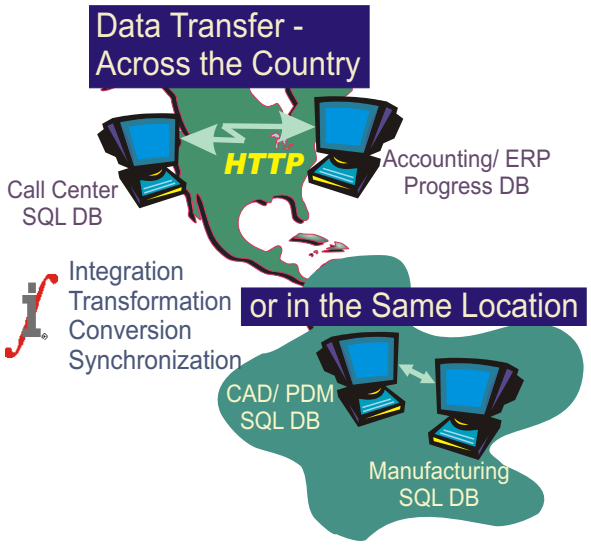
Integral Enterprise DataBridge™

Integration In Your Hands Today … Not Tomorrow

The fact is that there are many excellent software applications that are available to address your company's unique requirements. A situation may be that you have selected several applications to address various needs, but the one drawback is that there are islands of data and duplicate data stored in each of these separate systems. With duplicate data in multiple systems, there are increased costs associated because of the additional time needed to update every system, which can lead to an increased chance of data entry error into the multiple systems.

Another possibility could be that you have decided to postpone from doing upgrades to your systems because the cost to reapply the modifications for the integration between your multiple systems is too high.



The Integral Enterprise DataBridge™ (IED) addresses these challenges. IED was not simply an application that was redesigned using Microsoft .NET technology, but IED was engineered and designed utilizing the Microsoft .NET platform. IED locates, transforms, and integrates the various data sources that are required to give enterprise users the needed answers to critical real-time information. As your company grows, merges, or acquires other companies the task to identify and use this information by the end–users requires an easy to use tool to manage this data from diverse information sources in an efficient and cost effective manner. IED is the application to address your needs of today and of tomorrow.

Integration With Proven Technology

With Integral Enterprise DataBridge, you can now integrate two or more dissimilar applications, in the same location or anywhere across the globe. In the past, integration of dissimilar applications was only possible with custom programming. Integration with IED alleviates many of the integration complexities of custom programming.

IED is designed as a tool for both retrieving data and posting activities. It leverages our proven Integral Enterprise Viewer (IEV) code and technologies. In fact, the product can use the Integral Enterprise Viewer to pull data. Views are designated in the IEV to indicate where the data is coming from (regular flat files, hierarchical and/or XML files can be used). Data is presented as a Windows Service to handle scheduled transfers off-hours and /or at scheduled intervals and allows output to XML documents. Deployment can be local or as industry standard Web protocols (including File Transfer Protocol, FTP) to allow for scheduled transfers over the Internet. Companies looking to use products like Microsoft BizTalk for e-commerce and B2B applications will find the new DRI product the prefect tool to assist in the successful implementation of these types of applications.

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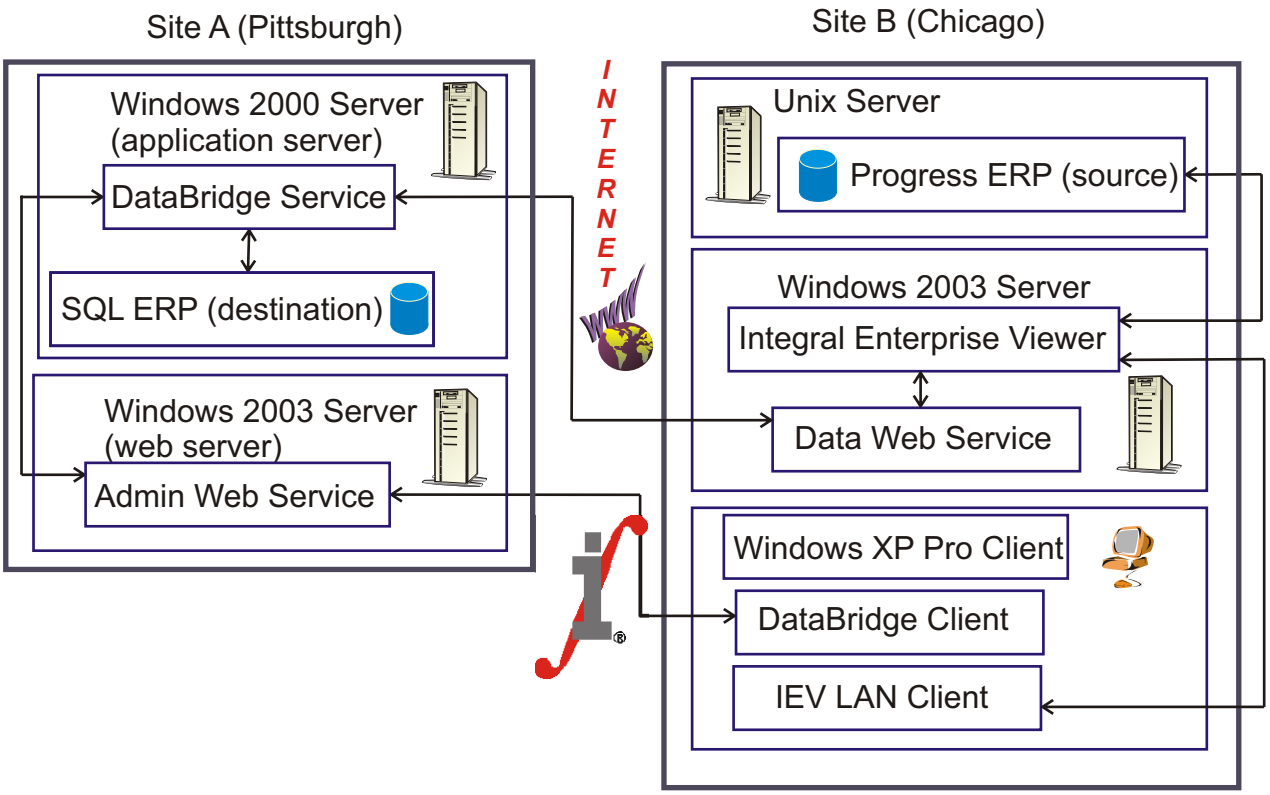
Integral Enterprise Viewer™ and Integral Enterprise DataBridge™ are members of the Integral Enterprise Data Access Series®

Integral Enterprise DataBridge Example Flow



The goal of this example flow is to help visualize how Integral Enterprise DataBridge works. Since configuration is flexible, an actual installation may look different.

In this scenario, a system administrator has been given the task of syncing two distinct but related databases. One is local to the home office in Chicago and is a Progress datasource; the other is in Pittsburgh and is a SQL datasource. Since most of the data processing is going to take place at the Pittsburgh site, the IED Service (Integral Enterprise DataBridge) will be installed at the Pittsburgh location.

The requirement is that the databases be updated twice daily; once at noon and again in the evening. The system administrator chose Integral Enterprise DataBridge (IED) because it included the transformation functionality, remote data access, and ease-of-use capabilities.

The Flow:

1. Using the Integral Enterprise Viewer (IEV), the system administrator creates an IEV View that represents the needed data that the target application is expecting. In this case, the administrator uses the IEV LAN Client to create the needed views (for remote users, the Web client of IEV can be used).

2. Next, the administrator opens the IED Client that communicates via the Internet to the Admin Web Services located in Pittsburgh. The administrator has full control over when the job will be scheduled (in this case, recurring) and how the data will be transformed and put into the target destination. In this case, the data will be directly written to the database, but it can also be posted via the application's COM or other interfaces (allowing the ERP's business rules to be applied as data is being entered).

3. Since both systems are in use simultaneously, and potential conflicts can occur, the administrator can choose to lookup a value in the target database and increment this value in order to assign a new record key (e.g., transaction numbers, order numbers, etc.) or apply a custom method and rule via script. In addition, if any unforeseen conflicts occur, there is functionality so that records can be easily updated that did not get posted manually, if desired.

4. After the job is defined and scheduled, the administrator can close the IED Client – now the IED Service waits for the scheduled time to execute the job. The IED Service communicates with IEV via the Data Web Service located in Chicago. This in turn uses their IEV login to pull the needed data.

5. The administrator can bring up the client at any time to see real-time status of the transfer, or to make any needed adjustments before or after the job is executed.

Keep your data working for you.
Using the Integral Enterprise DataBridge™

The Integral Enterprise DataBridge is the ideal tool to perform data conversions, data migration, data transformation and mapping services to and from any data source including data that resides both within your four walls, and across the World Wide Web.

Several types of data sources are available to the Integral Enterprise DataBridge:

- Datasets such as XML documents containing data and data relationships.
- Flat Files -- that comprise fixed length or character delimited (space, semicolon, tab, or comma) files from which data will be brought in. IED can also handle nested flat files (often used in working with EDI translator data) wherein a designator position within the flat file distinguishes distinct overlays of flat-file data.
- Data from the Integral Enterprise Viewer Views -- These leverage the power of the Integral Enterprise Viewer to bring in data from a wide array of ODBC compliant data sources with custom calculations, formatting, and row selection.

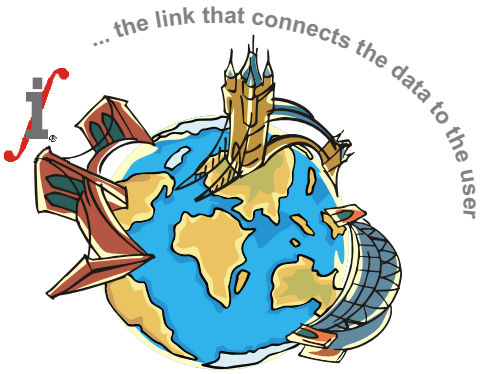
The data sources are written to one or more destinations. These destination types include:

- COM API -- Data is sent to a VBScript, which invokes COM components and passes data to them. As an example, the business rules that run in Component services could be this type of destination source.
- Databases -- Data is sent directly to a target MS SQL and Progress 9 database(s) after any desired data manipulation or default values are applied.
- Flat Files -- The data from any of the sources can also be written to a flat file that is either a fixed length, or a character delimited (space, semicolon, tab, or comma) type.
- XML data and data relationships.

IED basically lets you map data coming from any of its supported sources to any of its supported destination types. Complex transactions can be accomplished by changing from one type of source to a differently structured destination hierarchy, potentially applying sophisticated transformation logic. The actual transformation can be accomplished by running a job in IED; by scheduling a job for later or repetitive execution; by invoking an IED job via COM or a Windows Command-line; or by setting up an IED .NET File Watcher to wait for the source data to appear.

Built entirely on the Microsoft .NET platform the Integral Enterprise DataBridge provides a solid integration framework for a complete spectrum of diverse applications, for businesses of all sizes. Templates are included to provide a quick and easy way to get started with common operations.

Integral Enterprise Data Access Series® of products comprise complete and tightly integrated solutions for managing your information processes with simple and powerful tools, using: industry open standards, robust security, and reliable proven performance.



Integrating Applications

Integral Enterprise DataBridge includes capabilities for data integration, and data mapping of applications to extend the various systems that drive your business. For example, IED can wait for a falt-file or XML document, and transforms its contents into a new format that is presented to another applcation. It can periodically check for data in a database, and use that to update another database, or send an XML dataset to a new system. Some examples using IED, or where IED's capabilities can be used, are:

- EDI transactions.- both loading incoming EDI data into ERP systems, or sending ERP data to EDI systems
- Data Collection applications, including PLC's and other factory automation hardware and software systems.
- Integration of Product Data Management (PDM), Engineering Document Management (EDM). Computer Aided Design (CAD) to ERP systems.
- Customer Relations Management (CRM).
- Integration of transactions between separate and even dissimilar ERP systems.
- As a pre-processor / data scrubber for building Data Marts.

Conversions/Piloting

Using the Integral Enterprise DataBridge (IED) can increase the speed and accuracy of the conversion. Data to be converted can be read into IED by IEV views of data housed in many types of DBMS's, via flat-files, or from XML data sources; and can be loaded directly into SQL Server or Progress 9 database tables, loaded into other applications via flat-files or XML, or loaded into a new application via a COM API. These conversions are easily completed and you can convert your data as many times as you want, allowing you to fine-tune and polish your process until it is seamless. This is an ideal way for performing pilot operations with the data and doing final test runs insuring data accuracy within the new system.

Integration - Transformation - Conversion - Synchronization

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