

A Breakthrough in Microsoft Dynamics® GP Integration

SCRIBE ADAPTER FOR MICROSOFT DYNAMICS GP WITH ECONNECT



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A Breakthrough in Microsoft Dynamics GP Data Integration

TECHNICAL BRIEF

Two events have dramatically expanded the possibilities for integrating Microsoft Dynamics GP into a business enterprise; (1) the release of the eConnect product by Microsoft Dynamics GP, and (2) the creation of the Scribe Adapter for Microsoft Dynamics GP (utilizing eConnect) that enables Microsoft Dynamics GP to take advantage of the Scribe Insight product, a powerful integration tool designed exclusively for mid-market companies.

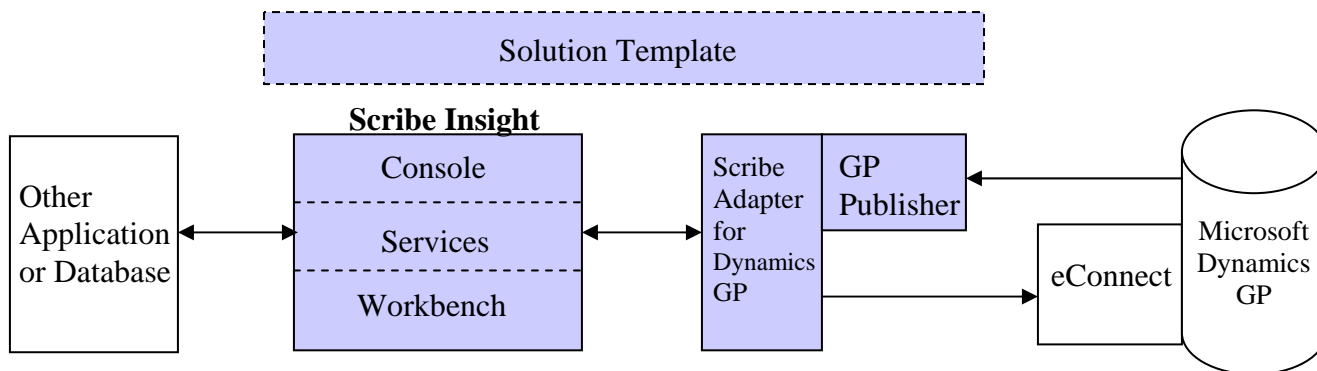
eConnect for Microsoft Dynamics GP is an API that enables developers to send, publish, and request data and transactions in Microsoft Dynamics GP via various middleware components that use published eConnect XML schemas. These middleware components can be accessed by developers via various methods including COM.NET, message queuing, Web services, stored procedures, and XML. At the core of eConnect is a set of SQL Server stored procedures that are accessed via the above methods. These stored procedures encapsulate the application business logic and data validation rules that previously were only accessible via the Microsoft Dynamics GP user interface.

eConnect has been optimized to support a broad range of automated integration processes, from single transaction, real-time interactions through large, batch data loads. It is a highly flexible interface that enables developers to support a wide variety of integration scenarios. The creation of eConnect has dramatically simplified the task of interfacing or exchanging information with Microsoft Dynamics GP from external applications. eConnect on its own, however, does not provide all of the tools required for companies to quickly and effectively integrate Microsoft Dynamics GP into a company's unique application environment. There still remains the need to define, execute, and manage the specific integration rules and data mappings between Microsoft Dynamics GP and other external systems. This is where Scribe Insight comes in.

Scribe Insight: The Integration Tool

The Scribe Adapter enables Microsoft Dynamics GP (hereinafter referred to as "Dynamics GP") to take advantage of Scribe Insight. For example, many customers and partners are using the Scribe Insight tool to seamlessly integrate Microsoft Dynamics CRM with Dynamics GP. Scribe Insight is a market leading integration tool optimized specifically for mid-market companies. Scribe Insight's architecture is solely driven by one key fact; ***the integration needs of mid-market companies are just as unique and sophisticated as large companies, but these companies have a fraction of the budget and IT staff of their bigger counterparts.*** They also need to deal with a rapidly evolving technology environment while attempting to keep up with ever changing business needs. What mid-market companies need is a powerful, yet easy to use, integration tool that enables them to quickly deploy integration solutions and rapidly evolve them as the business needs and underlying technology environment dictate. Scribe Insight has delivered this essential capability for thousands of mid-market companies. With the addition of the Scribe Adapter for Microsoft Dynamics GP (hereinafter referred to as "the Scribe Adapter for Dynamics GP") with eConnect, the power of the Scribe Insight tool is now broadly available to Dynamics GP customers.

The following diagram represents the Scribe Insight tool and the Scribe Adapter for Dynamics GP with eConnect.



The major Scribe technology elements, along with the Scribe Adapter for Dynamics GP, are represented by the shaded boxes in the diagram. These elements are the Scribe Insight product with its two graphical components, the Workbench and the Console, its Services (or run-time engine) and the Solution Templates developed by Scribe, its partners, and its customers:

Scribe Workbench - The Workbench is the graphical design environment where all the integration rules and data mappings are established, at both the object and field level. These mappings and integration rules are then saved as metadata in a portable template file that drive the integration process at run-time.

Scribe Console - The Console is the Web service-based automation and management environment where the events that initiate an integration process (as defined in the template file) are established. These events can be established in real-time, via queuing or polling, or in batch, via a schedule or file transfer, depending on the needs of the customer. In addition, the Console is where errors are viewed and corrected, system monitors and alerts are established for proactive integration management, and business activity monitors that enhance the effectiveness of your Dynamics GP application are defined.

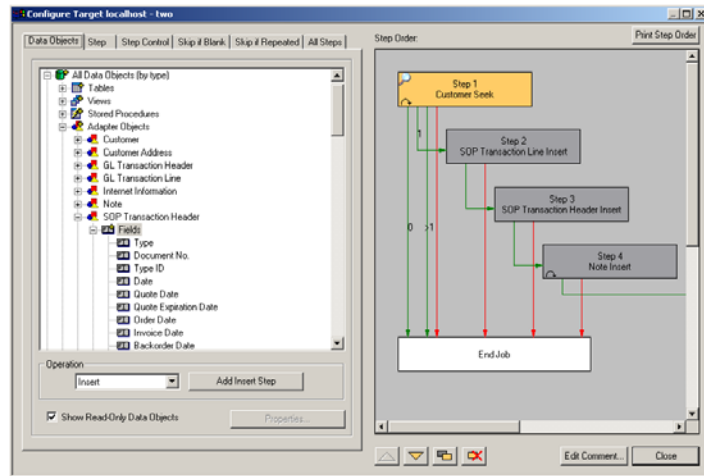
Scribe Services - The Services is the run-time engine of Scribe Insight represented by a set of Windows services. The Services detect real-time and scheduled events and execute the appropriate integration processes. The Services also detect real-time business events and raise alerts to individuals or groups via email or text message.

Solution Template - The components defined by both the Workbench and Console represent a solution template. An example of a Solution Template is Scribe's Solution for Microsoft Dynamics CRM to Dynamics GP. A Solution Template is a highly functional "starting point" that then can be extended and customized via the Workbench and Console to meet each customer's needs. Solution Templates may also be developed as a set of components, enabling companies to re-use common components across multiple integrations. For example, Scribe provides a template component that represents a "best practice" for identifying if a company record already exists so that duplicate customer records are not created in an integration process. Utilizing a standardized component across a number of integrations eliminates effort and provides a consistent result across all systems. Scribe regularly updates its Solution Templates and posts them to its Web community for download, at no additional cost, for its customers and partners.

The Tie that Binds

The final piece to this puzzle is the Scribe Adapter for Dynamics GP with eConnect. This .NET technology component enables Scribe Insight to easily read data from and write data to Dynamics GP. The adapter provides an abstracted and simplified view of the Dynamics GP object structure within the Scribe Workbench. Workbench users can perform sophisticated integration actions against objects within Dynamics GP in just a few clicks of the mouse.

Embedded within the Adapter is a run-time version of the eConnect libraries. There is no need for a customer to purchase eConnect separately to utilize the Scribe Adapter. The Scribe Adapter for Dynamics GP currently supports a list of the most commonly integrated objects within Dynamics GP. This list continues to expand as customer demand dictates. The list of currently supported objects is outlined at the end of this paper.



The Scribe Adapter for Dynamics GP supports the insertion, update, and deletion of data and transactions within Dynamics GP via the eConnect API. A key feature within the Scribe Workbench that is supported by the Adapter is step control. Step control provides the ability to perform multiple operations against multiple objects within one integration process. It provides the ability to control how the objects are processed based upon the results of operations from previous steps. For example, in an order integration process, a new “company” and “address” could be added if they do not exist in Dynamics GP followed by one “Order Header” record and multiple “Order Detail” records. And with its built-in automatic foreign key assignment and rollback capabilities, step control fully maintains the transactional and referential integrity of the integration process across these multiple objects. In our Order example, the address and order would be related to the company from the earlier step and if the mark down in the header exceeded the detail line items, the entire transaction could be rolled back and logged as an error.

A key component of the Adapter for Dynamics GP is the GP Publisher. The GP Publisher allows for the capture of newly changed data from Dynamics GP to be utilized in an integration process. For example, the GP Publisher can capture changes to customer or order records made in Dynamics GP for immediate updating in a front office system. This net change capability is critical to support efficient two-way real-time integration processes.

Additional capabilities supported by the Adapter for Dynamics GP and Scribe Insight include:

- **The capture of the detailed error messages provided by eConnect** – there are over 4,400 unique eConnect error messages that are fully exposed within Scribe’s advanced error reporting and management module, allowing for the quick diagnosis and resolution of error conditions.
- **The need to map only changed fields**– the Scribe Workbench supports precise field mapping and filtering rules that mean you only need to map those fields that have changed.

- **Record matching on any field or combination of fields**– the Scribe Workbench supports advanced matching capability for record updating that support lookups on any field, or combination of fields. This ensures that the proper records are updated and that duplicate records are not created.
- **Specialized data transformation functions** – in addition to over 150 standard, built-in data transformation formulas, there are a number of Dynamics GP specific formulas including functions for phone number and date formatting as well as the automatic generation of unique customer numbers.
- **Support for Business Activity Monitoring or BAM** – business events can be captured within Dynamics GP and business users can be proactively notified via email or text message, enabling them to take proactive action. For example, a monitor can notify a sales manager when a customer has been placed on credit hold, allowing them to quickly address the issue with the customer.

The Unparalleled Business Advantage

Scribe Insight and the Dynamics GP Adapter offer customers groundbreaking advantages over alternative approaches to integration with Dynamics GP, including:

- **Breadth of Capability** – The Scribe tool supports a wide range of needs including:
 - The initial migration of data from legacy systems
 - The occasional, ad-hoc loading of data
 - Scheduled or batch integration of data from legacy systems and other applications, such as 3rd party billing or web order entry systems
 - Real-time integration with front office and other business applications
 - Data cleansing, standardization, and mass update
 - Business Activity Monitoring to monitor business events and proactively notify users of recommended actions

Companies save money and gain great efficiencies by learning and standardizing on one tool to meet a broad range of needs. In addition, Scribe Insight goes beyond integration with Dynamics GP.

- **Flexibility and Power** – With Scribe, a company can get exactly what they need from their integration. With the power and flexibility of Scribe, combined with an easy to use interface, companies can quickly fashion an integration to meet their unique business needs...no compromise required.
- **Adaptability and Upgradeability** – Scribe takes the pain out of upgrading or changing an integration process. With Scribe's component architecture, changes in the technology environment have minimal impact on the integration process itself. For example, if a customer upgrades their Dynamics GP environment, unless there are schema or business rule changes that affect the integration process itself, the upgrade will have no effect on the Solution Template. It is as simple as upgrading the Adapter. If there is a schema or integration rule change, it is a simple matter of a few mouse clicks in the Scribe Workbench.
- **Openness** – Scribe Insight is an open integration tool that can integrate Dynamics GP with a broad range of environments including Web sites, legacy systems, packaged applications, message brokers, and databases. Out of the box, Scribe provides connectivity to SQL, ODBC data sources, flat files, message queues, and XML documents/messages. Scribe also provides Adapters for many of the leading mid-market CRM applications including Microsoft CRM, SalesLogix, salesforce.com, Pivotal, Onyx, ACT!, and Goldmine.

Scribe Adapter for Dynamics GP *Supported eConnect Objects*

Analytical Accounting

AA Distribution

Bank Reconciliation

BR Bank Deposit Header
BR Bank Deposit Line
BR Bank Deposit Post
BR Bank Transaction Dist
BR Bank Transaction Header
BR Bank Transaction Void
BR Get Next Number

Shared Master

Customer
Customer Address
Vendor
Vendor Address
Note
Internet Information
Batch Header
MDA Quantity

General Ledger

GL Account
GL Fixed Allocation
GL Get Next Number
GL Transaction Header
GL Transaction Line
GL Variable Allocation

Receivables

RM Get Next Number
RM Transaction
RM Distribution
RM Tax Detail
RM Cash Receipt
RM Apply

Payables

PM Get Next Number
PM Transaction
PM Distribution
PM Tax Detail
PM Manual Check

Inventory

Item

Item Currency
Item Vendor
Item Price List Header
Item Price List Line
Item Site
IV Get Next Number
IV Transaction Header
IV Transaction Line
IV Transaction Lot
IV Transaction Serial
IV Transaction Bin
IV Transfer Header
IV Transfer Line
IV Transfer Lot
IV Transfer Serial
IV Transfer Bin
IV Bin to Bin Transfer

Scribe Integration

SCRIBESHADOW

Sales Order Processing

SOP Get Next Number
SOP Transaction Header
SOP Transaction Line
SOP Transaction Payment
SOP Transaction Void
SOP Distribution
SOP Commission
SOP Tracking Number
SOP User Defined
SOP Line Lot
SOP Line Serial
SOP Line Tax Detail
SOP Line Bin
SOP Process Hold
SOP To POP Link

Purchase Order Processing

POP Get Next Number
POP Transaction Header
POP Transaction Line
POP Receipt Header
POP Receipt Line
POP Distribution
POP Receipt Line Lot
POP Receipt Line Serial

POP Receipt User Defined
POP Receipt Line Tax

Field Service

FS Note
Service Call
Service Call Equipment

Fixed Assets

FA Account Group
FA Asset
FA Asset Book
FA Asset Class
FA Asset Insurance
FA Asset Lease
FA Asset User Data
FA Book
FA Book Class
FA Insurance Class
FA Lease Company
FA Location
FA Note
FA Physical Location
FA Retirement
FA Structure

Project Accounting

PA Account
PA Change Order Budget
PA Change Order Fee Schedule
PA Change Order Fee Detail
PA Change Order Fee Header
PA Change Order Get Next Number
PA Change Order Header
PA Contract
PA Contract Billing Cycle
PA Employee Expense Header
PA Employee Expense Line
PA Employee Expense Tax
PA Get Next Number

PA Miscellaneous Log Header
PA Miscellaneous Log Line
PA Note
PA Project
PA Project Access
PA Project Billing Cycle
PA Project Budget
PA Project Equipment
PA Project Fee
PA Project Fee Schedule
PA Timesheet Header
PA Timesheet Line

Payroll

Employee
Employee Address
Employee Benefit
Employee Benefit Based on Code
Employee Deduction
Employee Deduction Based On Code
Employee Local Tax
Employee Pay Code
Employee State Tax
Employee Tax
UPR Batch
UPR Computer Check
UPR Manual Check Header
UPR Manual Check Line

About Scribe Software Corporation

Scribe Software Corporation provides cost-effective, no-coding solutions that can be used as the only tool businesses need to integrate virtually any application, data source or Software as a Service (SaaS) platform. Scribe solutions are simple to configure and provide ease of modification as business processes change. They are especially popular among organizations running Microsoft Dynamics CRM, Dynamics GP, Dynamics NAV and Sage SalesLogix applications as well as Salesforce.com and Microsoft Dynamics CRM Online. Scribe Software is led by experienced technology executives from Microsoft, Oracle, AutoDesk, i2, Vitria, Dun and Bradstreet, and WebTrends. For more information about Scribe, please visit www.scribesoft.com

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About the author

Peter R. Chase is Executive Vice President and founder of Scribe Software Corporation. With over 10,000 customers, Scribe is the leading provider of mid-market integration solutions. In his capacity at Scribe, Mr. Chase has advised numerous CRM vendors as they formulated their strategic integration strategies. He has also worked with many of Scribe's customers to ensure a successful rollout of their enterprise integration solutions.