, PowerCenter Data Virtualization Edition provides access to:

- Structured, unstructured, and semi-structured data; relational data
- Mainframe data, file data, standards-based data
- Data in packaged applications and Cloud
- Big data

Data Integration Services
With PowerCenter Data Virtualization Edition, your IT organization can access, transform, and deliver data across the enterprise without generating code or having to hand-code data integration procedures. The edition scales to support large volumes of data over multiple concurrent sessions.

Global Metadata Services
PowerCenter Data Virtualization Edition defines, modifies, and enables reuse of data integration procedures by storing and managing data models, transformations, workflows, and other artifacts. It integrates data by combining metadata-driven data integration logic with a high-performance transformation engine.

“Informatica offers the next-generation of data virtualization technology that overcomes all the limitations of traditional data federation and delivers many unique capabilities. It saves time as I can reuse integration logic for all my applications without rework. No other product can do this today.”

– Robert B. Myers, Manager BI Architecture and EDW Solution Architect, HealthNow NY
Integration Workflows
PowerCenter Data Virtualization Edition manages and tracks the complex flow of data across transactional systems, databases, and other data sources through visual tools. Using its built-in, time- or event-based scheduler for automated, “lights-out” operation, your IT team can schedule and execute data integration that doesn’t intrude on business operations

Centralized Data Security and Governance
PowerCenter Data Virtualization Edition supports the creation of policies and rules for data security, privacy, quality, and data freshness. IT users can centrally enforce and manage policies and rules across federated data for all data services in a single, unified environment.

Reference Table Manager
Through its Reference Table Manager, PowerCenter Data Virtualization Edition simplifies and streamlines the creation and management of all types of reference data, including default values, valid values, and cross-reference mapping data values. Business analysts and other subject matter experts use it to create, edit, and maintain reference data tables. IT organizations then use these reference tables to migrate data and to manage lookup tables. Reference Table Manager includes:

- Manual edit capabilities to edit reference data prior to data migration
- Audit trails to document changes to reference tables
- Import/export capabilities that handle reference tables as .csv

PowerCenter Data Virtualization Edition offers numerous performance optimizations typical to data federation and includes a query plan interface.
Mapping Architect for Visio

The Microsoft Visio-based data-flow design tool within PowerCenter Data Virtualization Edition simplifies and streamlines the creation and management of data integration mappings. It lets your IT organization automatically create these mappings with PowerCenter tools, templates, and resources. Reverse-engineering capabilities convert PowerCenter mappings into Visio templates to document mapping processes or to kick-start reuse.

Mapping Architect for Visio also includes:

- Reusable best-practice mapping templates based on Informatica Velocity
- Access to open community of mapping template contributors in the Informatica Communities
- Predefined wizards and templates to easily create common data integration mapping patterns, such as slowly changing dimensions
- Custom mapping templates to simplify and streamline mapping generation

Support for Mixed Versions of Application Services

PowerCenter Data Virtualization Edition supports mixed versions of the repository service, integration service, and Web services hub in a single PowerCenter domain. This edition simplifies the upgrade of application services to newer versions incrementally and the administration of multiple application services from a single console.

Key Features

Informatica offers a promising service-oriented data integration approach to significantly reduce the complexity of our underlying systems and also increase time-to-delivery of a trusted single-view of all our operational data, to meet our business goals.

– Jenny Mangasarian, Project Manager, Dean Health Plan

PowerCenter Data Virtualization Edition supports the creation of SQL-based data services.
LDAP Integration
PowerCenter Data Virtualization Edition supports secure authentication of users and groups through an enterprise directory system. It provides a choice for authentication between PowerCenter or LDAP.

Enterprise-Grade Security
With PowerCenter Data Virtualization Edition, you get granular privileges and flexible permissions management to ensure security, particularly across large, globally distributed teams. With enterprise-grade security, your IT organization can limit user access to only the minimally necessary functionality and data, reducing the risk of potential security breaches.

Operating System Profiles
PowerCenter Data Virtualization Edition ensures secure access to file system resources through PowerCenter workflows executed by different departments and users. The software tracks and monitors usage by specific groups within a shared environment, such as an Integration Competency Center, to facilitate departmental charge backs.

Extended Variables and Parameterization
PowerCenter Data Virtualization Edition improves reusability and developer productivity by providing flexible access to design and run-time metadata within the data mapping, session, and workflow logic.

“Informatica [software] delivers timely access to an accurate and consistent 360 degree view of all our customer data... It provides the ideal service-oriented data integration platform to fit our enterprise architecture strategy by delivering data as a service.

– Jeffrey Gheen, Senior Manager, Business Analytics, BMC Software
Key Benefits

Faster Access to New Critical Data and Reports for BI
PowerCenter Data Virtualization Edition enables analysts to access new critical data and reports—without IT involvement. Architects and developers can quickly reuse common logical data objects, without requiring rework across BI projects. The edition allows IT to deliver a single, trusted view by rapidly discovering and analyzing all data and then quickly creating a virtual view without physical data movement. Business and IT users can use an information catalog to avoid endless searches for data, transformations, and integration logic.

Lower Development and Maintenance Costs
The edition encourages the reuse of existing Informatica skills and data integration logic for all data access, across all BI projects. IT can standardize on a single platform for both data integration and data federation with integrated data profiling. The edition also enables IT to cut development and maintenance costs in half by providing rich ETL-like complex data transformations and data cleansing. Organizations overall can reduce the cost of change by insulating consuming applications from underlying data changes.

Seamless Reuse of Data Services Across BI and Other Projects
With PowerCenter Data Virtualization Edition, your organization can seamlessly and instantly reuse data services across BI, MDM, and SOA projects. You can augment the data warehouse with new data for operational BI and composite applications, and can deliver value by enabling reporting against consolidated data across multiple data warehouses. In an MDM project, the edition enables you to rapidly extend the MDM hub with transactional data to provide a current, single view of all data. You can also seamlessly support data migration projects by insulating reporting users from changes in the underlying data sources.

Increased Productivity and Rapid Prototyping
The edition involves business users in data integration earlier, which accelerates project rollout, provides early validation, and minimizes rework. Your organization can reuse data integration and data quality logic seamlessly and instantly for all applications and BI projects to eliminate redundant work. Architects and developers can use a zero-code model-driven environment to develop and deliver data services for a variety of users. The edition also provides developers with a rich set of pre-built rich ETL-like complex data transformations to enhance their productivity, and allows organizations to rapidly prototype reports and data warehouses.

Better Governance and Reduced Risk with Early Business Buy-In
With PowerCenter Data Virtualization Edition, your organization can ensure that the data and reports will meet SLAs and compliance requirements by easily setting and consistently enforcing policies. It also ensures compliance by validating actual data consumption with data lineage, and with its integrated data quality capabilities, prevents dirty data from contaminating downstream applications and systems.