TERADATAexpress Jumpstart Solution

A fast, simple, and affordable way to jumpstart your Teradata-based application development with expressor Studio

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expressor software's TERADATAexpress Jumpstart Solution, www.expressor-software.com/teradata, provides Teradata developers with a powerful, fully integrated end-to-end solution that is ideal for developing and testing new Teradata-based applications that integrate and normalize data from a range of data sources, in a free, local development environment.

Teradata Express is the no-cost developer version of the Teradata Database that runs on Windows, Linux, and Amazon's EC2 cloud service. expressor software's Community Edition, based on expressor Studio, is an easy-to-use, free Windows-based desktop ETL tool that allows users to quickly extract, transform, and load data into the Teradata Express database.

The TERADATAexpress Jumpstart Solution also includes video and web-based tutorials, sample applications, software download links, and detailed instructions to speed and simplify the development of complete, end-to-end Teradata Express and expressor Studio-based analytical database applications.

Key Benefits:
- Provides the ideal development environment for Teradata-based applications that incorporate data from various data sources.
- Provides full forward compatibility for upgrades to either product.
- Delivers seamless integration of expressor and Teradata, including built-in connectors and high-speed loading.
- Offers video- and web-based tutorials, sample applications, and other documentation to speed and simplify application development.
- Is free and easy to download, configure, learn, and use.

expressor Studio – Simplifying Data Integration

expressor Studio is the central component of the expressor Data Integration Platform, and offers a simplified, powerful, and affordable approach to data integration and ETL that is tightly integrated with the Teradata Database. Anyone can experience all of the benefits of expressor Studio by visiting http://www.expressor-software.com and downloading and evaluating expressor Studio at no cost.

expressor Studio…

- is easy to download, install, learn, and use
- is tightly integrated with Teradata, including Teradata Express
- offers a familiar user interface with a Microsoft Office look and feel
- enables drag and drop configuration of applications and workflows
- uses simplified, graphical tools for defining data mapping and business rules
- enables the creation of reusable artifacts, configurations, and business rules
- makes it easy to connect to a wide range of data sources and targets
- insulates applications from—and adapts to—changes to data sources and targets
- offers a powerful scripting language, *expressor Datascript*
- provides built-in field validation and error handling, enforcing consistency
- supports a "try-before-you-buy" approach to scale with your business as it grows
- offers annual subscription-based product and application support
- includes product upgrades and provides full-forward version compatibility

Teradata Express

Teradata Express is a no-cost, full-featured version of the Teradata Database for developing and testing Teradata-based applications that includes…

- full Teradata Database functionality (limited to 10 GB database size)
- Teradata Tools and Utilities including Teradata Manager, Teradata Analyst Pak, Teradata Parallel Transporter, Teradata Load and Unload Utilities and much more
- Teradata Warehouse Miner
- complete Teradata User Documentation

Key expressor Studio Features

Ease of Use
Download, install, build, and run your first expressor Studio application in minutes.

expressor Studio is a desktop ETL tool that is easy to download, install, learn, and use. It provides a familiar user

interface with a Microsoft Office-like look and feel. Studio enables drag and drop configuration and uses simplified, graphical tools for defining reusable data mappings and business rules. It provides built-in field validation and error handling, making it easy to enforce consistency.

Reuse Everything
Define and reuse any project artifact from simple file connections to complex data flows and business rules.

expressor Studio is designed with reuse in mind. It allows you to design and reuse transformation operators, data flows, data source connections, and transformation logic. Moreover, project artifacts can be shared and reused across multiple projects.

Powerful Connectivity
Easily access, transform, and integrate data from business systems including Teradata and all major database systems, file-based sources, and cloud data.

Unlike many other ETL products, expressor avoids requiring hundreds of different connectors, many of which are subtle variations on similar components. Instead, the expressor platform contains as few connections as possible, and each one is highly configurable and includes all of the parameters needed to get your data in and out of almost any data source.

Rich Transformations
Perform simple to complex transformations optimized for performance.

expressor Studio, offers several powerful, out-of-the-box transformation operators for virtually any type of transformation including aggregation, joins, look-ups, and complex filters. Each transformation operator is optimized for performance and can simultaneously support several types of transformation rules ranging from simple Microsoft Excel-like expressions to complex database look-ups and scripting functions.

Powerful Scripting
Extend your transformation logic with expressor Datascript, a powerful, easy-to-learn scripting language.

expressor Studio enables the configuration of transformation operators through drag and drop interfaces that let you process your data with speed and power. But when you need to extend a transformation through a script to perform more intricate data manipulations such as smart key processing, expressor's powerful Datascript language enables you to write custom logic that provides total control of the data transformation process.

Simplified Mappings
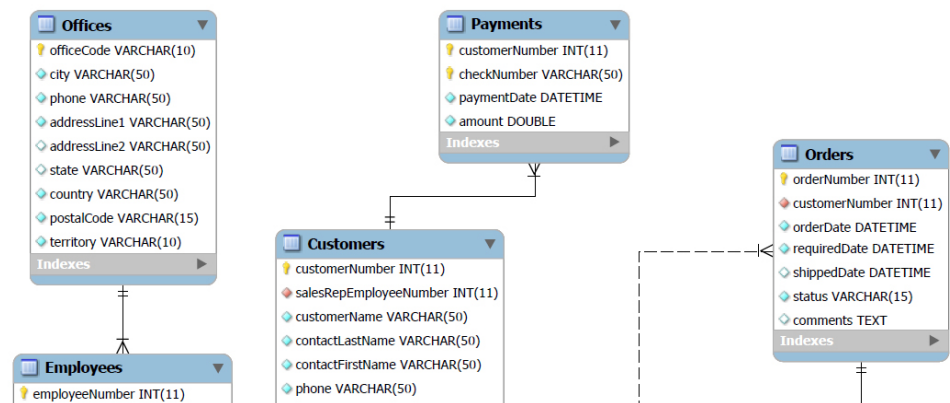Simplify data mapping with expressor's unique mapping approach.

expressor Studio simplifies the typical, highly complex data mapping process by replacing the point-to-point mapping done in traditional ETL tools with a unique, streamlined mapping structure achieved through the use of reusable business data objects. By mapping source and target datasets to business data objects, expressor automatically reconciles data type discrepancies.

Business Scenario – Migrating a MySQL-based application to Teradata Express

A company that resells rare collectible automobiles processes payments via a MySQL-based application integrated with a Microsoft Excel-based reporting interface. The company has a new requirement to move its MySQL database to the Teradata database platform, while continuing to use the existing Excel-based reports.

The data model for the application consists of nine tables, including tables for Offices, Employees, Payments, Customers, Orders, OrderDetails, Products, and so on. A partial schema for the data model is shown below:

Figure 1: Data Model (partial)

One of the report screens populated from the data in the MySQL database appears below.
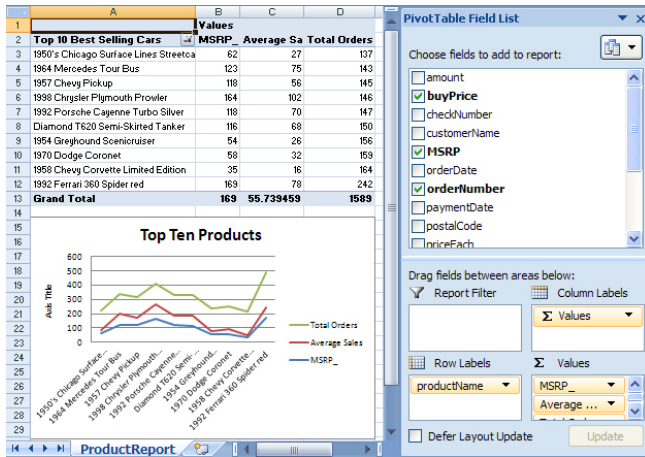

Figure 2: A typical daily report

To successfully migrate the application from MySQL to Teradata, the following steps are required:

- Create a Teradata database with a data model that corresponds to the existing MySQL data model.
- Migrate the existing data from MySQL to Teradata.
- Change the existing ETL processing to load new data into Teradata instead of MySQL.
- Change the Excel reports to report on data in Teradata instead of MySQL.

To develop and test the Teradata-based version of the application, the company downloaded the no-cost Teradata Express 13.0 application for Microsoft Windows from the Teradata website.

Since the expressor Studio application was built by defining reusable schemas, connections, and types in a single shared library, the existing artifacts can be easily reused with the Teradata database. For example, since the Teradata table schema is identical to the MySQL schema, a simple, existing expressor dataflow that loads data into MySQL tables is copied and the "connection" property is changed from MySQL to Teradata, and the expressor dataflow automatically creates the tables in Teradata and migrates the data into them.

Similarly, the dataflows that process the new daily payments and automatically send a custom confirmation letter for each payment are modified to point to the new Teradata database by changing the connection property to Teradata using a simple pull-down menu interface in the expressor GUI.

Finally, by changing the connection in Excel from MySQL to Teradata, the reports are automatically modified to pull data from the Teradata database.

This business scenario illustrates how expressor's unique approach to data integration makes it fast and straightforward to migrate an existing MySQL application
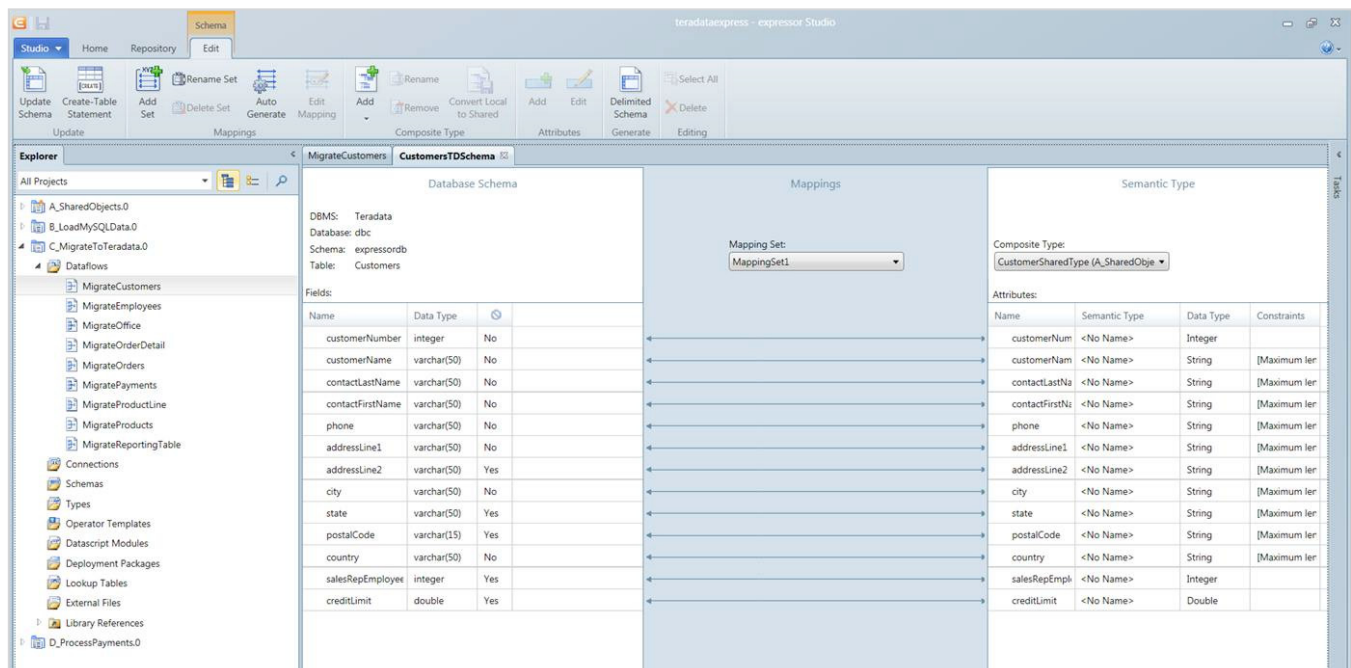

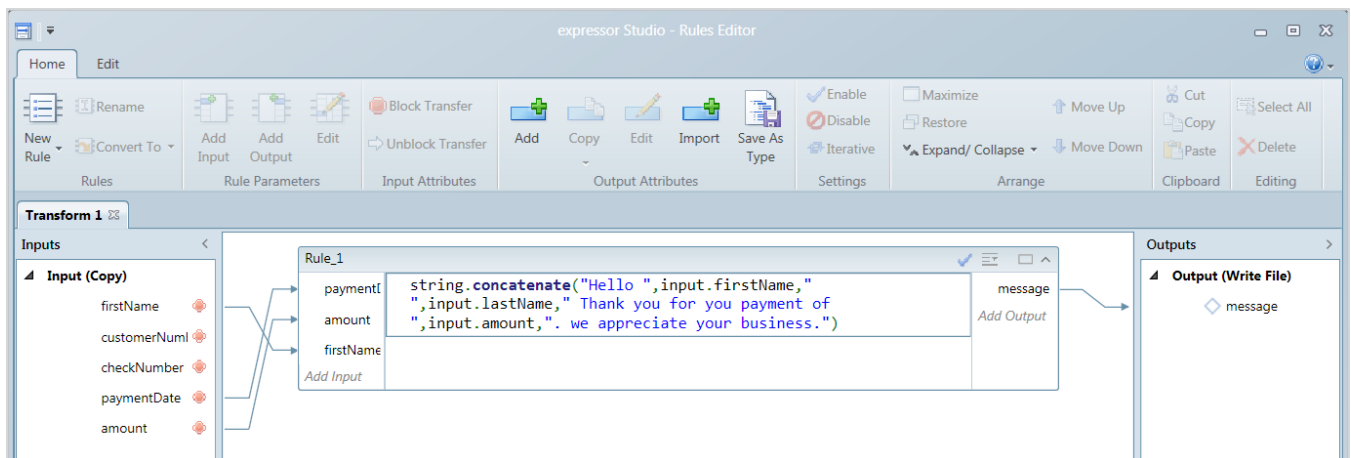*Figure 3: expressor dataflow to migrate data for the Customer table*

Figure 4: expressor rules editor defining the confirmation letter

for use with Teradata and Teradata Express by simply reusing existing artifacts, and how expressor's deep integration with Teradata automates and simplifies development and processing tasks for Teradata-based applications.

About expressor software

At expressor software, we're simplifying data integration by providing software that is easy to use, powerful, and affordable—enabling organizations to accomplish more with fewer resources. We dramatically simplify the vast majority of basic data integration tasks—making it far easier to map and move data from one location to another. And, when data integration becomes more complicated—requiring various types of data transformations—we help make data integration and ETL projects more flexible and efficient by enabling the creation and subsequent reuse of powerful artifacts, configurations, and business rules. This means that when a complex business data challenge is solved once, the solution can be reused.

expressor has a rapidly growing community of 14,000 unique expressor Studio download users. Leading organizations such as SKECHERS USA, American Tower, Viverae, Western World, LABVANTAGE, and BHI Energy have adopted expressor's affordable data integration platform for server deployment to help them integrate on-premises and cloud data sources with their business critical applications.

expressor software is headquartered in Burlington, MA. For more information, please visit our website at www.expressor-software.com.

expressor ® **Simplifying** Data Integration