



Unisys Data Exchange 8.0

Product overview

Organizations are overwhelmed by data access demands. Customers, suppliers, and employees are demanding 7x24x365 access from mobile devices. Business units need support for digital channel initiatives. Data from multiple systems must be consolidated to satisfy regulatory requirements.

Unisys Data Exchange for ClearPath® MCP and OS 2200 environments is a data integration software that is designed to help organizations address these issues.

Data Exchange propagates selected data from one data store to another data store. While propagating the data, Data Exchange applies transformations to the data as needed by the business processes and the applications that support them.

The data propagation and transformation capabilities of Data Exchange are designed to facilitate timely access to data for decision support, additional business processing, and AI-driven insights, while minimizing the impact on the online transaction processing environment. Users can leverage the propagated data for machine learning models, predictive analytics, and AI applications, enabling automation, intelligent decision-making, and enhanced operational efficiencies.

Data Exchange can help you to reduce software development costs by avoiding the development and support of your own data integration and transformation tools. Data Exchange is designed to work with existing applications and databases and help you avoid costly changes to them.

Data Exchange is also designed to work with a variety of data stores and operating systems.

General features:

Transformation definition

Data Exchange has a transformation definition facility that allows you to select data items in the source data store and to determine how and where each of them gets placed in one or more target data stores. You can customize transformations to satisfy your business requirements by defining functions for manipulating the data. A source or target data store can be used in multiple transformations as needed to satisfy your business requirements.

Bulk data transformations

You can use the bulk data transformation facility to propagate and transform historical data from a source data store to one or more target data stores.

Changed data transformations

A changed data transformation is a near real-time process to propagate and transform selected changed data from a source data store to one or more target data stores. Once you start a changed data transformation, Data Exchange provides a continuous feed of changed data from the source data store to the target data store. Data in the target data store can be used by other applications. You can manage operations, such as starting and stopping a changed data transformation, by using the Data Exchange Runtime Administration facility.

Efficiency

Data Exchange is designed to be efficient. It enables you to select the data items to propagate for propagating only the changed data. In addition, you can define filters so that only the data that satisfies certain criteria are propagated. These features help you avoid the additional overhead associated with propagating data that is not needed in the target data store.

Data Exchange also offloads transformation processing to a server that is separate from the

servers hosting the source and target data stores. This is designed to minimize the impact of Data Exchange on database performance.

Ease of use

Data Exchange provides tools with graphical interfaces for transformation definition and administration. Programming skills are not required to use these tools.

Data store pairings

Data Exchange 8.0 supports the following source and target data store pairings:

Source	Target
Enterprise Database Server for ClearPath MCP	Microsoft SQL Server
Enterprise Database Server for ClearPath MCP	Oracle Database
Enterprise Database Server for ClearPath MCP	Apache Kafka
Microsoft SQL Server	Enterprise Database Server for ClearPath MCP
Relational Database Server for ClearPath OS 2200	Microsoft SQL Server
Relational Database Server for ClearPath OS 2200	Oracle Database
Relational Database Server for ClearPath OS 2200	Apache Kafka
Network Database Server for OS 2200	Apache Kafka

Data Exchange software components:

Development Workbench

The Data Exchange Development Workbench (DDW) is a Microsoft Windows-based application designed for defining transformations between a source data store and target data store(s). You also

use DDW to deploy transformations to the Data Exchange Runtime Administration facility.

Data Exchange Management Studio

The Data Exchange Management Studio (DEMS) enables you to define and manage user access to various Data

Exchange components. It also enables you to turn on secure connections between the Data Exchange internal Windows components.

Runtime Service

The Runtime Service is the heart of Data Exchange. It applies transformations to the data that is retrieved from a source data store and sends it to one or more target data stores.

Runtime Administration

The Data Exchange Runtime Administration facility enables you to use a standard Web browser to control and monitor all runtime activities involving the Runtime Service and host components.

Data Exchange MCP Service

The Data Exchange MCP Service runs on a ClearPath MCP server. When an Enterprise Database Server is a source data store, the Data Exchange MCP Service monitors the audit trail associated with an Enterprise Database Server data store and is responsible for passing changed data to the Runtime Service.

When an Enterprise Database Server is a target data store, the Data Exchange MCP Service provides support to the Runtime Service to update Enterprise Database Server data stores.

Data Exchange OS 2200 Service

The Data Exchange OS 2200 Service is a batch processing component running on a ClearPath OS 2200 server.

When executing a changed data transformation, the Data Exchange OS 2200 Service monitors the audit trail associated with a Relational Database Server and Network Database Server. It passes changed data to the Runtime Service. The Data Exchange OS 2200 Service is also responsible for providing the data, in bulk, for bulk data transformations.

Data Exchange SQL Server Service

The Data Exchange SQL Server Service is used to support changed and bulk data transformations when a Microsoft SQL Server database is a source data store. The Service monitors the SQL Server

database's Change Data Capture (CDC) tables and passes the changed data information to the Runtime Service.

Configuration requirements:

Refer to the Unisys Data Exchange Hardware and Software Specifications for ClearPath MCP or OS 2200 Users on support.unisys.com for detailed hardware and software requirements, such as specific software editions and release levels.

Enterprise Database Server for ClearPath MCP Data Store

- ClearPath Forward® Libra 4500, 4501, 4600, 6500, 6501, 6600, 8500, 8501 or 8600, ClearPath Financial Services FS800, FS801, and FS860 servers, or ClearPath Software Series product
- ClearPath MCP operating environment
- Enterprise Database Server for ClearPath MCP (included in the MCP operating environment)

ClearPath Application Integration Services, Enterprise Edition

Relational Database Server for ClearPath OS 2200 Data Store

- ClearPath Forward Dorado 4400, 4500, 4600, 6400, 6500, 6600, 8400, 8500 or 8600 servers, or ClearPath Software Series product
- ClearPath OS 2200 operating environment
- Relational Database Server for ClearPath OS 2200
- Connectivity Services

Network Database Server for ClearPath OS 2200 Data Store

- ClearPath Forward Dorado 4400, 4500, 4600, 6400, 6500, 6600, 8400, 8500 or 8600 servers, or ClearPath Software Series product
- ClearPath OS 2200 operating environment
- Network Database Server for ClearPath OS 2200
- Connectivity Services

Microsoft SQL Server Data Store

- Computer with a network connection that can run compatible versions of Microsoft Windows Server and Microsoft SQL Server
- Microsoft Windows Server
- Microsoft SQL Server

Oracle Database Data Store

- Computer with a network connection that can run compatible versions of Microsoft Windows Server or Linux and Oracle Database
- Microsoft Windows Server or Linux
- Oracle Database

Apache Kafka Messaging Platform

- Computer with a network connection that can run compatible versions of Linux and Apache Kafka
- Linux

Development Workbench, DEMS, Runtime Service, Runtime Administration, and DE Agent for SQL Server

- Computer with a network connection that can run compatible versions of Microsoft Windows and Microsoft SQL Server
- Microsoft Windows
- Microsoft SQL Server

Product Information

[Unisys Data Exchange Installation and Configuration Guide for ClearPath MCP Users](#)

[Unisys Data Exchange Installation and Configuration Guide for ClearPath OS 2200 Users](#)

[Unisys Data Exchange Hardware and Software Specification for ClearPath MCP Users](#)

[Unisys Data Exchange Hardware and Software Specification for ClearPath OS 2200 Users](#)

[Unisys Data Exchange Online Information Center](#)

[Unisys Data Exchange Performance Report](#)

[Unisys Data Exchange Performance Counters](#)

[Unisys Data Exchange Performance Guidelines](#)



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